Appendix E – Monitoring Data

WYG, 11th Floor, 1 Angel Court, London EC2R 7HJ.
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GROUND GAS & WATER MONITORING RECORD SHEET

Client: Homes England | **Job No:** A090070-474 | **Instruments Used:** Infra Red Gas Analyser, Dip Meter | **Monitored by:** Regulation 13

Point Details					Peak							Steady								Physical				
Location ID	Point Ref	Reading Reference	Date	Cover Level (m aod)	Gas Flow (l/min)	CO_2 (%vol)	CH_4 (%vol)	O_2 (%vol)	CO (ppm)	H_2S (ppm)	PID (ppm)	Gas Flow (l/min)	CO_2 (%vol)	CH_4 (%vol)	O_2 (%vol)	CO (ppm)	Resid N_2 (%vol)	Min O_2 (% vol)	PID (ppm)	Atmos Pressure (BAR)	Water Depth (m bgl)	Install Base (m bgl)	Water Level (m aod)	Water Flow (l/min)
BH01	MP1	1	14/03/2019	117.63	-	0.10	0.60	19.60	3.00	1.00	-	0.00	0.60	0.10	19.60	2.00	-	-	-	0.99	22.57	35.70	95.06	-
		2	22/03/2019	117.63	-	0.10	1.30	19.80	0.00	0.00	-	0.01	0.90	0.10	19.60	0.00	-	-	-	1.01	22.33	35.65	95.30	-
		3	27/03/2019	117.63	-	0.10	1.90	19.10	0.00	1.00	-	0.00	1.90	0.10	19.10	0.00	-	-	-	1.02	22.20	35.68	95.43	-
		4	04/04/2019	117.63	-	0.00	1.20	19.70	0.00	1.00	-	0.01	0.90	0.00	19.70	0.00	-	-	-	0.98	21.94	35.68	95.69	-
		5	11/04/2019	117.63	-	0.10	1.50	19.70	0.00	0.00	-	0.01	1.50	0.10	19.70	0.00	-	-	-	1.01	21.98	35.70	95.65	-
		6	17/04/2019	117.63	-	0.00	1.40	20.40	0.00	0.00	-	0.01	1.40	0.00	20.40	0.00	-	-	-	1.01	21.68	35.70	95.95	-
BH02	MP1	1	15/03/2019	118.89	-	0.10	1.40	19.40	0.00	1.00	-	0.00	1.40	0.10	19.40	0.00	-	-	-	0.99	23.90	36.50	94.99	-
		2	22/03/2019	118.89	-	0.10	0.70	18.60	0.00	0.00	-	0.00	0.70	0.10	18.60	0.00	-	-	-	1.02	23.68	36.52	95.21	-
		3	27/03/2019	118.89	-	0.00	0.20	20.00	0.00	1.00	-	0.00	0.20	0.00	20.00	0.00	-	-	-	1.02	23.53	36.52	95.36	-
		4	04/04/2019	118.89	-	0.00	0.60	19.80	1.00	1.00	-	0.00	0.60	0.00	19.80	0.00	-	-	-	0.98	23.27	36.52	95.62	-
		5	11/04/2019	118.89	-	0.10	0.30	20.70	0.00	0.00	-	0.00	0.30	0.10	20.70	0.00	-	-	-	1.01	23.18	36.50	95.71	-
		6	17/04/2019	118.89	-	0.00	0.80	21.00	2.00	0.00	-	0.00	0.80	0.00	21.00	2.00	-	-	-	1.01	22.98	36.50	95.91	-
BH03	MP1	1	14/03/2019	103.08	-	0.10	0.20	18.40	1.00	1.00	-	0.00	0.20	0.10	18.40	0.00	-	-	-	0.99	8.90	18.80	94.18	-
		2	22/03/2019	103.08	-	0.00	4.30	15.60	0.00	1.00	-	0.00	4.30	0.00	15.60	0.00	-	-	-	1.02	8.70	18.79	94.38	-
		3	28/03/2019	103.08	-	0.10	0.30	20.40	1.00	0.00	-	0.00	0.60	0.10	20.40	0.00	-	-	-	1.02	8.53	18.77	94.55	-
		4	04/04/2019	103.08	-	0.00	1.50	18.80	0.00	1.00	-	0.00	1.30	0.00	18.80	0.00	-	-	-	0.98	8.26	18.77	94.82	-
		5	11/04/2019	103.08	-	0.10	5.80	12.30	2.00	0.00	-	0.00	5.80	0.10	12.30	2.00	-	-	-	1.01	8.23	18.80	94.85	-
		6	17/04/2019	103.08	-	0.00	0.90	20.80	1.00	0.00	-	0.01	0.90	0.00	20.80	1.00	-	-	-	1.01	8.02	18.80	95.06	-
BH04	MP1	1	14/03/2019	110.63	-	0.10	0.40	20.20	1.00	0.00	-	0.00	0.10	0.00	20.10	0.00	-	-	-	0.99	15.95	17.30	94.68	-
		2	21/03/2019	110.63	-	0.00	0.10	19.90	0.00	1.00	-	0.00	0.10	0.00	19.60	0.00	-	-	-	1.02	15.77	17.30	94.86	-
		3	28/03/2019	110.63	-	0.10	0.50	19.80	0.00	0.00	-	0.01	0.50	0.10	19.80	0.00	-	-	-	1.02	15.59	17.30	95.04	-
		4	04/04/2019	110.63	-	0.00	0.30	20.00	0.00	0.00	-	0.01	0.30	0.00	20.00	0.00	-	-	-	0.98	15.23	17.30	95.40	-
		5	11/04/2019	110.63	-	0.10	0.10	20.50	0.00	0.00	-	0.00	0.10	0.00	20.50	0.00	-	-	-	1.01	15.21	17.42	95.42	-
		6	17/04/2019	110.63	-	0.00	0.20	21.40	1.00	1.00	-	0.01	0.20	0.00	21.40	1.00	-	-	-	1.01	14.95	17.30	95.68	-
WS01	MP1	1	14/03/2019	118.49	-	0.10	0.40	20.20	2.00	1.00	-	0.00	0.20	0.10	20.20	0.00	-	-	-	0.99	DRY	2.97	*	-
		2	22/03/2019	118.49	-	0.10	1.40	20.10	1.00	1.00	-	0.01	0.20	0.10	19.50	0.00	-	-	-	1.01	DRY	2.95	*	-
		3	27/03/2019	118.49	-	0.00	0.70	19.20	0.00	1.00	-	0.01	0.70	0.00	19.00	0.00	-	-	-	1.02	DRY	2.95	*	-
		4	04/04/2019	118.49	-	0.00	0.90	19.60	1.00	2.00	-	0.00	0.30	0.00	19.60	0.00	-	-	-	0.98	DRY	2.95	*	-
		5	12/04/2019	118.49	-	0.10	0.90	19.80	0.00	0.00	-	0.01	0.80	0.00	19.80	0.00	-	-	-	1.01	DRY	2.97	*	-
		6	17/04/2019	118.49	-	0.10	0.90	20.50	0.00	1.00	-	0.00	0.90	0.10	20.50	0.00	-	-	-	1.01	DRY	2.97	*	-
WS03	MP1	1	14/03/2019	117.54	-	0.00	0.10	20.20	1.00	1.00	-	0.00	0.10	0.00	20.20	0.00	-	-	-	0.99	DRY	2.67	*	-
		2	22/03/2019	117.54	-	0.10	0.30	20.10	0.00	1.00	-	0.00	0.10	0.10	20.10	0.00	-	-	-	1.01	DRY	2.67	*	-
		3	27/03/2019	117.54	-	0.10	0.20	19.60	0.00	1.00	-	0.01	0.20	0.00	19.60	0.00	-	-	-	1.02	DRY	2.67	*	-
		4	04/04/2019	117.54	-	0.00	0.10	19.90	1.00	1.00	-	0.01	0.10	0.00	19.90	0.00	-	-	-	0.98	DRY	2.67	*	-
		5	12/04/2019	117.54	-	0.10	0.10	20.80	0.00	0.00	-	0.00	0.10	0.10	20.80	0.00	-	-	-	1.01	DRY	2.67	*	-
		6	17/04/2019	117.54	-	0.00	0.10	21.50	0.00	0.00	-	0.00	0.10	0.00	21.50	0.00	-	-	-	1.01	DRY	2.67	*	-
WS05	MP1	1	14/03/2019	117.10	-	0.10	0.20	20.30	4.00	0.00	-	0.00	0.10	0.10	20.30	0.00	-	-	-	0.99	DRY	0.60	*	-
		2	22/03/2019	117.10	-	0.10	0.30	19.90	1.00	1.00	-	0.01	0.30	0.10	19.90	0.00	-	-	-	1.01	DRY	0.60	*	-
		3	27/03/2019	117.10	-	0.10	0.20	19.60	0.00	1.00	-	0.01	0.20	0.10	19.60	0.00	-	-	-	1.02	DRY	0.60	*	-
		4	04/04/2019	117.10	-	0.00	0.10	19.90	0.00	1.00	-	0.00	0.10	0.00	19.90	0.00	-	-	-	0.98	DRY	0.60	*	-
		5	12/04/2019	117.10	-	0.10	0.10	20.80	0.00	0.00	-	0.00	0.10	0.10	20.80	0.00	-	-	-	1.01	DRY	0.60	*	-
		6	17/04/2019	117.10	-	0.00	0.10	21.50	0.00	0.00	-	0.00	0.10	0.00	21.50	0.00	-	-	-	1.01	DRY	0.60	*	-
		1	15/03/2019	113.41	-	0.00	1.00	19.80	2.00	1.00	-	0.00	1.00	0.00	19.80	0.00	-	-	-	0.99	DRY	0.70	*	-
		2	22/03/2019	113.41	-	0.10	1.10	19.90	0.00	0.00	-	0.01	1.10	0.10	19.90	0.00	-	-	-	1.02	DRY	0.70	*	-

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WS07	**MP1**	**3**	**27/03/2019**	113.41	-	0.00	0.90	19.80	0.00	0.00	-	0.00	0.90	0.00	19.80	0.00	-	-	-	1.02	DRY	0.70	*	-
		4	**04/04/2019**	113.41	-	0.00	0.90	19.80	2.00	1.00	-	0.00	0.90	0.00	19.80	0.00	-	-	-	0.98	DRY	0.70	*	-
		5	**12/04/2019**	113.41	-	0.10	0.40	20.80	0.00	0.00	-	0.01	0.40	0.10	20.80	0.10	-	-	-	1.01	DRY	0.70	*	-
		6	**17/04/2019**	113.41	-	0.00	0.40	21.10	0.00	0.00	-	0.00	0.40	0.00	21.10	0.00	-	-	-	1.01	DRY	0.70	*	-
WS08	**MP1**	**1**	**15/03/2019**	116.41	-	0.10	1.30	19.80	0.00	1.00	-	0.00	0.20	0.10	19.60	0.00	-	-	-	0.99	DRY	2.51	*	-
		2	**22/03/2019**	116.41	-	0.10	0.30	19.60	10.00	1.00	-	0.01	0.30	0.10	19.60	1.00	-	-	-	1.01	DRY	2.55	*	-
		3	**27/03/2019**	116.41	-	0.00	0.60	19.60	5.00	1.00	-	0.00	0.30	0.00	19.60	0.00	-	-	-	1.02	DRY	2.55	*	-
		4	**04/04/2019**	116.41	-	0.00	0.40	19.40	6.00	1.00	-	0.01	0.40	0.00	19.40	1.00	-	-	-	0.98	DRY	2.55	*	-
		5	**12/04/2019**	116.41	-	0.10	0.40	19.80	0.00	0.00	-	0.00	0.40	0.10	19.80	0.00	-	-	-	1.01	DRY	2.51	*	-
		6	**17/04/2019**	116.41	-	0.00	0.20	21.50	3.00	0.00	-	0.01	0.20	0.00	21.50	0.00	-	-	-	1.01	DRY	2.51	*	-
WS10	**MP1**	**1**	**15/03/2019**	113.94	-	0.10	0.50	20.00	0.00	1.00	-	0.00	0.50	0.10	20.00	0.00	-	-	-	0.99	DRY	1.78	*	-
		2	**22/03/2019**	113.94	-	0.10	0.40	20.10	0.00	0.00	-	0.01	0.40	0.00	20.10	0.00	-	-	-	1.02	DRY	1.78	*	-
		3	**27/03/2019**	113.94	-	0.00	0.50	19.70	0.00	1.00	-	0.00	0.50	0.00	19.70	0.00	-	-	-	1.02	DRY	1.78	*	-
		4	**04/04/2019**	113.94	-	0.10	0.20	20.10	0.00	1.00	-	0.00	0.20	0.10	20.10	0.00	-	-	-	0.98	DRY	1.78	*	-
		5	**12/04/2019**	113.94	-	0.10	0.30	20.10	0.00	0.00	-	0.00	0.30	0.10	20.10	0.00	-	-	-	1.01	DRY	1.78	*	-
		6	**17/04/2019**	113.94	-	0.00	0.40	20.70	1.00	0.00	-	0.00	0.40	0.00	20.70	0.00	-	-	-	1.01	DRY	1.78	*	-
WS12	**MP1**	**1**	**15/03/2019**	115.51	-	0.10	1.00	20.40	1.00	0.00	-	0.00	0.10	0.10	20.20	0.00	-	-	-	0.99	4.98	5.10	110.53	-
		2	**22/03/2019**	115.51	-	0.10	0.70	20.10	0.00	0.00	-	0.00	0.30	0.10	20.10	0.00	-	-	-	1.02	5.00	5.10	110.51	-
		3	**27/03/2019**	115.51	-	0.10	0.10	19.80	1.00	1.00	-	0.00	0.10	0.10	19.80	0.00	-	-	-	1.02	5.00	5.10	110.51	-
		4	**04/04/2019**	115.51	-	0.00	0.20	19.60	0.00	0.00	-	0.01	0.20	0.00	19.60	0.00	-	-	-	0.98	5.00	5.10	110.51	-
		5	**12/04/2019**	115.51	-	0.10	0.10	20.80	0.00	0.00	-	0.00	0.10	0.10	20.80	0.00	-	-	-	1.01	4.99	5.10	110.52	-
		6	**17/04/2019**	115.51	-	0.10	0.10	21.70	1.00	0.00	-	0.00	0.10	0.00	21.70	0.00	-	-	-	1.01	4.98	5.10	110.53	-
WS13	**MP1**	**1**	**15/03/2019**	114.40	-	0.00	0.30	20.20	2.00	1.00	-	0.00	0.30	0.00	20.20	0.00	-	-	-	0.99	5.00	5.05	109.40	-
		2	**22/03/2019**	114.40	-	0.10	0.30	19.80	1.00	0.00	-	0.00	0.20	0.10	19.80	0.00	-	-	-	1.02	5.00	5.05	109.40	-
		3	**27/03/2019**	114.40	-	0.10	0.40	20.00	1.00	0.00	-	0.00	0.40	0.10	20.00	0.00	-	-	-	1.02	4.94	5.05	109.46	-
		4	**04/04/2019**	114.40	-	0.10	0.50	19.40	0.00	1.00	-	0.00	0.50	0.10	19.40	0.00	-	-	-	0.98	5.01	5.05	109.39	-
		5	**12/04/2019**	114.40	-	0.10	0.30	20.70	0.00	0.00	-	0.00	0.30	0.10	20.70	0.00	-	-	-	1.01	4.96	5.05	109.44	-
		6	**17/04/2019**	114.40	-	0.00	0.30	19.30	1.00	0.00	-	0.00	0.30	0.00	19.30	1.00	-	-	-	1.01	4.95	5.05	109.45	-
WS14	**MP1**	**1**	**15/03/2019**	118.14	-	0.10	1.50	19.60	1.00	1.00	-	0.00	1.50	0.10	19.60	0.00	-	-	-	0.99	4.89	5.00	113.25	-
		2	**22/03/2019**	118.14	-	0.10	1.50	19.50	0.00	1.00	-	0.00	1.50	0.10	19.50	0.00	-	-	-	1.01	DRY	5.00	*	-
		3	**27/03/2019**	118.14	-	0.00	1.50	19.20	1.00	1.00	-	0.00	1.50	0.00	19.20	0.00	-	-	-	1.02	DRY	5.00	*	-
		4	**04/04/2019**	118.14	-	0.10	1.40	18.90	1.00	1.00	-	0.01	1.40	0.10	18.90	0.00	-	-	-	0.98	4.87	5.00	113.27	-
		5	**12/04/2019**	118.14	-	0.10	0.40	19.80	0.00	0.00	-	0.00	0.40	0.10	19.80	0.00	-	-	-	1.01	DRY	5.00	*	-
		6	**17/04/2019**	118.14	-	0.00	1.30	21.20	0.00	0.00	-	0.00	1.30	0.00	21.20	0.00	-	-	-	1.01	DRY	5.00	*	-
WS16	**MP1**	**1**	**15/03/2019**	112.02	-	0.10	1.00	18.90	0.00	1.00	-	0.00	1.00	0.10	18.90	0.00	-	-	-	0.99	1.05	1.20	110.97	-
		2	**22/03/2019**	112.02	-	0.10	0.90	19.10	0.00	0.00	-	0.00	0.90	0.10	19.10	0.00	-	-	-	1.01	1.00	1.20	111.02	-
		3	**27/03/2019**	112.02	-	0.00	1.20	17.40	5.00	1.00	-	0.01	1.20	0.00	17.40	0.00	-	-	-	1.02	1.00	1.22	111.02	-
		4	**04/04/2019**	112.02	-	0.10	1.40	18.60	3.00	2.00	-	0.00	1.40	0.10	18.60	0.00	-	-	-	0.98	1.00	1.22	111.02	-
		5	**12/04/2019**	112.02	-	0.10	1.00	17.50	0.00	0.00	-	0.00	1.00	0.10	17.50	0.00	-	-	-	1.01	1.05	1.20	110.97	-
		6	**17/04/2019**	112.02	-	0.00	1.10	17.80	2.00	0.00	-	0.00	1.10	0.00	17.80	0.00	-	-	-	1.01	1.00	1.20	111.02	-
WS18	**MP1**	**1**	**15/03/2019**	118.99	-	0.10	1.30	19.70	1.00	0.00	-	0.00	1.30	0.10	19.70	0.00	-	-	-	0.99	DRY	3.93	*	-
		2	**22/03/2019**	118.99	-	0.10	1.30	19.80	1.00	1.00	-	0.01	1.30	0.10	19.10	0.00	-	-	-	1.02	DRY	3.93	*	-
		3	**27/03/2019**	118.99	-	0.00	0.10	20.00	0.00	1.00	-	0.01	0.10	0.00	20.00	0.00	-	-	-	1.02	DRY	3.93	*	-
		4	**04/04/2019**	118.99	-	0.00	0.10	20.00	0.00	0.00	-	0.00	0.10	0.00	20.00	0.00	-	-	-	0.98	DRY	3.93	*	-
		5	**12/04/2019**	118.99	-	0.10	0.40	20.80	0.00	0.00	-	0.01	0.40	0.10	20.80	0.00	-	-	-	1.01	DRY	3.93	*	-
		6	**17/04/2019**	118.99	-	0.00	0.80	20.70	1.00	0.00	-	0.00	0.80	0.00	20.70	0.00	-	-	-	1.01	DRY	3.93	*	-
WS20	**MP1**	**1**	**15/03/2019**	111.31	-	0.00	1.00	20.00	20.00	1.00	-	0.00	0.30	0.00	19.80	0.00	-	-	-	0.99	DRY	1.75	*	-
		2	**21/03/2019**	111.31	-	0.00	0.40	19.30	0.00	1.00	-	0.01	0.40	0.00	19.80	0.00	-	-	-	1.02	DRY	1.77	*	-
		3	**28/03/2019**	111.31	-	0.10	0.80	19.50	3.00	0.00	-	0.00	0.80	0.10	19.50	1.00	-	-	-	1.03	DRY	1.77	*	-
		4	**03/04/2019**	111.31	-	0.10	1.20	18.70	2.00	1.00	-	0.01	1.20	0.00	18.70	0.00	-	-	-	0.99	DRY	1.77	*	-
		5	**11/04/2019**	111.31	-	0.10	1.00	19.40	0.00	0.00	-	0.00	1.00	0.10	19.40	0.00	-	-	-	1.01	DRY	1.75	*	-

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		6	17/04/2019	111.31	-	0.00	0.90	20.70	4.00	1.00	-	0.00	0.90	0.00	20.70	3.00	-	-	-	1.01	DRY	1.75	*	-
WS21	MP1	1	15/03/2019	110.13	-	0.10	0.80	19.70	2.00	1.00	-	0.00	0.80	0.00	19.70	0.00	-	-	-	0.99	DRY	5.10	*	-
		2	21/03/2019	110.13	-	0.00	1.10	18.50	0.00	1.00	-	0.00	1.10	0.00	18.50	0.00	-	-	-	1.02	DRY	5.10	*	-
		3	28/03/2019	110.13	-	0.10	1.20	19.40	0.00	1.00	-	0.00	1.20	0.10	19.40	0.00	-	-	-	1.03	DRY	5.10	*	-
		4	03/04/2019	110.13	-	0.10	1.20	18.30	0.00	1.00	-	0.01	1.20	0.10	18.30	0.00	-	-	-	0.99	DRY	5.10	*	-
		5	11/04/2019	110.13	-	0.10	1.30	18.50	0.00	0.00	-	0.01	1.30	0.10	18.50	0.00	-	-	-	1.01	DRY	5.10	*	-
		6	17/04/2019	110.13	-	0.00	1.70	19.30	3.00	1.00	-	0.00	1.70	0.00	19.30	3.00	-	-	-	1.01	DRY	5.10	*	-
WS22	MP1	1	15/03/2019	108.98	-	0.00	0.70	20.20	2.00	0.00	-	0.00	0.50	0.00	19.90	0.00	-	-	-	0.99	DRY	3.00	*	-
		2	21/03/2019	108.98	-	0.00	0.60	19.40	0.00	1.00	-	0.00	0.60	0.00	19.40	0.00	-	-	-	1.02	DRY	3.00	*	-
		3	28/03/2019	108.98	-	0.10	0.80	20.10	0.00	0.00	-	0.01	0.80	0.10	20.10	0.00	-	-	-	1.03	DRY	3.00	*	-
		4	03/04/2019	108.98	-	0.00	1.00	19.50	0.00	1.00	-	0.00	1.00	0.10	19.50	0.00	-	-	-	0.99	DRY	3.00	*	-
		5	11/04/2019	108.98	-	0.10	0.70	19.20	0.00	0.00	-	0.00	0.70	0.10	19.20	0.00	-	-	-	1.01	DRY	3.00	*	-
		6	17/04/2019	108.98	-	0.00	0.60	20.90	3.00	1.00	-	0.00	0.60	0.00	20.90	3.00	-	-	-	1.01	DRY	3.00	*	-
WS24	MP1	1	15/03/2019	-	-	0.10	1.20	19.80	2.00	0.00	-	0.00	1.20	0.10	19.80	0.00	-	-	-	0.99	DRY	5.05	*	-
		2	21/03/2019	-	-	0.00	1.00	19.60	1.00	0.00	-	0.00	1.00	0.00	19.60	0.00	-	-	-	1.02	DRY	5.05	*	-
		3	27/03/2019	-	-	0.00	1.30	19.10	2.00	1.00	-	0.01	1.30	0.00	18.90	0.00	-	-	-	1.02	DRY	5.05	*	-
		4	03/04/2019	-	-	0.00	1.50	18.60	1.00	1.00	-	0.00	1.50	0.00	18.60	0.00	-	-	-	0.99	DRY	5.05	*	-
		5	11/04/2019	-	-	0.10	1.20	18.90	0.00	0.00	-	0.00	1.20	0.10	18.90	0.00	-	-	-	1.01	DRY	5.05	*	-
		6	17/04/2019	-	-	0.00	1.10	20.90	2.00	1.00	-	0.01	1.10	0.00	20.90	1.00	-	-	-	1.01	DRY	5.05	*	-
WS26	MP1	1	15/03/2019	115.95	-	0.10	1.00	20.20	0.00	0.00	-	0.00	1.00	0.10	20.20	0.00	-	-	-	0.99	DRY	4.96	*	-
		2	21/03/2019	115.95	-	0.00	1.10	19.70	1.00	0.00	-	0.00	1.10	0.00	19.70	0.00	-	-	-	1.02	DRY	4.95	*	-
		3	28/03/2019	115.95	-	0.10	1.20	19.90	1.00	1.00	-	0.01	1.20	0.10	19.90	0.00	-	-	-	1.02	DRY	4.95	*	-
		4	03/04/2019	115.95	-	0.00	1.30	18.30	0.00	1.00	-	0.00	1.30	0.00	18.30	0.00	-	-	-	0.99	DRY	4.95	*	-
		5	11/04/2019	115.95	-	0.10	0.90	19.00	0.00	0.00	-	0.00	0.90	0.10	19.00	0.00	-	-	-	1.01	DRY	4.96	*	-
		6	17/04/2019	115.95	-	0.00	1.20	20.50	1.00	0.00	-	0.01	1.20	0.00	20.50	0.00	-	-	-	1.01	DRY	4.96	*	-
WS28	MP1	1	15/03/2019	110.54	-	0.00	2.60	18.20	2.00	1.00	-	0.00	2.60	0.00	18.20	0.00	-	-	-	0.99	DRY	3.03	*	-
		2	21/03/2019	110.54	-	0.00	2.40	17.70	1.00	1.00	-	0.00	2.40	0.00	17.70	0.00	-	-	-	1.02	DRY	3.03	*	-
		3	28/03/2019	110.54	-	0.10	2.50	18.10	1.00	1.00	-	0.00	2.50	0.10	18.10	0.00	-	-	-	1.03	DRY	3.03	*	-
		4	03/04/2019	110.54	-	0.00	2.00	18.10	0.00	1.00	-	0.00	2.00	0.00	18.10	0.00	-	-	-	0.99	DRY	3.03	*	-
		5	11/04/2019	110.54	-	0.10	0.50	19.50	0.00	0.00	-	0.00	0.50	0.10	19.50	0.00	-	-	-	1.01	DRY	3.03	*	-
		6	17/04/2019	110.54	-	0.00	1.00	20.20	1.00	0.00	-	0.01	1.00	0.00	20.20	0.00	-	-	-	1.01	DRY	3.03	*	-
WS30	MP1	1	15/03/2019	108.67	-	0.00	2.50	19.50	1.00	1.00	-	0.00	0.60	0.00	18.70	0.00	-	-	-	0.99	DRY	4.80	*	-
		2	21/03/2019	108.67	-	0.00	0.50	19.50	1.00	1.00	-	0.00	0.50	0.00	19.50	0.00	-	-	-	1.02	DRY	4.80	*	-
		3	28/03/2019	108.67	-	0.10	0.70	19.50	2.00	1.00	-	0.01	0.70	0.10	19.50	0.00	-	-	-	1.03	DRY	4.80	*	-
		4	03/04/2019	108.67	-	0.00	0.80	18.70	0.00	1.00	-	0.01	0.80	0.00	17.90	0.00	-	-	-	0.99	DRY	4.80	*	-
		5	11/04/2019	108.67	-	0.10	0.40	19.90	0.00	0.00	-	0.00	0.40	0.10	19.90	0.00	-	-	-	1.01	DRY	4.80	*	-
		6	17/04/2019	108.67	-	0.00	0.40	20.80	1.00	1.00	-	0.00	0.40	0.00	20.80	1.00	-	-	-	1.01	DRY	4.80	*	-
WS32	MP1	1	15/03/2019	105.49	-	0.00	0.30	19.00	1.00	0.00	-	0.00	0.10	0.00	19.00	0.00	-	-	-	1.00	DRY	1.56	*	-
		2	21/03/2019	105.49	-	0.00	4.00	19.60	1.00	1.00	-	0.00	0.20	0.00	18.30	0.00	-	-	-	1.02	DRY	1.56	*	-
		3	28/03/2019	105.49	-	0.00	0.20	20.50	2.00	0.00	-	0.00	0.10	0.10	20.50	0.00	-	-	-	1.03	DRY	1.56	*	-
		4	03/04/2019	105.49	-	0.00	0.10	19.80	2.00	1.00	-	0.01	0.10	0.00	19.80	0.00	-	-	-	0.99	DRY	1.56	*	-
		5	11/04/2019	105.49	-	0.10	0.10	20.30	0.00	0.00	-	0.00	0.10	0.10	20.30	0.00	-	-	-	1.01	DRY	1.56	*	-
		6	17/04/2019	105.49	-	0.00	0.10	19.80	1.00	1.00	-	0.01	0.10	0.00	19.80	0.00	-	-	-	1.01	DRY	1.56	*	-
WS34	MP1	1	15/03/2019	111.38	-	0.00	0.80	20.00	1.00	1.00	-	0.00	0.80	0.00	20.00	0.00	-	-	-	0.99	DRY	1.85	*	-
		2	21/03/2019	111.38	-	0.00	0.90	19.60	1.00	0.00	-	0.01	0.90	0.00	19.60	0.00	-	-	-	1.02	DRY	1.87	*	-
		3	28/03/2019	111.38	-	0.10	1.00	19.70	1.00	0.00	-	0.00	1.00	0.10	19.70	1.00	-	-	-	1.02	DRY	1.87	*	-
		4	03/04/2019	111.38	-	0.00	1.10	18.00	0.00	1.00	-	0.00	1.10	0.00	18.00	0.00	-	-	-	0.99	DRY	1.87	*	-
		5	11/04/2019	111.38	-	0.10	0.80	19.20	0.00	0.00	-	0.00	0.80	0.10	19.20	0.00	-	-	-	1.01	DRY	1.85	*	-
		6	17/04/2019	111.38	-	0.00	0.80	21.00	1.00	1.00	-	0.01	0.80	0.00	21.00	1.00	-	-	-	1.01	DRY	1.85	*	-
		1	15/03/2019	110.88	-	0.00	0.60	19.30	1.00	0.00	-	0.00	0.60	0.10	19.30	0.00	-	-	-	0.99	DRY	1.75	*	-
		2	21/03/2019	110.88	-	0.00	1.00	19.50	1.00	0.00	-	0.01	1.00	0.00	19.50	0.00	-	-	-	1.02	DRY	1.75	*	-

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WS37	**MP1**	**3**	**28/03/2019**	110.88	-	0.10	0.50	20.20	1.00	0.00	-	0.01	0.50	0.10	20.20	0.00	-	-	-	1.02	DRY	1.75	*	-
		4	**03/04/2019**	110.88	-	0.00	1.00	18.20	1.00	1.00	-	0.00	1.00	0.00	18.20	0.00	-	-	-	0.99	DRY	1.75	*	-
		5	**11/04/2019**	110.88	-	0.10	0.10	19.70	0.00	0.00	-	0.00	0.10	0.10	19.70	0.00	-	-	-	1.01	DRY	1.75	*	-
		6	**17/04/2019**	110.88	-	0.00	1.00	20.70	1.00	0.00	-	0.00	1.00	0.00	20.70	1.00	-	-	-	1.01	DRY	1.75	*	-
WS40	**MP1**	**1**	**15/03/2019**	103.00	-	0.10	1.50	19.30	12.00	0.00	-	0.00	1.50	0.10	19.30	2.00	-	-	-	1.00	DRY	1.00	*	-
		2	**21/03/2019**	103.00	-	0.10	1.90	17.60	0.00	1.00	-	0.00	1.90	0.10	17.60	0.00	-	-	-	1.02	DRY	1.00	*	-
		3	**28/03/2019**	103.00	-	0.10	1.60	17.90	3.00	1.00	-	0.00	1.60	0.10	17.90	0.00	-	-	-	1.03	DRY	1.00	*	-
		4	**03/04/2019**	103.00	-	0.00	1.80	17.50	1.00	1.00	-	0.01	1.80	0.00	17.50	0.00	-	-	-	0.99	DRY	1.00	*	-
		5	**11/04/2019**	103.00	-	0.10	2.30	17.20	4.00	0.00	-	0.01	2.30	0.10	17.20	0.00	-	-	-	1.01	DRY	1.00	*	-
		6	**17/04/2019**	103.00	-	0.00	1.60	17.80	2.00	0.00	-	0.00	1.60	0.00	17.80	1.00	-	-	-	1.01	DRY	1.00	*	-
WS42	**MP1**	**1**	**15/03/2019**	106.58	-	0.10	0.30	19.30	0.00	1.00	-	0.00	0.20	0.00	19.30	0.00	-	-	-	0.99	DRY	4.15	*	-
		2	**22/03/2019**	106.58	-	0.10	0.40	19.60	1.00	1.00	-	0.01	0.40	0.10	19.60	0.00	-	-	-	1.02	DRY	4.13	*	-
		3	**28/03/2019**	106.58	-	0.10	0.50	19.40	1.00	1.00	-	0.00	0.40	0.10	19.40	0.00	-	-	-	1.03	DRY	4.13	*	-
		4	**03/04/2019**	106.58	-	0.00	0.30	18.50	1.00	1.00	-	0.01	0.30	0.00	18.50	0.00	-	-	-	0.99	DRY	4.13	*	-
		5	**11/04/2019**	106.58	-	0.10	0.20	20.70	0.00	0.00	-	0.01	0.20	0.10	20.70	0.00	-	-	-	1.01	DRY	4.15	*	-
		6	**17/04/2019**	106.58	-	0.00	0.40	18.90	1.00	1.00	-	0.01	0.40	0.00	18.90	0.00	-	-	-	1.01	DRY	4.15	*	-
WS44	**MP1**	**1**	**15/03/2019**	103.33	-	0.00	1.30	18.90	1.00	0.00	-	0.00	1.30	0.00	18.90	0.00	-	-	-	1.00	DRY	2.07	*	-
		2	**22/03/2019**	103.33	-	0.10	1.20	19.50	1.00	0.00	-	0.00	1.20	0.10	19.50	0.00	-	-	-	1.02	DRY	2.05	*	-
		3	**28/03/2019**	103.33	-	0.10	1.30	19.10	1.00	1.00	-	0.01	1.30	0.10	19.10	0.00	-	-	-	1.03	DRY	2.06	*	-
		4	**04/04/2019**	103.33	-	0.00	1.40	19.30	1.00	1.00	-	0.00	1.40	0.00	19.30	0.00	-	-	-	0.99	DRY	2.06	*	-
		5	**11/04/2019**	103.33	-	0.10	1.10	19.80	0.00	1.00	-	0.00	1.10	0.10	19.80	0.00	-	-	-	1.01	DRY	2.07	*	-
		6	**17/04/2019**	103.33	-	0.00	1.10	19.20	1.00	0.00	-	0.00	1.10	0.00	19.20	0.00	-	-	-	1.01	DRY	2.07	*	-
WS47	**MP1**	**1**	**15/03/2019**	101.68	-	0.00	1.20	19.20	1.00	0.00	-	0.00	0.30	0.00	19.00	1.00	-	-	-	1.00	DRY	2.70	*	-
		2	**22/03/2019**	101.68	-	0.10	0.90	19.50	0.00	0.00	-	0.00	0.90	0.10	19.30	0.00	-	-	-	1.02	DRY	2.70	*	-
		3	**28/03/2019**	101.68	-	0.10	0.90	19.40	0.00	1.00	-	0.00	0.90	0.10	19.40	0.00	-	-	-	1.03	DRY	2.70	*	-
		4	**04/04/2019**	101.68	-	0.00	0.90	19.40	0.00	1.00	-	0.00	0.90	0.00	19.40	0.00	-	-	-	0.99	DRY	2.70	*	-
		5	**11/04/2019**	101.68	-	0.10	0.90	20.00	0.00	1.00	-	0.00	0.90	0.10	20.00	0.00	-	-	-	1.01	DRY	2.70	*	-
		6	**17/04/2019**	101.68	-	0.00	0.90	19.40	0.00	0.00	-	0.01	0.90	0.00	19.70	0.00	-	-	-	1.01	DRY	2.70	*	-
WS49	**MP1**	**1**	**15/03/2019**	100.74	-	0.10	0.10	20.80	1.00	0.00	-	0.00	0.10	0.00	20.70	0.00	-	-	-	1.00	DRY	1.30	*	-
		2	**22/03/2019**	100.74	-	0.10	0.90	19.50	0.00	0.00	-	0.00	0.90	0.10	19.50	0.00	-	-	-	1.02	DRY	1.33	*	-
		3	**28/03/2019**	100.74	-	0.00	0.40	19.90	2.00	1.00	-	0.00	0.40	0.00	19.90	0.00	-	-	-	1.03	DRY	1.33	*	-
		4	**04/04/2019**	100.74	-	0.00	0.50	20.00	1.00	1.00	-	0.00	0.50	0.00	20.00	0.00	-	-	-	0.99	DRY	1.33	*	-
		5	**11/04/2019**	100.74	-	0.10	0.50	20.50	0.00	0.00	-	0.00	0.50	0.10	20.50	0.00	-	-	-	1.01	DRY	1.30	*	-
		6	**17/04/2019**	100.74	-	0.00	0.50	19.80	1.00	0.00	-	0.00	0.50	0.00	19.80	0.00	-	-	-	1.01	DRY	1.30	*	-
WS55	**MP1**	**1**	**15/03/2019**	109.09	-	0.10	0.50	20.40	12.00	0.00	-	0.00	0.40	0.00	20.40	0.00	-	-	-	1.00	DRY	5.02	*	-
		2	**22/03/2019**	109.09	-	0.10	0.30	20.10	1.00	1.00	-	0.00	0.30	0.10	20.10	0.00	-	-	-	1.02	DRY	5.00	*	-
		3	**28/03/2019**	109.09	-	0.10	0.20	20.10	0.00	1.00	-	0.01	0.10	0.10	20.10	0.00	-	-	-	1.03	DRY	5.02	*	-
		4	**04/04/2019**	109.09	-	0.00	0.30	19.80	1.00	1.00	-	0.01	0.30	0.00	19.80	0.00	-	-	-	0.99	DRY	5.02	*	-
		5	**11/04/2019**	109.09	-	0.10	0.20	20.70	0.00	1.00	-	0.00	0.20	0.10	20.70	0.00	-	-	-	1.01	DRY	5.02	*	-
		6	**17/04/2019**	109.09	-	0.00	0.40	20.10	1.00	1.00	-	0.00	0.40	0.00	20.10	0.00	-	-	-	1.01	DRY	5.02	*	-

Appendix F – Laboratory Testing Results

Unit 7-8 Hawarden Business Park
Manor Road (off Manor Lane)
Hawarden
Deeside
CH5 3US
Tel: (01244) 528700
Fax: (01244) 528701
email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

WYG Geo-Environment
Arndale Court
Headingley
Leeds
West Yorkshire
LS6 2UJ

Attention: Regulation

CERTIFICATE OF ANALYSIS

Date:	19 December 2018
Customer:	H_WYG_LEE
Sample Delivery Group (SDG):	181204-14
Your Reference:	A090070-474
Location:	HE Compton
Report No:	485869

This report has been revised and directly supersedes 485097 in its entirety.

We received 1 sample on Monday December 03, 2018 and 1 of these samples were scheduled for analysis which was completed on Wednesday December 19, 2018. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Environmental Hawarden (Method codes TM) or ALS Environmental Aberdeen (Method codes S).

Approved By:

Regulation 13

Regulation 13
Operations Manager

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CERTIFICATE OF ANALYSIS

SDG:	181204-14	**Client Reference:**	A090070-474	**Report Number:**	485869
Location:	HE Compton	**Order Number:**	18/COMP016/8116/4016	**Superseded Report:**	485097

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
18874291	GW 1			

Maximum Sample/Coolbox Temperature (°C) : **6.2**

ISO5667-3 Water quality - Sampling - Part3 -
During Transportation samples shall be stored in a cooling device capable of maintaining a temperature of (5±3)°C.

ALS have data which show that a cool box with 4 frozen icepacks is capable of maintaining pre-chilled samples at a temperature of (5±3)°C for a period of up to 24hrs.

Only received samples which have had analysis scheduled will be shown on the following pages.

CERTIFICATE OF ANALYSIS

SDG:	181204-14	**Client Reference:**	A090070-474	**Report Number:**	485869
Location:	HE Compton	**Order Number:**	18/COMP016/8116/4016	**Superseded Report:**	485097

Results Legend

X **Test**

N **No Determination Possible**

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)			18874291
			Customer Sample Reference			GW 1
			AGS Reference			
			Depth (m)			
			Container	1000ml glass bottle (ALE220)	NaOH (ALE245)	Vial (ALE297)
			Sample Type	GW	GW	GW
Ammoniacal Nitrogen	All	NDPs: 0 Tests: 1		X		
Anions by Kone (w)	All	NDPs: 0 Tests: 1		X		
Conductivity (at 20 deg.C)	All	NDPs: 0 Tests: 1		X		
Cyanide Comp/Free/Total/Thiocyanate	All	NDPs: 0 Tests: 1			X	
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 1		X		
EPH CWG (Aliphatic) Aqueous GC (W)	All	NDPs: 0 Tests: 1		X		
EPH CWG (Aromatic) Aqueous GC (W)	All	NDPs: 0 Tests: 1		X		
GRO by GC-FID (W)	All	NDPs: 0 Tests: 1				X
Mercury Dissolved	All	NDPs: 0 Tests: 1		X		
PAH Spec MS - Aqueous (W)	All	NDPs: 0 Tests: 1		X		
PCB Congeners - Aqueous (W)	All	NDPs: 0 Tests: 1		X		
pH Value	All	NDPs: 0 Tests: 1		X		
Phenols by HPLC (W)	All	NDPs: 0 Tests: 1		X		
Phosphate by Kone (w)	All	NDPs: 0 Tests: 1		X		
Sulphide	All	NDPs: 0 Tests: 1		X		

CERTIFICATE OF ANALYSIS

SDG:	181204-14	**Client Reference:**	A090070-474	**Report Number:**	485869
Location:	HE Compton	**Order Number:**	18/COMP016/8116/4016	**Superseded Report:**	485097

Results Legend

X **Test**

N **No Determination Possible**

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
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LE - Land Leachate
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RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	18874291		
			Customer Sample Reference	GW 1		
			AGS Reference			
			Depth (m)			
			Container	1000ml glass bottle (ALE220)	NaOH (ALE245)	Vial (ALE297)
			Sample Type	GW	GW	GW
SVOC MS (W) - Aqueous	All	NDPs: 0 Tests: 1		X		
Total Organic and Inorganic Carbon	All	NDPs: 0 Tests: 1		X		
TPH CWG (W)	All	NDPs: 0 Tests: 1		X		
VOC MS (W)	All	NDPs: 0 Tests: 1				X

Validated

CERTIFICATE OF ANALYSIS

SDG:	181204-14	**Client Reference:**	A090070-474	**Report Number:**	485869
Location:	HE Compton	**Order Number:**	18/COMP016/8116/4016	**Superseded Report:**	485097

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.	GW 1
Depth (m)	.
Sample Type	Ground Water (GW)
Date Sampled	-
Sampled Time	.
Date Received	03/12/2018
SDG Ref	181204-14
Lab Sample No.(s)	18874291
AGS Reference	

Component	LOD/Units	Method	
Organic Carbon, Total	<3 mg/l	TM090	<3 2 § #
Ammoniacal Nitrogen as N	<0.2 mg/l	TM099	<0.2 2 § #
Sulphide	<0.01 mg/l	TM101	<0.01 2 § #
Conductivity @ 20 deg.C	<0.005 mS/cm	TM120	0.555 § #
Arsenic (diss.filt)	<0.5 µg/l	TM152	0.611 2 § #
Boron (diss.filt)	<10 µg/l	TM152	27.7 2 § #
Cadmium (diss.filt)	<0.08 µg/l	TM152	<0.08 2 § #
Chromium (diss.filt)	<1 µg/l	TM152	1.31 2 § #
Copper (diss.filt)	<0.3 µg/l	TM152	10.8 2 § #
Lead (diss.filt)	<0.2 µg/l	TM152	<0.2 2 § #
Nickel (diss.filt)	<0.4 µg/l	TM152	0.711 2 § #
Selenium (diss.filt)	<1 µg/l	TM152	<1 2 § #
Vanadium (diss.filt)	<1 µg/l	TM152	<1 2 § #
Zinc (diss.filt)	<1 µg/l	TM152	19.8 2 § #
Mercury (diss.filt)	<0.01 µg/l	TM183	<0.01 2 § #
Phosphate (Ortho as PO4)	<0.05 mg/l	TM184	<0.05 § #
Sulphate	<2 mg/l	TM184	25.8 § #
Chloride	<2 mg/l	TM184	29.5 § #
Nitrate as NO3	<0.3 mg/l	TM184	53.7 §
PCB congener 28	<0.015 µg/l	TM197	<0.015 §
PCB congener 52	<0.015 µg/l	TM197	<0.015 §
PCB congener 101	<0.015 µg/l	TM197	<0.015 §
PCB congener 118	<0.015 µg/l	TM197	<0.015 §
PCB congener 138	<0.015 µg/l	TM197	<0.015 §
PCB congener 153	<0.015 µg/l	TM197	<0.015 §
PCB congener 180	<0.015 µg/l	TM197	<0.015 §
Sum of detected EC7 PCB's	<0.105 µg/l	TM197	<0.105 §
Cyanide, Total	<0.05 mg/l	TM227	<0.05 § #
pH	<1 pH Units	TM256	7.75 § #
Phenol	<0.002 mg/l	TM259	<0.002 2 § #
Cresols	<0.006 mg/l	TM259	<0.006 2 § #
Xylenols	<0.008 mg/l	TM259	<0.008 2 § #

Validated

CERTIFICATE OF ANALYSIS

SDG:	181204-14	**Client Reference:**	A090070-474	**Report Number:**	485869
Location:	HE Compton	**Order Number:**	18/COMP016/8116/4016	**Superseded Report:**	485097

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.			GW 1
Depth (m)			.
Sample Type			Ground Water (GW)
Date Sampled			-
Sampled Time			.
Date Received			03/12/2018
SDG Ref			181204-14
Lab Sample No.(s)			18874291
AGS Reference			
Component	**LOD/Units**	**Method**	
Phenols, Total Detected monohydric	<0.016 mg/l	TM259	<0.016 2 § #

CERTIFICATE OF ANALYSIS

SDG:	181204-14	**Client Reference:**	A090070-474	**Report Number:**	485869
Location:	HE Compton	**Order Number:**	18/COMP016/8116/4016	**Superseded Report:**	485097

PAH Spec MS - Aqueous (W)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.	GW 1
Depth (m)	.
Sample Type	Ground Water (GW)
Date Sampled	-
Sampled Time	.
Date Received	03/12/2018
SDG Ref	181204-14
Lab Sample No.(s)	18874291
AGS Reference	

Component	LOD/Units	Method	
Naphthalene (aq)	<0.01 µg/l	TM178	<0.01 §
Acenaphthene (aq)	<0.005 µg/l	TM178	<0.005 §
Acenaphthylene (aq)	<0.005 µg/l	TM178	<0.005 §
Fluoranthene (aq)	<0.005 µg/l	TM178	<0.005 §
Anthracene (aq)	<0.005 µg/l	TM178	<0.005 §
Phenanthrene (aq)	<0.005 µg/l	TM178	<0.005 §
Fluorene (aq)	<0.005 µg/l	TM178	<0.005 §
Chrysene (aq)	<0.005 µg/l	TM178	<0.005 §
Pyrene (aq)	<0.005 µg/l	TM178	<0.005 §
Benzo(a)anthracene (aq)	<0.005 µg/l	TM178	<0.005 §
Benzo(b)fluoranthene (aq)	<0.005 µg/l	TM178	<0.005 §
Benzo(k)fluoranthene (aq)	<0.005 µg/l	TM178	<0.005 §
Benzo(a)pyrene (aq)	<0.002 µg/l	TM178	<0.002 §
Dibenzo(a,h)anthracene (aq)	<0.005 µg/l	TM178	<0.005 §
Benzo(g,h,i)perylene (aq)	<0.005 µg/l	TM178	<0.005 §
Indeno(1,2,3-cd)pyrene (aq)	<0.005 µg/l	TM178	<0.005 §
PAH, Total Detected USEPA 16 (aq)	<0.082 µg/l	TM178	<0.082 §

CERTIFICATE OF ANALYSIS

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Location:	HE Compton	**Order Number:**	18/COMP016/8116/4016	**Superseded Report:**	485097

SVOC MS (W) - Aqueous

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.	GW 1
Depth (m)	.
Sample Type	Ground Water (GW)
Date Sampled	-
Sampled Time	.
Date Received	03/12/2018
SDG Ref	181204-14
Lab Sample No.(s)	18874291
AGS Reference	

Component	LOD/Units	Method	
1,2,4-Trichlorobenzene (aq)	<1 µg/l	TM176	<1 § #
1,2-Dichlorobenzene (aq)	<1 µg/l	TM176	<1 § #
1,3-Dichlorobenzene (aq)	<1 µg/l	TM176	<1 § #
1,4-Dichlorobenzene (aq)	<1 µg/l	TM176	<1 § #
2,4,5-Trichlorophenol (aq)	<1 µg/l	TM176	<1 § #
2,4,6-Trichlorophenol (aq)	<1 µg/l	TM176	<1 § #
2,4-Dichlorophenol (aq)	<1 µg/l	TM176	<1 § #
2,4-Dimethylphenol (aq)	<1 µg/l	TM176	<1 § #
2,4-Dinitrotoluene (aq)	<1 µg/l	TM176	<1 § #
2,6-Dinitrotoluene (aq)	<1 µg/l	TM176	<1 § #
2-Chloronaphthalene (aq)	<1 µg/l	TM176	<1 § #
2-Chlorophenol (aq)	<1 µg/l	TM176	<1 § #
2-Methylnaphthalene (aq)	<1 µg/l	TM176	<1 § #
2-Methylphenol (aq)	<1 µg/l	TM176	<1 § #
2-Nitroaniline (aq)	<1 µg/l	TM176	<1 § #
2-Nitrophenol (aq)	<1 µg/l	TM176	<1 § #
3-Nitroaniline (aq)	<1 µg/l	TM176	<1 § #
4-Bromophenylphenylether (aq)	<1 µg/l	TM176	<1 § #
4-Chloro-3-methylphenol (aq)	<1 µg/l	TM176	<1 § #
4-Chloroaniline (aq)	<1 µg/l	TM176	<1 §
4-Chlorophenylphenylether (aq)	<1 µg/l	TM176	<1 § #
4-Methylphenol (aq)	<1 µg/l	TM176	<1 § #
4-Nitroaniline (aq)	<1 µg/l	TM176	<1 § #
4-Nitrophenol (aq)	<1 µg/l	TM176	<1 §
Azobenzene (aq)	<1 µg/l	TM176	<1 § #
bis(2-Chloroethyl)ether (aq)	<1 µg/l	TM176	<1 § #
bis(2-Chloroethoxy)methane (aq)	<1 µg/l	TM176	<1 § #
bis(2-Ethylhexyl) phthalate (aq)	<2 µg/l	TM176	<4 § #
Butylbenzyl phthalate (aq)	<1 µg/l	TM176	<1 § #
Carbazole (aq)	<1 µg/l	TM176	<1 § #
Dibenzofuran (aq)	<1 µg/l	TM176	<1 § #
n-Dibutyl phthalate (aq)	<1 µg/l	TM176	<1 § #

CERTIFICATE OF ANALYSIS

SDG:	181204-14	**Client Reference:**	A090070-474	**Report Number:**	485869
Location:	HE Compton	**Order Number:**	18/COMP016/8116/4016	**Superseded Report:**	485097

SVOC MS (W) - Aqueous

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.	GW 1
Depth (m)	.
Sample Type	Ground Water (GW)
Date Sampled	-
Sampled Time	.
Date Received	03/12/2018
SDG Ref	181204-14
Lab Sample No.(s)	18874291
AGS Reference	

Component	LOD/Units	Method	
Diethyl phthalate (aq)	<1 µg/l	TM176	<1 § #
Dimethyl phthalate (aq)	<1 µg/l	TM176	<1 § #
n-Dioctyl phthalate (aq)	<5 µg/l	TM176	<5 § #
Hexachlorobenzene (aq)	<1 µg/l	TM176	<1 § #
Hexachlorobutadiene (aq)	<1 µg/l	TM176	<1 § #
Pentachlorophenol (aq)	<1 µg/l	TM176	<1 §
Phenol (aq)	<1 µg/l	TM176	<1 §
n-Nitroso-n-dipropylamine (aq)	<1 µg/l	TM176	<1 § #
Hexachloroethane (aq)	<1 µg/l	TM176	<1 § #
Nitrobenzene (aq)	<1 µg/l	TM176	<1 § #
Isophorone (aq)	<1 µg/l	TM176	<1 § #
Hexachlorocyclopentadiene (aq)	<1 µg/l	TM176	<1 §

CERTIFICATE OF ANALYSIS

SDG:	181204-14	**Client Reference:**	A090070-474	**Report Number:**	485869
Location:	HE Compton	**Order Number:**	18/COMP016/8116/4016	**Superseded Report:**	485097

TPH CWG (W)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.	GW 1
Depth (m)	.
Sample Type	Ground Water (GW)
Date Sampled	-
Sampled Time	.
Date Received	03/12/2018
SDG Ref	181204-14
Lab Sample No.(s)	18874291
AGS Reference	

Component	LOD/Units	Method	
GRO Surrogate % recovery**	%	TM245	96 §
GRO >C5-C12	<50 µg/l	TM245	<50 § #
Methyl tertiary butyl ether (MTBE)	<3 µg/l	TM245	<3 §
Benzene	<7 µg/l	TM245	<7 §
Toluene	<4 µg/l	TM245	<4 §
Ethylbenzene	<5 µg/l	TM245	<5 §
m,p-Xylene	<8 µg/l	TM245	<8 §
o-Xylene	<3 µg/l	TM245	<3 §
Sum of detected Xylenes	<11 µg/l	TM245	<11 §
Sum of detected BTEX	<28 µg/l	TM245	<28 §
Aliphatics >C5-C6	<10 µg/l	TM245	<10 §
Aliphatics >C6-C8	<10 µg/l	TM245	<10 §
Aliphatics >C8-C10	<10 µg/l	TM245	<10 §
Aliphatics >C10-C12	<10 µg/l	TM245	<10 §
Aliphatics >C12-C16 (aq)	<10 µg/l	TM174	<10 §
Aliphatics >C16-C21 (aq)	<10 µg/l	TM174	<10 §
Aliphatics >C21-C35 (aq)	<10 µg/l	TM174	<10 §
Total Aliphatics >C12-C35 (aq)	<10 µg/l	TM174	<10 §
Aromatics >EC5-EC7	<10 µg/l	TM245	<10 §
Aromatics >EC7-EC8	<10 µg/l	TM245	<10 §
Aromatics >EC8-EC10	<10 µg/l	TM245	<10 §
Aromatics >EC10-EC12	<10 µg/l	TM245	<10 §
Aromatics >EC12-EC16 (aq)	<10 µg/l	TM174	<10 §
Aromatics >EC16-EC21 (aq)	<10 µg/l	TM174	<10 §
Aromatics >EC21-EC35 (aq)	<10 µg/l	TM174	<10 §
Total Aromatics >EC12-EC35 (aq)	<10 µg/l	TM174	<10 §
Total Aliphatics & Aromatics >C5-35 (aq)	<10 µg/l	TM174	<10 §
Aliphatics >C16-C35 Aqueous	<10 µg/l	TM174	<10 §

CERTIFICATE OF ANALYSIS

SDG:	181204-14	**Client Reference:**	A090070-474	**Report Number:**	485869
Location:	HE Compton	**Order Number:**	18/COMP016/8116/4016	**Superseded Report:**	485097

VOC MS (W)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.	GW 1
Depth (m)	.
Sample Type	Ground Water (GW)
Date Sampled	-
Sampled Time	.
Date Received	03/12/2018
SDG Ref	181204-14
Lab Sample No.(s)	18874291
AGS Reference	

Component	LOD/Units	Method	
Dibromofluoromethane**	%	TM208	118 §
Toluene-d8**	%	TM208	97.3 §
4-Bromofluorobenzene**	%	TM208	102 §
Dichlorodifluoromethane	<1 µg/l	TM208	<1 §
Chloromethane	<1 µg/l	TM208	<1 § #
Vinyl chloride	<1 µg/l	TM208	<1 § #
Bromomethane	<1 µg/l	TM208	<1 § #
Chloroethane	<1 µg/l	TM208	<1 § #
Trichlorofluoromethane	<1 µg/l	TM208	<1 § #
1,1-Dichloroethene	<1 µg/l	TM208	<1 § #
Carbon disulphide	<1 µg/l	TM208	<1 § #
Dichloromethane	<3 µg/l	TM208	<3 § #
Methyl tertiary butyl ether (MTBE)	<1 µg/l	TM208	<1 § #
trans-1,2-Dichloroethene	<1 µg/l	TM208	<1 § #
1,1-Dichloroethane	<1 µg/l	TM208	<1 § #
cis-1,2-Dichloroethene	<1 µg/l	TM208	<1 § #
2,2-Dichloropropane	<1 µg/l	TM208	<1 §
Bromochloromethane	<1 µg/l	TM208	<1 § #
Chloroform	<1 µg/l	TM208	<1 § #
1,1,1-Trichloroethane	<1 µg/l	TM208	<1 § #
1,1-Dichloropropene	<1 µg/l	TM208	<1 § #
Carbontetrachloride	<1 µg/l	TM208	<1 § #
1,2-Dichloroethane	<1 µg/l	TM208	<1 § #
Benzene	<1 µg/l	TM208	<1 § #
Trichloroethene	<1 µg/l	TM208	<1 § #
1,2-Dichloropropane	<1 µg/l	TM208	<1 § #
Dibromomethane	<1 µg/l	TM208	<1 § #
Bromodichloromethane	<1 µg/l	TM208	<1 § #
cis-1,3-Dichloropropene	<1 µg/l	TM208	<1 § #
Toluene	<1 µg/l	TM208	<1 § #
trans-1,3-Dichloropropene	<1 µg/l	TM208	<1 § #
1,1,2-Trichloroethane	<1 µg/l	TM208	<1 § #

CERTIFICATE OF ANALYSIS

SDG:	181204-14	**Client Reference:**	A090070-474	**Report Number:**	485869
Location:	HE Compton	**Order Number:**	18/COMP016/8116/4016	**Superseded Report:**	485097

VOC MS (W)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Customer Sample Ref.	GW 1
Depth (m)	.
Sample Type	Ground Water (GW)
Date Sampled	-
Sampled Time	.
Date Received	03/12/2018
SDG Ref	181204-14
Lab Sample No.(s)	18874291
AGS Reference	

Component	LOD/Units	Method	
1,3-Dichloropropane	<1 µg/l	TM208	<1 § #
Tetrachloroethene	<1 µg/l	TM208	<1 § #
Dibromochloromethane	<1 µg/l	TM208	<1 § #
1,2-Dibromoethane	<1 µg/l	TM208	<1 § #
Chlorobenzene	<1 µg/l	TM208	<1 § #
1,1,1,2-Tetrachloroethane	<1 µg/l	TM208	<1 § #
Ethylbenzene	<1 µg/l	TM208	<1 § #
m,p-Xylene	<1 µg/l	TM208	<1 § #
o-Xylene	<1 µg/l	TM208	<1 § #
Styrene	<1 µg/l	TM208	<1 § #
Bromoform	<1 µg/l	TM208	<1 § #
Isopropylbenzene	<1 µg/l	TM208	<1 § #
1,1,2,2-Tetrachloroethane	<1 µg/l	TM208	<1 § #
1,2,3-Trichloropropane	<1 µg/l	TM208	<1 § #
Bromobenzene	<1 µg/l	TM208	<1 § #
Propylbenzene	<1 µg/l	TM208	<1 § #
2-Chlorotoluene	<1 µg/l	TM208	<1 § #
1,3,5-Trimethylbenzene	<1 µg/l	TM208	<1 § #
4-Chlorotoluene	<1 µg/l	TM208	<1 § #
tert-Butylbenzene	<1 µg/l	TM208	<1 § #
1,2,4-Trimethylbenzene	<1 µg/l	TM208	<1 § #
sec-Butylbenzene	<1 µg/l	TM208	<1 § #
4-iso-Propyltoluene	<1 µg/l	TM208	<1 § #
1,3-Dichlorobenzene	<1 µg/l	TM208	<1 § #
1,4-Dichlorobenzene	<1 µg/l	TM208	<1 § #
n-Butylbenzene	<1 µg/l	TM208	<1 § #
1,2-Dichlorobenzene	<1 µg/l	TM208	<1 § #
1,2-Dibromo-3-chloropropane	<1 µg/l	TM208	<1 §
1,2,4-Trichlorobenzene	<1 µg/l	TM208	<1 § #
Hexachlorobutadiene	<1 µg/l	TM208	<1 § #
tert-Amyl methyl ether (TAME)	<1 µg/l	TM208	<1 § #
Naphthalene	<1 µg/l	TM208	<1 § #

Validated

CERTIFICATE OF ANALYSIS

SDG:	181204-14	**Client Reference:**	A090070-474	**Report Number:**	485869
Location:	HE Compton	**Order Number:**	18/COMP016/8116/4016	**Superseded Report:**	485097

VOC MS (W)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

		Customer Sample Ref.	GW 1
		Depth (m)	.
		Sample Type	Ground Water (GW)
		Date Sampled	-
		Sampled Time	.
		Date Received	03/12/2018
		SDG Ref	181204-14
		Lab Sample No.(s)	18874291
		AGS Reference	
Component	**LOD/Units**	**Method**	
1,2,3-Trichlorobenzene	<1 µg/l	TM208	<1 § #
1,3,5-Trichlorobenzene	<1 µg/l	TM208	<1 §

CERTIFICATE OF ANALYSIS

SDG:	181204-14	**Client Reference:**	A090070-474	**Report Number:**	485869
Location:	HE Compton	**Order Number:**	18/COMP016/8116/4016	**Superseded Report:**	485097

Table of Results - Appendix

Method No	Reference	Description
TM061	Method for the Determination of EPH,Massachusetts Dept.of EP, 1998	Determination of Extractable Petroleum Hydrocarbons by GC-FID (C10-C40)
TM090	Method 5310, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 415.1 & 9060	Determination of Total Organic Carbon/Total Inorganic Carbon in Water and Waste Water
TM099	BS 2690: Part 7:1968 / BS 6068: Part2.11:1984	Determination of Ammonium in Water Samples using the Kone Analyser
TM101	Method 4500B & C, AWWA/APHA, 20th Ed., 1999	Determination of Sulphide in soil and water samples using the Kone Analyser
TM120	Method 2510B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part 9:1970	Determination of Electrical Conductivity using a Conductivity Meter
TM152	Method 3125B, AWWA/APHA, 20th Ed., 1999	Analysis of Aqueous Samples by ICP-MS
TM174	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Determination of Speciated Extractable Petroleum Hydrocarbons in Waters by GC-FID
TM176	EPA 8270D Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of SVOCs in Water by GCMS
TM178	Modified: US EPA Method 8100	Determination of Polynuclear Aromatic Hydrocarbons (PAH) by GC-MS in Waters
TM183	BS EN 23506:2002, (BS 6068-2.74:2002) ISBN 0 580 38924 3	Determination of Trace Level Mercury in Waters and Leachates by PSA Cold Vapour Atomic Fluorescence Spectrometry
TM184	EPA Methods 325.1 & 325.2,	The Determination of Anions in Aqueous Matrices using the Kone Spectrophotometric Analysers
TM197	Modified: US EPA Method 8082.EA Method 174 and 5109631	Determination of WHO12 and EC7 Polychlorinated Biphenyl Congeners by GC-MS in Waters
TM208	Modified: US EPA Method 8260b & 624	Determination of Volatile Organic Compounds by Headspace / GC-MS in Waters
TM227	Standard methods for the examination of waters and wastewaters 20th Edition, AWWA/APHA Method 4500.	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate
TM245	By GC-FID	Determination of GRO by Headspace in waters
TM256	The measurement of Electrical Conductivity and the Laboratory determination of pH Value of Natural, Treated and Wastewaters. HMSO, 1978. ISBN 011 751428 4.	Determination of pH in Water and Leachate using the GLpH pH Meter
TM259	by HPLC	Determination of Phenols in Waters and Leachates by HPLC

NA = not applicable.

Chemical testing (unless subcontracted) performed at ALS Environmental Hawarden (Method codes TM) or ALS Environmental Aberdeen (Method codes S).

CERTIFICATE OF ANALYSIS

SDG:	181204-14	**Client Reference:**	A090070-474	**Report Number:**	485869
Location:	HE Compton	**Order Number:**	18/COMP016/8116/4016	**Superseded Report:**	485097

Test Completion Dates

Lab Sample No(s)	18874291
Customer Sample Ref.	GW 1
AGS Ref.	
Depth	
Type	Ground Water
Ammoniacal Nitrogen	06-Dec-2018
Anions by Kone (w)	11-Dec-2018
Conductivity (at 20 deg.C)	06-Dec-2018
Cyanide Comp/Free/Total/Thiocyanate	06-Dec-2018
Dissolved Metals by ICP-MS	12-Dec-2018
EPH CWG (Aliphatic) Aqueous GC (W)	10-Dec-2018
EPH CWG (Aromatic) Aqueous GC (W)	10-Dec-2018
GRO by GC-FID (W)	13-Dec-2018
Mercury Dissolved	12-Dec-2018
Nitrite by Kone (w)	11-Dec-2018
PAH Spec MS - Aqueous (W)	10-Dec-2018
PCB Congeners - Aqueous (W)	10-Dec-2018
pH Value	07-Dec-2018
Phenols by HPLC (W)	19-Dec-2018
Phosphate by Kone (w)	11-Dec-2018
Sulphide	11-Dec-2018
SVOC MS (W) - Aqueous	11-Dec-2018
Total Organic and Inorganic Carbon	06-Dec-2018
TPH CWG (W)	13-Dec-2018
VOC MS (W)	12-Dec-2018

ASSOCIATED AQC DATA

Ammoniacal Nitrogen

Component	Method Code	QC 1834
Ammoniacal Nitrogen as N	TM099	**99.6** 95.98 : 104.95

Anions by Kone (w)

Component	Method Code	QC 1854
Chloride	TM184	**105.0** 92.93 : 115.43
Phosphate (Ortho as PO4)	TM184	 96.40 : 108.40
Sulphate (soluble)	TM184	**104.0** 90.53 : 113.03
TON as NO3	TM184	**107.0** 96.26 : 111.21

Conductivity (at 20 deg.C)

Component	Method Code	QC 1890
Conductivity (at 20 deg.C)	TM120	**103.01** 100.75 : 105.26

Cyanide Comp/Free/Total/Thiocyanate

Component	Method Code	QC 1805
Free Cyanide (W)	TM227	**99.5** 92.00 : 113.00
Thiocyanate (W)	TM227	**102.75** 95.50 : 107.50
Total Cyanide (W)	TM227	**101.75** 95.50 : 110.50

Dissolved Metals by ICP-MS

Component	Method Code	QC 1886
Aluminium	TM152	**102.67** 94.19 : 114.31
Antimony	TM152	**102.67** 79.80 : 122.00
Arsenic	TM152	**103.17** 90.42 : 111.32
Barium	TM152	**102.5** 90.79 : 113.16
Beryllium	TM152	**104.33** 93.25 : 120.04
Bismuth	TM152	**104.0** 94.65 : 117.05

CERTIFICATE OF ANALYSIS

SDG:	181204-14	**Client Reference:**	A090070-474	**Report Number:**	485869
Location:	HE Compton	**Order Number:**	18/COMP016/8116/4016	**Superseded Report:**	485097

Dissolved Metals by ICP-MS

		QC 1886
Borate	TM152	**104.94** 88.00 : 112.00
Boron	TM152	**104.67** 86.68 : 117.67
Cadmium	TM152	**104.67** 94.60 : 112.40
Calcium	TM152	**108.0** 83.40 : 121.11
Chromium	TM152	**102.5** 93.28 : 110.91
Cobalt	TM152	**103.17** 84.39 : 114.26
Copper	TM152	**104.67** 88.86 : 118.72
Iron	TM152	**102.0** 92.00 : 113.00
Lead	TM152	**103.0** 89.25 : 115.12
Lithium	TM152	**100.5** 89.26 : 119.04
Magnesium	TM152	**104.67** 86.35 : 113.36
Manganese	TM152	**101.33** 94.24 : 112.74
Molybdenum	TM152	**101.5** 87.00 : 108.89
Nickel	TM152	**104.17** 92.11 : 110.56
Phosphorus	TM152	**102.83** 90.52 : 115.47
Potassium	TM152	**104.0** 90.23 : 109.87
Selenium	TM152	**104.5** 88.44 : 113.86
Silver	TM152	**99.67** 87.04 : 107.38
Sodium	TM152	**104.67** 92.68 : 108.68
Strontium	TM152	**102.33** 90.72 : 114.82
Tellurium	TM152	**102.5** 90.72 : 112.62
Thallium	TM152	**101.0** 86.08 : 122.48
Tin	TM152	**102.5** 91.00 : 109.00
Titanium	TM152	**97.33** 91.87 : 102.47
Tungsten	TM152	**102.17** 78.12 : 132.82
Uranium	TM152	**101.33** 90.58 : 113.28

CERTIFICATE OF ANALYSIS

SDG:	181204-14	**Client Reference:**	A090070-474	**Report Number:**	485869
Location:	HE Compton	**Order Number:**	18/COMP016/8116/4016	**Superseded Report:**	485097

Dissolved Metals by ICP-MS

		QC 1886
Vanadium	TM152	**101.33** 88.43 : 114.30
Zinc	TM152	**104.33** 86.52 : 115.27

EPH CWG (Aliphatic) Aqueous GC (W)

Component	Method Code	QC 1856
Total Aliphatics >C10-C40	TM174	**90.1** 61.69 : 124.83

EPH CWG (Aromatic) Aqueous GC (W)

Component	Method Code	QC 1862
Total Aromatics >EC10-EC40	TM174	**87.56** 60.75 : 129.09

GRO by GC-FID (W)

Component	Method Code	QC 1823
Benzene by GC	TM245	**102.5** 78.79 : 124.61
Ethylbenzene by GC	TM245	**102.0** 76.66 : 126.56
m & p Xylene by GC	TM245	**103.5** 76.61 : 126.24
MTBE GC-FID	TM245	**102.0** 79.77 : 125.56
o Xylene by GC	TM245	**102.5** 77.23 : 124.70
QC	TM245	**108.71** 60.71 : 137.65
Toluene by GC	TM245	**103.5** 77.29 : 127.45

Mercury Dissolved

Component	Method Code	QC 1891
Mercury Dissolved (CVAF)	TM183	**105.0** 74.00 : 116.00

PAH Spec MS - Aqueous (W)

CERTIFICATE OF ANALYSIS

SDG:	181204-14	**Client Reference:**	A090070-474	**Report Number:**	485869
Location:	HE Compton	**Order Number:**	18/COMP016/8116/4016	**Superseded Report:**	485097

PAH Spec MS - Aqueous (W)

Component	Method Code	QC 1871
Acenaphthene by GCMS	TM178	**111.2** 101.20 : 115.60
Acenaphthylene by GCMS	TM178	**99.2** 91.66 : 114.36
Anthracene by GCMS	TM178	**104.0** 91.60 : 106.00
Benz(a)anthracene by GCMS	TM178	**104.4** 87.31 : 114.17
Benzo(a)pyrene by GCMS	TM178	**98.4** 92.44 : 115.80
Benzo(b)fluoranthene by GCMS	TM178	**110.4** 88.00 : 114.40
Benzo(ghi)perylene by GCMS	TM178	**101.2** 96.80 : 113.60
Benzo(k)fluoranthene by GCMS	TM178	**109.2** 92.80 : 116.80
Chrysene by GCMS	TM178	**116.0** 97.96 : 116.37
Dibenzo(ah)anthracene by GCMS	TM178	**100.4** 88.00 : 114.40
Fluoranthene by GCMS	TM178	**106.0** 93.49 : 118.20
Fluorene by GCMS	TM178	**110.0** 94.39 : 118.66
Indeno(123cd)pyrene by GCMS	TM178	**103.6** 92.01 : 112.04
Naphthalene by GCMS	TM178	**111.2** 94.57 : 120.07
Phenanthrene by GCMS	TM178	**105.6** 94.00 : 113.20
Pyrene by GCMS	TM178	**110.0** 96.40 : 115.60

PCB Congeners - Aqueous (W)

Component	Method Code	QC 1882
PCB congener 101	TM197	60.09 : 116.40
PCB congener 105	TM197	71.03 : 110.99
PCB congener 114	TM197	72.71 : 110.48
PCB congener 118	TM197	70.89 : 111.75
PCB congener 123	TM197	71.04 : 109.29
PCB congener 126	TM197	57.93 : 119.82
PCB congener 138	TM197	72.39 : 112.98
PCB congener 153	TM197	62.30 : 116.99
PCB congener 156	TM197	65.00 : 101.00

PCB Congeners - Aqueous (W)

		QC 1882
PCB congener 157	TM197	72.58 : 113.35
PCB congener 167	TM197	67.45 : 111.28
PCB congener 169	TM197	64.53 : 118.23
PCB congener 180	TM197	59.13 : 117.99
PCB congener 189	TM197	62.63 : 114.65
PCB congener 28	TM197	60.05 : 117.23
PCB congener 52	TM197	75.58 : 115.87
PCB congener 77	TM197	68.03 : 109.07
PCB congener 81	TM197	71.33 : 115.52

pH Value

Component	Method Code	QC 1825
pH	TM256	**101.48** 99.20 : 102.14

Phenols by HPLC (W)

Component	Method Code	QC 1870
2.3.5 Trimethyl-Phenol by HPLC (W)	TM259	**102.0** 93.10 : 108.70
2-Isopropyl Phenol by HPLC (W)	TM259	**96.0** 92.10 : 114.90
Cresols by HPLC (W)	TM259	**105.0** 91.13 : 108.53
Napthol by HPLC (W)	TM259	**102.0** 87.00 : 111.00
Phenol by HPLC (W)	TM259	**98.0** 93.20 : 107.60
Xylenols by HPLC (W)	TM259	**104.33** 92.83 : 107.73

Phosphate by Kone (w)

Component	Method Code	QC 1856
Phosphate (Ortho as PO4)	TM184	**102.0** 96.40 : 109.60

Sulphide

Sulphide

Component	Method Code	QC 1867
Sulphide	TM101	**100.0** 86.00 : 110.00

SVOC MS (W) - Aqueous

Component	Method Code	QC 1872
4-Bromophenylphenylether	TM176	**92.0** 58.88 : 100.16
Benzo(a)anthracene	TM176	**96.8** 58.56 : 106.08
Benzo(a)pyrene	TM176	**97.6** 55.84 : 106.24
Butylbenzyl phthalate	TM176	**85.6** 45.10 : 118.90
Hexachlorobutadiene	TM176	**80.8** 49.76 : 92.00
Naphthalene	TM176	**102.4** 65.68 : 110.32
Nitrobenzene	TM176	**95.2** 60.56 : 102.80
Phenol	TM176	**59.04** 39.44 : 60.56

Total Organic and Inorganic Carbon

Component	Method Code	QC 1815
Total Organic Carbon	TM090	**102.5** 97.97 : 110.17

VOC MS (W)

Component	Method Code	QC 1885
1,1,1,2-Tetrachloroethane	TM208	**99.0** 81.85 : 113.65
1,1,1-Trichloroethane	TM208	**98.5** 81.48 : 111.75
1,1-Dichloroethane	TM208	**99.5** 79.60 : 118.57
1,2-Dichloroethane	TM208	**105.0** 77.72 : 133.33
2-Chlorotoluene	TM208	**105.5** 84.32 : 115.68
4-Chlorotoluene	TM208	**105.5** 79.46 : 115.88
Benzene	TM208	**102.0** 81.22 : 118.60
Bromomethane	TM208	**84.5** 66.94 : 108.55

VOC MS (W)

		QC 1885
Carbontetrachloride	TM208	**102.0** 82.11 : 114.90
Chlorobenzene	TM208	**102.0** 81.61 : 113.62
Chloroform	TM208	**104.5** 83.01 : 121.64
Chloromethane	TM208	**91.5** 58.04 : 120.53
Cis-1,2-Dichloroethene	TM208	**104.5** 82.23 : 124.89
Dichloromethane	TM208	**100.0** 78.23 : 120.65
Ethylbenzene	TM208	**97.0** 79.55 : 110.51
Hexachlorobutadiene	TM208	**83.5** 67.63 : 111.28
o-Xylene	TM208	**102.0** 79.71 : 111.54
p/m-Xylene	TM208	**102.0** 79.64 : 111.14
Tert-butyl methyl ether	TM208	**95.0** 70.18 : 125.95
Tetrachloroethene	TM208	**99.0** 79.34 : 112.46
Toluene	TM208	**100.5** 79.88 : 116.83
Trichloroethene	TM208	**99.5** 82.30 : 112.45
Vinyl Chloride	TM208	**82.0** 66.89 : 111.22

The above information details the reference name of the analytical quality control sample (AQC) that has been run with the samples contained in this report for the different methods of analysis.
The figure detailed is the percentage recovery result for the AQC.
The subscript numbers below are the percentage recovery lower control limit (LCL) and the upper control limit (UCL). The percentage recovery result for the AQC should be between these limits to be statistically in control.

CERTIFICATE OF ANALYSIS

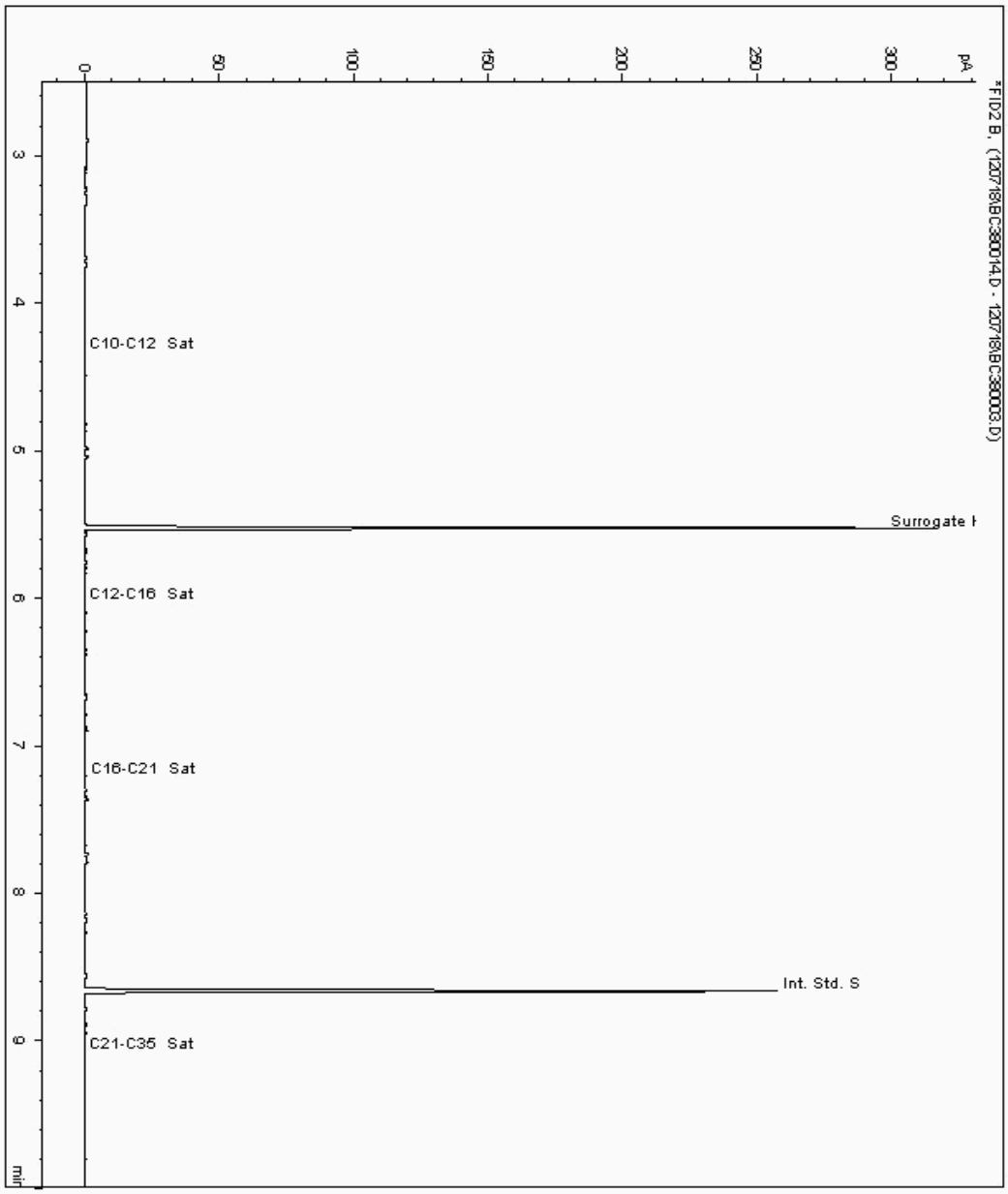
SDG:	181204-14	**Client Reference:**	A090070-474	**Report Number:**	485869
Location:	HE Compton	**Order Number:**	18/COMP016/8116/4016	**Superseded Report:**	485097

Chromatogram

Analysis: EPH CWG (Aliphatic) Aqueous GC (W) **Sample No :** 18879648 **Depth :**
Sample ID : GW 1

Speciated TPH - SATS (C12 - C40)

Sample Identity: 17731995-
Date Acquired : 07/12/18 15:17:09 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

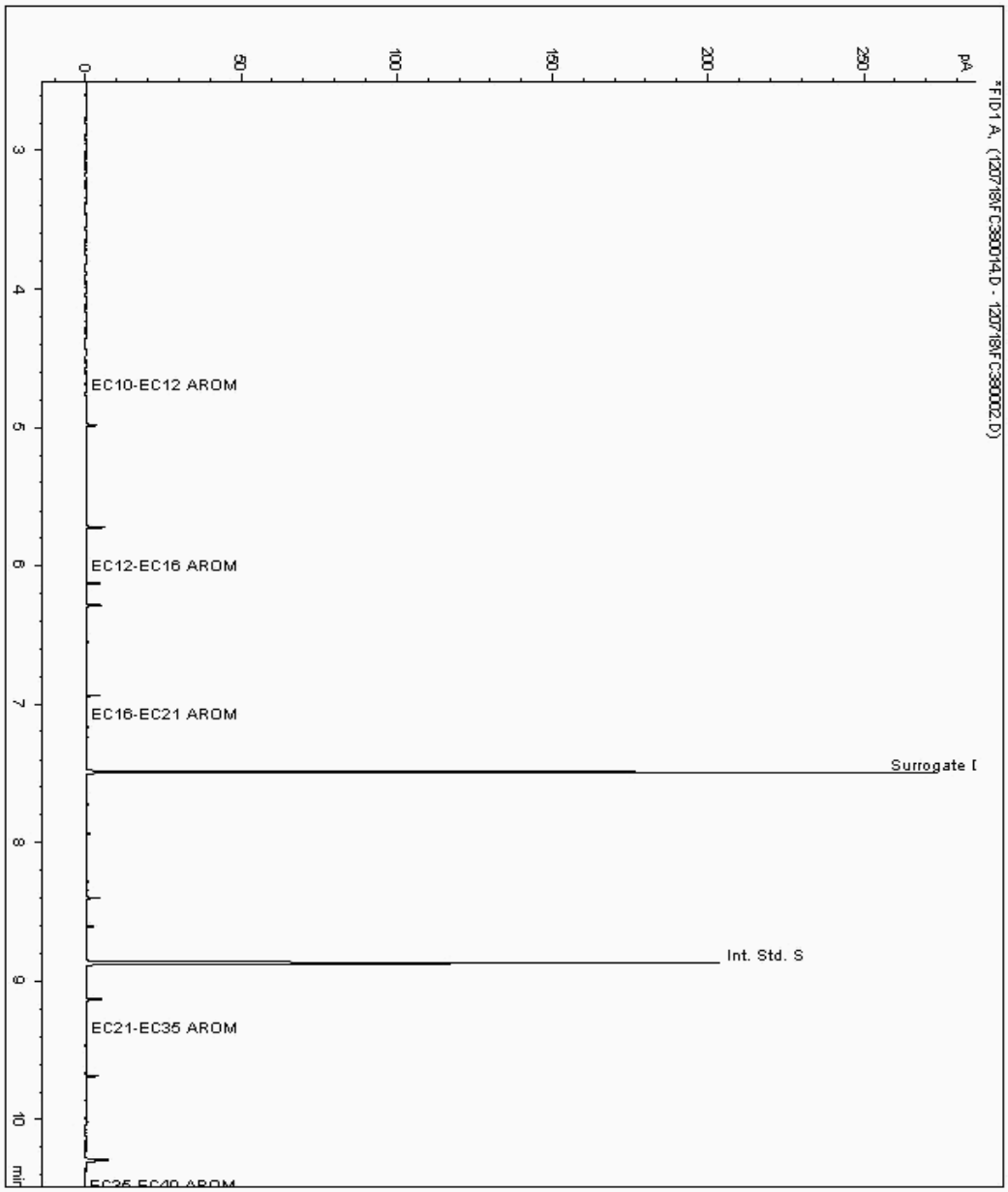
SDG:	181204-14	**Client Reference:**	A090070-474	**Report Number:**	485869
Location:	HE Compton	**Order Number:**	18/COMP016/8116/4016	**Superseded Report:**	485097

Chromatogram

Analysis: EPH CWG (Aromatic) Aqueous GC (W) **Sample No :** 18879648 **Depth :**
Sample ID : GW 1

Speciated TPH - AROM (C12 - C40)

Sample Identity: 17731996-
Date Acquired : 07/12/18 15:17:09 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

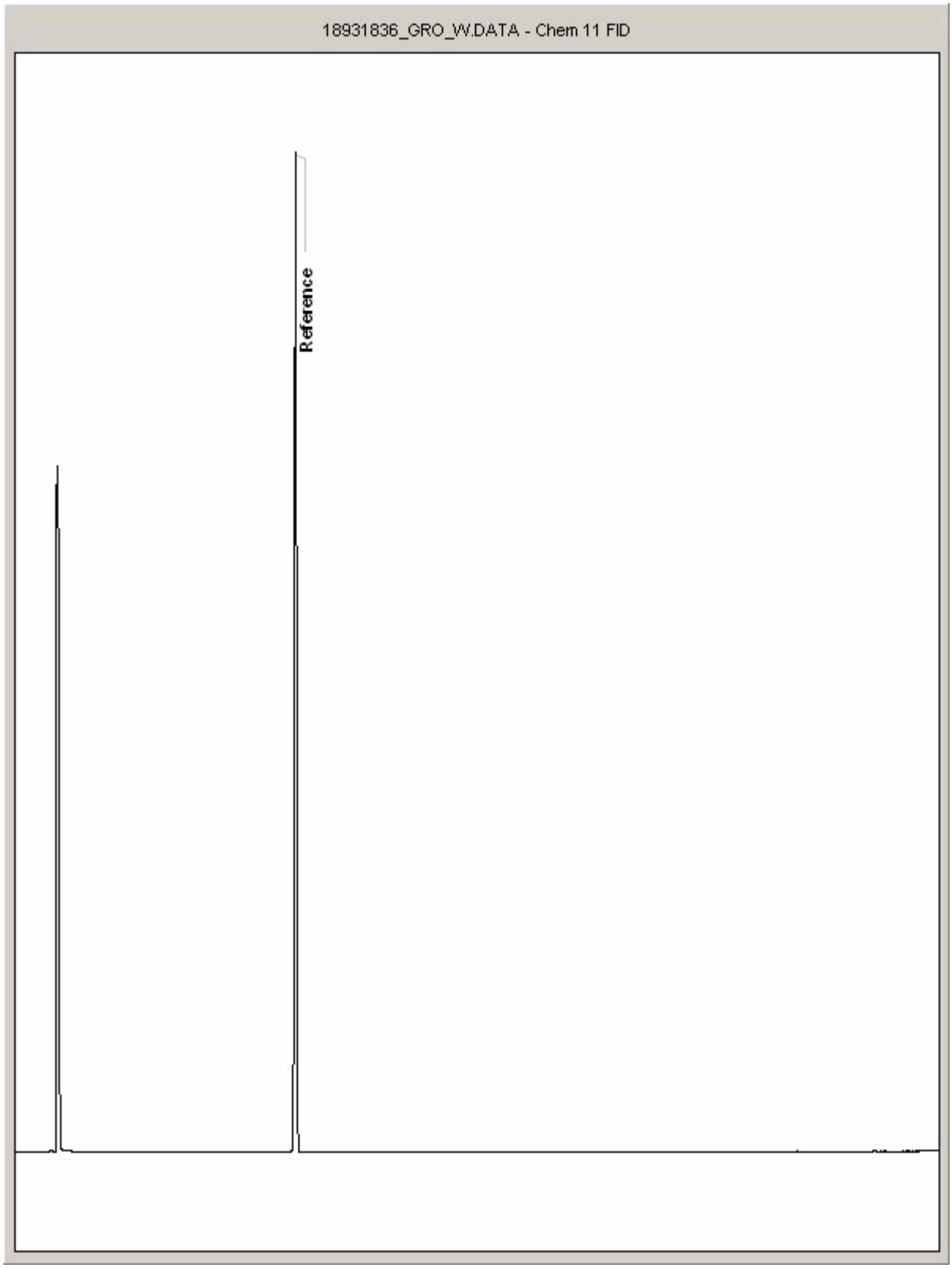
SDG:	181204-14	**Client Reference:**	A090070-474	**Report Number:**	485869
Location:	HE Compton	**Order Number:**	18/COMP016/8116/4016	**Superseded Report:**	485097

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 18931836
Sample ID : GW 1

Depth :



Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. Samples will be run in duplicate upon request, but an additional charge may be incurred.

3. If sufficient sample is received a sub sample will be retained free of charge for 30 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of one month after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

4. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

5. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

6. When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2005), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

7. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised. This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

8. If appropriate preserved bottles are not received preservation will take place on receipt. However, the integrity of the data may be compromised.

9. NDP - No determination possible due to insufficient/unsuitable sample.

10. Metals in water are performed on a filtered sample, and therefore represent dissolved metals - total metals must be requested separately.

11. Results relate only to the items tested.

12. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

13. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

14. **Product analyses** - Organic analyses on products can only be semi-quantitative due to the matrix effects and high dilution factors employed.

15. Phenols monohydric by HPLC include phenol, cresols (2-Methylphenol, 3-Methylphenol and 4-Methylphenol) and Xylenols (2,3 Dimethylphenol, 2,4 Dimethylphenol, 2,5 Dimethylphenol, 2,6 Dimethylphenol, 3,4 Dimethyphenol, 3,5 Dimethylphenol).

16. Total of 5 speciated phenols by HPLC includes Phenol, 2,3,5-Trimethyl Phenol, 2-Isopropylphenol, Cresols and Xylenols (as detailed in 15).

17. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

18. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

19. Mercury results quoted on soils will not include volatile mercury as the analysis is performed on a dried and crushed sample.

20. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

21. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis. The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

22. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

23. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l. Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only. It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

24. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

Sample Deviations

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
4	**Holding time exceeded before sample received**
5	**Samples exceeded holding time before presevation was performed**
§	**Sampled on date not provided**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to sampled on date**
&	**Sample Holding Time exceeded - Late arrival of instructions.**

Asbestos

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.

The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

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Website: www.alsenvironmental.co.uk

WYG Geo-Environment
11th Floor
1 Angel Court
London
Middlesex
EC2R 7HJ

Attention: Regulation

CERTIFICATE OF ANALYSIS

Date of report Generation:	15 April 2019
Customer:	H_WYG_LON
Sample Delivery Group (SDG):	190405-72
Your Reference:	A090070-474
Location:	HE COMPTON
Report No:	501239

We received 4 samples on Thursday April 04, 2019 and 4 of these samples were scheduled for analysis which was completed on Monday April 15, 2019. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Environmental Hawarden (Method codes TM) or ALS Environmental Aberdeen (Method codes S).

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:
Regulation 13

Regulation 13
Operations Manager

ALS Life Sciences Limited. ALS Life Sciences Limited registered Office: Units 7 & 8 Hawarden Business Park, Manor Road, Hawarden, Deeside, CH5 3US. Registered in England and Wales No. 4057291.

CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
19709277	BH01			04/04/2019
19709278	BH02			04/04/2019
19709279	BH03			04/04/2019
19709280	BH04			04/04/2019

Maximum Sample/Coolbox Temperature (°C) : **5.8**

ISO5667-3 Water quality - Sampling - Part3 -
During Transportation samples shall be stored in a cooling device capable of maintaining a temperature of (5±3)°C.

ALS have data which show that a cool box with 4 frozen icepacks is capable of maintaining pre-chilled samples at a temperature of (5±3)°C for a period of up to 24hrs.

Only received samples which have had analysis scheduled will be shown on the following pages.

CERTIFICATE OF ANALYSIS

Validated

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

Lab Sample No(s)								19709277							19709278							19709279				19709280	
Customer Sample Reference								BH01							BH02							BH03				BH04	
AGS Reference																											
Depth (m)																											
Container								1000ml glass bottle (ALE220)	500ml Plastic (ALE208)	H2SO4 (ALE244)	HNO3 Filtered (ALE204)	NaOH (ALE245)	Vial (ALE297)	1000ml glass bottle (ALE220)	500ml Plastic (ALE208)	H2SO4 (ALE244)	HNO3 Filtered (ALE204)	NaOH (ALE245)	Vial (ALE297)	1000ml glass bottle (ALE220)	500ml Plastic (ALE208)	H2SO4 (ALE244)	HNO3 Filtered (ALE204)	NaOH (ALE245)	Vial (ALE297)	1000ml glass bottle (ALE220)	500ml Plastic (ALE208)
Sample Type								GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW
Ammoniacal Nitrogen	All	NDPs: 0 Tests: 4								X						X						X					
Anions by Kone (w)	All	NDPs: 0 Tests: 4							X						X						X						X
Conductivity (at 20 deg.C)	All	NDPs: 0 Tests: 4							X						X						X						X
Cyanide Comp/Free/Total/Thiocyanate	All	NDPs: 0 Tests: 4						X								X						X					
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 4					X									X						X					
EPH CWG (Aliphatic) Aqueous GC (W)	All	NDPs: 0 Tests: 4	X						X					X							X						X	
EPH CWG (Aromatic) Aqueous GC (W)	All	NDPs: 0 Tests: 4	X						X					X							X						X	
Fluoride	All	NDPs: 0 Tests: 4		X						X						X						X						X
GRO by GC-FID (W)	All	NDPs: 0 Tests: 4						X							X						X							
Low Level Phenols by HPLC (W)	All	NDPs: 0 Tests: 4			X						X						X						X					
Mercury Dissolved	All	NDPs: 0 Tests: 4				X						X						X										
PAH Spec MS - Aqueous (W)	All	NDPs: 0 Tests: 4	X						X					X							X						X	
PCB Congeners - Aqueous (W)	All	NDPs: 0 Tests: 4	X						X					X							X						X	
pH Value	All	NDPs: 0 Tests: 4		X						X						X						X						X
Phosphate by Kone (w)	All	NDPs: 0 Tests: 4		X						X						X						X						X

				19709280
				BH04
H2SO4 (ALE244)	HNO3 Filtered (ALE204)	NaOH (ALE245)	Vial (ALE297)	
GW	GW	GW	GW	
X				
		X		
	X			
			X	
X				
	X			

CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	Sample Type
			19709277	BH01			1000ml glass bottle (ALE220)	GW
							500ml Plastic (ALE208)	GW
							H2SO4 (ALE244)	GW
							HNO3 Filtered (ALE204)	GW
							NaOH (ALE245)	GW
							Vial (ALE297)	GW
			19709278	BH02			1000ml glass bottle (ALE220)	GW
							500ml Plastic (ALE208)	GW
							H2SO4 (ALE244)	GW
							HNO3 Filtered (ALE204)	GW
							NaOH (ALE245)	GW
							Vial (ALE297)	GW
			19709279	BH03			1000ml glass bottle (ALE220)	GW
							500ml Plastic (ALE208)	GW
							H2SO4 (ALE244)	GW
							HNO3 Filtered (ALE204)	GW
							NaOH (ALE245)	GW
							Vial (ALE297)	GW
			19709280	BH04			1000ml glass bottle (ALE220)	GW
							500ml Plastic (ALE208)	GW
Sulphide	All	NDPs: 0 Tests: 4		X				X						X						X
SVOC MS (W) - Aqueous	All	NDPs: 0 Tests: 4	X						X						X						X	
Total Organic and Inorganic Carbon	All	NDPs: 0 Tests: 4			X						X						X					
TPH CWG (W)	All	NDPs: 0 Tests: 4	X						X						X						X	
VOC MS (W)	All	NDPs: 0 Tests: 4						X						X						X		

				19709280
				BH04
Vial (ALE297)	NaOH (ALE245)	HNO3 Filtered (ALE204)	H2SO4 (ALE244)	
GW	GW	GW	GW	
			X	
X				

Validated

CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH01	BH02	BH03	BH04		
			Depth (m)	.	.	.	.		
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)		
			Date Sampled	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			Sampled Time	.	.	.	.		
			Date Received	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			SDG Ref	190405-72	190405-72	190405-72	190405-72		
			Lab Sample No.(s)	19709277	19709278	19709279	19709280		
			AGS Reference						
Organic Carbon, Total	<3 mg/l	TM090		<3 #	<3 #	<3 #	<3 #		
Ammoniacal Nitrogen as N	<0.2 mg/l	TM099		0.257 #	<0.2 #	<0.2 #	<0.2 #		
Sulphide	<0.01 mg/l	TM101		<0.01 2 #	0.0332 2 #	<0.01 2 #	<0.01 2 #		
Fluoride	<0.5 mg/l	TM104		<0.5 #	<0.5 #	<0.5 #	<0.5 #		
Conductivity @ 20 deg.C	<0.005 mS/cm	TM120		0.454 #	0.481 #	0.504 #	0.526 #		
Arsenic (diss.filt)	<0.5 µg/l	TM152		0.515 #	<0.5 #	0.794 #	6.76 #		
Boron (diss.filt)	<10 µg/l	TM152		<10 #	<10 #	<10 #	<10 #		
Cadmium (diss.filt)	<0.08 µg/l	TM152		<0.08 #	<0.08 #	<0.08 #	<0.08 #		
Chromium (diss.filt)	<1 µg/l	TM152		11.5 #	10.8 #	11.6 #	10.3 #		
Copper (diss.filt)	<0.3 µg/l	TM152		1.88 #	1.13 #	0.777 #	1.18 #		
Lead (diss.filt)	<0.2 µg/l	TM152		<0.2 #	<0.2 #	0.307 #	<0.2 #		
Nickel (diss.filt)	<0.4 µg/l	TM152		1.04 #	0.61 #	1.05 #	2.51 #		
Selenium (diss.filt)	<1 µg/l	TM152		<1 #	<1 #	<1 #	<1 #		
Vanadium (diss.filt)	<1 µg/l	TM152		<1 #	<1 #	<1 #	<1 #		
Zinc (diss.filt)	<1 µg/l	TM152		4.97 #	1.72 #	4.81 #	3.64 #		
Mercury (diss.filt)	<0.01 µg/l	TM183		<0.01 #	<0.01 #	<0.01 #	<0.01 #		
Phosphate (Ortho as PO4)	<0.05 mg/l	TM184		<0.05 #	<0.05 #	<0.05 #	<0.05 #		
Sulphate	<2 mg/l	TM184		11.9 #	10.1 #	16.3 #	21.8 #		
Chloride	<2 mg/l	TM184		19.1 #	18 #	19.9 #	24.7 #		
Nitrate as NO3	<0.3 mg/l	TM184		42.6	48	52.1	42.5		
PCB congener 28	<0.015 µg/l	TM197		<0.015	<0.015	<0.015	<0.015		
PCB congener 52	<0.015 µg/l	TM197		<0.015	<0.015	<0.015	<0.015		
PCB congener 101	<0.015 µg/l	TM197		<0.015	<0.015	<0.015	<0.015		
PCB congener 118	<0.015 µg/l	TM197		<0.015	<0.015	<0.015	<0.015		
PCB congener 138	<0.015 µg/l	TM197		<0.015	<0.015	<0.015	<0.015		
PCB congener 153	<0.015 µg/l	TM197		<0.015	<0.015	<0.015	<0.015		
PCB congener 180	<0.015 µg/l	TM197		<0.015	<0.015	<0.015	<0.015		
Sum of detected EC7 PCB's	<0.105 µg/l	TM197		<0.105	<0.105	<0.105	<0.105		
Cyanide, Total	<0.05 mg/l	TM227		<0.05 #	<0.05 #	<0.05 #	<0.05 #		
Resorcinol (low level)	<0.5 µg/l	TM255		<0.5	<0.5	<0.5	<0.5		
Catechol (low level)	<0.5 µg/l	TM255		<0.5	<0.5	<0.5	<0.5		
Phenol (low level)	<0.5 µg/l	TM255		<0.5	<0.5	<0.5	<0.5		

Validated

CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH01	BH02	BH03	BH04		
			Depth (m)	-	-	-	-		
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)		
			Date Sampled	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			Sampled Time	-	-	-	-		
			Date Received	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			SDG Ref	190405-72	190405-72	190405-72	190405-72		
			Lab Sample No.(s)	19709277	19709278	19709279	19709280		
			AGS Reference						
Cresols (low level)	<0.5 µg/l	TM255		<0.5	<0.5	<0.5	<0.5		
Xylenols (low level)	<0.5 µg/l	TM255		<0.5	<0.5	<0.5	<0.5		
1-Naphthol (low level)	<0.5 µg/l	TM255		<0.5	<0.5	<0.5	<0.5		
2,3,5-Trimethylphenol (low level)	<0.5 µg/l	TM255		<0.5	<0.5	<0.5	<0.5		
2-Isopropylphenol (low level)	<0.5 µg/l	TM255		<0.5	<0.5	<0.5	<0.5		
pH	<1 pH Units	TM256		7.7 #	7.66 #	7.62 #	7.53 #		

CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

PAH Spec MS - Aqueous (W)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH01	BH02	BH03	BH04		
			Depth (m)	.	.	.	.		
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)		
			Date Sampled	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			Sampled Time	.	.	.	.		
			Date Received	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			SDG Ref	190405-72	190405-72	190405-72	190405-72		
			Lab Sample No.(s)	19709277	19709278	19709279	19709280		
			AGS Reference						
Naphthalene (aq)	<0.01 µg/l	TM178		<0.01 #	<0.01 #	<0.01 #	<0.01 #		
Acenaphthene (aq)	<0.005 µg/l	TM178		<0.005 #	<0.005 #	<0.005 #	<0.005 #		
Acenaphthylene (aq)	<0.005 µg/l	TM178		<0.005 #	<0.005 #	<0.005 #	<0.005 #		
Fluoranthene (aq)	<0.005 µg/l	TM178		0.0104 #	0.00971 #	0.0336 #	0.0136 #		
Anthracene (aq)	<0.005 µg/l	TM178		<0.005 #	<0.005 #	<0.005 #	<0.005 #		
Phenanthrene (aq)	<0.005 µg/l	TM178		<0.005 #	<0.005 #	0.0109 #	<0.005 #		
Fluorene (aq)	<0.005 µg/l	TM178		<0.005 #	<0.005 #	<0.005 #	<0.005 #		
Chrysene (aq)	<0.005 µg/l	TM178		<0.005 #	<0.005 #	0.0161 #	<0.005 #		
Pyrene (aq)	<0.005 µg/l	TM178		0.012 #	0.0155 #	0.0393 #	0.0204 #		
Benzo(a)anthracene (aq)	<0.005 µg/l	TM178		<0.005 #	<0.005 #	0.0132 #	<0.005 #		
Benzo(b)fluoranthene (aq)	<0.005 µg/l	TM178		0.00762 #	0.0118 #	0.0274 #	0.0123 #		
Benzo(k)fluoranthene (aq)	<0.005 µg/l	TM178		<0.005 #	0.00503 #	0.0108 #	0.00577 #		
Benzo(a)pyrene (aq)	<0.002 µg/l	TM178		0.00551 #	0.00835 #	0.0197 #	0.00972 #		
Dibenzo(a,h)anthracene (aq)	<0.005 µg/l	TM178		<0.005 #	<0.005 #	<0.005 #	<0.005 #		
Benzo(g,h,i)perylene (aq)	<0.005 µg/l	TM178		<0.005 #	<0.005 #	<0.005 #	<0.005 #		
Indeno(1,2,3-cd)pyrene (aq)	<0.005 µg/l	TM178		<0.005 #	<0.005 #	0.0117 #	<0.005 #		
PAH, Total Detected USEPA 16 (aq)	<0.082 µg/l	TM178		<0.082 #	<0.082 #	0.183 #	<0.082 #		

CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

SVOC MS (W) - Aqueous

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH01	BH02	BH03	BH04		
			Depth (m)	.	.	.	.		
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)		
			Date Sampled	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			Sampled Time	.	.	.	.		
			Date Received	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			SDG Ref	190405-72	190405-72	190405-72	190405-72		
			Lab Sample No.(s)	19709277	19709278	19709279	19709280		
			AGS Reference						
1,2,4-Trichlorobenzene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
1,2-Dichlorobenzene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
1,3-Dichlorobenzene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
1,4-Dichlorobenzene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
2,4,5-Trichlorophenol (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
2,4,6-Trichlorophenol (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
2,4-Dichlorophenol (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
2,4-Dimethylphenol (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
2,4-Dinitrotoluene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
2,6-Dinitrotoluene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
2-Chloronaphthalene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
2-Chlorophenol (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
2-Methylnaphthalene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
2-Methylphenol (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
2-Nitroaniline (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
2-Nitrophenol (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
3-Nitroaniline (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
4-Bromophenylphenylether (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
4-Chloro-3-methylphenol (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
4-Chloroaniline (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
4-Chlorophenylphenylether (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
4-Methylphenol (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
4-Nitroaniline (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
4-Nitrophenol (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
Azobenzene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
bis(2-Chloroethyl)ether (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
bis(2-Chloroethoxy)methane (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
bis(2-Ethylhexyl) phthalate (aq)	<2 µg/l	TM176		2.93 #	<2 #	3.21 #	<2 #		
Butylbenzyl phthalate (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
Carbazole (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
Dibenzofuran (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
n-Dibutyl phthalate (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		

CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

SVOC MS (W) - Aqueous

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH01	BH02	BH03	BH04		
			Depth (m)	-	-	-	-		
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)		
			Date Sampled	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			Sampled Time	-	-	-	-		
			Date Received	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			SDG Ref	190405-72	190405-72	190405-72	190405-72		
			Lab Sample No.(s)	19709277	19709278	19709279	19709280		
			AGS Reference						
Diethyl phthalate (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
Dimethyl phthalate (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
n-Dioctyl phthalate (aq)	<5 µg/l	TM176		<5 #	<5 #	<5 #	<5 #		
Hexachlorobenzene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
Hexachlorobutadiene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
Pentachlorophenol (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
Phenol (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
n-Nitroso-n-dipropylamine (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
Hexachloroethane (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
Nitrobenzene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
Isophorone (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
Hexachlorocyclopentadiene (aq)	<1 µg/l	TM176		<1	<1	<1	<1		

CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

TPH CWG (W)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH01	BH02	BH03	BH04		
			Depth (m)	.	.	.	.		
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)		
			Date Sampled	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			Sampled Time	.	.	.	.		
			Date Received	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			SDG Ref	190405-72	190405-72	190405-72	190405-72		
			Lab Sample No.(s)	19709277	19709278	19709279	19709280		
			AGS Reference						
GRO Surrogate % recovery**	%	TM245		113	111	109	116 1		
GRO >C5-C12	<50 µg/l	TM245		<50 #	<50 #	<50 #	<50 1 #		
Methyl tertiary butyl ether (MTBE)	<3 µg/l	TM245		<3	<3	<3	<3 1		
Benzene	<7 µg/l	TM245		<7	<7	<7	<7 1		
Toluene	<4 µg/l	TM245		<4	<4	<4	<4 1		
Ethylbenzene	<5 µg/l	TM245		<5	<5	<5	<5 1		
m,p-Xylene	<8 µg/l	TM245		<8	<8	<8	<8 1		
o-Xylene	<3 µg/l	TM245		<3	<3	<3	<3 1		
Sum of detected Xylenes	<11 µg/l	TM245		<11	<11	<11	<11 1		
Sum of detected BTEX	<28 µg/l	TM245		<28	<28	<28	<28 1		
Aliphatics >C5-C6	<10 µg/l	TM245		<10	<10	<10	<10 1		
Aliphatics >C6-C8	<10 µg/l	TM245		<10	<10	<10	<10 1		
Aliphatics >C8-C10	<10 µg/l	TM245		<10	<10	<10	<10 1		
Aliphatics >C10-C12	<10 µg/l	TM245		<10	<10	<10	<10 1		
Aliphatics >C12-C16 (aq)	<10 µg/l	TM174		<10	<10	<10	<10		
Aliphatics >C16-C21 (aq)	<10 µg/l	TM174		<10	<10	15	<10		
Aliphatics >C21-C35 (aq)	<10 µg/l	TM174		39	59	87	38		
Total Aliphatics >C12-C35 (aq)	<10 µg/l	TM174		39	59	102	38		
Aromatics >EC5-EC7	<10 µg/l	TM245		<10	<10	<10	<10 1		
Aromatics >EC7-EC8	<10 µg/l	TM245		<10	<10	<10	<10 1		
Aromatics >EC8-EC10	<10 µg/l	TM245		<10	<10	<10	<10 1		
Aromatics >EC10-EC12	<10 µg/l	TM245		<10	<10	<10	<10 1		
Aromatics >EC12-EC16 (aq)	<10 µg/l	TM174		<10	<10	<10	<10		
Aromatics >EC16-EC21 (aq)	<10 µg/l	TM174		<10	<10	<10	<10		
Aromatics >EC21-EC35 (aq)	<10 µg/l	TM174		<10	<10	34	12		
Total Aromatics >EC12-EC35 (aq)	<10 µg/l	TM174		<10	<10	34	12		
Total Aliphatics & Aromatics >C5-35 (aq)	<10 µg/l	TM174		39	59	136	50		
Aliphatics >C16-C35 Aqueous	<10 µg/l	TM174		39	59	102	38		

CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

VOC MS (W)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH01	BH02	BH03	BH04		
			Depth (m)	.	.	.	.		
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)		
			Date Sampled	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			Sampled Time	.	.	.	.		
			Date Received	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			SDG Ref	190405-72	190405-72	190405-72	190405-72		
			Lab Sample No.(s)	19709277	19709278	19709279	19709280		
			AGS Reference						
Dibromofluoromethane**	%	TM208		111	109	108	109		
Toluene-d8**	%	TM208		99.3	99.1	99.4	100		
4-Bromofluorobenzene**	%	TM208		97.8	100	99.8	99.9		
Dichlorodifluoromethane	<1 µg/l	TM208		<1	<1	<1	<1		
Chloromethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Vinyl chloride	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Bromomethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Chloroethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Trichlorofluoromethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,1-Dichloroethene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Carbon disulphide	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Dichloromethane	<3 µg/l	TM208		<3 #	<3 #	<3 #	<3 #		
Methyl tertiary butyl ether (MTBE)	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
trans-1,2-Dichloroethene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,1-Dichloroethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
cis-1,2-Dichloroethene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
2,2-Dichloropropane	<1 µg/l	TM208		<1	<1	<1	<1		
Bromochloromethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Chloroform	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,1,1-Trichloroethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,1-Dichloropropene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Carbontetrachloride	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,2-Dichloroethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Benzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Trichloroethene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,2-Dichloropropane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Dibromomethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Bromodichloromethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
cis-1,3-Dichloropropene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Toluene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
trans-1,3-Dichloropropene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,1,2-Trichloroethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		

CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

VOC MS (W)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH01	BH02	BH03	BH04		
			Depth (m)	-	-	-	-		
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)		
			Date Sampled	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			Sampled Time	-	-	-	-		
			Date Received	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			SDG Ref	190405-72	190405-72	190405-72	190405-72		
			Lab Sample No.(s)	19709277	19709278	19709279	19709280		
			AGS Reference						
1,3-Dichloropropane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Tetrachloroethene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Dibromochloromethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,2-Dibromoethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Chlorobenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,1,1,2-Tetrachloroethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Ethylbenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
m,p-Xylene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
o-Xylene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Styrene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Bromoform	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Isopropylbenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,1,2,2-Tetrachloroethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,2,3-Trichloropropane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Bromobenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Propylbenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
2-Chlorotoluene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,3,5-Trimethylbenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
4-Chlorotoluene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
tert-Butylbenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,2,4-Trimethylbenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
sec-Butylbenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
4-iso-Propyltoluene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,3-Dichlorobenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,4-Dichlorobenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
n-Butylbenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,2-Dichlorobenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,2-Dibromo-3-chloropropane	<1 µg/l	TM208		<1	<1	<1	<1		
1,2,4-Trichlorobenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Hexachlorobutadiene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
tert-Amyl methyl ether (TAME)	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Naphthalene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		

Validated

CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

VOC MS (W)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH01	BH02	BH03	BH04		
			Depth (m)	.	.	.	.		
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)		
			Date Sampled	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			Sampled Time	.	.	.	.		
			Date Received	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			SDG Ref	190405-72	190405-72	190405-72	190405-72		
			Lab Sample No.(s)	19709277	19709278	19709279	19709280		
			AGS Reference						
1,2,3-Trichlorobenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,3,5-Trichlorobenzene	<1 µg/l	TM208		<1	<1	<1	<1		
Sum of detected Xylenes	<2 µg/l	TM208		<2	<2	<2	<2		

CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Table of Results - Appendix

Method No	Reference	Description
TM061	Method for the Determination of EPH,Massachusetts Dept.of EP, 1998	Determination of Extractable Petroleum Hydrocarbons by GC-FID (C10-C40)
TM090	Method 5310, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 415.1 & 9060	Determination of Total Organic Carbon/Total Inorganic Carbon in Water and Waste Water
TM099	BS 2690: Part 7:1968 / BS 6068: Part2.11:1984	Determination of Ammonium in Water Samples using the Kone Analyser
TM101	Method 4500B & C, AWWA/APHA, 20th Ed., 1999	Determination of Sulphide in soil and water samples using the Kone Analyser
TM104	Method 4500F, AWWA/APHA, 20th Ed., 1999	Determination of Fluoride using the Kone Analyser
TM120	Method 2510B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part 9:1970	Determination of Electrical Conductivity using a Conductivity Meter
TM152	Method 3125B, AWWA/APHA, 20th Ed., 1999	Analysis of Aqueous Samples by ICP-MS
TM174	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Determination of Speciated Extractable Petroleum Hydrocarbons in Waters by GC-FID
TM176	EPA 8270D Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of SVOCs in Water by GCMS
TM178	Modified: US EPA Method 8100	Determination of Polynuclear Aromatic Hydrocarbons (PAH) by GC-MS in Waters
TM183	BS EN 23506:2002, (BS 6068-2.74:2002) ISBN 0 580 38924 3	Determination of Trace Level Mercury in Waters and Leachates by PSA Cold Vapour Atomic Fluorescence Spectrometry
TM184	EPA Methods 325.1 & 325.2,	The Determination of Anions in Aqueous Matrices using the Kone Spectrophotometric Analysers
TM197	Modified: US EPA Method 8082.EA Method 174 and 5109631	Determination of WHO12 and EC7 Polychlorinated Biphenyl Congeners by GC-MS in Waters
TM208	Modified: US EPA Method 8260b & 624	Determination of Volatile Organic Compounds by Headspace / GC-MS in Waters
TM227	Standard methods for the examination of waters and wastewaters 20th Edition, AWWA/APHA Method 4500.	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate
TM245	By GC-FID	Determination of GRO by Headspace in waters
TM255		Determination of Low Level Phenols in Waters and Leachates by HPLC
TM256	The measurement of Electrical Conductivity and the Laboratory determination of pH Value of Natural, Treated and Wastewaters. HMSO, 1978. ISBN 011 751428 4.	Determination of pH in Water and Leachate using the GLpH pH Meter

NA = not applicable.

Chemical testing (unless subcontracted) performed at ALS Environmental Hawarden (Method codes TM) or ALS Environmental Aberdeen (Method codes S).

CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	19709277	19709278	19709279	19709280
Customer Sample Ref.	BH01	BH02	BH03	BH04
AGS Ref.				
Depth				
Type	Ground Water	Ground Water	Ground Water	Ground Water
Ammoniacal Nitrogen	08-Apr-2019	08-Apr-2019	08-Apr-2019	08-Apr-2019
Anions by Kone (w)	12-Apr-2019	11-Apr-2019	12-Apr-2019	12-Apr-2019
Conductivity (at 20 deg.C)	09-Apr-2019	10-Apr-2019	10-Apr-2019	10-Apr-2019
Cyanide Comp/Free/Total/Thiocyanate	10-Apr-2019	10-Apr-2019	10-Apr-2019	10-Apr-2019
Dissolved Metals by ICP-MS	12-Apr-2019	12-Apr-2019	12-Apr-2019	12-Apr-2019
EPH CWG (Aliphatic) Aqueous GC (W)	12-Apr-2019	12-Apr-2019	12-Apr-2019	12-Apr-2019
EPH CWG (Aromatic) Aqueous GC (W)	12-Apr-2019	12-Apr-2019	12-Apr-2019	12-Apr-2019
Fluoride	09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019
GRO by GC-FID (W)	12-Apr-2019	12-Apr-2019	12-Apr-2019	12-Apr-2019
Low Level Phenols by HPLC (W)	15-Apr-2019	15-Apr-2019	15-Apr-2019	15-Apr-2019
Mercury Dissolved	11-Apr-2019	10-Apr-2019	10-Apr-2019	10-Apr-2019
Nitrite by Kone (w)	09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019
PAH Spec MS - Aqueous (W)	11-Apr-2019	11-Apr-2019	11-Apr-2019	11-Apr-2019
PCB Congeners - Aqueous (W)	12-Apr-2019	12-Apr-2019	12-Apr-2019	12-Apr-2019
pH Value	10-Apr-2019	11-Apr-2019	10-Apr-2019	10-Apr-2019
Phosphate by Kone (w)	09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019
Sulphide	10-Apr-2019	10-Apr-2019	10-Apr-2019	10-Apr-2019
SVOC MS (W) - Aqueous	11-Apr-2019	11-Apr-2019	11-Apr-2019	11-Apr-2019
Total Organic and Inorganic Carbon	12-Apr-2019	10-Apr-2019	12-Apr-2019	10-Apr-2019
TPH CWG (W)	12-Apr-2019	12-Apr-2019	12-Apr-2019	12-Apr-2019
VOC MS (W)	11-Apr-2019	11-Apr-2019	11-Apr-2019	11-Apr-2019

ASSOCIATED AQC DATA

Ammoniacal Nitrogen

Component	Method Code	QC 1987
Ammoniacal Nitrogen as N	TM099	**101.6** 93.14 : 108.60

Anions by Kone (w)

Component	Method Code	QC 1990	QC 1939	QC 1939
Chloride	TM184	**100.0** 94.04 : 108.61	**106.0** 92.93 : 115.43	**107.0** 92.93 : 115.43
Phosphate (Ortho as PO4)	TM184	 95.74 : 105.80	 96.40 : 108.40	 96.40 : 108.40
Sulphate (soluble)	TM184	**101.2** 96.38 : 107.58	**99.6** 90.53 : 113.03	**101.2** 90.53 : 113.03
TON as NO3	TM184	**104.0** 92.98 : 109.90	**104.5** 96.26 : 111.21	**104.5** 96.26 : 111.21

Conductivity (at 20 deg.C)

Component	Method Code	QC 1906	QC 1923
Conductivity (at 20 deg.C)	TM120	**103.76** 100.75 : 105.26	**103.76** 100.75 : 105.26

Cyanide Comp/Free/Total/Thiocyanate

Component	Method Code	QC 1950	QC 1971
Free Cyanide (W)	TM227	**98.25** 93.25 : 112.75	**101.0** 93.25 : 112.75
Thiocyanate (W)	TM227	**104.5** 96.25 : 111.25	**105.25** 96.25 : 111.25
Total Cyanide (W)	TM227	**99.5** 92.25 : 111.75	**101.0** 92.25 : 111.75

Dissolved Metals by ICP-MS

Component	Method Code	QC 1913
Aluminium	TM152	**101.0** 94.19 : 114.31
Antimony	TM152	**107.33** 79.80 : 122.00
Arsenic	TM152	**102.33** 90.42 : 111.32
Barium	TM152	**104.5** 90.79 : 113.16
Beryllium	TM152	**100.17** 93.25 : 120.04
Bismuth	TM152	**106.17** 94.65 : 117.05

CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Dissolved Metals by ICP-MS

		QC 1913
Borate	TM152	**101.23** 88.00 : 112.00
Boron	TM152	**101.33** 86.68 : 117.67
Cadmium	TM152	**105.0** 94.60 : 112.40
Calcium	TM152	**103.33** 83.40 : 121.11
Chromium	TM152	**101.83** 93.28 : 110.91
Cobalt	TM152	**101.67** 84.39 : 114.26
Copper	TM152	**103.0** 88.86 : 118.72
Iron	TM152	**101.33** 92.00 : 113.00
Lead	TM152	**105.17** 89.25 : 115.12
Lithium	TM152	**101.33** 89.26 : 119.04
Magnesium	TM152	**101.33** 86.35 : 113.36
Manganese	TM152	**101.33** 94.24 : 112.74
Molybdenum	TM152	**97.17** 87.00 : 108.89
Nickel	TM152	**101.0** 92.11 : 110.56
Phosphorus	TM152	**101.17** 90.52 : 115.47
Potassium	TM152	**103.33** 98.63 : 110.48
Selenium	TM152	**104.0** 88.44 : 113.86
Silver	TM152	**105.17** 94.40 : 114.74
Sodium	TM152	**101.33** 97.63 : 110.31
Strontium	TM152	**104.33** 90.72 : 114.82
Tellurium	TM152	**100.17** 90.72 : 112.62
Thallium	TM152	**108.17** 86.08 : 122.48
Tin	TM152	**105.83** 91.00 : 109.00
Titanium	TM152	**95.17** 91.87 : 102.47
Tungsten	TM152	**103.17** 78.12 : 132.82
Uranium	TM152	**101.67** 90.58 : 113.28

Dissolved Metals by ICP-MS

		QC 1913
Vanadium	TM152	**102.33** 88.43 : 114.30
Zinc	TM152	**102.67** 86.52 : 115.27

EPH CWG (Aliphatic) Aqueous GC (W)

Component	Method Code	QC 1921
Total Aliphatics >C10-C40	TM174	**86.47** 68.59 : 134.82

EPH CWG (Aromatic) Aqueous GC (W)

Component	Method Code	QC 1962
Total Aromatics >EC10-EC40	TM174	**88.05** 60.75 : 129.09

Fluoride

Component	Method Code	QC 1911	QC 1932
Fluoride	TM104	**98.0** 93.20 : 104.48	**98.0** 93.20 : 104.48

GRO by GC-FID (W)

Component	Method Code	QC 1952
Benzene by GC	TM245	**103.5** 81.54 : 119.70
Ethylbenzene by GC	TM245	**103.0** 80.99 : 121.09
m & p Xylene by GC	TM245	**101.5** 82.77 : 123.19
MTBE GC-FID	TM245	**103.0** 80.06 : 123.27
o Xylene by GC	TM245	**102.5** 84.26 : 121.50
QC	TM245	**107.34** 76.13 : 145.89
Toluene by GC	TM245	**102.0** 82.78 : 121.99

Mercury Dissolved

Mercury Dissolved

Component	Method Code	QC 1990	QC 1990
Mercury Dissolved (CVAF)	TM183	**95.5** 75.00 : 111.00	**90.9** 75.00 : 111.00

PAH Spec MS - Aqueous (W)

Component	Method Code	QC 1902
Acenaphthene by GCMS	TM178	**104.8** 100.00 : 119.20
Acenaphthylene by GCMS	TM178	**102.0** 95.20 : 119.20
Anthracene by GCMS	TM178	**107.2** 91.60 : 113.20
Benz(a)anthracene by GCMS	TM178	**104.0** 90.40 : 119.20
Benzo(a)pyrene by GCMS	TM178	**110.8** 92.80 : 119.20
Benzo(b)fluoranthene by GCMS	TM178	**112.4** 89.60 : 120.80
Benzo(ghi)perylene by GCMS	TM178	**101.2** 93.20 : 117.20
Benzo(k)fluoranthene by GCMS	TM178	**112.4** 96.40 : 120.40
Chrysene by GCMS	TM178	**106.8** 96.40 : 125.20
Dibenzo(ah)anthracene by GCMS	TM178	**96.4** 92.00 : 113.60
Fluoranthene by GCMS	TM178	**106.0** 91.20 : 117.60
Fluorene by GCMS	TM178	**109.2** 95.60 : 122.00
Indeno(123cd)pyrene by GCMS	TM178	**103.6** 90.40 : 112.00
Naphthalene by GCMS	TM178	**110.0** 98.00 : 122.00
Phenanthrene by GCMS	TM178	**107.2** 94.00 : 120.40
Pyrene by GCMS	TM178	**109.2** 92.40 : 118.80

PCB Congeners - Aqueous (W)

Component	Method Code	QC 1992
PCB congener 101	TM197	**104.4** 85.28 : 119.60
PCB congener 105	TM197	**106.8** 81.16 : 119.80
PCB congener 114	TM197	**104.8** 88.32 : 118.08
PCB congener 118	TM197	**106.8** 87.76 : 117.04

PCB Congeners - Aqueous (W)

		QC 1992
PCB congener 123	TM197	**108.0** 86.80 : 117.28
PCB congener 126	TM197	**106.0** 84.56 : 116.00
PCB congener 138	TM197	**107.2** 83.00 : 117.80
PCB congener 153	TM197	**106.4** 84.12 : 117.00
PCB congener 156	TM197	**107.6** 82.24 : 119.20
PCB congener 157	TM197	**108.8** 84.96 : 116.40
PCB congener 167	TM197	**107.2** 81.64 : 119.32
PCB congener 169	TM197	**109.2** 84.60 : 117.96
PCB congener 180	TM197	**107.2** 80.40 : 119.04
PCB congener 189	TM197	**106.4** 81.56 : 119.00
PCB congener 28	TM197	**102.0** 83.20 : 117.04
PCB congener 52	TM197	**103.6** 81.84 : 119.52
PCB congener 77	TM197	**104.0** 81.96 : 117.24
PCB congener 81	TM197	**103.2** 82.28 : 120.20

pH Value

Component	Method Code	QC 1944	QC 1999	QC 1980	QC 1985
pH	TM256	**101.62** 99.73 : 102.16	**100.67** 99.33 : 102.56	**101.35** 99.73 : 102.16	**101.62** 99.73 : 102.16

Phosphate by Kone (w)

Component	Method Code	QC 1967	QC 1997	QC 1909
Phosphate (Ortho as PO4)	TM184	**102.8** 96.40 : 109.60	**104.0** 96.40 : 109.60	**103.6** 96.40 : 109.60

Sulphide

Sulphide

Component	Method Code	QC 1987	QC 1907	QC 1917
Sulphide	TM101	**103.33** 88.90 : 112.50	**103.33** 88.90 : 112.50	**106.0** 88.90 : 112.50

SVOC MS (W) - Aqueous

Component	Method Code	QC 1972
4-Bromophenylphenylether	TM176	**69.76** 55.76 : 105.20
Benzo(a)anthracene	TM176	**66.16** 59.28 : 107.76
Benzo(a)pyrene	TM176	**66.32** 54.40 : 105.76
Butylbenzyl phthalate	TM176	**65.44** 49.84 : 109.84
Hexachlorobutadiene	TM176	**70.4** 48.64 : 95.68
Naphthalene	TM176	**72.08** 63.04 : 111.04
Nitrobenzene	TM176	**78.32** 59.92 : 108.40
Phenol	TM176	**43.68** 38.16 : 63.60

Total Organic and Inorganic Carbon

Component	Method Code	QC 1913	QC 1944	QC 1963
Total Organic Carbon	TM090	**105.67** 97.97 : 110.17	**107.33** 97.97 : 110.17	**107.17** 97.97 : 110.17

VOC MS (W)

Component	Method Code	QC 1937	QC 1919
1,1,1,2-Tetrachloroethane	TM208	**97.0** 78.82 : 115.90	**96.5** 81.85 : 113.65
1,1,1-Trichloroethane	TM208	**95.5** 79.61 : 114.35	**96.5** 81.48 : 111.75
1,1-Dichloroethane	TM208	**93.5** 79.99 : 118.57	**95.0** 79.60 : 118.57
1,2-Dichloroethane	TM208	**92.5** 79.35 : 124.02	**95.5** 77.72 : 133.33
2-Chlorotoluene	TM208	**99.5** 79.67 : 114.74	**97.0** 82.89 : 116.61
4-Chlorotoluene	TM208	**99.5** 80.15 : 113.42	**98.0** 79.46 : 115.88
Benzene	TM208	**96.5** 84.37 : 119.68	**98.0** 81.22 : 118.60
Bromomethane	TM208	**89.0** 68.41 : 115.99	**91.0** 68.25 : 113.64

VOC MS (W)

		QC 1937	QC 1919
Carbontetrachloride	TM208	**91.0** 79.73 : 118.91	**98.5** 86.16 : 119.10
Chlorobenzene	TM208	**98.5** 89.49 : 115.83	**102.5** 87.25 : 116.65
Chloroform	TM208	**96.0** 82.31 : 120.71	**98.5** 83.01 : 121.64
Chloromethane	TM208	**94.0** 62.46 : 124.98	**95.0** 65.28 : 130.05
Cis-1,2-Dichloroethene	TM208	**95.0** 84.04 : 126.19	**95.0** 82.23 : 124.89
Dichloromethane	TM208	**95.0** 81.20 : 120.83	**98.5** 78.23 : 120.65
Ethylbenzene	TM208	**91.5** 80.54 : 112.31	**92.5** 79.55 : 110.51
Hexachlorobutadiene	TM208	**102.0** 59.76 : 107.25	**86.0** 67.63 : 111.28
o-Xylene	TM208	**98.0** 79.22 : 112.31	**98.5** 90.42 : 112.27
p/m-Xylene	TM208	**93.5** 79.85 : 111.06	**96.5** 84.45 : 113.50
Tert-butyl methyl ether	TM208	**92.0** 70.94 : 119.66	**87.5** 70.18 : 125.95
Tetrachloroethene	TM208	**94.5** 87.13 : 116.26	**93.5** 80.43 : 115.53
Toluene	TM208	**93.5** 81.59 : 111.56	**94.0** 79.88 : 116.83
Trichloroethene	TM208	**96.0** 79.53 : 112.32	**94.5** 82.30 : 112.45
Vinyl Chloride	TM208	**85.0** 68.68 : 119.35	**85.5** 66.89 : 111.22

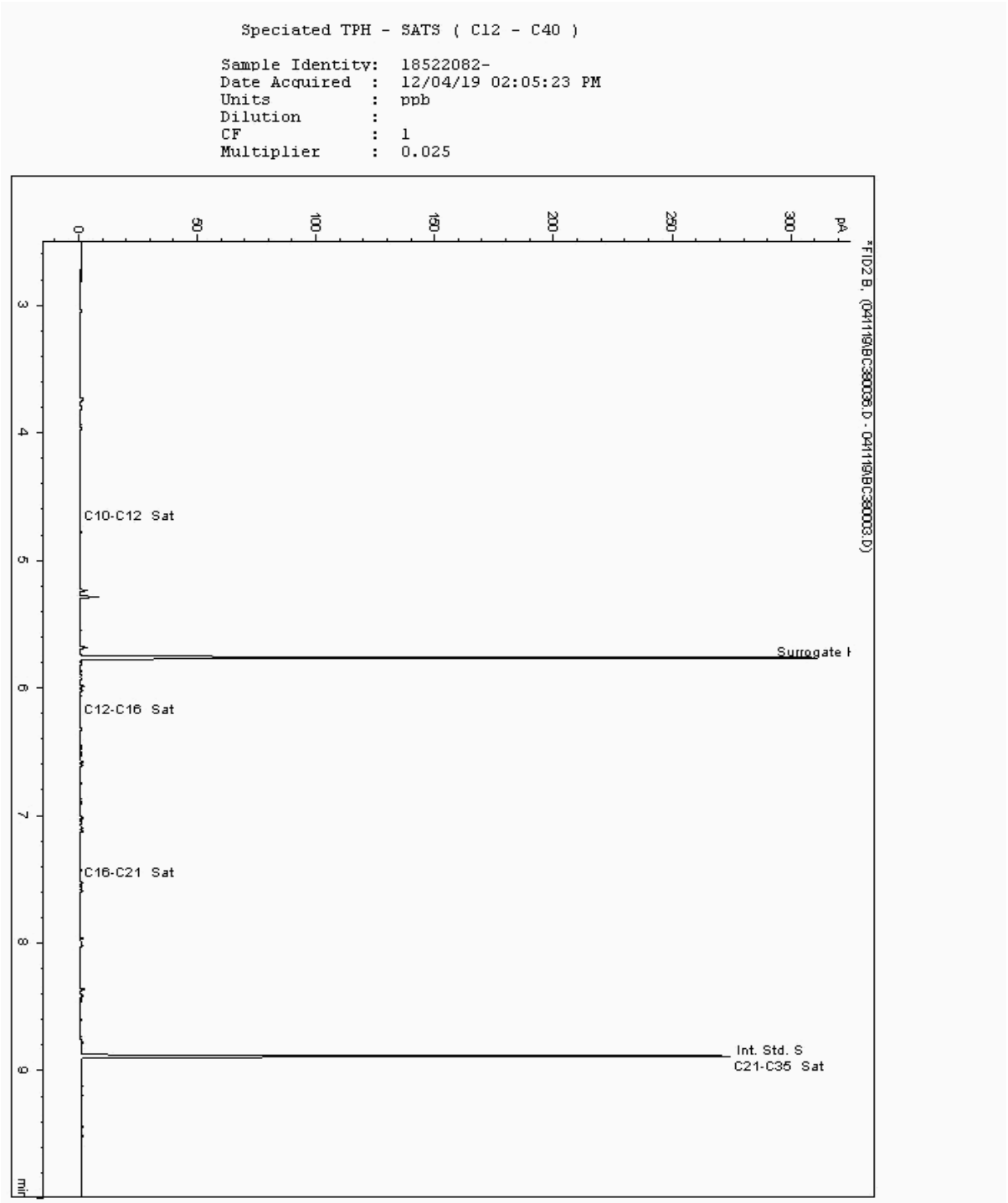
The above information details the reference name of the analytical quality control sample (AQC) that has been run with the samples contained in this report for the different methods of analysis.
The figure detailed is the percentage recovery result for the AQC.
The subscript numbers below are the percentage recovery lower control limit (LCL) and the upper control limit (UCL). The percentage recovery result for the AQC should be between these limits to be statistically in control.

CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aliphatic) Aqueous GC (W) **Sample No :** 19717361 **Depth :**
Sample ID : BH02



CERTIFICATE OF ANALYSIS

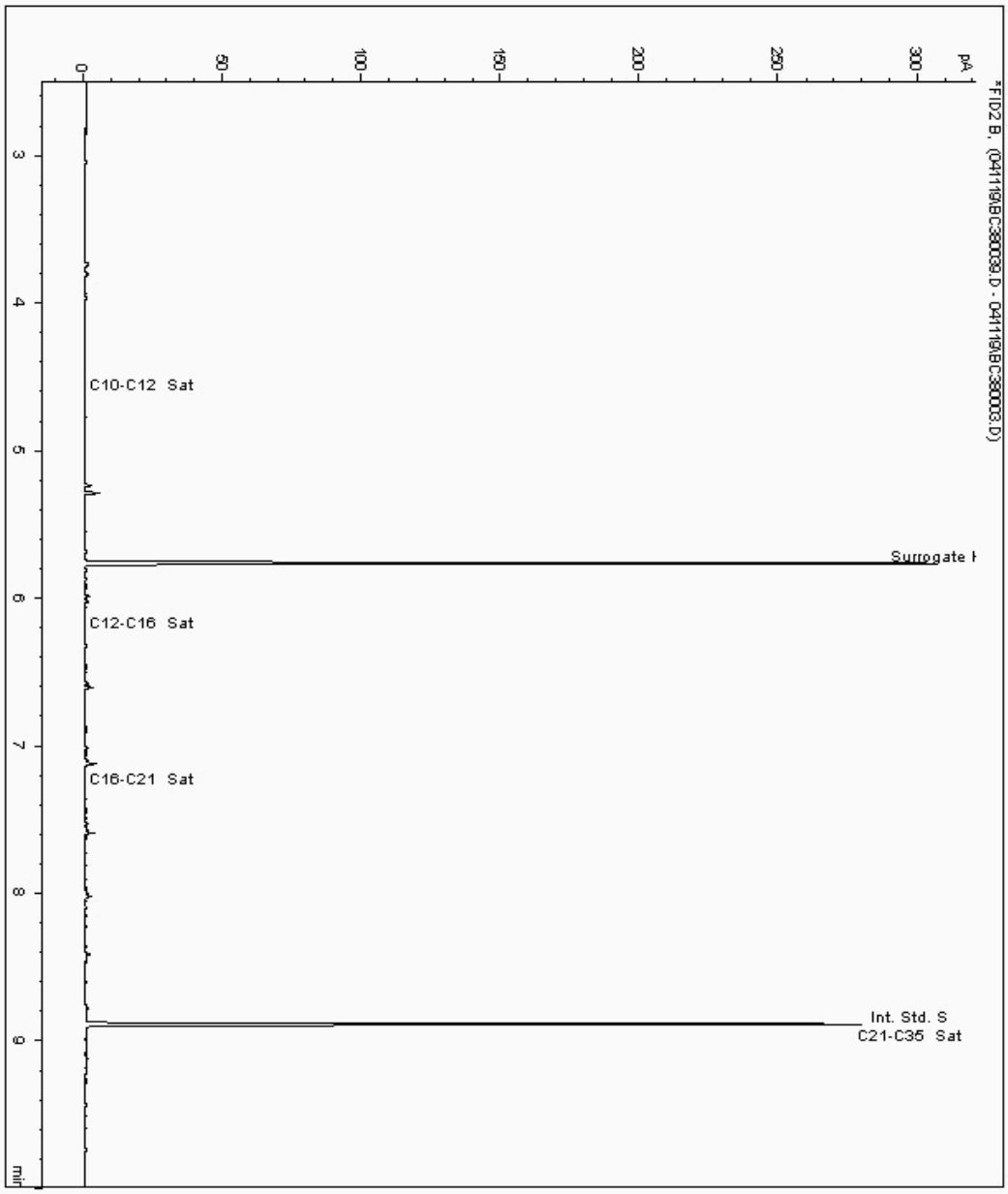
SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aliphatic) Aqueous GC (W) **Sample No :** 19717372 **Depth :**
Sample ID : BH01

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18521996-
Date Acquired : 12/04/19 03:15:29 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

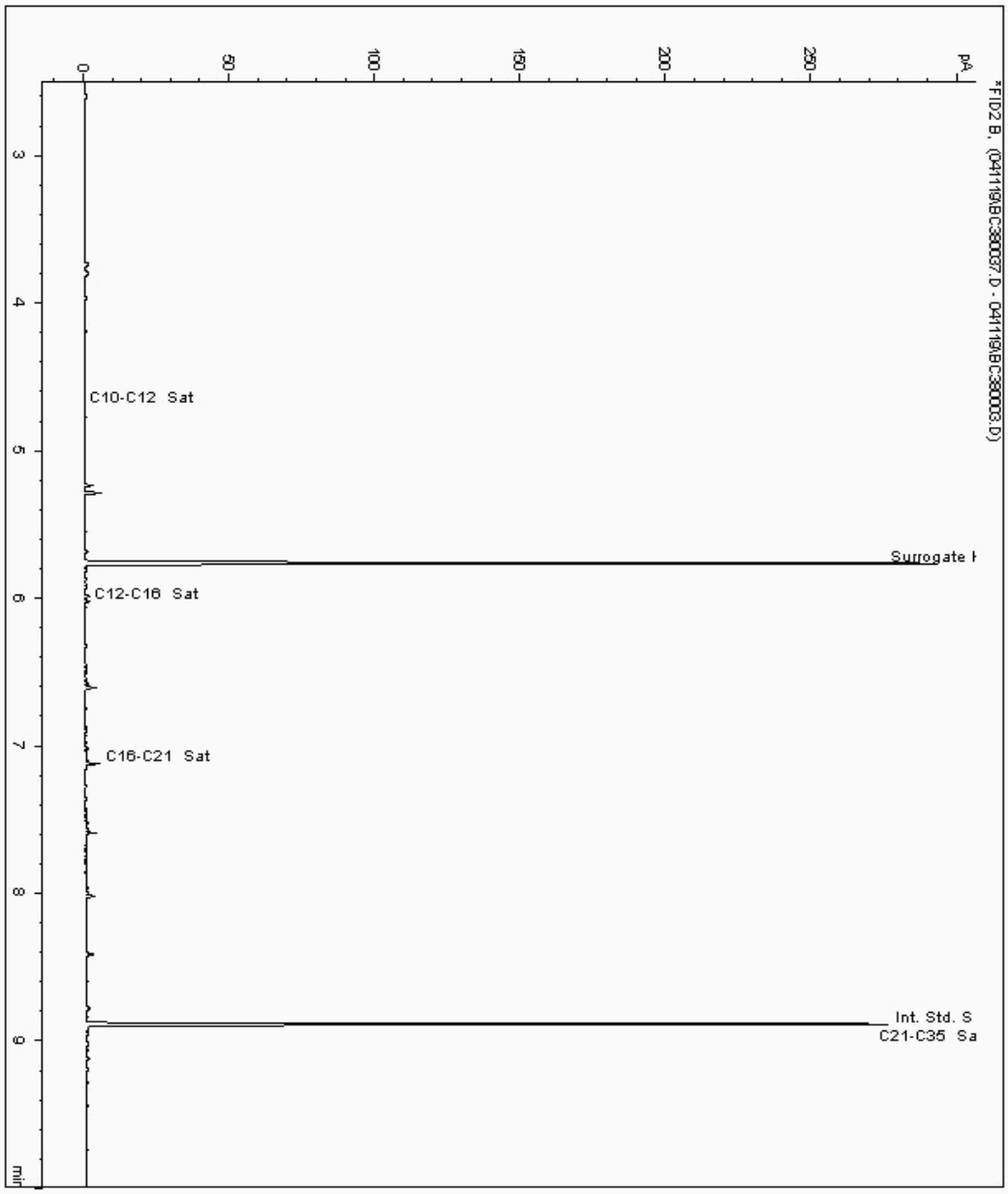
SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aliphatic) Aqueous GC (W) **Sample No :** 19717616 **Depth :**
Sample ID : BH03

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18522178-
Date Acquired : 12/04/19 02:28:54 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

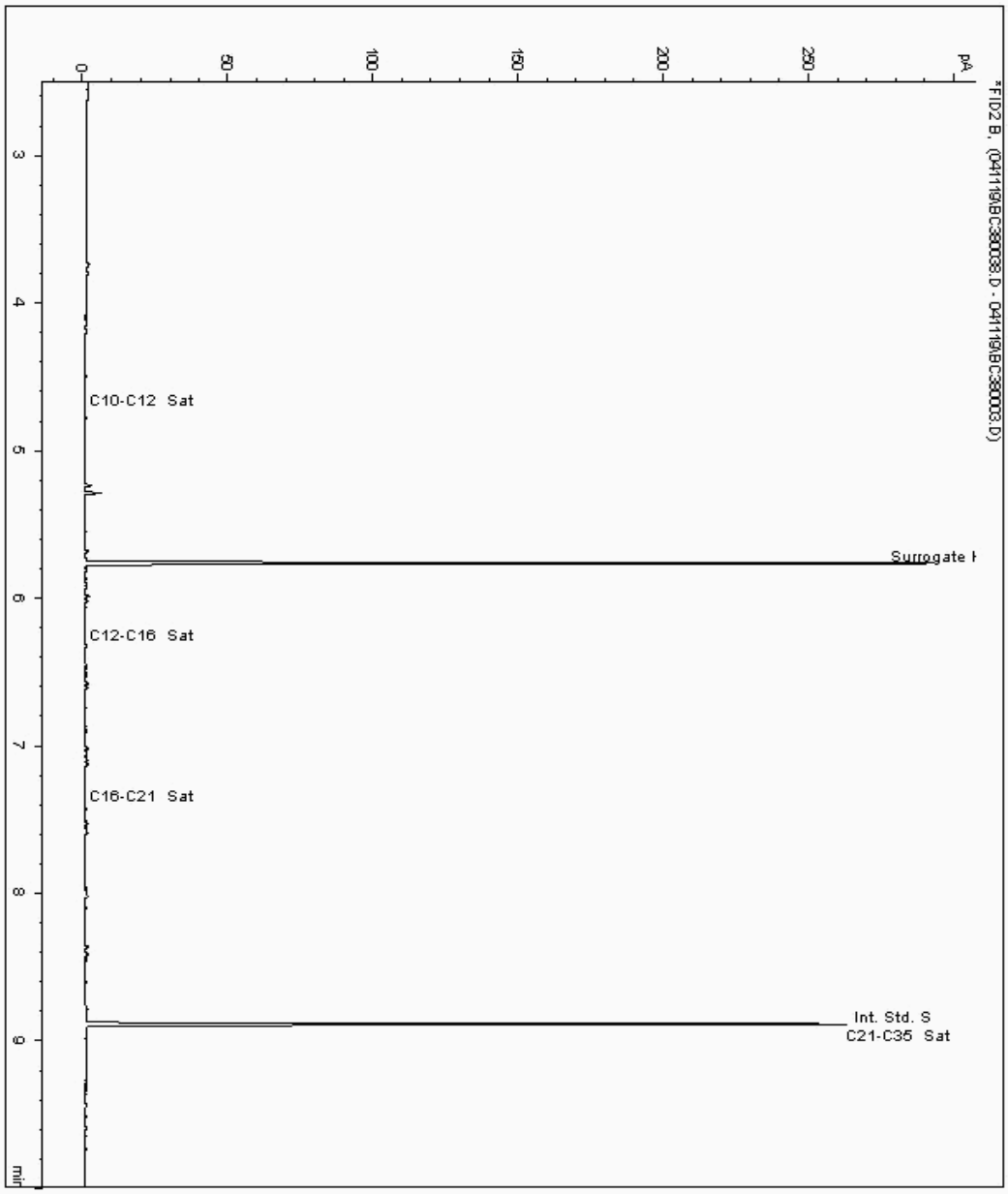
SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aliphatic) Aqueous GC (W) **Sample No :** 19717618 **Depth :**
Sample ID : BH04

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18522272-
Date Acquired : 12/04/19 02:52:10 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

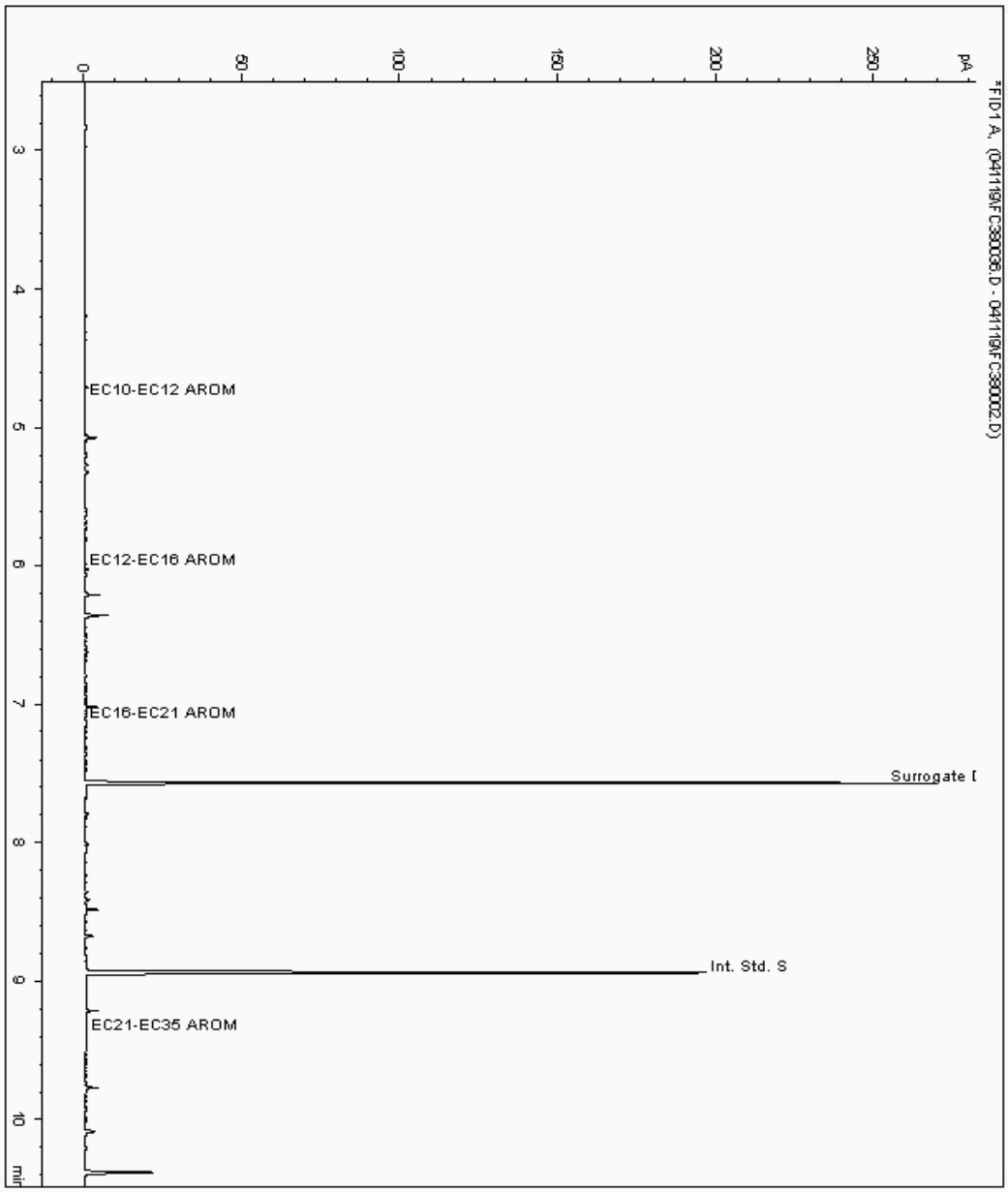
SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aromatic) Aqueous GC (W) **Sample No :** 19717361 **Depth :**
Sample ID : BH02

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18522083-
Date Acquired : 12/04/19 02:05:24 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

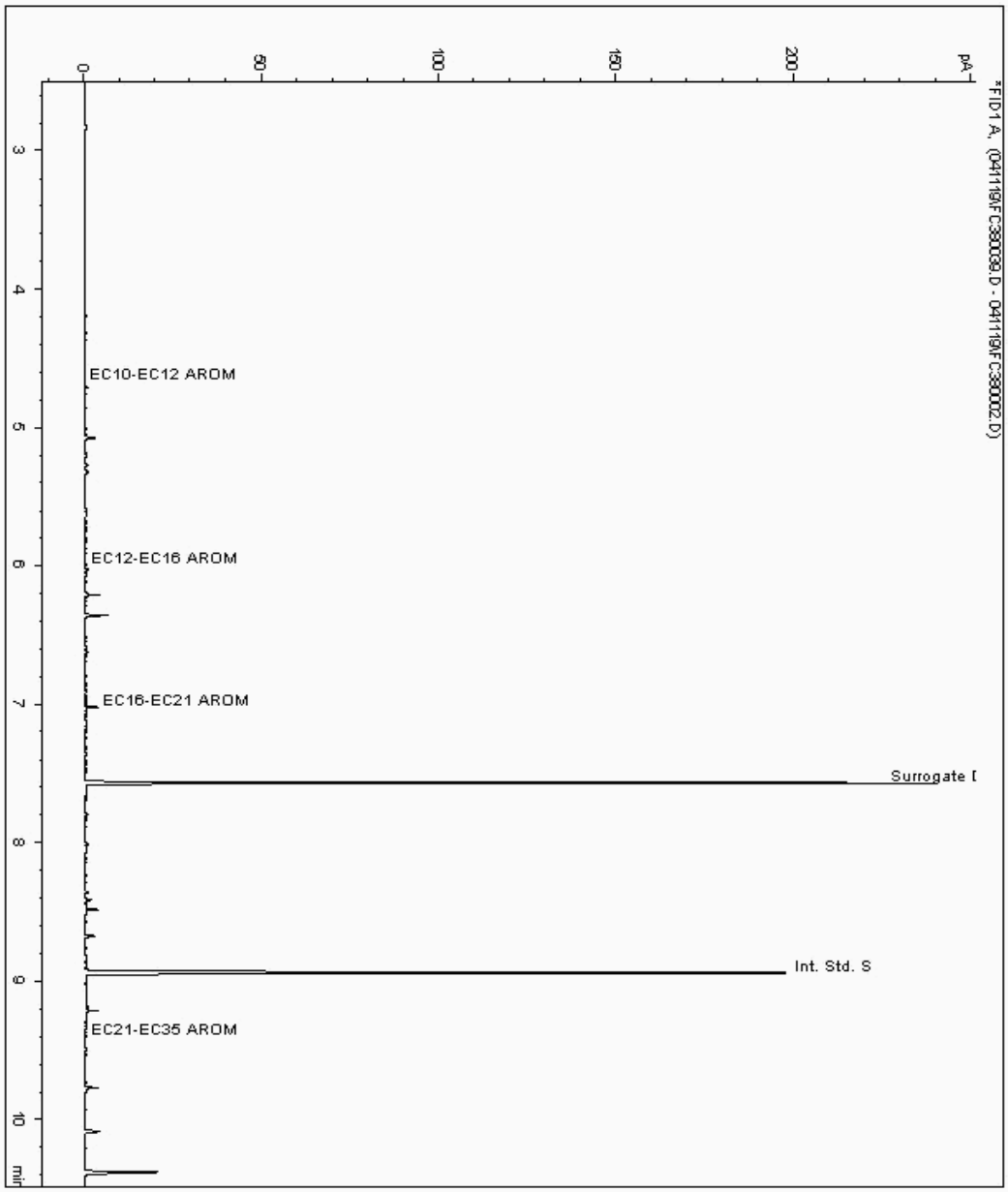
SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aromatic) Aqueous GC (W) **Sample No :** 19717372 **Depth :**
Sample ID : BH01

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18521997-
Date Acquired : 12/04/19 03:15:29 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025

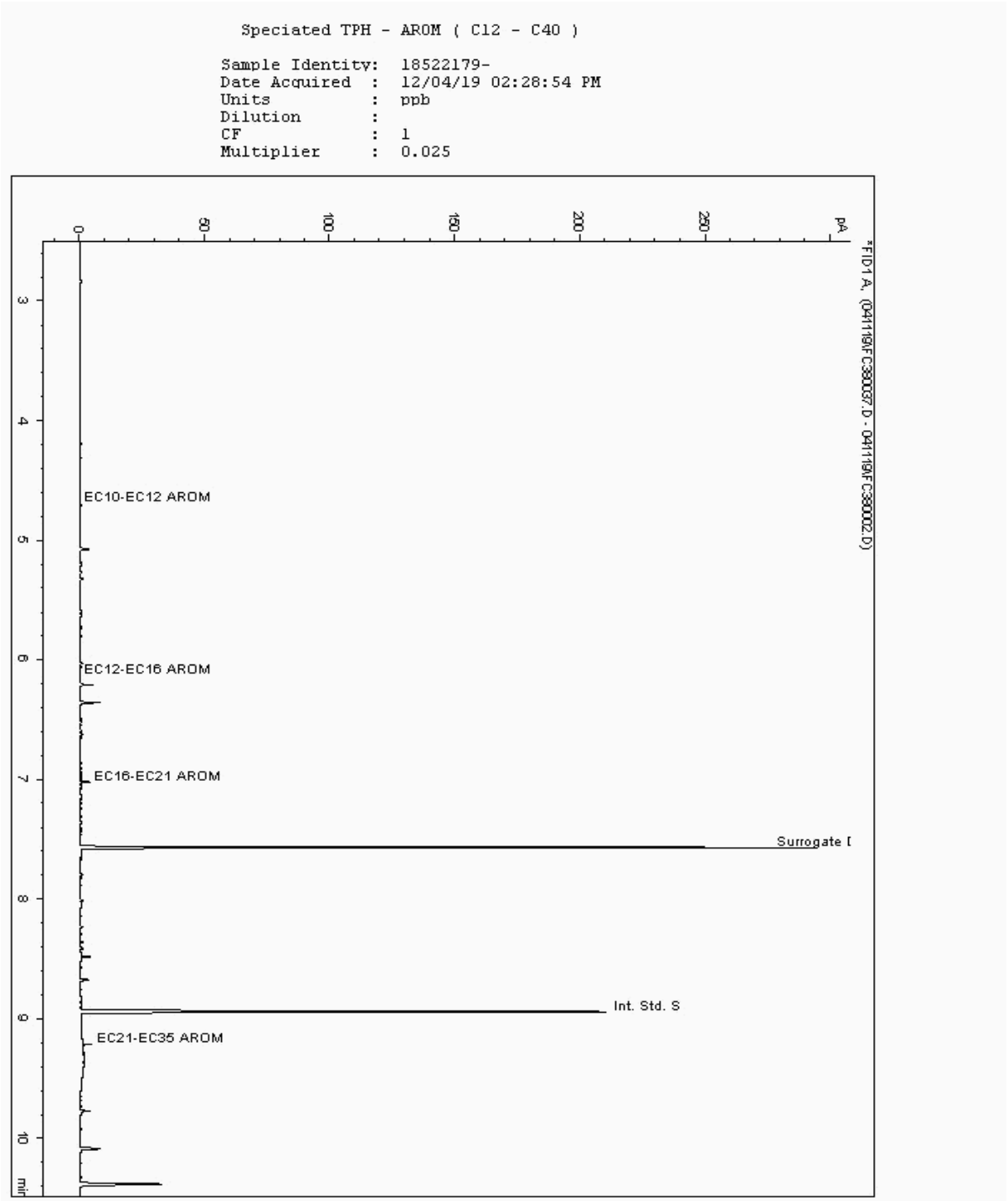


CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aromatic) Aqueous GC (W) **Sample No :** 19717616 **Depth :**
Sample ID : BH03



CERTIFICATE OF ANALYSIS

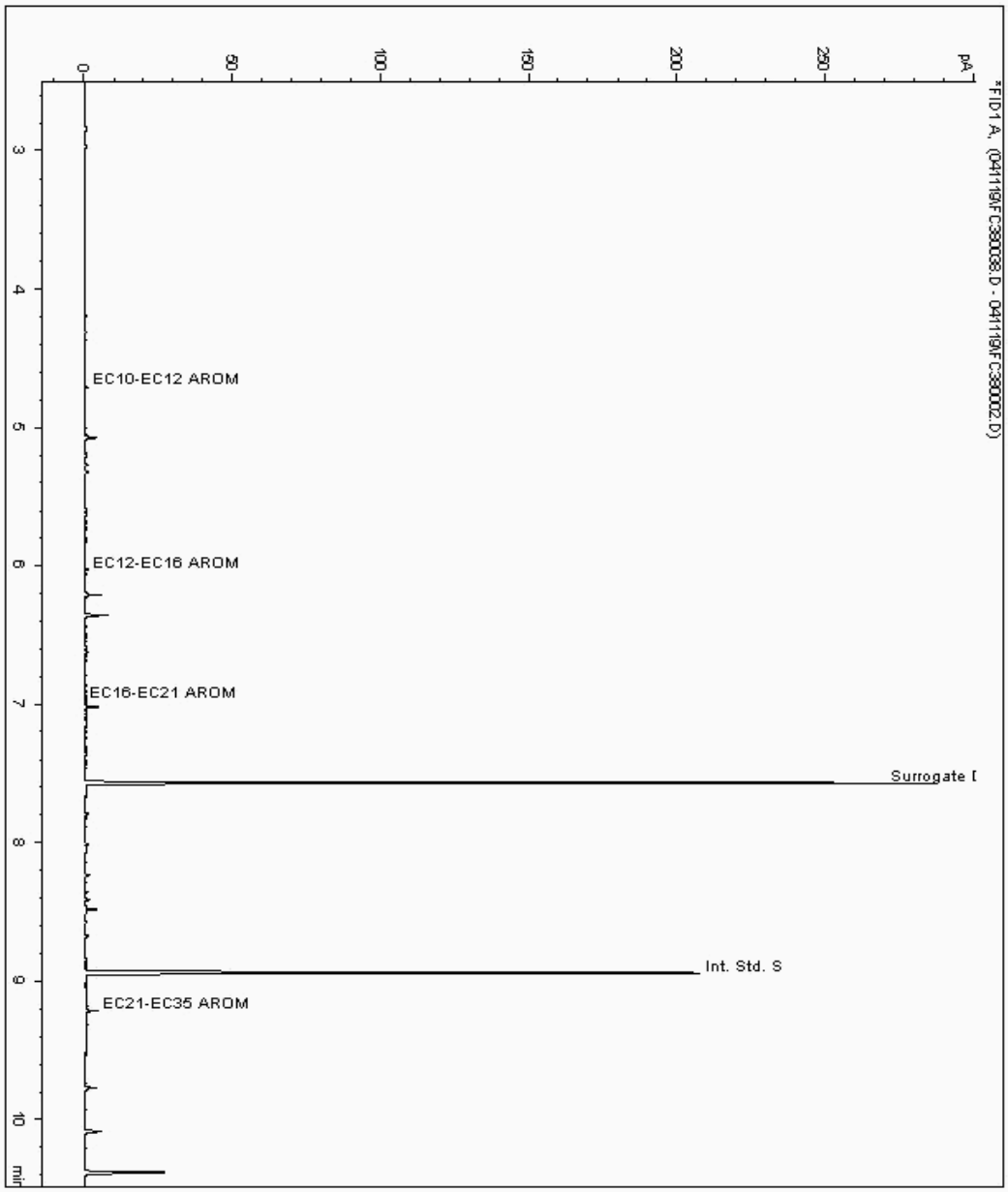
SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aromatic) Aqueous GC (W) **Sample No :** 19717618 **Depth :**
Sample ID : BH04

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18522273-
Date Acquired : 12/04/19 02:52:10 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

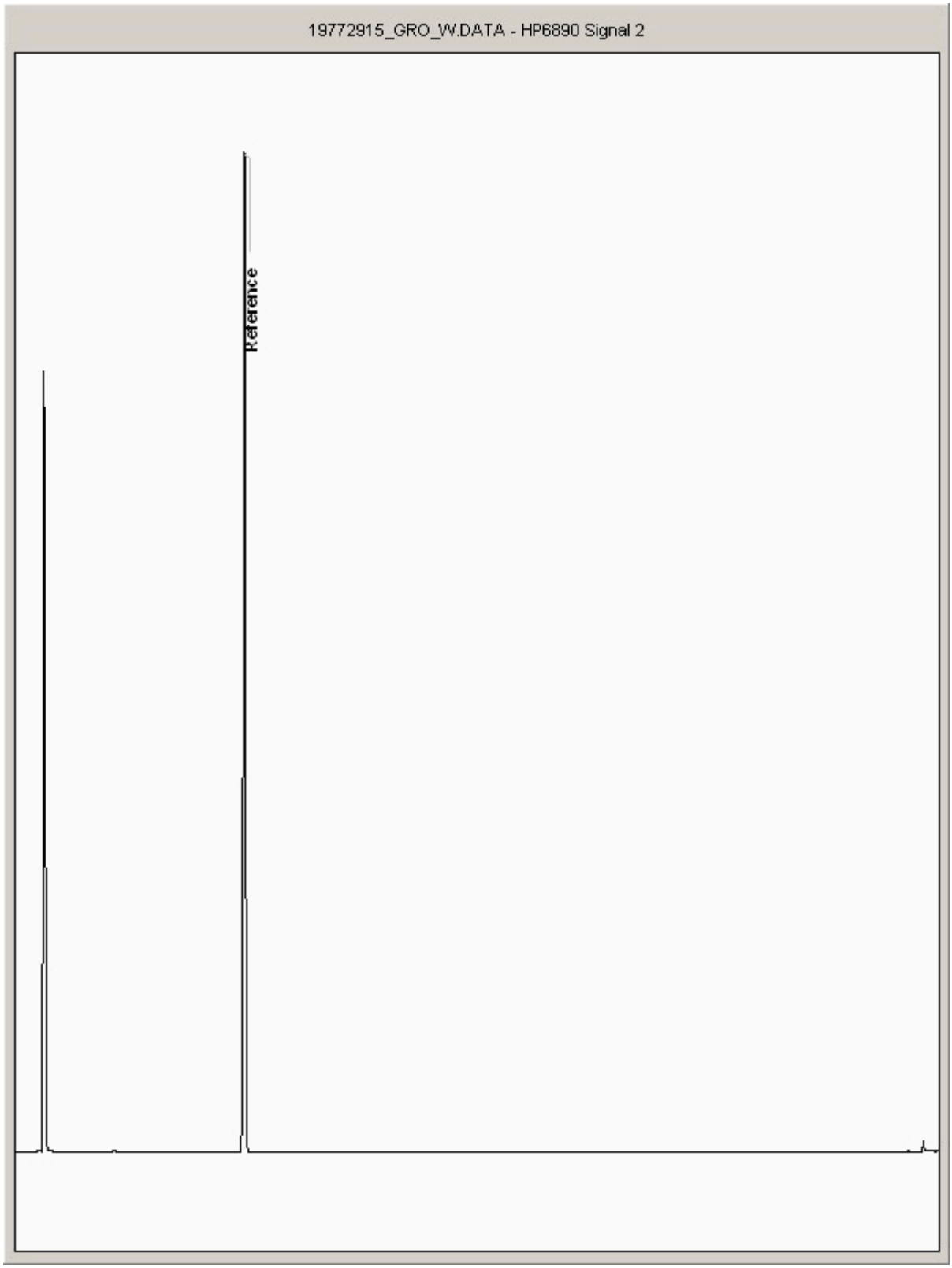
SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19772915
Sample ID : BH04

Depth :



CERTIFICATE OF ANALYSIS

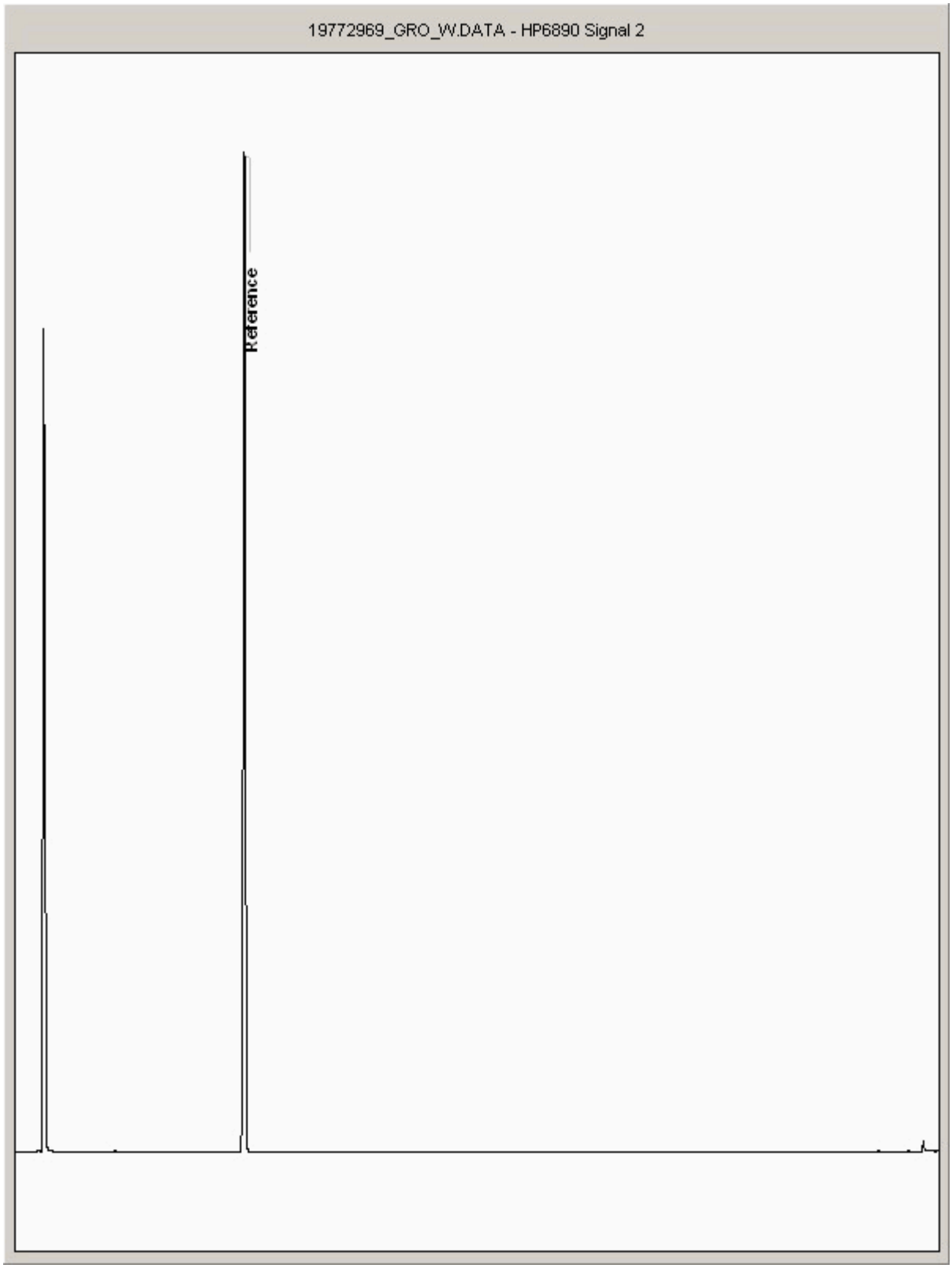
SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19772969
Sample ID : BH03

Depth :



CERTIFICATE OF ANALYSIS

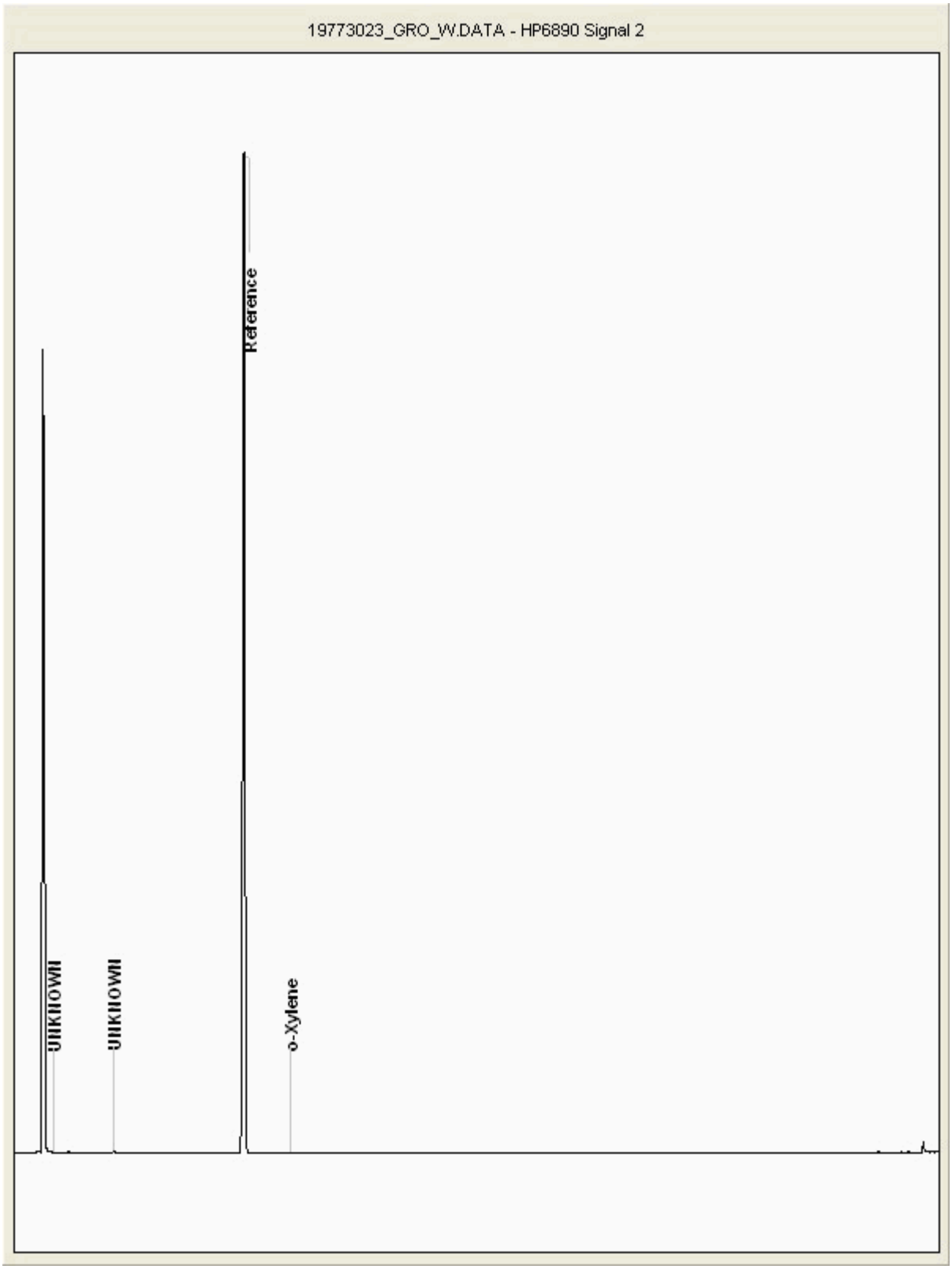
SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19773023
Sample ID : BH01

Depth :



CERTIFICATE OF ANALYSIS

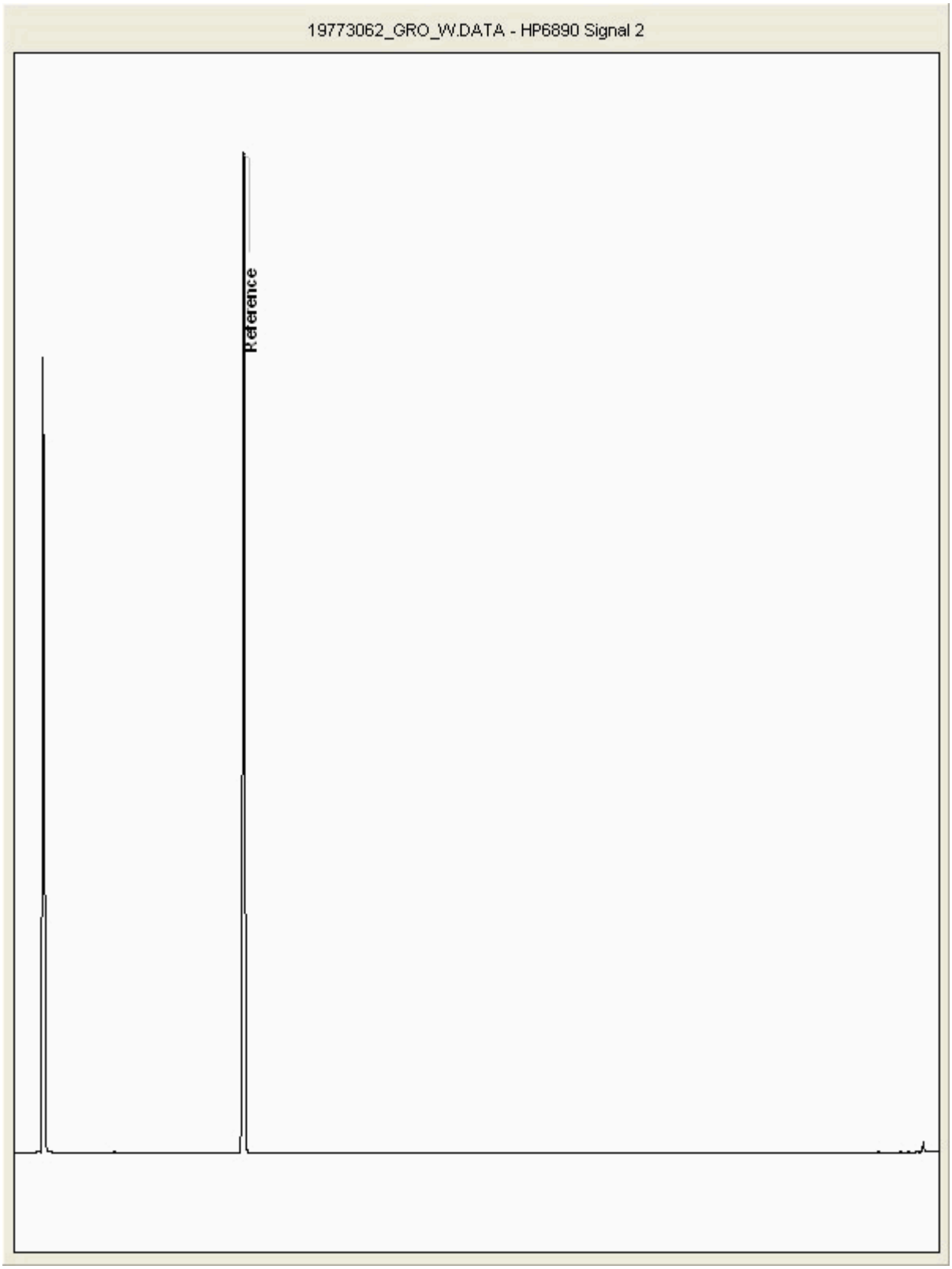
SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19773062
Sample ID : BH02

Depth :



Appendix General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. Samples will be run in duplicate upon request, but an additional charge may be incurred.

3. If sufficient sample is received a sub sample will be retained free of charge for 30 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of one month after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

4. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

5. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

6. When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2005), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

7. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised. This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

8. If appropriate preserved bottles are not received preservation will take place on receipt. However, the integrity of the data may be compromised.

9. NDP - No determination possible due to insufficient/unsuitable sample.

10. Metals in water are performed on a filtered sample, and therefore represent dissolved metals - total metals must be requested separately.

11. Results relate only to the items tested.

12. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

13. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

14. **Product analyses** - Organic analyses on products can only be semi-quantitative due to the matrix effects and high dilution factors employed.

15. Phenols monohydric by HPLC include phenol, cresols (2-Methylphenol, 3-Methylphenol and 4-Methylphenol) and Xylenols (2,3 Dimethylphenol, 2,4 Dimethylphenol, 2,5 Dimethylphenol, 2,6 Dimethylphenol, 3,4 Dimethyphenol, 3,5 Dimethylphenol).

16. Total of 5 speciated phenols by HPLC includes Phenol, 2,3,5-Trimethyl Phenol, 2-Isopropylphenol, Cresols and Xylenols (as detailed in 15).

17. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

18. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

19. Mercury results quoted on soils will not include volatile mercury as the analysis is performed on a dried and crushed sample.

20. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

21. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis. The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

22. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

23. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l. Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only. It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

24. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

Sample Deviations

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
§	**Sampled on date not provided**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**

Asbestos

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.

The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

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11th Floor
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Attention: Regulation

CERTIFICATE OF ANALYSIS

Date of report Generation:	28 January 2019
Customer:	H_WYG_LON
Sample Delivery Group (SDG):	190116-100
Your Reference:	A090070-474
Location:	RG20 6NL
Report No:	490175

We received 19 samples on Wednesday January 16, 2019 and 10 of these samples were scheduled for analysis which was completed on Monday January 28, 2019. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Environmental Hawarden (Method codes TM) or ALS Environmental Aberdeen (Method codes S).

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:
Regulation 13

Regulation 13
Operations Manager

ALS Environmental is part of ALS Life Sciences Limited. ALS Life Sciences Limited registered Office: Units 7 & 8 Hawarden Business Park, Manor Road, Hawarden, Deeside, CH5 3US. Registered in England and Wales No. 4057291.

CERTIFICATE OF ANALYSIS

SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
19125368	WS44		0.30	09/01/2019
19125369	WS44		0.90	09/01/2019
19125371	WS44		1.10	09/01/2019
19125372	WS47		0.50	09/01/2019
19125374	WS47		1.40	09/01/2019
19125376	WS48		0.30	09/01/2019
19125377	WS48		1.30	09/01/2019
19125379	WS48		1.60	09/01/2019
19125380	WS48		3.50	09/01/2019
19125381	WS48		4.50	09/01/2019
19125383	WS49		0.20	09/01/2019
19125384	WS49		0.70	09/01/2019
19125386	WS49		1.20	09/01/2019
19125387	WS49		1.90	09/01/2019
19125390	WS50		0.40	
19125393	WS50		1.50	
19125395	WS51		0.30	08/01/2019
19125396	WS51		1.20	08/01/2019
19125398	WS51		2.30	

Maximum Sample/Coolbox Temperature (°C) : **6.4**

ISO5667-3 Water quality - Sampling - Part3 -
During Transportation samples shall be stored in a cooling device capable of maintaining a temperature of (5±3)°C.

ALS have data which show that a cool box with 4 frozen icepacks is capable of maintaining pre-chilled samples at a temperature of (5±3)°C for a period of up to 24hrs.

Only received samples which have had analysis scheduled will be shown on the following pages.

Validated

CERTIFICATE OF ANALYSIS

SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			19125369			19125372			19125376			19125380			19125381			19125384			19125386	
Lab Sample No(s)																						
Customer Sample Reference			WS44			WS47			WS48			WS48			WS48			WS49			WS49	
AGS Reference																						
Depth (m)			0.90			0.50			0.30			3.50			4.50			0.70			1.20	
Container			1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)
Sample Type			S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Asbestos ID in Solid Samples	All	NDPs: 0 Tests: 10	X			X			X			X			X			X			X	
Boron Water Soluble	All	NDPs: 0 Tests: 10		X			X			X			X			X			X			X
Cyanide Comp/Free/Total/Thiocyanate	All	NDPs: 0 Tests: 10		X			X			X			X			X			X			X
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 10		X			X			X			X			X			X			X
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 10		X			X			X			X			X			X			X
GRO by GC-FID (S)	All	NDPs: 0 Tests: 10			X			X			X			X			X			X		
Metals in solid samples by OES	All	NDPs: 0 Tests: 10		X			X			X			X			X			X			X
PAH by GCMS	All	NDPs: 0 Tests: 10		X			X			X			X			X			X			X
PCBs by GCMS	All	NDPs: 0 Tests: 2																	X			X
pH	All	NDPs: 0 Tests: 10		X			X			X			X			X			X			X
Phenols Spec MS (S)	All	NDPs: 0 Tests: 10		X			X			X			X			X			X			X
Sample description	All	NDPs: 0 Tests: 10		X			X			X			X			X			X			X
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 2																	X			X
Total Organic Carbon	All	NDPs: 0 Tests: 10		X			X			X			X			X			X			X
TPH CWG GC (S)	All	NDPs: 0 Tests: 10		X			X			X			X			X			X			X

19125398	WS51		2.30	60g VOC (ALE215)	S
				250g Amber Jar (ALE210)	S
				X	
				X	
				X	
				X	
				X	
				X	
				X	
				X	
				X	
				X	
				X	
				X	
				X	
				X	
19125396	WS51		1.20	60g VOC (ALE215)	S
				250g Amber Jar (ALE210)	S
				X	
				X	
				X	
				X	
				X	
				X	
				X	
				X	
				X	
				X	
				X	
19125393	WS50		1.50	60g VOC (ALE215)	S
				250g Amber Jar (ALE210)	S
				X	
				X	
				X	
				X	
			X		
				X	
				X	
				X	
				X	
				X	
				X	
				X	
19125386	WS49		1.20	60g VOC (ALE215)	S
				250g Amber Jar (ALE210)	S
				X	
				X	
				X	
				X	
			X		
				X	
				X	
				X	
				X	
				X	
				X	
				X	

Validated

CERTIFICATE OF ANALYSIS

SDG:	190116-100	Client Reference:	A090070-474	Report Number:	490175
Location:	RG20 6NL	Order Number:	Comp016cs	Superseded Report:	

Results Legend

- X Test
- N No Determination Possible

Sample Types -

- S - Soil/Solid
- UNS - Unspecified Solid
- GW - Ground Water
- SW - Surface Water
- LE - Land Leachate
- PL - Prepared Leachate
- PR - Process Water
- SA - Saline Water
- TE - Trade Effluent
- TS - Treated Sewage
- US - Untreated Sewage
- RE - Recreational Water
- DW - Drinking Water Non-regulatory
- UNL - Unspecified Liquid
- SL - Sludge
- G - Gas
- OTH - Other

Lab Sample No(s)	19125369			19125372			19125376			19125380			19125381			19125384			19125386	
Customer Sample Reference	WS44			WS47			WS48			WS48			WS48			WS49			WS49	
AGS Reference																				
Depth (m)	0.90			0.50			0.30			3.50			4.50			0.70			1.20	
Container	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)
Sample Type	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
VOC MS (S) — All — NDPs: 0 Tests: 10			X			X			X			X			X			X		

19125398	WS51		2.30				
				S	250g Amber Jar (ALE210)		
X				S	60g VOC (ALE215)		
19125396	WS51		1.20				
				S	250g Amber Jar (ALE210)		
X				S	60g VOC (ALE215)		
19125393	WS50		1.50				
				S	250g Amber Jar (ALE210)		
X				S	60g VOC (ALE215)		
19125386	WS49		1.20				
				S	250g Amber Jar (ALE210)		
X				S	60g VOC (ALE215)		

CERTIFICATE OF ANALYSIS

SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Sample Descriptions

Grain Sizes

very fine	<0.063mm	fine	0.063mm - 0.1mm	medium	0.1mm - 2mm	coarse	2mm - 10mm	very coarse	>10mm

Lab Sample No(s)	Customer Sample Ref.	Depth (m)	Colour	Description	Inclusions	Inclusions 2
19125369	WS44	0.90	Dark Brown	Sandy Loam	Stones	Vegetation
19125372	WS47	0.50	Dark Brown	Sandy Clay	Stones	Vegetation
19125376	WS48	0.30	Dark Brown	Silty Clay Loam	Stones	Vegetation
19125380	WS48	3.50	Light Brown	Sandy Clay	Stones	Vegetation
19125381	WS48	4.50	Cream	Chalk	Stones	None
19125384	WS49	0.70	Dark Brown	Sandy Loam	Stones	Vegetation
19125386	WS49	1.20	Dark Brown	Sand	Vegetation	Stones
19125393	WS50	1.50	Dark Brown	Sand	Vegetation	Stones
19125396	WS51	1.20	Dark Brown	Sandy Loam	Vegetation	Stones
19125398	WS51	2.30	Dark Brown	Sandy Loam	Vegetation	Stones

These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally ocurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.

Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

Validated

CERTIFICATE OF ANALYSIS

SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS44	WS47	WS48	WS48	WS48	WS49
			Depth (m)	0.90	0.50	0.30	3.50	4.50	0.70
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	09/01/2019	09/01/2019	09/01/2019	09/01/2019	09/01/2019	09/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	16/01/2019	16/01/2019	16/01/2019	16/01/2019	16/01/2019	16/01/2019
			SDG Ref	190116-100	190116-100	190116-100	190116-100	190116-100	190116-100
			Lab Sample No.(s)	19125369	19125372	19125376	19125380	19125381	19125384
			AGS Reference						
Moisture Content Ratio (% of as received sample)	%	PM024		16	9.5	9	8.4	17	45
Organic Carbon, Total	<0.2 %	TM132		0.781 M	0.354 M	0.326 M	<0.2 M	<0.2 #	0.519 M
pH	1 pH Units	TM133		8.41 M	8.54 M	8.47 M	8.97 M	9.14 #	8.42 M
Cyanide, Total	<1 mg/kg	TM153		<1 M	<1 M	<1 M	<1 M	<1 #	<1 M
PCB congener 28	<3 µg/kg	TM168							<3 M
PCB congener 52	<3 µg/kg	TM168							<3 M
PCB congener 101	<3 µg/kg	TM168							<3 M
PCB congener 118	<3 µg/kg	TM168							<3 M
PCB congener 138	<3 µg/kg	TM168							<3 M
PCB congener 153	<3 µg/kg	TM168							<3 M
PCB congener 180	<3 µg/kg	TM168							<3 M
Sum of detected PCB 7 Congeners	<21 µg/kg	TM168							<21
Arsenic	<0.6 mg/kg	TM181		11.2 M	5.5 M	4.44 M	2.75 M	1.13 #	7.45 M
Cadmium	<0.02 mg/kg	TM181		0.319 M	0.221 M	0.249 M	0.129 M	0.125 #	0.314 M
Chromium	<0.9 mg/kg	TM181		27.5 M	14 M	14.1 M	3.44 M	2.89 #	16 M
Copper	<1.4 mg/kg	TM181		13.5 M	10.2 M	5.94 M	4.87 M	3.24 #	7.33 M
Lead	<0.7 mg/kg	TM181		12.7 M	26.3 M	9.38 M	1.06 M	1.35 #	8.94 M
Mercury	<0.14 mg/kg	TM181		<0.14 M	<0.14 M	<0.14 M	<0.14 M	<0.14 #	<0.14 M
Nickel	<0.2 mg/kg	TM181		27.4 M	10.3 M	11.8 M	6.91 M	5.2 #	13.7 M
Selenium	<1 mg/kg	TM181		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Vanadium	<0.2 mg/kg	TM181		44.9 #	20.4 #	20.4 #	5.94 #	3.42 #	20.8 #
Zinc	<1.9 mg/kg	TM181		63.3 M	48.7 M	35.2 M	17.3 M	18.6 #	40.1 M
Boron, water soluble	<1 mg/kg	TM222		<1 M	<1 M	<1 M	<1 M	<1 #	<1 M

CERTIFICATE OF ANALYSIS

SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS49	WS50	WS51	WS51		
			Depth (m)	1.20	1.50	1.20	2.30		
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)		
			Date Sampled	09/01/2019	-	08/01/2019	-		
			Sampled Time	.	.	.	.		
			Date Received	16/01/2019	16/01/2019	16/01/2019	16/01/2019		
			SDG Ref	190116-100	190116-100	190116-100	190116-100		
			Lab Sample No.(s)	19125386	19125393	19125396	19125398		
			AGS Reference						
Moisture Content Ratio (% of as received sample)	%	PM024		10	9.8 §	7.8	10 §		
Organic Carbon, Total	<0.2 %	TM132		0.315 M	<0.2 § M	0.448 M	<0.2 § M		
pH	1 pH Units	TM133		8.85 M	8.85 § M	8.78 M	8.76 § M		
Cyanide, Total	<1 mg/kg	TM153		<1 M	<1 § M	<1 M	<1 § M		
PCB congener 28	<3 µg/kg	TM168		<3 M					
PCB congener 52	<3 µg/kg	TM168		<3 M					
PCB congener 101	<3 µg/kg	TM168		<3 M					
PCB congener 118	<3 µg/kg	TM168		<3 M					
PCB congener 138	<3 µg/kg	TM168		<3 M					
PCB congener 153	<3 µg/kg	TM168		<3 M					
PCB congener 180	<3 µg/kg	TM168		<3 M					
Sum of detected PCB 7 Congeners	<21 µg/kg	TM168		<21					
Arsenic	<0.6 mg/kg	TM181		5.91 M	8.45 § M	4.73 M	8.74 § M		
Cadmium	<0.02 mg/kg	TM181		0.293 M	0.276 § M	0.313 M	0.686 § M		
Chromium	<0.9 mg/kg	TM181		12.1 M	18.8 § M	14 M	22.5 § M		
Copper	<1.4 mg/kg	TM181		5.83 M	6.13 § M	8.63 M	<14 § M		
Lead	<0.7 mg/kg	TM181		3.73 M	1.84 § M	16.2 M	7.19 § M		
Mercury	<0.14 mg/kg	TM181		<0.14 M	<0.14 § M	<0.14 M	<1.4 § M		
Nickel	<0.2 mg/kg	TM181		11.1 M	15.3 § M	10.2 M	19.2 § M		
Selenium	<1 mg/kg	TM181		<1 #	<1 § #	<1 #	<10 § #		
Vanadium	<0.2 mg/kg	TM181		17.7 #	19.3 § #	17.9 #	22.4 § #		
Zinc	<1.9 mg/kg	TM181		31 M	35.6 § M	64 M	65.9 § M		
Boron, water soluble	<1 mg/kg	TM222		<1 M	<1 § M	<1 M	<1 § M		

Validated

CERTIFICATE OF ANALYSIS

SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS44	WS47	WS48	WS48	WS48	WS49
			Depth (m)	0.90	0.50	0.30	3.50	4.50	0.70
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	09/01/2019	09/01/2019	09/01/2019	09/01/2019	09/01/2019	09/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	16/01/2019	16/01/2019	16/01/2019	16/01/2019	16/01/2019	16/01/2019
			SDG Ref	190116-100	190116-100	190116-100	190116-100	190116-100	190116-100
			Lab Sample No.(s)	19125369	19125372	19125376	19125380	19125381	19125384
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		85.4	86.9	82.6	83.3	84.5	84.9
Acenaphthene-d10 % recovery**	%	TM218		84.2	83.6	81.7	82.4	83.2	83.9
Phenanthrene-d10 % recovery**	%	TM218		78.6	83.2	78.6	80.4	83	81.9
Chrysene-d12 % recovery**	%	TM218		72.9	85	72.8	76	75.6	76.1
Perylene-d12 % recovery**	%	TM218		71.9	84.4	70.8	72.7	71.6	74.3
Naphthalene	µg/kg	TM218	<9	<9 M	<9 M	<9 M	<9 M	<9 #	<9 M
Acenaphthylene	µg/kg	TM218	<12	<12 M	<12 M	<12 M	<12 M	<12 #	<12 M
Acenaphthene	µg/kg	TM218	<8	<8 M	<8 M	<8 M	<8 M	<8 #	<8 M
Fluorene	µg/kg	TM218	<10	<10 M	<10 M	<10 M	<10 M	<10 #	<10 M
Phenanthrene	µg/kg	TM218	<15	<15 M	<15 M	<15 M	<15 M	<15 #	<15 M
Anthracene	µg/kg	TM218	<16	<16 M	<16 M	<16 M	<16 M	<16 #	<16 M
Fluoranthene	µg/kg	TM218	<17	<17 M	<17 M	<17 M	<17 M	<17 #	105 M
Pyrene	µg/kg	TM218	<15	<15 M	<15 M	<15 M	<15 M	<15 #	98.6 M
Benz(a)anthracene	µg/kg	TM218	<14	<14 M	<14 M	<14 M	<14 M	<14 #	57.9 M
Chrysene	µg/kg	TM218	<10	<10 M	<10 M	<10 M	<10 M	<10 #	61.1 M
Benzo(b)fluoranthene	µg/kg	TM218	<15	<15 M	<15 M	<15 M	<15 M	<15 #	88.1 M
Benzo(k)fluoranthene	µg/kg	TM218	<14	<14 M	<14 M	<14 M	<14 M	<14 #	28.6 M
Benzo(a)pyrene	µg/kg	TM218	<15	<15 M	<15 M	<15 M	<15 M	<15 #	60 M
Indeno(1,2,3-cd)pyrene	µg/kg	TM218	<18	<18 M	<18 M	<18 M	<18 M	<18 #	57.7 M
Dibenzo(a,h)anthracene	µg/kg	TM218	<23	<23 M	<23 M	<23 M	<23 M	<23 #	<23 M
Benzo(g,h,i)perylene	µg/kg	TM218	<24	<24 M	<24 M	<24 M	<24 M	<24 #	<24 M
PAH, Total Detected USEPA 16	µg/kg	TM218	<118	<118	<118	<118	<118	<118	557

CERTIFICATE OF ANALYSIS

SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS49	WS50	WS51	WS51		
			Depth (m)	1.20	1.50	1.20	2.30		
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)		
			Date Sampled	09/01/2019	-	08/01/2019	-		
			Sampled Time	.	.	.	.		
			Date Received	16/01/2019	16/01/2019	16/01/2019	16/01/2019		
			SDG Ref	190116-100	190116-100	190116-100	190116-100		
			Lab Sample No.(s)	19125386	19125393	19125396	19125398		
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		108	95.1 §	96.8	90.8 §		
Acenaphthene-d10 % recovery**	%	TM218		106	91.5 §	89.1	91.8 §		
Phenanthrene-d10 % recovery**	%	TM218		109	92.9 §	85.3	90.2 §		
Chrysene-d12 % recovery**	%	TM218		115	103 §	110	91.9 §		
Perylene-d12 % recovery**	%	TM218		116	104 §	109	91.5 §		
Naphthalene	µg/kg	TM218	<9	<9 M	<9 § M	<9 M	<9 § M		
Acenaphthylene	µg/kg	TM218	<12	<12 M	<12 § M	<12 M	<12 § M		
Acenaphthene	µg/kg	TM218	<8	<8 M	<8 § M	<8 M	<8 § M		
Fluorene	µg/kg	TM218	<10	<10 M	<10 § M	<10 M	<10 § M		
Phenanthrene	µg/kg	TM218	<15	<15 M	<15 § M	31 M	<15 § M		
Anthracene	µg/kg	TM218	<16	<16 M	<16 § M	<16 M	<16 § M		
Fluoranthene	µg/kg	TM218	<17	49.2 M	<17 § M	109 M	<17 § M		
Pyrene	µg/kg	TM218	<15	44.1 M	<15 § M	96.2 M	<15 § M		
Benz(a)anthracene	µg/kg	TM218	<14	26.7 M	<14 § M	63.7 M	25.2 § M		
Chrysene	µg/kg	TM218	<10	24.2 M	<10 § M	62.3 M	20.4 § M		
Benzo(b)fluoranthene	µg/kg	TM218	<15	29.6 M	<15 § M	53.1 M	28.1 § M		
Benzo(k)fluoranthene	µg/kg	TM218	<14	<14 M	<14 § M	36.2 M	<14 § M		
Benzo(a)pyrene	µg/kg	TM218	<15	30.5 M	<15 § M	79.5 M	19.8 § M		
Indeno(1,2,3-cd)pyrene	µg/kg	TM218	<18	<18 M	<18 § M	55.1 M	<18 § M		
Dibenzo(a,h)anthracene	µg/kg	TM218	<23	<23 M	<23 § M	<23 M	<23 § M		
Benzo(g,h,i)perylene	µg/kg	TM218	<24	<24 M	<24 § M	50.6 M	<24 § M		
PAH, Total Detected USEPA 16	µg/kg	TM218		204	<118 §	637	<118 §		

CERTIFICATE OF ANALYSIS

SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Phenols Spec MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS44	WS47	WS48	WS48	WS48	WS49
			Depth (m)	0.90	0.50	0.30	3.50	4.50	0.70
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	09/01/2019	09/01/2019	09/01/2019	09/01/2019	09/01/2019	09/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	16/01/2019	16/01/2019	16/01/2019	16/01/2019	16/01/2019	16/01/2019
			SDG Ref	190116-100	190116-100	190116-100	190116-100	190116-100	190116-100
			Lab Sample No.(s)	19125369	19125372	19125376	19125380	19125381	19125384
			AGS Reference						
4-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4,6-Trichlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4-Dichlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Pentachlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Phenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
4-Chloro-3-methylphenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4-Dimethylphenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2-Chlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Sum of Detected Phenols	<9 µg/kg	TM072		<9	<9	<9	<9	<9	<9

CERTIFICATE OF ANALYSIS

SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Phenols Spec MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS49	WS50	WS51	WS51		
			Depth (m)	1.20	1.50	1.20	2.30		
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)		
			Date Sampled	09/01/2019	-	08/01/2019	-		
			Sampled Time	.	.	.	.		
			Date Received	16/01/2019	16/01/2019	16/01/2019	16/01/2019		
			SDG Ref	190116-100	190116-100	190116-100	190116-100		
			Lab Sample No.(s)	19125386	19125393	19125396	19125398		
			AGS Reference						
4-Nitrophenol	<1 µg/kg	TM072		<1	<1 §	<1	<1 §		
2,4,6-Trichlorophenol	<1 µg/kg	TM072		<1	<1 §	<1	<1 §		
2-Nitrophenol	<1 µg/kg	TM072		<1	<1 §	<1	<1 §		
2,4-Dichlorophenol	<1 µg/kg	TM072		<1	<1 §	<1	<1 §		
Pentachlorophenol	<1 µg/kg	TM072		<1	<1 §	<1	<1 §		
Phenol	<1 µg/kg	TM072		<1	<1 §	<1	<1 §		
4-Chloro-3-methylphenol	<1 µg/kg	TM072		<1	<1 §	<1	<1 §		
2,4-Dimethylphenol	<1 µg/kg	TM072		<1	<1 §	<1	<1 §		
2-Chlorophenol	<1 µg/kg	TM072		<1	<1 §	<1	<1 §		
Sum of Detected Phenols	<9 µg/kg	TM072		<9	<9 §	<9	<9 §		

CERTIFICATE OF ANALYSIS

SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS49	WS49				
			Depth (m)	0.70	1.20				
			Sample Type	Soil/Solid (S)	Soil/Solid (S)				
			Date Sampled	09/01/2019	09/01/2019				
			Sampled Time	.	.				
			Date Received	16/01/2019	16/01/2019				
			SDG Ref	190116-100	190116-100				
			Lab Sample No.(s)	19125384	19125386				
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100				
Pentachlorophenol	<100 µg/kg	TM157		<100	<100				
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100				
Nitrobenzene	<100 µg/kg	TM157		<100	<100				
Isophorone	<100 µg/kg	TM157		<100	<100				
Hexachloroethane	<100 µg/kg	TM157		<100	<100				
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100				
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100				
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100				
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100				
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100				
Diethyl phthalate	<100 µg/kg	TM157		<100	<100				
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100				
Dibenzofuran	<100 µg/kg	TM157		<100	<100				
Carbazole	<100 µg/kg	TM157		<100	<100				
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100				
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100				
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100				
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100				
Azobenzene	<100 µg/kg	TM157		<100	<100				
4-Nitrophenol	<100 µg/kg	TM157		<100	<100				
4-Nitroaniline	<100 µg/kg	TM157		<100	<100				
4-Methylphenol	<100 µg/kg	TM157		<100	<100				
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100				
4-Chloroaniline	<100 µg/kg	TM157		<100	<100				
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100				
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100				
3-Nitroaniline	<100 µg/kg	TM157		<100	<100				
2-Nitrophenol	<100 µg/kg	TM157		<100	<100				
2-Nitroaniline	<100 µg/kg	TM157		<100	<100				
2-Methylphenol	<100 µg/kg	TM157		<100	<100				
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100				

CERTIFICATE OF ANALYSIS

SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS49	WS49				
			Depth (m)	0.70	1.20				
			Sample Type	Soil/Solid (S)	Soil/Solid (S)				
			Date Sampled	09/01/2019	09/01/2019				
			Sampled Time	-	-				
			Date Received	16/01/2019	16/01/2019				
			SDG Ref	190116-100	190116-100				
			Lab Sample No.(s)	19125384	19125386				
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100				
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100				
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100				
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100				
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100				
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100				
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100				
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100				
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100				
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100				
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100				
2-Methylnaphthalene	<100 µg/kg	TM157		<100	<100				
Acenaphthylene	<100 µg/kg	TM157		<100	<100				
Acenaphthene	<100 µg/kg	TM157		<100	<100				
Anthracene	<100 µg/kg	TM157		<100	<100				
Benzo(a)anthracene	<100 µg/kg	TM157		<100	<100				
Benzo(b)fluoranthene	<100 µg/kg	TM157		<100	<100				
Benzo(k)fluoranthene	<100 µg/kg	TM157		<100	<100				
Benzo(a)pyrene	<100 µg/kg	TM157		<100	<100				
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	<100				
Chrysene	<100 µg/kg	TM157		<100	<100				
Fluoranthene	<100 µg/kg	TM157		<100	<100				
Fluorene	<100 µg/kg	TM157		<100	<100				
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	<100				
Phenanthrene	<100 µg/kg	TM157		<100	<100				
Pyrene	<100 µg/kg	TM157		<100	<100				
Naphthalene	<100 µg/kg	TM157		<100	<100				
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100				
Bis(2-chloroisopropyl) ether	<100 µg/kg	TM157		<100	<100				

CERTIFICATE OF ANALYSIS

SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS44	WS47	WS48	WS48	WS48	WS49
			Depth (m)	0.90	0.50	0.30	3.50	4.50	0.70
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	09/01/2019	09/01/2019	09/01/2019	09/01/2019	09/01/2019	09/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	16/01/2019	16/01/2019	16/01/2019	16/01/2019	16/01/2019	16/01/2019
			SDG Ref	190116-100	190116-100	190116-100	190116-100	190116-100	190116-100
			Lab Sample No.(s)	19125369	19125372	19125376	19125380	19125381	19125384
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		81	92	94	92	94	92
GRO TOT (Moisture Corrected)	<100 µg/kg	TM089		<100	<100	<100	<100	<100	<100
Aliphatics >C5-C6	<10 µg/kg	TM089		<10	<10	<10	<10	<10	<10
Aliphatics >C6-C8	<10 µg/kg	TM089		<10	<10	<10	<10	<10	<10
Aliphatics >C8-C10	<10 µg/kg	TM089		<10	<10	<10	<10	<10	<10
Aliphatics >C10-C12	<10 µg/kg	TM089		<10	<10	<10	<10	<10	<10
Aliphatics >C12-C16	<100 µg/kg	TM173		<100	<100	<100	<100	<100	<100
Aliphatics >C16-C21	<100 µg/kg	TM173		<100	<100	<100	<100	<100	<100
Aliphatics >C21-C35	<100 µg/kg	TM173		<100	<100	<100	<100	<100	<100
Aliphatics >C35-C44	<100 µg/kg	TM173		<100	<100	<100	<100	<100	<100
Total Aliphatics >C12-C44	<100 µg/kg	TM173		<100	<100	<100	<100	<100	<100
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10	<10	<10	<10	<10	<10
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<10	<10	<10	<10	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089		<10	<10	<10	<10	<10	<10
Aromatics >EC10-EC12	<10 µg/kg	TM089		<10	<10	<10	<10	<10	<10
Aromatics >EC12-EC16	<100 µg/kg	TM173		<100	<100	<100	<100	<100	<100
Aromatics >EC16-EC21	<100 µg/kg	TM173		<100	<100	<100	<100	<100	362
Aromatics >EC21-EC35	<100 µg/kg	TM173		<100	<100	<100	<100	<100	6200
Aromatics >EC35-EC44	<100 µg/kg	TM173		<100	<100	<100	<100	<100	<100
Aromatics >EC40-EC44	<100 µg/kg	TM173		<100	<100	<100	<100	<100	<100
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		<100	<100	<100	<100	<100	6560
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173		<100	<100	<100	<100	<100	6560

CERTIFICATE OF ANALYSIS

SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

TPH CWG (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS49	WS50	WS51	WS51		
			Depth (m)	1.20	1.50	1.20	2.30		
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)		
			Date Sampled	09/01/2019	-	08/01/2019	-		
			Sampled Time	.	.	.	.		
			Date Received	16/01/2019	16/01/2019	16/01/2019	16/01/2019		
			SDG Ref	190116-100	190116-100	190116-100	190116-100		
			Lab Sample No.(s)	19125386	19125393	19125396	19125398		
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		109	111 §	103	99 §		
GRO TOT (Moisture Corrected)	<100 µg/kg	TM089		<100	<100 §	<100	<100 §		
Aliphatics >C5-C6	<10 µg/kg	TM089		<10	<10 §	<10	<10 §		
Aliphatics >C6-C8	<10 µg/kg	TM089		<10	<10 §	<10	<10 §		
Aliphatics >C8-C10	<10 µg/kg	TM089		<10	<10 §	<10	<10 §		
Aliphatics >C10-C12	<10 µg/kg	TM089		<10	<10 §	<10	<10 §		
Aliphatics >C12-C16	<100 µg/kg	TM173		<100	385 §	563	550 §		
Aliphatics >C16-C21	<100 µg/kg	TM173		<100	243 §	<100	707 §		
Aliphatics >C21-C35	<100 µg/kg	TM173		<100	<100 §	2300	4120 §		
Aliphatics >C35-C44	<100 µg/kg	TM173		<100	<100 §	<100	<100 §		
Total Aliphatics >C12-C44	<100 µg/kg	TM173		<100	628 §	2860	5380 §		
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10	<10 §	<10	<10 §		
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<10 §	<10	<10 §		
Aromatics >EC8-EC10	<10 µg/kg	TM089		<10	<10 §	<10	<10 §		
Aromatics >EC10-EC12	<10 µg/kg	TM089		<10	<10 §	<10	<10 §		
Aromatics >EC12-EC16	<100 µg/kg	TM173		<100	<100 §	<100	<100 §		
Aromatics >EC16-EC21	<100 µg/kg	TM173		<100	191 §	174	<100 §		
Aromatics >EC21-EC35	<100 µg/kg	TM173		<100	<100 §	2340	907 §		
Aromatics >EC35-EC44	<100 µg/kg	TM173		<100	<100 §	1380	1370 §		
Aromatics >EC40-EC44	<100 µg/kg	TM173		<100	<100 §	201	<100 §		
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		<100	191 §	3890	2270 §		
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173		<100	819 §	6750	7650 §		

CERTIFICATE OF ANALYSIS

SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS44	WS47	WS48	WS48	WS48	WS49
			Depth (m)	0.90	0.50	0.30	3.50	4.50	0.70
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	09/01/2019	09/01/2019	09/01/2019	09/01/2019	09/01/2019	09/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	16/01/2019	16/01/2019	16/01/2019	16/01/2019	16/01/2019	16/01/2019
			SDG Ref	190116-100	190116-100	190116-100	190116-100	190116-100	190116-100
			Lab Sample No.(s)	19125369	19125372	19125376	19125380	19125381	19125384
			AGS Reference						
Dibromofluoromethane**	%	TM116		105	107	107	112	103	106
Toluene-d8**	%	TM116		99.4	98.3	99.2	102	99.6	101
4-Bromofluorobenzene**	%	TM116		83.2	80.3	82.7	96.4	93.1	85.4
Dichlorodifluoromethane	<6 µg/kg	TM116							<6 M
Chloromethane	<7 µg/kg	TM116							<7 #
Vinyl Chloride	<6 µg/kg	TM116							<6 M
Bromomethane	<10 µg/kg	TM116							<10 M
Chloroethane	<10 µg/kg	TM116							<10 M
Trichlorofluorormethane	<6 µg/kg	TM116							<6 M
1,1-Dichloroethene	<10 µg/kg	TM116							<10 #
Carbon Disulphide	<7 µg/kg	TM116							<7 M
Dichloromethane	<10 µg/kg	TM116							<10 #
Methyl Tertiary Butyl Ether	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M	<10 #	<10 M
trans-1,2-Dichloroethene	<10 µg/kg	TM116							<10 M
1,1-Dichloroethane	<8 µg/kg	TM116							<8 M
cis-1,2-Dichloroethene	<6 µg/kg	TM116							<6 M
2,2-Dichloropropane	<10 µg/kg	TM116							<10
Bromochloromethane	<10 µg/kg	TM116							<10 M
Chloroform	<8 µg/kg	TM116							<8 M
1,1,1-Trichloroethane	<7 µg/kg	TM116							<7 M
1,1-Dichloropropene	<10 µg/kg	TM116							<10 M
Carbontetrachloride	<10 µg/kg	TM116							<10 M
1,2-Dichloroethane	<5 µg/kg	TM116							<5 M
Benzene	<9 µg/kg	TM116		<9 M	<9 M	<9 M	<9 M	<9 #	<9 M
Trichloroethene	<9 µg/kg	TM116							<9 #
1,2-Dichloropropane	<10 µg/kg	TM116							<10 M
Dibromomethane	<9 µg/kg	TM116							<9 M
Bromodichloromethane	<7 µg/kg	TM116							<7 M
cis-1,3-Dichloropropene	<10 µg/kg	TM116							<10 M
Toluene	<7 µg/kg	TM116		<7 M	<7 M	<7 M	<7 M	<7 #	<7 M
trans-1,3-Dichloropropene	<10 µg/kg	TM116							<10
1,1,2-Trichloroethane	<10 µg/kg	TM116							<10 M

CERTIFICATE OF ANALYSIS

SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

VOC MS (S)

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS44	WS47	WS48	WS48	WS48	WS49
			Depth (m)	0.90	0.50	0.30	3.50	4.50	0.70
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	09/01/2019	09/01/2019	09/01/2019	09/01/2019	09/01/2019	09/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	16/01/2019	16/01/2019	16/01/2019	16/01/2019	16/01/2019	16/01/2019
			SDG Ref	190116-100	190116-100	190116-100	190116-100	190116-100	190116-100
			Lab Sample No.(s)	19125369	19125372	19125376	19125380	19125381	19125384
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116							<7 M
Tetrachloroethene	<5 µg/kg	TM116							<5 M
Dibromochloromethane	<10 µg/kg	TM116							<10 M
1,2-Dibromoethane	<10 µg/kg	TM116							<10 M
Chlorobenzene	<5 µg/kg	TM116							<5 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116							<10 M
Ethylbenzene	<4 µg/kg	TM116	<4 M	<4 M	<4 M	<4 M	<4 #	<4 M	
p/m-Xylene	<10 µg/kg	TM116	<10 #	<10 #	<10 #	<10 #	<10 #	<10 #	
o-Xylene	<10 µg/kg	TM116	<10 M	<10 M	<10 M	<10 M	<10 #	<10 M	
Styrene	<10 µg/kg	TM116							<10 #
Bromoform	<10 µg/kg	TM116							<10 M
Isopropylbenzene	<5 µg/kg	TM116							<5 #
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116							<10 #
1,2,3-Trichloropropane	<16 µg/kg	TM116							<16 M
Bromobenzene	<10 µg/kg	TM116							<10 M
Propylbenzene	<10 µg/kg	TM116							<10 M
2-Chlorotoluene	<9 µg/kg	TM116							<9 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116							<8 M
4-Chlorotoluene	<10 µg/kg	TM116							<10 M
tert-Butylbenzene	<14 µg/kg	TM116							<14 M
1,2,4-Trimethylbenzene	<9 µg/kg	TM116							<9 #
sec-Butylbenzene	<10 µg/kg	TM116							<10
4-Isopropyltoluene	<10 µg/kg	TM116							<10 M
1,3-Dichlorobenzene	<8 µg/kg	TM116							<8 M
1,4-Dichlorobenzene	<5 µg/kg	TM116							<5 M
n-Butylbenzene	<11 µg/kg	TM116							<11
1,2-Dichlorobenzene	<10 µg/kg	TM116							<10 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116							<14 M
Tert-amyl methyl ether	<10 µg/kg	TM116							<10 #
1,2,4-Trichlorobenzene	<20 µg/kg	TM116							<20
Hexachlorobutadiene	<20 µg/kg	TM116							<20
Naphthalene	<13 µg/kg	TM116							<13 M

CERTIFICATE OF ANALYSIS

SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	Depth (m)	Sample Type	Date Sampled	Sampled Time	Date Received	SDG Ref	Lab Sample No.(s)	AGS Reference
			WS44	0.90	Soil/Solid (S)	09/01/2019	.	16/01/2019	190116-100	19125369	
			WS47	0.50	Soil/Solid (S)	09/01/2019	.	16/01/2019	190116-100	19125372	
			WS48	0.30	Soil/Solid (S)	09/01/2019	.	16/01/2019	190116-100	19125376	
			WS48	3.50	Soil/Solid (S)	09/01/2019	.	16/01/2019	190116-100	19125380	
			WS48	4.50	Soil/Solid (S)	09/01/2019	.	16/01/2019	190116-100	19125381	
			WS49	0.70	Soil/Solid (S)	09/01/2019	.	16/01/2019	190116-100	19125384	
1,2,3-Trichlorobenzene	<20 µg/kg	TM116									<20 #
Sum of Detected Xylenes	<0.02 mg/kg	TM116	<0.02					<0.02			<0.02
Sum of BTEX	<40 µg/kg	TM116	<40					<40			<40

CERTIFICATE OF ANALYSIS

SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS49	WS50	WS51	WS51		
			Depth (m)	1.20	1.50	1.20	2.30		
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)		
			Date Sampled	09/01/2019	-	08/01/2019	-		
			Sampled Time	.	.	.	.		
			Date Received	16/01/2019	16/01/2019	16/01/2019	16/01/2019		
			SDG Ref	190116-100	190116-100	190116-100	190116-100		
			Lab Sample No.(s)	19125386	19125393	19125396	19125398		
			AGS Reference						
Dibromofluoromethane**	%	TM116		106	105 §	109	116 §		
Toluene-d8**	%	TM116		98.9	100 §	98.9	99.7 §		
4-Bromofluorobenzene**	%	TM116		86.4	93.9 §	84.8	90.8 §		
Dichlorodifluoromethane	<6 µg/kg	TM116		<6 M					
Chloromethane	<7 µg/kg	TM116		<7 #					
Vinyl Chloride	<6 µg/kg	TM116		<6 M					
Bromomethane	<10 µg/kg	TM116		<10 M					
Chloroethane	<10 µg/kg	TM116		<10 M					
Trichlorofluorormethane	<6 µg/kg	TM116		<6 M					
1,1-Dichloroethene	<10 µg/kg	TM116		<10 #					
Carbon Disulphide	<7 µg/kg	TM116		<7 M					
Dichloromethane	<10 µg/kg	TM116		<10 #					
Methyl Tertiary Butyl Ether	<10 µg/kg	TM116		<10 M	<10 § M	<10 M	<10 § M		
trans-1,2-Dichloroethene	<10 µg/kg	TM116		<10 M					
1,1-Dichloroethane	<8 µg/kg	TM116		<8 M					
cis-1,2-Dichloroethene	<6 µg/kg	TM116		<6 M					
2,2-Dichloropropane	<10 µg/kg	TM116		<10					
Bromochloromethane	<10 µg/kg	TM116		<10 M					
Chloroform	<8 µg/kg	TM116		<8 M					
1,1,1-Trichloroethane	<7 µg/kg	TM116		<7 M					
1,1-Dichloropropene	<10 µg/kg	TM116		<10 M					
Carbontetrachloride	<10 µg/kg	TM116		<10 M					
1,2-Dichloroethane	<5 µg/kg	TM116		<5 M					
Benzene	<9 µg/kg	TM116		<9 M	<9 § M	<9 M	<9 § M		
Trichloroethene	<9 µg/kg	TM116		<9 #					
1,2-Dichloropropane	<10 µg/kg	TM116		<10 M					
Dibromomethane	<9 µg/kg	TM116		<9 M					
Bromodichloromethane	<7 µg/kg	TM116		<7 M					
cis-1,3-Dichloropropene	<10 µg/kg	TM116		<10 M					
Toluene	<7 µg/kg	TM116		<7 M	<7 § M	<7 M	<7 § M		
trans-1,3-Dichloropropene	<10 µg/kg	TM116		<10					
1,1,2-Trichloroethane	<10 µg/kg	TM116		<10 M					

CERTIFICATE OF ANALYSIS

SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS49	WS50	WS51	WS51		
			Depth (m)	1.20	1.50	1.20	2.30		
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)		
			Date Sampled	09/01/2019	-	08/01/2019	-		
			Sampled Time	-	-	-	-		
			Date Received	16/01/2019	16/01/2019	16/01/2019	16/01/2019		
			SDG Ref	190116-100	190116-100	190116-100	190116-100		
			Lab Sample No.(s)	19125386	19125393	19125396	19125398		
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<7 M					
Tetrachloroethene	<5 µg/kg	TM116		<5 M					
Dibromochloromethane	<10 µg/kg	TM116		<10 M					
1,2-Dibromoethane	<10 µg/kg	TM116		<10 M					
Chlorobenzene	<5 µg/kg	TM116		<5 M					
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<10 M					
Ethylbenzene	<4 µg/kg	TM116		<4 M	<4 § M	<4 M	<4 § M		
p/m-Xylene	<10 µg/kg	TM116		<10 #	<10 § #	<10 #	<10 § #		
o-Xylene	<10 µg/kg	TM116		<10 M	<10 § M	<10 M	<10 § M		
Styrene	<10 µg/kg	TM116		<10 #					
Bromoform	<10 µg/kg	TM116		<10 M					
Isopropylbenzene	<5 µg/kg	TM116		<5 #					
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<10 #					
1,2,3-Trichloropropane	<16 µg/kg	TM116		<16 M					
Bromobenzene	<10 µg/kg	TM116		<10 M					
Propylbenzene	<10 µg/kg	TM116		<10 M					
2-Chlorotoluene	<9 µg/kg	TM116		<9 M					
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<8 M					
4-Chlorotoluene	<10 µg/kg	TM116		<10 M					
tert-Butylbenzene	<14 µg/kg	TM116		<14 M					
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<9 #					
sec-Butylbenzene	<10 µg/kg	TM116		<10					
4-Isopropyltoluene	<10 µg/kg	TM116		<10 M					
1,3-Dichlorobenzene	<8 µg/kg	TM116		<8 M					
1,4-Dichlorobenzene	<5 µg/kg	TM116		<5 M					
n-Butylbenzene	<11 µg/kg	TM116		<11					
1,2-Dichlorobenzene	<10 µg/kg	TM116		<10 M					
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<14 M					
Tert-amyl methyl ether	<10 µg/kg	TM116		<10 #					
1,2,4-Trichlorobenzene	<20 µg/kg	TM116		<20					
Hexachlorobutadiene	<20 µg/kg	TM116		<20					
Naphthalene	<13 µg/kg	TM116		<13 M					

CERTIFICATE OF ANALYSIS

SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS49	WS50	WS51	WS51		
			Depth (m)	1.20	1.50	1.20	2.30		
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)		
			Date Sampled	09/01/2019	-	08/01/2019	-		
			Sampled Time	-	-	-	-		
			Date Received	16/01/2019	16/01/2019	16/01/2019	16/01/2019		
			SDG Ref	190116-100	190116-100	190116-100	190116-100		
			Lab Sample No.(s)	19125386	19125393	19125396	19125398		
			AGS Reference						
1,2,3-Trichlorobenzene	<20 µg/kg	TM116		<20 #					
Sum of Detected Xylenes	<0.02 mg/kg	TM116		<0.02	<0.02 §	<0.02	<0.02 §		
Sum of BTEX	<40 µg/kg	TM116		<40	<40 §	<40	<40 §		

CERTIFICATE OF ANALYSIS

SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Asbestos Identification - Solid Samples

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
*	Subcontracted test.
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS44 0.90 SOLID 09/01/2019 00:00:00 16/01/2019 06:00:00 190116-100 19125369 TM048	23/01/2019	Lucy Caroe	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS47 0.50 SOLID 09/01/2019 00:00:00 16/01/2019 06:00:00 190116-100 19125372 TM048	23/01/2019	Lucy Caroe	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS48 0.30 SOLID 09/01/2019 00:00:00 16/01/2019 06:00:00 190116-100 19125376 TM048	23/01/19	Andrzej Ferfecki	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS48 3.50 SOLID 09/01/2019 00:00:00 16/01/2019 06:00:00 190116-100 19125380 TM048	23/01/2019	Lucy Caroe	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS48 4.50 SOLID 09/01/2019 00:00:00 16/01/2019 06:00:00 190116-100 19125381 TM048	24/01/19	Andrzej Ferfecki	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS49 0.70 SOLID 09/01/2019 00:00:00 16/01/2019 06:00:00 190116-100 19125384 TM048	23/01/2019	James Richards	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS49 1.20 SOLID 09/01/2019 00:00:00 16/01/2019 06:00:00 190116-100 19125386 TM048	22/1/19	Christian Hallam	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS50 1.50 SOLID 16/01/2019 06:00:00 190116-100 19125393 TM048	22/1/19	Christian Hallam	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS51 1.20 SOLID 08/01/2019 00:00:00 16/01/2019 06:00:00 190116-100 19125396 TM048	22/1/19	Christian Hallam	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS51 2.30 SOLID 16/01/2019 06:00:00 190116-100 19125398 TM048	22/01/2019	Barbara Urbanek-Walsh	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

Table of Results - Appendix

Method No	Reference	Description
PM001		Preparation of Samples for Metals Analysis
PM024	Modified BS 1377	Soil preparation including homogenisation, moisture screens of soils for Asbestos Containing Material
TM048	HSG 248, Asbestos: The analysts' guide for sampling, analysis and clearance procedures	Identification of Asbestos in Bulk Material
TM072	Modified: US EPA Method 8141A	Determination of Phenols by GC-MS
TM089	Modified: US EPA Methods 8020 & 602	Determination of Gasoline Range Hydrocarbons (GRO) by Headspace GC-FID (C4-C12)
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS
TM132	In - house Method	ELTRA CS800 Operators Guide
TM133	BS 1377: Part 3 1990;BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter
TM153	Method 4500A,B,C, I, M AWWA/APHA, 20th Ed., 1999	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate using the Skalar SANS+ System Segmented Flow Analyser
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone
TM168	EPA Method 8082, Polychlorinated Biphenyls by Gas Chromatography	Determination of WHO12 and EC7 Polychlorinated Biphenyl Congeners by GC-MS in Soils
TM173	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Determination of Speciated Extractable Petroleum Hydrocarbons in Soils by GC-FID
TM181	US EPA Method 6010B	Determination of Routine Metals in Soil by iCap 6500 Duo ICP-OES
TM218	Shaker extraction - EPA method 3546.	The determination of PAH in soil samples by GC-MS
TM222	In-House Method	Determination of Hot Water Soluble Boron in Soils (10:1 Water:soil) by IRIS Emission Spectrometer

NA = not applicable.

Chemical testing (unless subcontracted) performed at ALS Environmental Hawarden (Method codes TM) or ALS Environmental Aberdeen (Method codes S).

CERTIFICATE OF ANALYSIS

SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	19125369	19125372	19125376	19125380	19125381	19125384	19125386	19125393	19125396	19125398
Customer Sample Ref.	WS44	WS47	WS48	WS48	WS48	WS49	WS49	WS50	WS51	WS51
AGS Ref.										
Depth	0.90	0.50	0.30	3.50	4.50	0.70	1.20	1.50	1.20	2.30
Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Asbestos ID in Solid Samples	23-Jan-2019	23-Jan-2019	23-Jan-2019	23-Jan-2019	24-Jan-2019	23-Jan-2019	22-Jan-2019	22-Jan-2019	22-Jan-2019	22-Jan-2019
Boron Water Soluble	24-Jan-2019	24-Jan-2019	24-Jan-2019	24-Jan-2019	24-Jan-2019	24-Jan-2019	24-Jan-2019	24-Jan-2019	24-Jan-2019	24-Jan-2019
Cyanide Comp/Free/Total/Thiocyanate	23-Jan-2019	23-Jan-2019	23-Jan-2019	23-Jan-2019	23-Jan-2019	23-Jan-2019	22-Jan-2019	22-Jan-2019	22-Jan-2019	22-Jan-2019
EPH CWG (Aliphatic) GC (S)	24-Jan-2019	24-Jan-2019	24-Jan-2019	24-Jan-2019	24-Jan-2019	24-Jan-2019	22-Jan-2019	24-Jan-2019	23-Jan-2019	23-Jan-2019
EPH CWG (Aromatic) GC (S)	24-Jan-2019	24-Jan-2019	24-Jan-2019	24-Jan-2019	24-Jan-2019	24-Jan-2019	22-Jan-2019	24-Jan-2019	23-Jan-2019	23-Jan-2019
GRO by GC-FID (S)	24-Jan-2019	23-Jan-2019	24-Jan-2019	24-Jan-2019	23-Jan-2019	24-Jan-2019	23-Jan-2019	23-Jan-2019	24-Jan-2019	24-Jan-2019
Metals in solid samples by OES	28-Jan-2019	28-Jan-2019	24-Jan-2019	24-Jan-2019	25-Jan-2019	24-Jan-2019	24-Jan-2019	25-Jan-2019	24-Jan-2019	25-Jan-2019
PAH by GCMS	26-Jan-2019	26-Jan-2019	26-Jan-2019	26-Jan-2019	26-Jan-2019	26-Jan-2019	24-Jan-2019	24-Jan-2019	24-Jan-2019	23-Jan-2019
PCBs by GCMS						24-Jan-2019	24-Jan-2019			
pH	22-Jan-2019	22-Jan-2019	22-Jan-2019	22-Jan-2019	22-Jan-2019	22-Jan-2019	22-Jan-2019	22-Jan-2019	22-Jan-2019	22-Jan-2019
Phenols Spec MS (S)	24-Jan-2019	24-Jan-2019	24-Jan-2019	24-Jan-2019	24-Jan-2019	24-Jan-2019	24-Jan-2019	24-Jan-2019	24-Jan-2019	24-Jan-2019
Sample description	21-Jan-2019	21-Jan-2019	21-Jan-2019	21-Jan-2019	21-Jan-2019	21-Jan-2019	19-Jan-2019	19-Jan-2019	19-Jan-2019	19-Jan-2019
Semi Volatile Organic Compounds						24-Jan-2019	24-Jan-2019			
Total Organic Carbon	28-Jan-2019	28-Jan-2019	25-Jan-2019	24-Jan-2019	28-Jan-2019	24-Jan-2019	28-Jan-2019	28-Jan-2019	28-Jan-2019	28-Jan-2019
TPH CWG GC (S)	24-Jan-2019	24-Jan-2019	24-Jan-2019	24-Jan-2019	24-Jan-2019	24-Jan-2019	23-Jan-2019	24-Jan-2019	24-Jan-2019	24-Jan-2019
VOC MS (S)	23-Jan-2019	23-Jan-2019	23-Jan-2019	23-Jan-2019	23-Jan-2019	24-Jan-2019	23-Jan-2019	23-Jan-2019	23-Jan-2019	23-Jan-2019

ASSOCIATED AQC DATA

Boron Water Soluble

Component	Method Code	QC 1983	QC 1921	QC 1908
Water Soluble Boron	TM222	**99.5** 86.05 : 109.75	**104.5** 86.05 : 109.75	**102.5** 86.05 : 109.75

Cyanide Comp/Free/Total/Thiocyanate

Component	Method Code	QC 1941	QC 1977
Free Cyanide	TM153	**96.4** 87.60 : 108.63	**95.9** 87.60 : 108.63
Thiocyanate	TM153	**93.41** 92.90 : 108.39	**92.81** 92.90 : 108.39
Total Cyanide	TM153	**100.0** 87.00 : 103.00	**97.86** 87.00 : 103.00

EPH CWG (Aliphatic) GC (S)

Component	Method Code	QC 1980	QC 1909	QC 1979	QC 1955
Total Aliphatics >C12-C35	TM173	**87.5** 70.61 : 106.16	**80.83** 66.17 : 105.28	**95.42** 70.71 : 106.26	**95.63** 71.82 : 103.92

EPH CWG (Aromatic) GC (S)

Component	Method Code	QC 1980	QC 1909	QC 1979	QC 1955
Total Aromatics >EC12-EC35	TM173	**68.0** 67.75 : 104.04	**87.33** 65.78 : 102.90	 65.82 : 105.00	**87.33** 68.32 : 103.07

GRO by GC-FID (S)

Component	Method Code	QC 1916
QC	TM089	**89.27** 72.28 : 114.54

Metals in solid samples by OES

Component	Method Code	QC 1974	QC 1940	QC 1985	QC 1980	QC 1985
Aluminium	TM181	**92.04** 77.46 : 123.98	**90.27** 77.46 : 123.98	**90.27** 77.46 : 123.98	**92.04** 77.46 : 123.98	**95.58** 77.46 : 123.98
Antimony	TM181	**86.18** 87.04 : 111.16	**91.46** 87.04 : 111.16	**91.87** 87.04 : 111.16	**90.65** 87.04 : 111.16	**93.09** 87.04 : 111.16

Metals in solid samples by OES

		QC 1974	QC 1940	QC 1985	QC 1980	QC 1985
Arsenic	TM181	**96.51** 87.34 : 110.87	**95.93** 87.34 : 110.87	**97.97** 87.34 : 110.87	**96.22** 87.34 : 110.87	**98.26** 87.34 : 110.87
Barium	TM181	**93.58** 80.73 : 115.16	**90.46** 80.73 : 115.16	**90.37** 80.73 : 115.16	**92.66** 80.73 : 115.16	**86.33** 80.73 : 115.16
Beryllium	TM181	**97.39** 89.47 : 112.97	**95.9** 89.47 : 112.97	**97.01** 89.47 : 112.97	**95.52** 89.47 : 112.97	**93.66** 89.47 : 112.97
Boron	TM181	**86.25** 76.57 : 104.15	**85.39** 76.57 : 104.15	**87.39** 76.57 : 104.15	**85.1** 76.57 : 104.15	**86.53** 76.57 : 104.15
Cadmium	TM181	**90.53** 82.98 : 105.97	**90.53** 82.98 : 105.97	**93.42** 82.98 : 105.97	**88.07** 82.98 : 105.97	**90.53** 82.98 : 105.97
Chromium	TM181	**95.33** 77.55 : 104.47	**91.89** 77.55 : 104.47	**91.48** 77.55 : 104.47	**91.68** 77.55 : 104.47	**92.09** 77.55 : 104.47
Cobalt	TM181	**88.99** 83.30 : 102.38	**87.42** 83.30 : 102.38	**88.36** 83.30 : 102.38	**86.79** 83.30 : 102.38	**88.68** 83.30 : 102.38
Copper	TM181	**93.84** 88.76 : 109.59	**91.55** 88.76 : 109.59	**84.86** 88.76 : 109.59	**90.49** 88.76 : 109.59	**93.13** 88.76 : 109.59
Iron	TM181	**93.65** 81.43 : 115.79	**91.27** 81.43 : 115.79	**90.48** 81.43 : 115.79	**96.83** 81.43 : 115.79	**88.89** 81.43 : 115.79
Lead	TM181	**100.23** 81.95 : 107.63	**90.09** 81.95 : 107.63	**91.22** 81.95 : 107.63	**88.06** 81.95 : 107.63	**92.12** 81.95 : 107.63
Manganese	TM181	**114.72** 97.73 : 122.27	**114.44** 97.73 : 122.27	**117.78** 97.73 : 122.27	**110.56** 97.73 : 122.27	**110.28** 97.73 : 122.27
Mercury	TM181	**92.51** 82.73 : 106.36	**92.51** 82.73 : 106.36	**93.48** 82.73 : 106.36	**93.0** 82.73 : 106.36	**95.17** 82.73 : 106.36
Molybdenum	TM181	**92.18** 86.61 : 111.07	**93.0** 86.61 : 111.07	**94.24** 86.61 : 111.07	**100.41** 86.61 : 111.07	**90.95** 86.61 : 111.07
Nickel	TM181	**91.2** 83.87 : 104.87	**88.02** 83.87 : 104.87	**88.26** 83.87 : 104.87	**88.26** 83.87 : 104.87	**90.22** 83.87 : 104.87
Phosphorus	TM181	**110.71** 92.65 : 125.47	**108.69** 92.65 : 125.47	**108.08** 92.65 : 125.47	**107.47** 92.65 : 125.47	**105.45** 92.65 : 125.47
Selenium	TM181	**95.29** 88.36 : 111.25	**93.73** 88.36 : 111.25	**95.69** 88.36 : 111.25	**94.51** 88.36 : 111.25	**98.04** 88.36 : 111.25
Strontium	TM181	**92.43** 83.94 : 111.48	**90.2** 83.94 : 111.48	**89.76** 83.94 : 111.48	**91.09** 83.94 : 111.48	**92.43** 83.94 : 111.48
Thallium	TM181	**98.67** 88.60 : 116.73	**97.79** 88.60 : 116.73	**98.23** 88.60 : 116.73	**97.35** 88.60 : 116.73	**59.73** 88.60 : 116.73
Tin	TM181	**96.96** 89.77 : 112.62	**96.96** 89.77 : 112.62	**96.96** 89.77 : 112.62	**96.96** 89.77 : 112.62	**98.86** 89.77 : 112.62
Titanium	TM181	**79.39** 66.29 : 105.96	**81.68** 66.29 : 105.96	**82.44** 66.29 : 105.96	**78.63** 66.29 : 105.96	**83.21** 66.29 : 105.96
Vanadium	TM181	**95.24** 84.11 : 113.29	**94.51** 84.11 : 113.29	**97.8** 84.11 : 113.29	**92.31** 84.11 : 113.29	**93.41** 84.11 : 113.29
Zinc	TM181	**94.66** 86.34 : 113.56	**93.84** 86.34 : 113.56	**94.46** 86.34 : 113.56	**93.43** 86.34 : 113.56	**94.66** 86.34 : 113.56

PAH by GCMS

Component	Method Code	QC 1968	QC 1937	QC 1967	QC 1966
Acenaphthene	TM218	**94.0** 84.53 : 114.86	**100.0** 76.82 : 113.72	**94.0** 80.97 : 105.99	**90.0** 80.97 : 105.99
Acenaphthylene	TM218	**89.5** 80.13 : 113.99	**101.5** 75.95 : 108.85	**94.5** 80.24 : 105.29	**89.5** 80.24 : 105.29
Anthracene	TM218	**91.5** 71.15 : 111.65	**102.5** 76.67 : 109.58	**92.0** 79.32 : 108.94	**93.5** 79.32 : 108.94

CERTIFICATE OF ANALYSIS

SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

PAH by GCMS

		QC 1968	QC 1937	QC 1967	QC 1966
Benz(a)anthracene	TM218	**90.5** 74.78 : 122.48	**102.5** 70.05 : 119.30	**101.5** 79.72 : 116.84	**93.5** 79.72 : 116.84
Benzo(a)pyrene	TM218	**90.5** 70.68 : 115.92	**102.0** 68.22 : 116.60	**103.0** 79.52 : 108.45	**91.5** 79.52 : 108.45
Benzo(b)fluoranthene	TM218	**95.0** 73.56 : 121.32	**100.5** 75.44 : 113.45	**101.5** 77.35 : 112.97	**90.5** 77.35 : 112.97
Benzo(ghi)perylene	TM218	**86.5** 71.68 : 115.27	**98.5** 70.79 : 114.76	**91.0** 77.68 : 107.38	**83.5** 77.68 : 107.38
Benzo(k)fluoranthene	TM218	**85.0** 73.30 : 120.87	**107.0** 81.43 : 115.17	**104.5** 82.61 : 111.93	**91.0** 82.61 : 111.93
Chrysene	TM218	**89.0** 77.24 : 120.84	**99.0** 75.94 : 114.39	**104.0** 80.28 : 111.42	**93.0** 80.28 : 111.42
Dibenzo(ah)anthracene	TM218	**85.5** 72.03 : 116.78	**96.0** 71.87 : 118.97	**92.5** 79.17 : 106.41	**86.5** 79.17 : 106.41
Fluoranthene	TM218	**87.0** 78.65 : 113.45	**101.0** 77.92 : 113.69	**90.0** 79.07 : 112.75	**91.5** 79.07 : 112.75
Fluorene	TM218	**90.5** 76.95 : 117.18	**96.0** 82.02 : 108.34	**89.0** 80.52 : 110.90	**87.0** 80.52 : 110.90
Indeno(123cd)pyrene	TM218	**87.5** 68.53 : 118.42	**103.5** 67.80 : 113.60	**95.0** 76.97 : 113.36	**93.0** 76.97 : 113.36
Naphthalene	TM218	**92.5** 78.80 : 115.10	**98.0** 77.17 : 112.55	**95.0** 79.37 : 105.57	**87.5** 79.37 : 105.57
Phenanthrene	TM218	**90.5** 76.49 : 119.30	**100.0** 78.26 : 113.22	**88.5** 79.34 : 111.91	**90.5** 79.34 : 111.91
Pyrene	TM218	**87.0** 76.20 : 119.96	**97.0** 74.86 : 116.81	**89.5** 78.80 : 115.76	**89.0** 78.80 : 115.76

PCBs by GCMS

Component	Method Code	QC 1926	QC 1914
PCB congener 101	TM168	**83.4** 79.46 : 109.70	**93.7** 73.09 : 112.63
PCB congener 105	TM168	**91.0** 77.82 : 109.32	**95.1** 70.08 : 112.92
PCB congener 114	TM168	**89.5** 78.15 : 110.49	**95.3** 71.45 : 111.53
PCB congener 118	TM168	**88.2** 78.85 : 110.11	**95.1** 70.76 : 113.78
PCB congener 123	TM168	**89.5** 77.04 : 109.44	**93.6** 69.96 : 112.50
PCB congener 126	TM168	**90.5** 77.79 : 112.65	**99.0** 70.61 : 116.15
PCB congener 138	TM168	**93.5** 82.92 : 114.57	**97.0** 69.88 : 115.78
PCB congener 153	TM168	**86.9** 78.13 : 108.55	**91.1** 73.32 : 111.54
PCB congener 156	TM168	**89.2** 79.00 : 111.76	**99.1** 73.48 : 118.60
PCB congener 157	TM168	**91.8** 78.17 : 110.03	**97.9** 70.22 : 115.22
PCB congener 167	TM168	**94.6** 79.50 : 110.52	**97.7** 70.04 : 118.16
PCB congener 169	TM168	**97.0** 67.65 : 121.47	**107.0** 64.01 : 129.89

PCBs by GCMS

		QC 1926	QC 1914
PCB congener 180	TM168	**88.0** 78.72 : 110.94	**97.6** 67.10 : 120.80
PCB congener 189	TM168	**91.1** 69.53 : 116.81	**104.0** 65.53 : 126.07
PCB congener 28	TM168	**85.7** 77.37 : 110.55	**87.8** 73.86 : 116.94
PCB congener 52	TM168	**91.7** 82.53 : 112.65	**93.9** 78.72 : 119.28
PCB congener 77	TM168	**95.5** 73.92 : 120.16	**101.0** 74.04 : 120.60
PCB congener 81	TM168	**89.5** 75.24 : 110.52	**97.8** 71.38 : 116.14

pH

Component	Method Code	QC 1948	QC 1950	QC 1968
pH	TM133	**98.17** 97.41 : 101.91	**100.0** 98.63 : 101.37	**100.8** 97.41 : 101.91

Semi Volatile Organic Compounds

Component	Method Code	QC 1985	QC 1948
4-Bromophenylphenylether (Soil)	TM157	**100.5** 66.75 : 125.25	**90.0** 66.75 : 125.25
Benzo(a)anthracene (Soil)	TM157	**108.5** 67.40 : 120.50	**103.5** 67.40 : 120.50
Hexachlorobutadiene (Soil)	TM157	**109.0** 68.25 : 126.75	**100.5** 68.25 : 126.75
Naphthalene (Soil)	TM157	**113.0** 67.55 : 125.45	**102.0** 67.55 : 125.45
Nitrobenzene (Soil)	TM157	**107.5** 66.50 : 123.50	**97.5** 66.50 : 123.50
Phenol (Soil)	TM157	**105.5** 69.92 : 114.02	**91.0** 69.92 : 114.02

Total Organic Carbon

Component	Method Code	QC 1955	QC 1960	QC 1907	QC 1934
Total Organic Carbon	TM132	**99.22** 88.47 : 112.82	**99.22** 88.47 : 112.82	**100.78** 88.47 : 112.82	**94.92** 88.47 : 112.82

VOC MS (S)

VOC MS (S)

Component	Method Code	QC 1967	QC 1991	QC 1906
1,1,1,2-tetrachloroethane	TM116	**101.6** 79.10 : 119.66	**101.4** 79.10 : 119.66	**105.0** 79.10 : 119.66
1,1,1-Trichloroethane	TM116	**105.6** 87.51 : 115.37	**102.6** 87.51 : 115.37	**107.4** 87.51 : 115.37
1,1,2-Trichloroethane	TM116	**99.4** 75.16 : 112.70	**100.0** 75.16 : 112.70	**98.6** 75.16 : 112.70
1,1-Dichloroethane	TM116	**113.0** 77.84 : 124.12	**108.2** 77.84 : 124.12	**113.6** 77.84 : 124.12
1,2-Dichloroethane	TM116	**119.6** 86.58 : 129.62	**113.4** 86.58 : 129.62	**115.4** 86.58 : 129.62
1,4-Dichlorobenzene	TM116	**115.4** 71.61 : 124.63	**115.2** 71.61 : 124.63	**117.2** 71.61 : 124.63
2-Chlorotoluene	TM116	**102.8** 66.81 : 118.43	**100.2** 66.81 : 118.43	**105.2** 66.81 : 118.43
4-Chlorotoluene	TM116	**104.6** 65.88 : 114.76	**99.0** 65.88 : 114.76	**101.6** 65.88 : 114.76
Benzene	TM116	**106.2** 88.66 : 121.07	**102.0** 88.66 : 121.07	**104.0** 88.66 : 121.07
Carbon Disulphide	TM116	**118.2** 75.11 : 124.81	**98.2** 75.11 : 124.81	**118.6** 75.11 : 124.81
Carbontetrachloride	TM116	**110.0** 82.35 : 126.46	**108.8** 82.35 : 126.46	**111.8** 82.35 : 126.46
Chlorobenzene	TM116	**104.4** 82.88 : 122.42	**103.2** 82.88 : 122.42	**105.8** 82.88 : 122.42
Chloroform	TM116	**116.6** 82.52 : 123.25	**114.8** 82.52 : 123.25	**117.2** 82.52 : 123.25
Chloromethane	TM116	**129.6** 52.88 : 131.36	**92.2** 52.88 : 131.36	**129.4** 52.88 : 131.36
Cis-1,2-Dichloroethene	TM116	**110.6** 78.27 : 128.90	**110.8** 78.27 : 128.90	**109.4** 78.27 : 128.90
Dibromomethane	TM116	**101.4** 71.69 : 119.43	**102.8** 71.69 : 119.43	**98.8** 71.69 : 119.43
Dichloromethane	TM116	**124.6** 89.49 : 128.89	**121.0** 89.49 : 128.89	**126.2** 89.49 : 128.89
Ethylbenzene	TM116	**93.8** 79.78 : 120.07	**89.2** 79.78 : 120.07	**94.4** 79.78 : 120.07
Hexachlorobutadiene	TM116	**88.2** 7.32 : 139.00	**85.0** 7.32 : 139.00	**108.8** 7.32 : 139.00
Isopropylbenzene	TM116	**90.8** 52.15 : 132.52	**86.4** 52.15 : 132.52	**96.8** 52.15 : 132.52
Naphthalene	TM116	**116.4** 80.29 : 135.77	**120.4** 80.29 : 135.77	**128.0** 80.29 : 135.77
o-Xylene	TM116	**89.8** 68.16 : 107.61	**86.8** 68.16 : 107.61	**90.2** 68.16 : 107.61
p/m-Xylene	TM116	**91.0** 77.41 : 112.71	**88.3** 77.41 : 112.71	**92.6** 77.41 : 112.71
Sec-Butylbenzene	TM116	**88.2** 44.71 : 117.87	**79.4** 44.71 : 117.87	**102.6** 44.71 : 117.87
Tetrachloroethene	TM116	**107.2** 81.43 : 126.65	**101.0** 81.43 : 126.65	**107.2** 81.43 : 126.65
Toluene	TM116	**95.6** 85.50 : 114.89	**94.4** 85.50 : 114.89	**95.6** 85.50 : 114.89

CERTIFICATE OF ANALYSIS

SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

VOC MS (S)

		QC 1967	QC 1991	QC 1906
Trichloroethene	TM116	**103.0** 79.80 : 112.33	**101.0** 79.80 : 112.33	**104.2** 79.80 : 112.33
Trichlorofluoromethane	TM116	**123.0** 77.64 : 122.74	**109.0** 77.64 : 122.74	**125.8** 77.64 : 122.74
Vinyl Chloride	TM116	**115.8** 64.90 : 133.10	**87.8** 64.90 : 133.10	**113.4** 64.90 : 133.10

The above information details the reference name of the analytical quality control sample (AQC) that has been run with the samples contained in this report for the different methods of analysis.
The figure detailed is the percentage recovery result for the AQC.
The subscript numbers below are the percentage recovery lower control limit (LCL) and the upper control limit (UCL). The percentage recovery result for the AQC should be between these limits to be statistically in control.

CERTIFICATE OF ANALYSIS

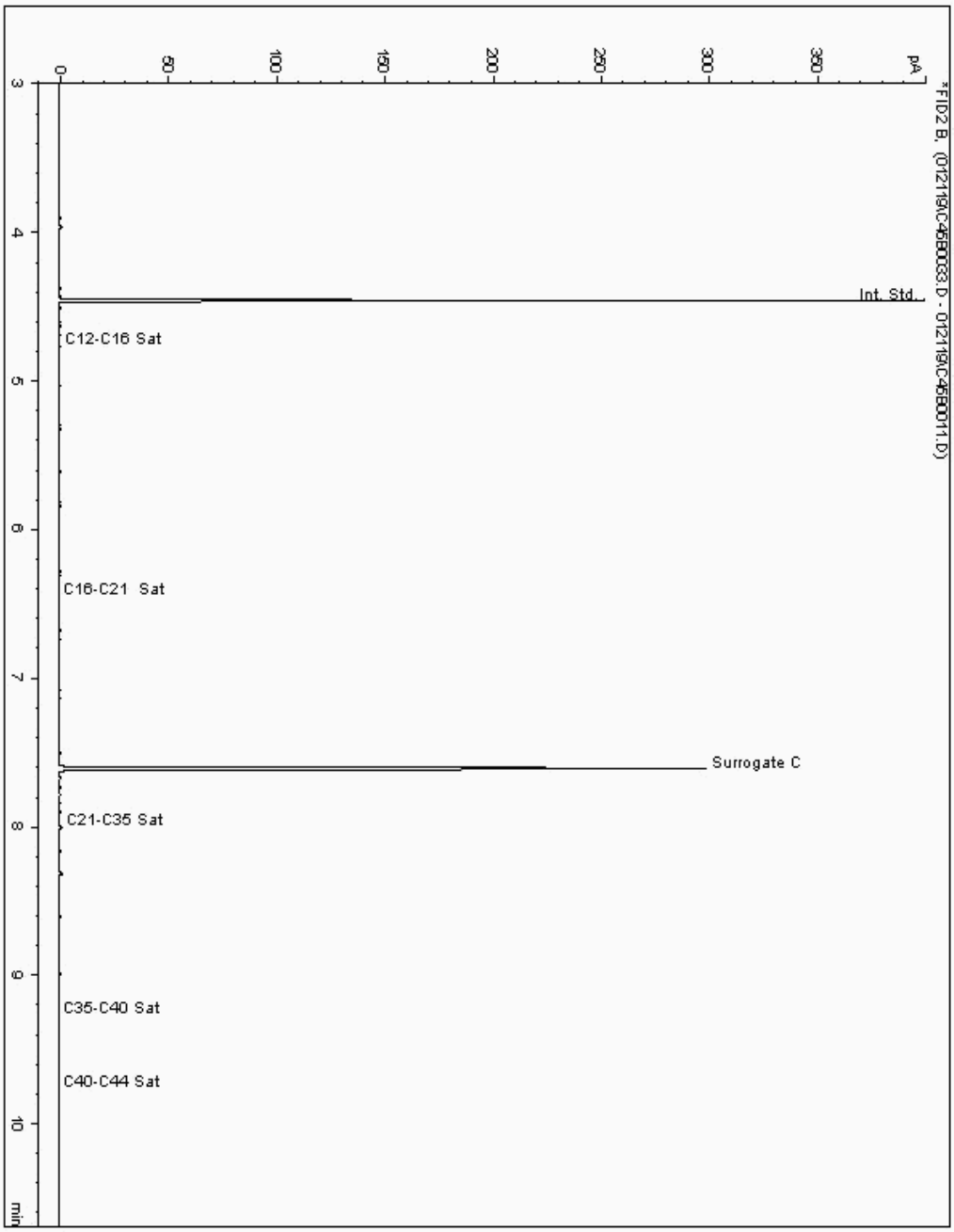
SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19153294 **Depth :** 1.20
Sample ID : WS49

Speciated TPH - AROM (C12 - C40)

Sample Identity: 17985714-
Date Acquired : 22/01/2019 01:09:40 PM
Units : ppb
Dilution: WS49[1.20] ->



CERTIFICATE OF ANALYSIS

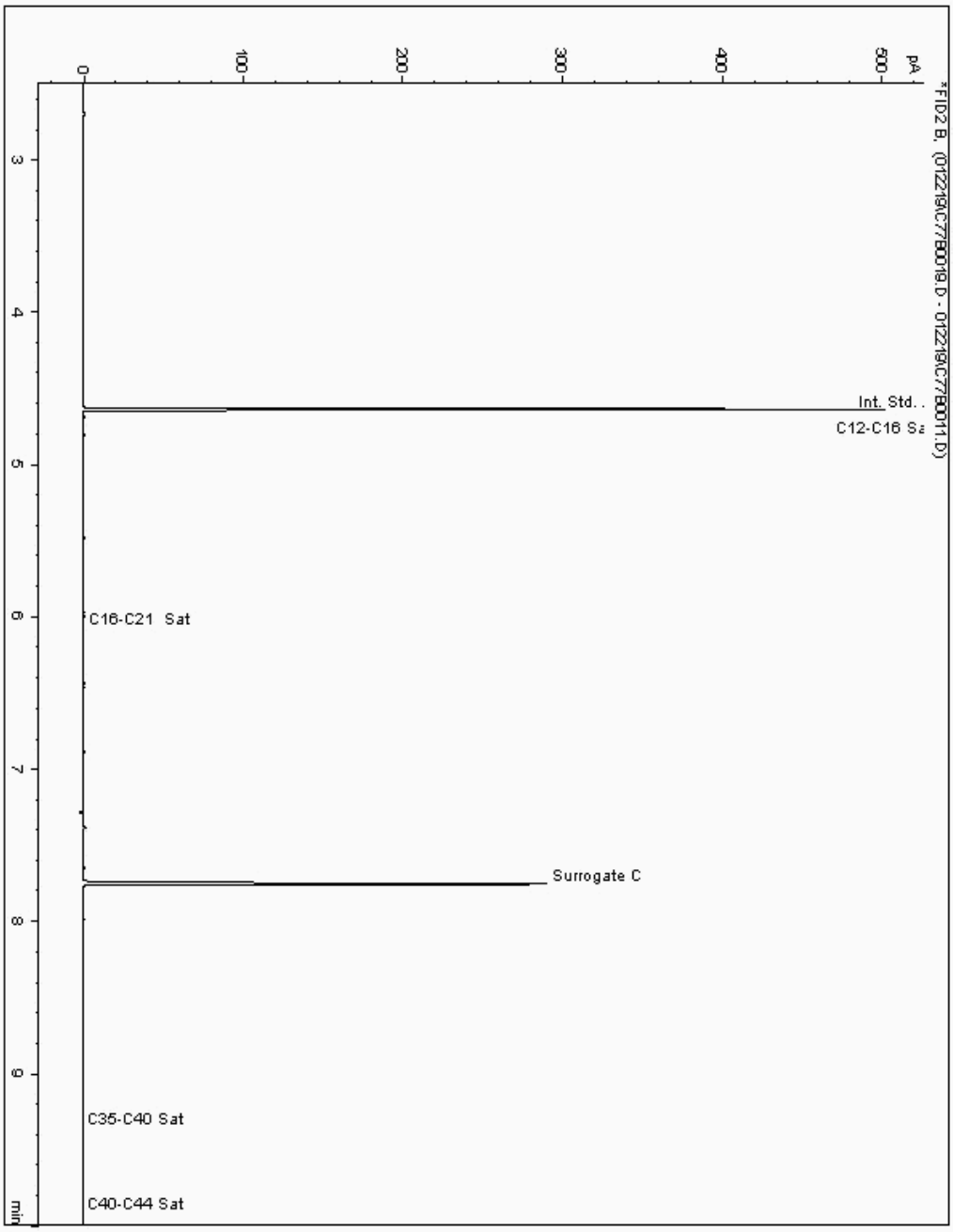
SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19153368 **Depth :** 1.50
Sample ID : WS50

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 17985738-
Date Acquired : 1/22/2019 4:48:22 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.990



CERTIFICATE OF ANALYSIS

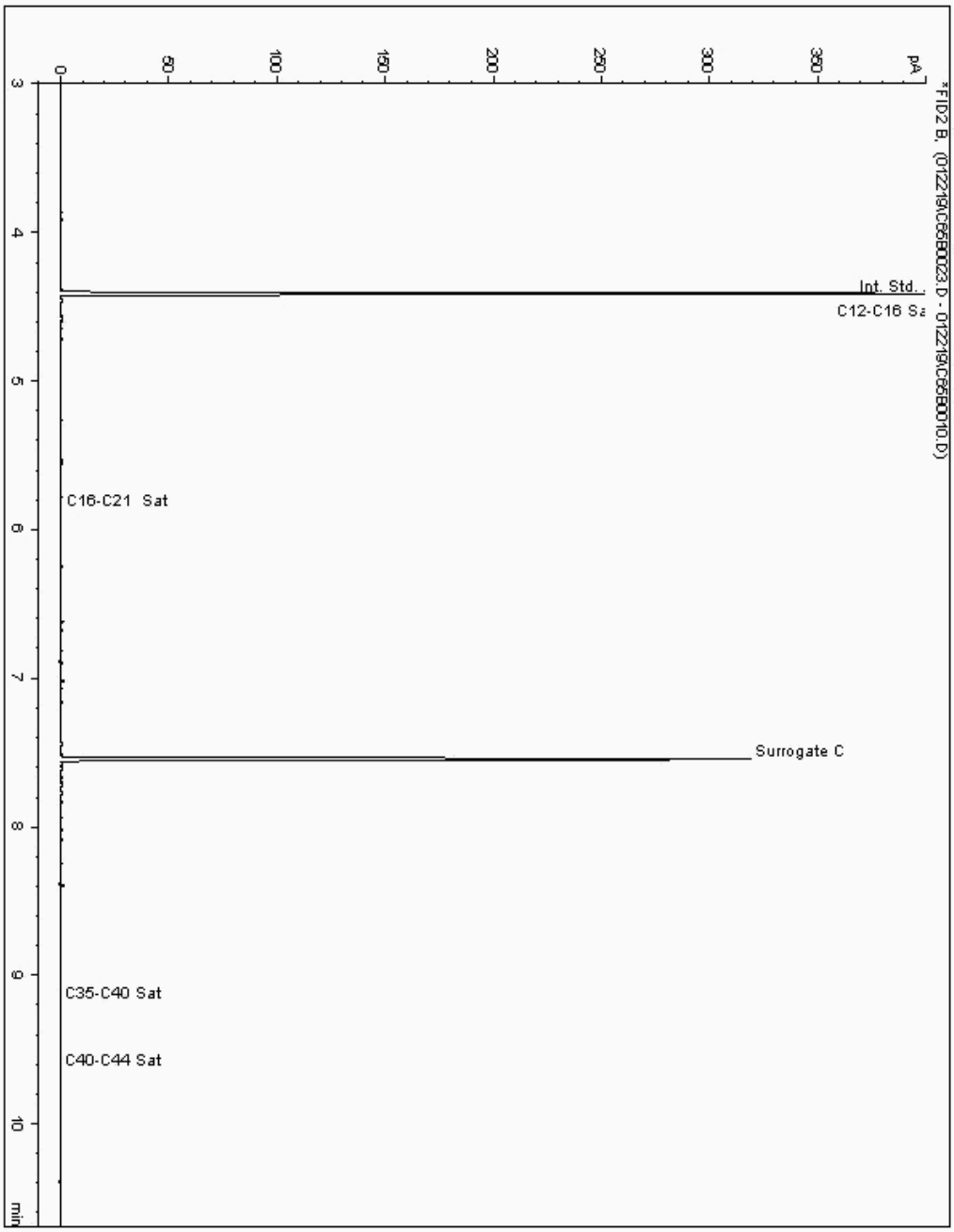
SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19153488 **Depth :** 2.30
Sample ID : WS51

Speciated TPH - SATS (C12 - C40)

Sample Identity: 17985798-
Date Acquired : 22/01/2019 16:45:39 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

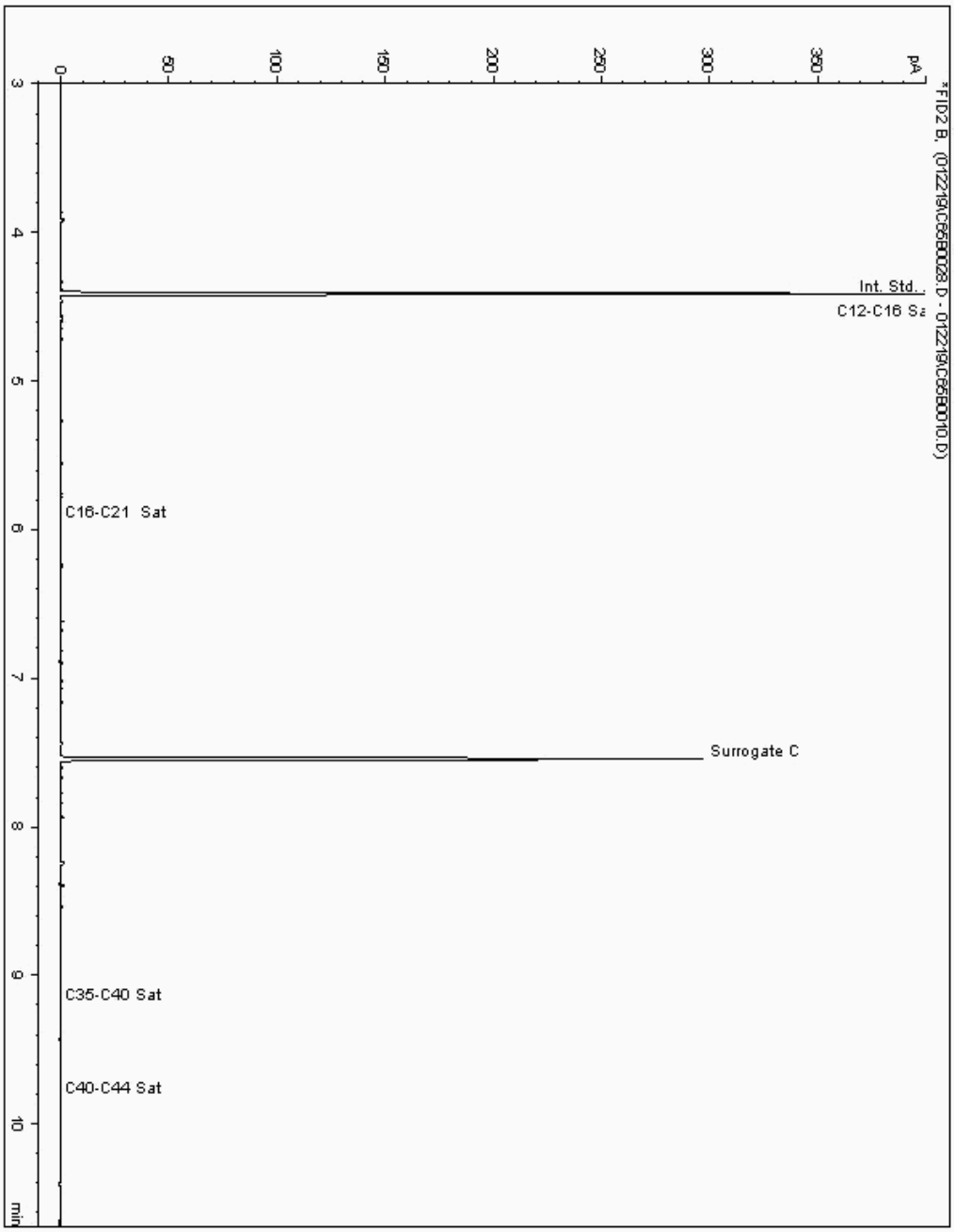
SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19153682 **Depth :** 1.20
Sample ID : WS51

Speciated TPH - SATS (C12 - C40)

Sample Identity: 17985765-
Date Acquired : 22/01/2019 18:18:24 PM
Units : ppb
Dilution:

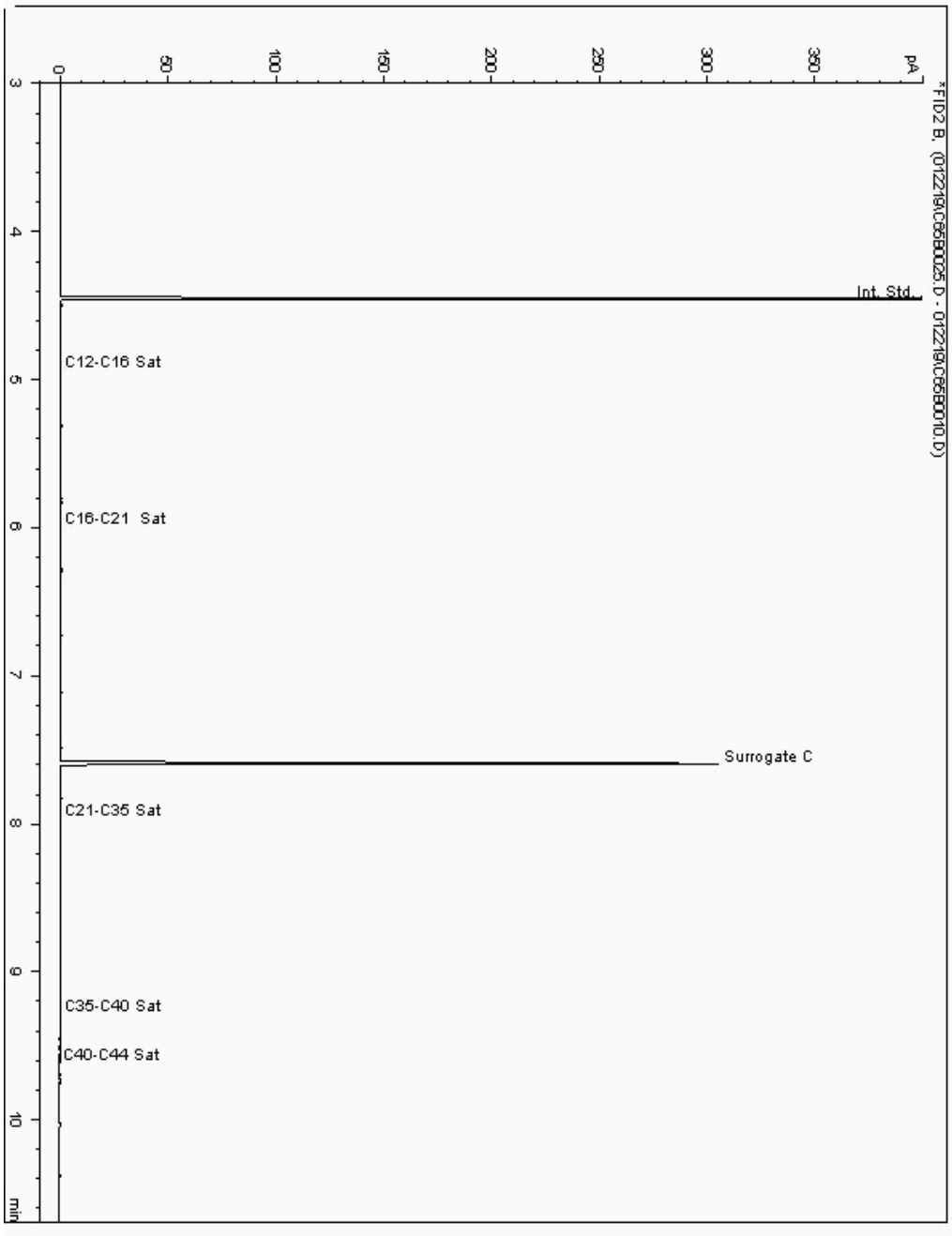


CERTIFICATE OF ANALYSIS

SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19163398 **Depth :** 3.50
Sample ID : WS48



CERTIFICATE OF ANALYSIS

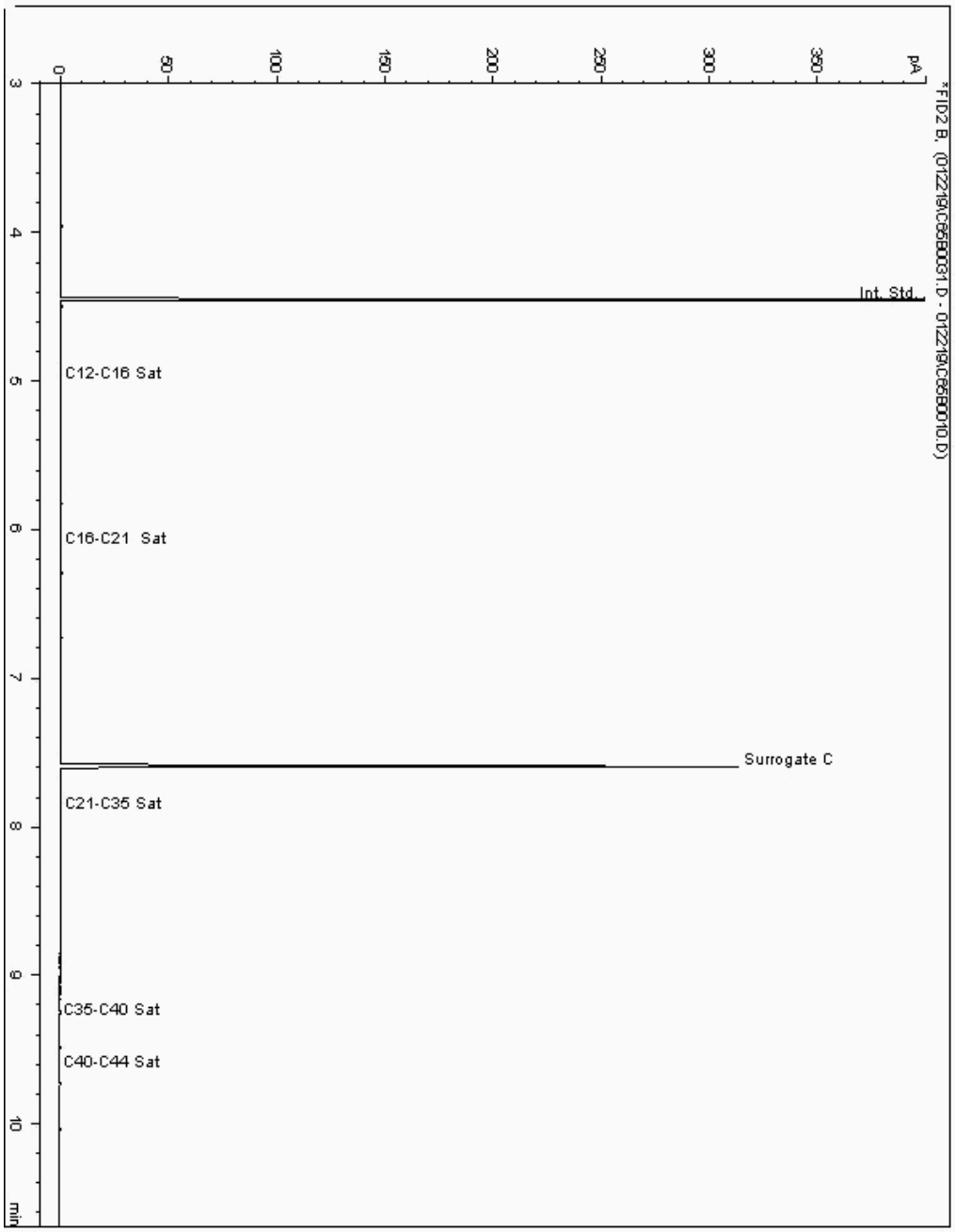
SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19163425 **Depth :** 4.50
Sample ID : WS48

Speciated TPH - SATS (C12 - C40)

Sample Identity: 17985649-
Date Acquired : 22/01/2019 20:49:55 PM
Units : ppb
Dilution: WS48[4.50] ->



CERTIFICATE OF ANALYSIS

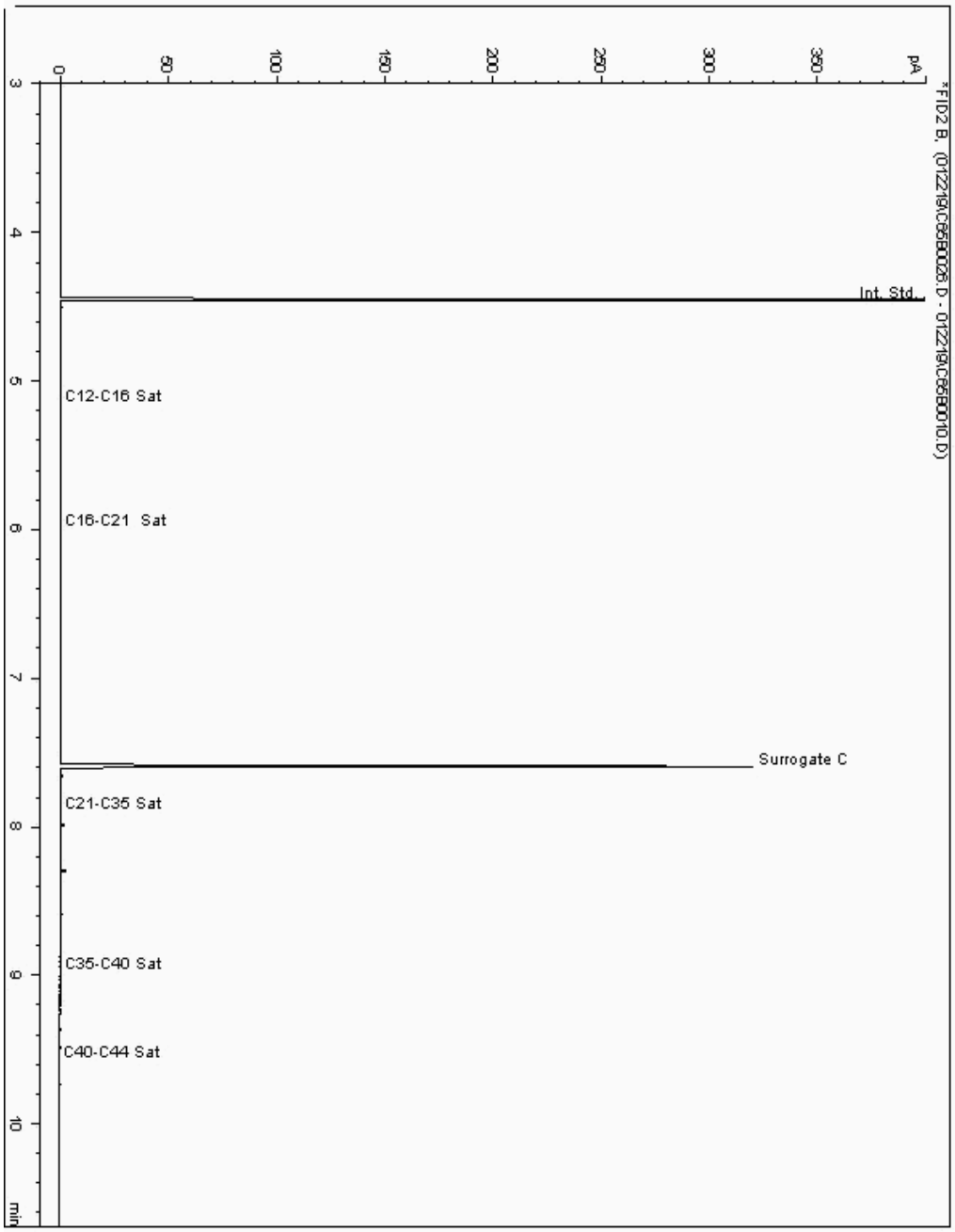
SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19163444 **Depth :** 0.70
Sample ID : WS49

Speciated TPH - SATS (C12 - C40)

Sample Identity: 17985682-
Date Acquired : 22/01/2019 19:15:29 PM
Units : ppb
Dilution: WS49[0.70] ->



CERTIFICATE OF ANALYSIS

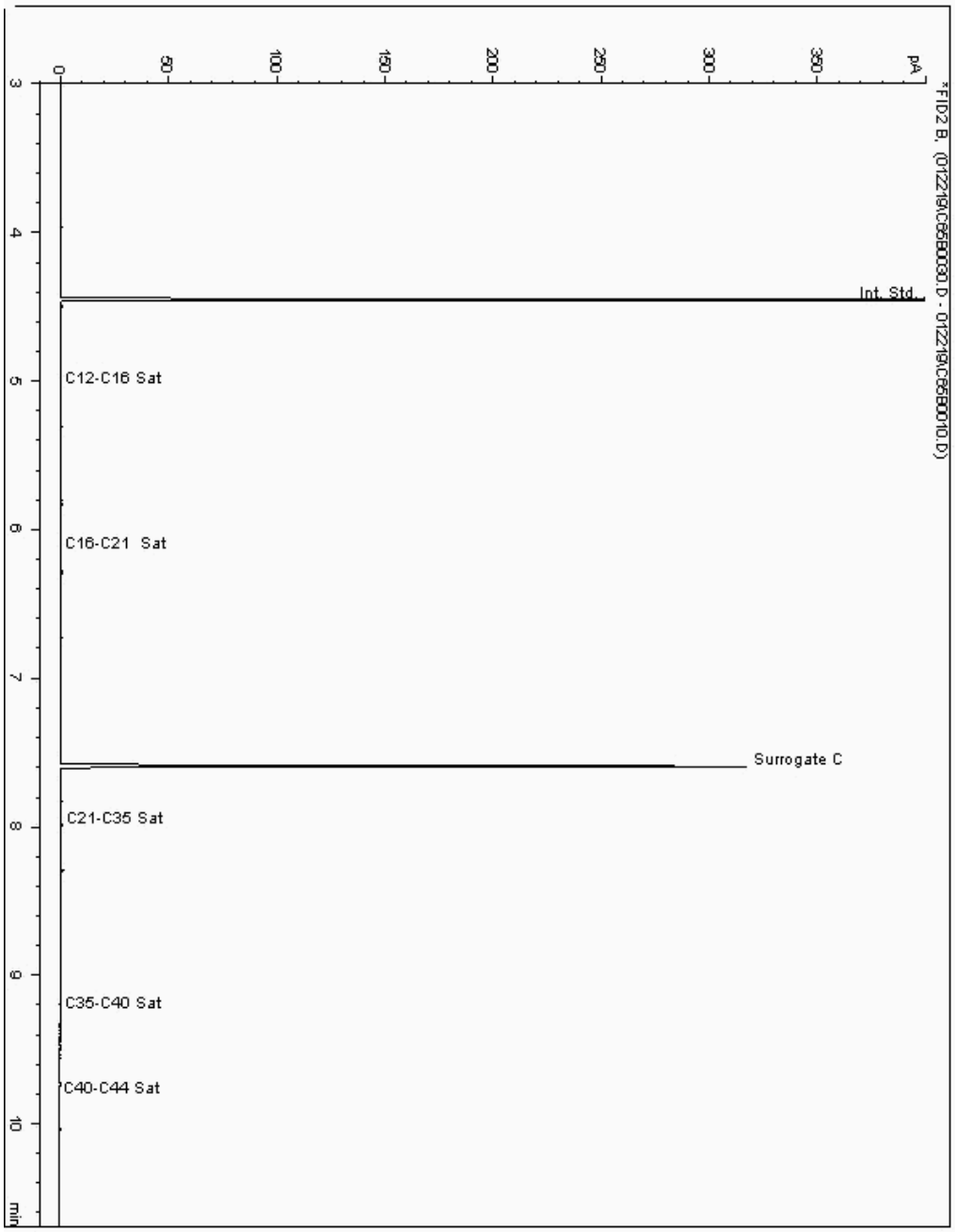
SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19163529 **Depth :** 0.50
Sample ID : WS47

Speciated TPH - SATS (C12 - C40)

Sample Identity: 17985582-
Date Acquired : 22/01/2019 20:29:25 PM
Units : ppb
Dilution: WS47[0.50] ->



CERTIFICATE OF ANALYSIS

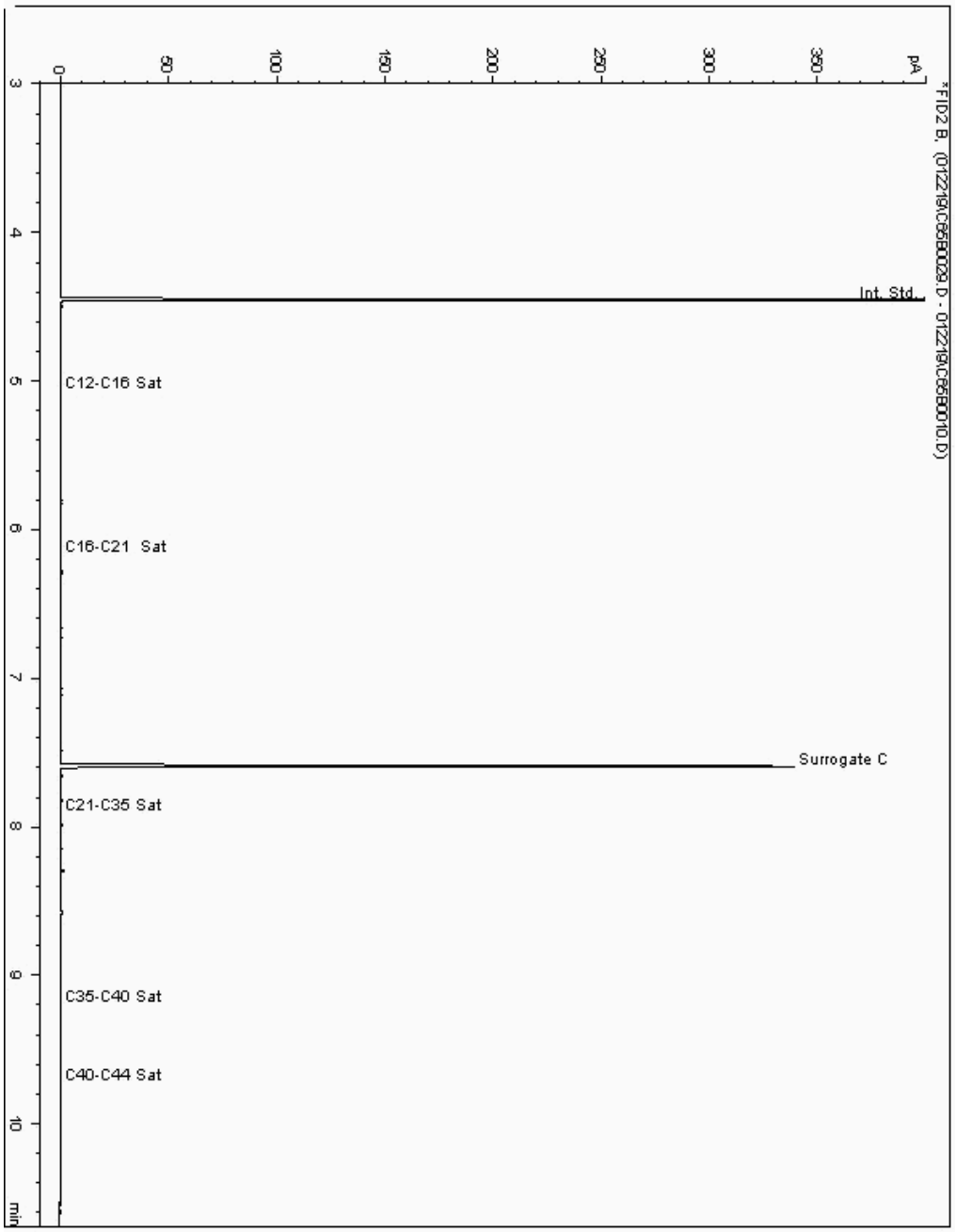
SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19163592 **Depth :** 0.90
Sample ID : WS44

Speciated TPH - SATS (C12 - C40)

Sample Identity: 17985507-
Date Acquired : 22/01/2019 20:08:45 PM
Units : ppb
Dilution: WS44[0.90] ->



CERTIFICATE OF ANALYSIS

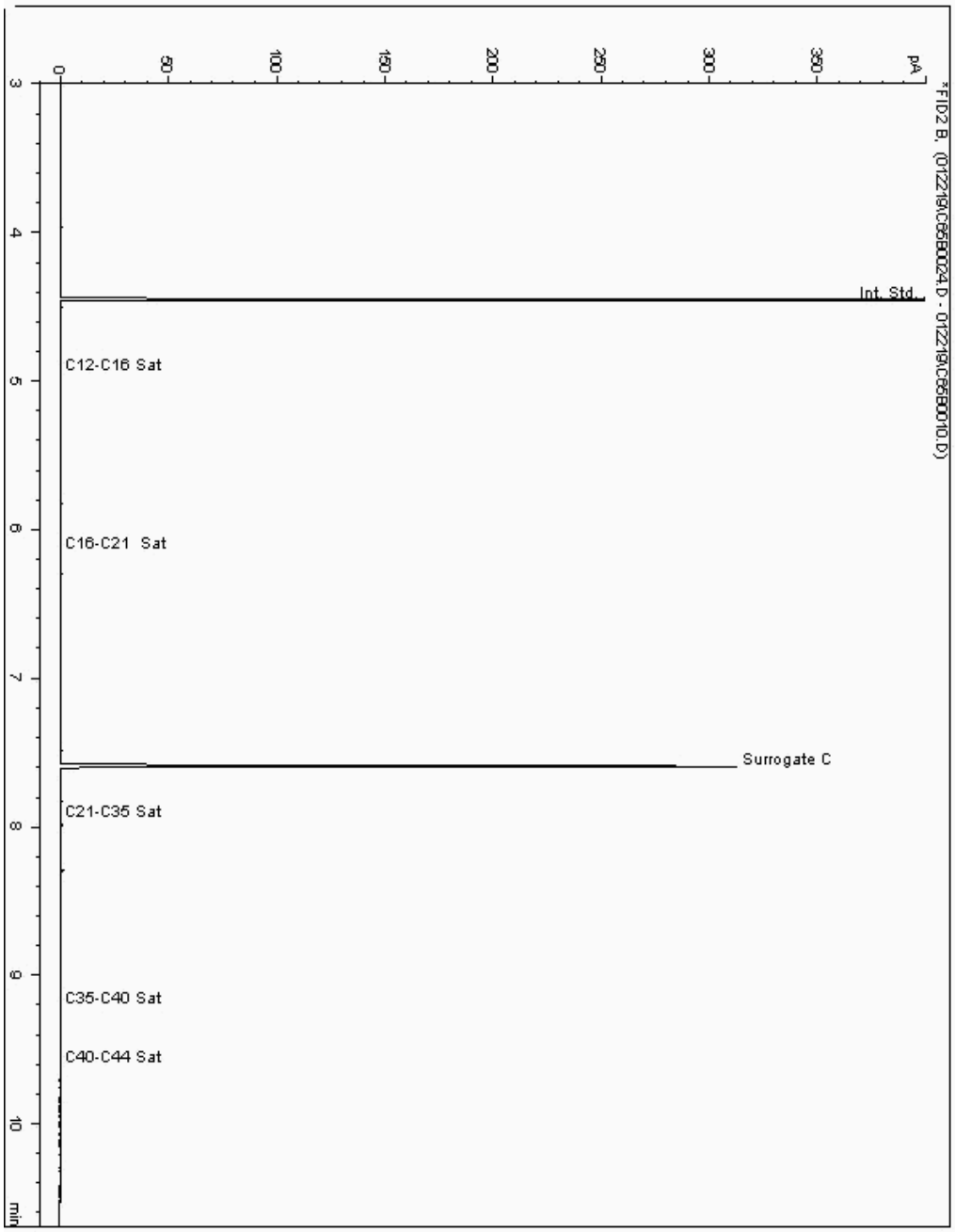
SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19163965 **Depth :** 0.30
Sample ID : WS48

Speciated TPH - SATS (C12 - C40)

Sample Identity: 17985608-
Date Acquired : 22/01/2019 18:34:30 PM
Units : ppb
Dilution: WS48[0.30] ->



CERTIFICATE OF ANALYSIS

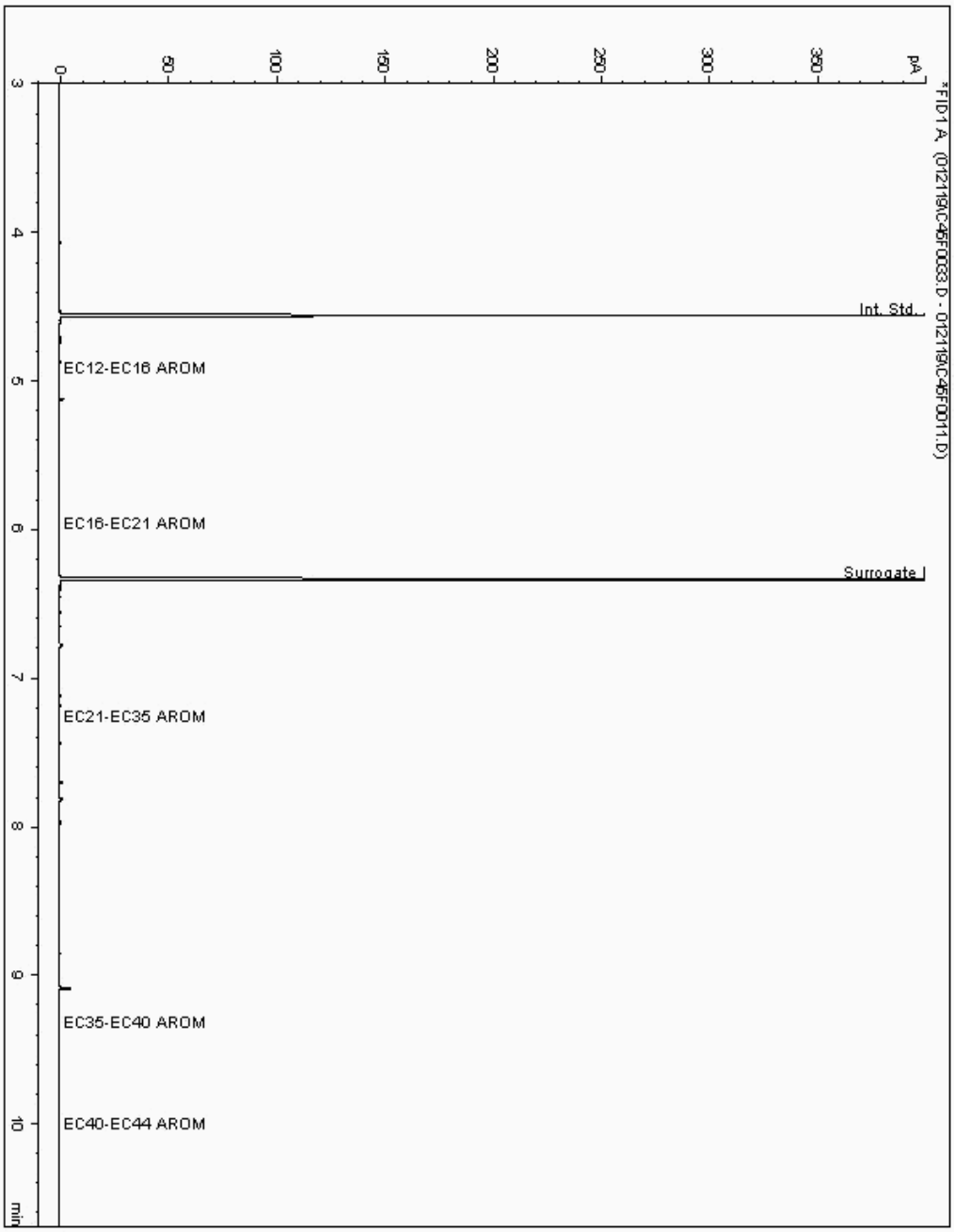
SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19153294 **Depth :** 1.20
Sample ID : WS49

Speciated TPH - AROM (C12 - C40)

Sample Identity: 17985715-
Date Acquired : 22/01/2019 01:09:40 PM
Units : ppb
Dilution: WS49[1.20] ->



CERTIFICATE OF ANALYSIS

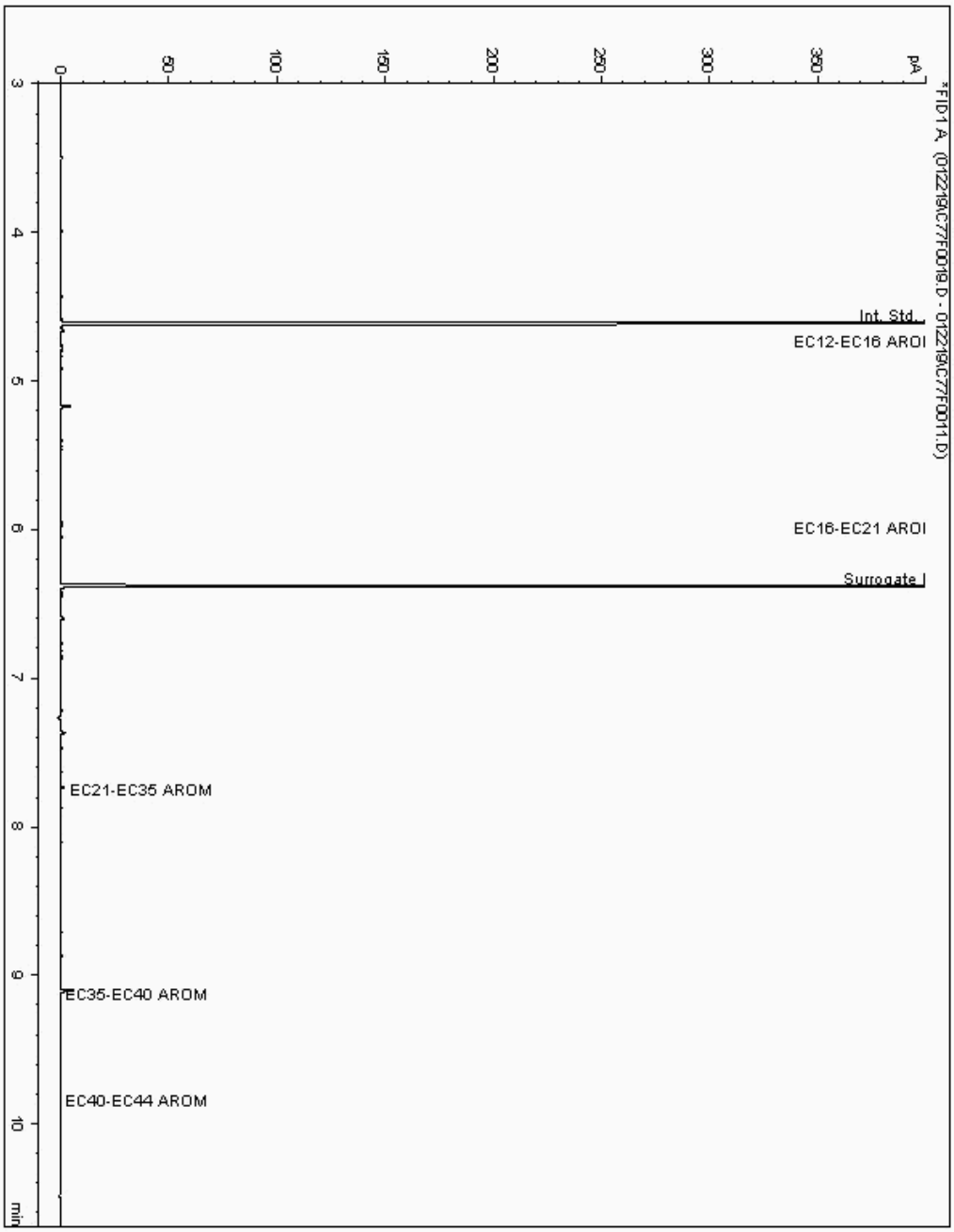
SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19153368 **Depth :** 1.50
Sample ID : WS50

Speciated TPH - AROM (C12 - C40)

Sample Identity: 17985739-
Date Acquired : 1/22/2019 4:48:22 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

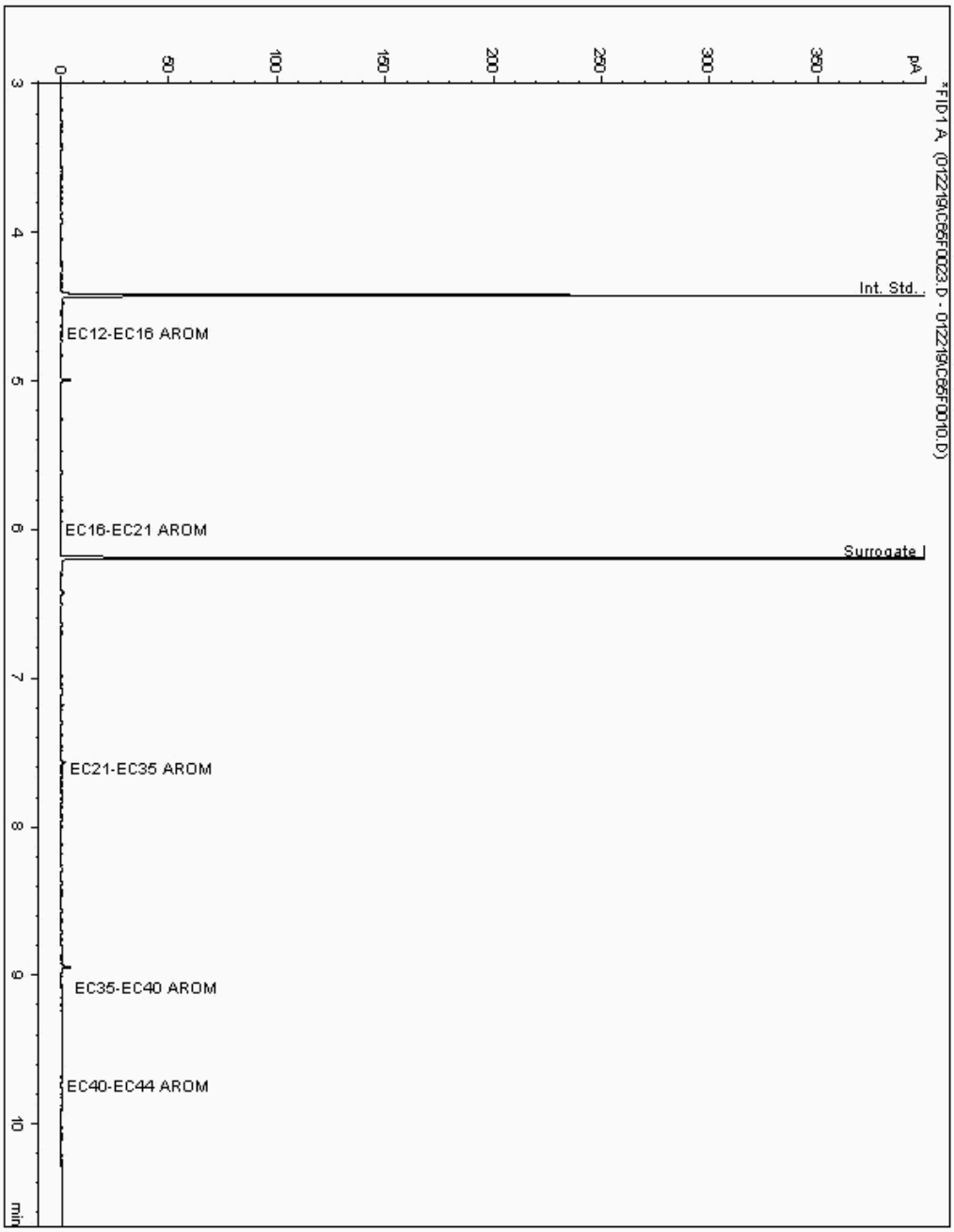
SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19153488 **Depth :** 2.30
Sample ID : WS51

Speciated TPH - SATS (C12 - C40)

Sample Identity: 17985799-
Date Acquired : 22/01/2019 16:45:38 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

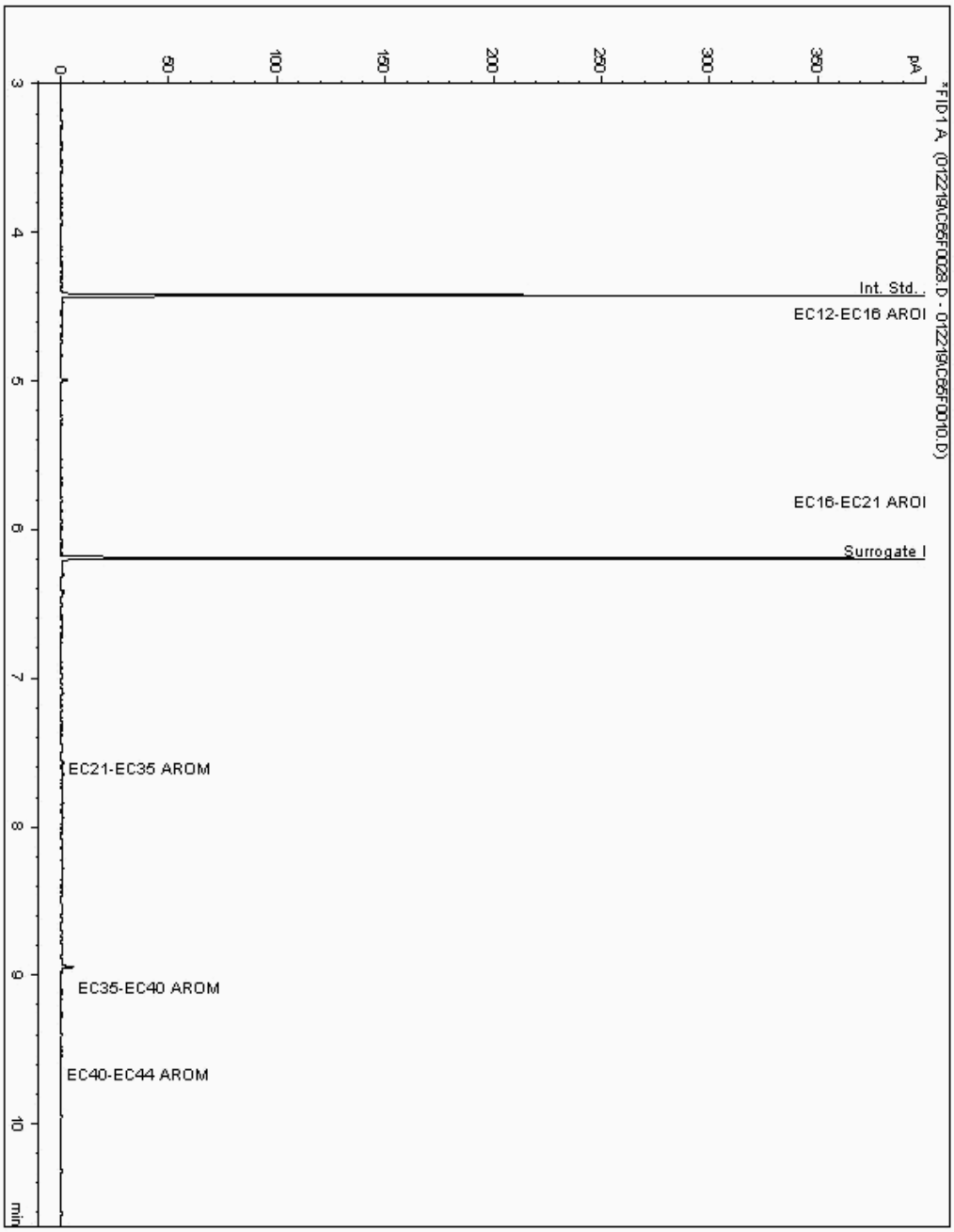
SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19153682 **Depth :** 1.20
Sample ID : WS51

Speciated TPH - SATS (C12 - C40)

Sample Identity: 17985766-
Date Acquired : 22/01/2019 18:18:23 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

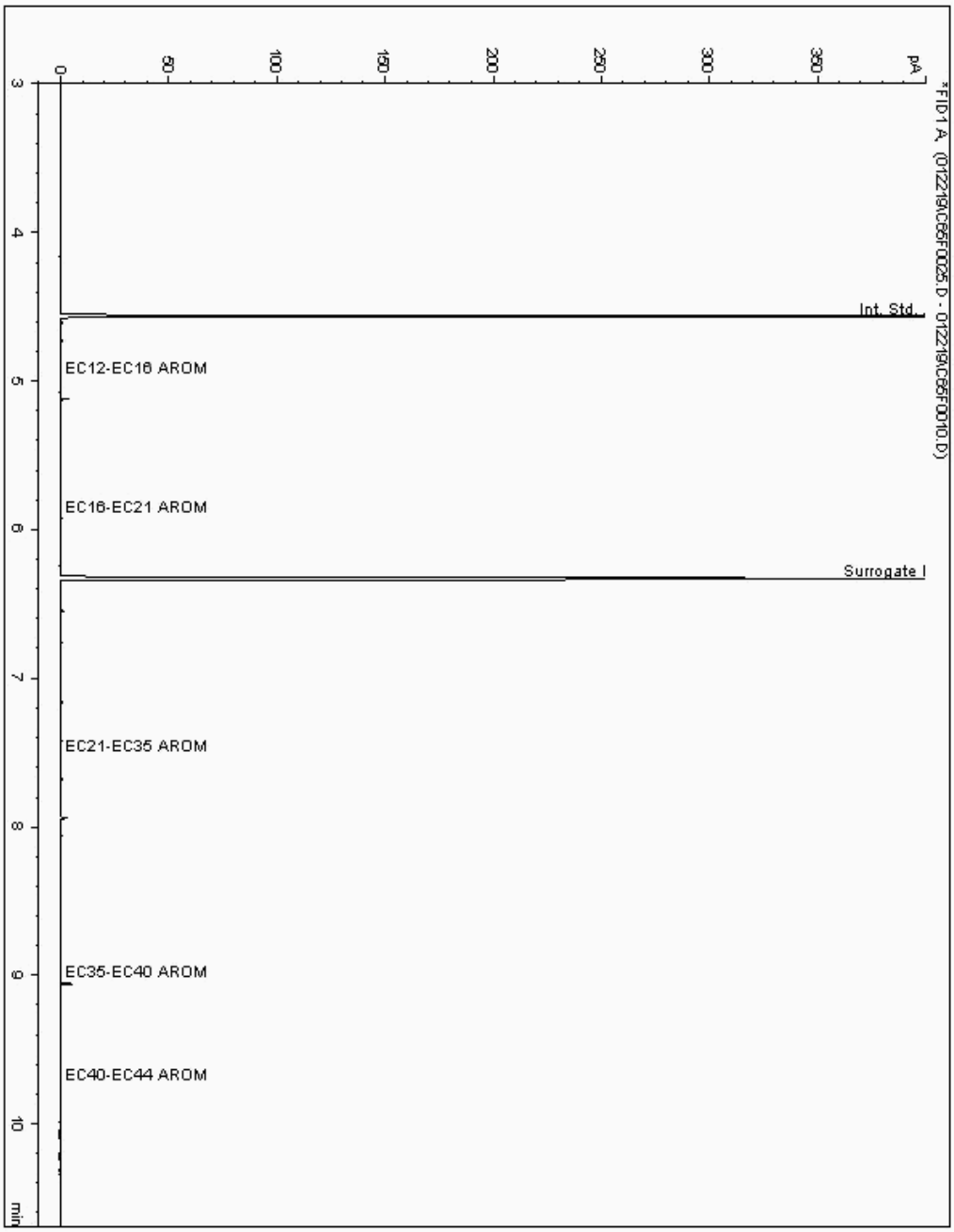
SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19163398 **Depth :** 3.50
Sample ID : WS48

Speciated TPH - AROM (C12 - C40)

Sample Identity: 17985628-
Date Acquired : 22/01/2019 18:54:56 PM
Units : ppb
Dilution: WS48[3.50] ->



CERTIFICATE OF ANALYSIS

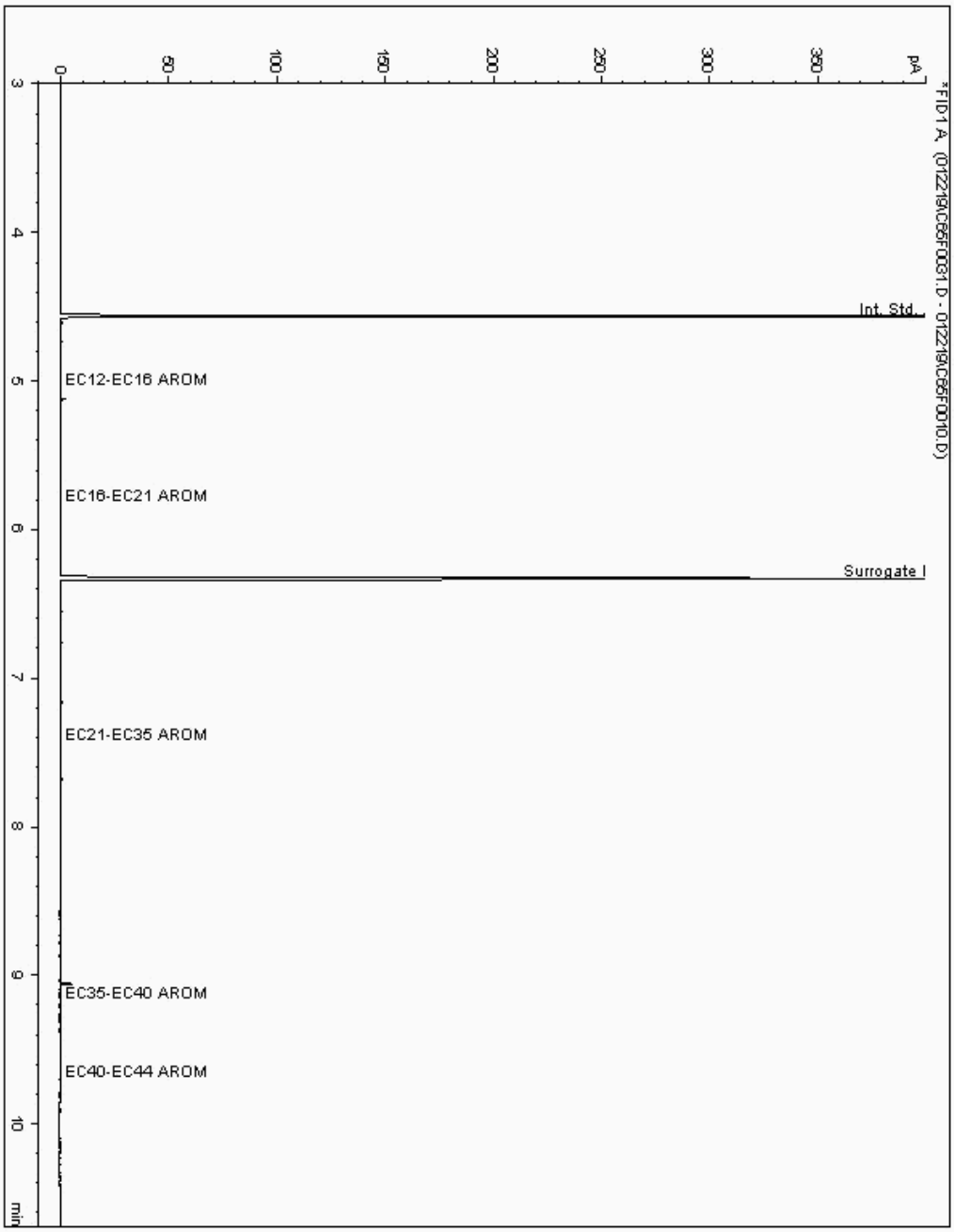
SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19163425 **Depth :** 4.50
Sample ID : WS48

Speciated TPH - AROM (C12 - C40)

Sample Identity: 17985650-
Date Acquired : 22/01/2019 20:49:55 PM
Units : ppb
Dilution: WS48[4.50] ->



CERTIFICATE OF ANALYSIS

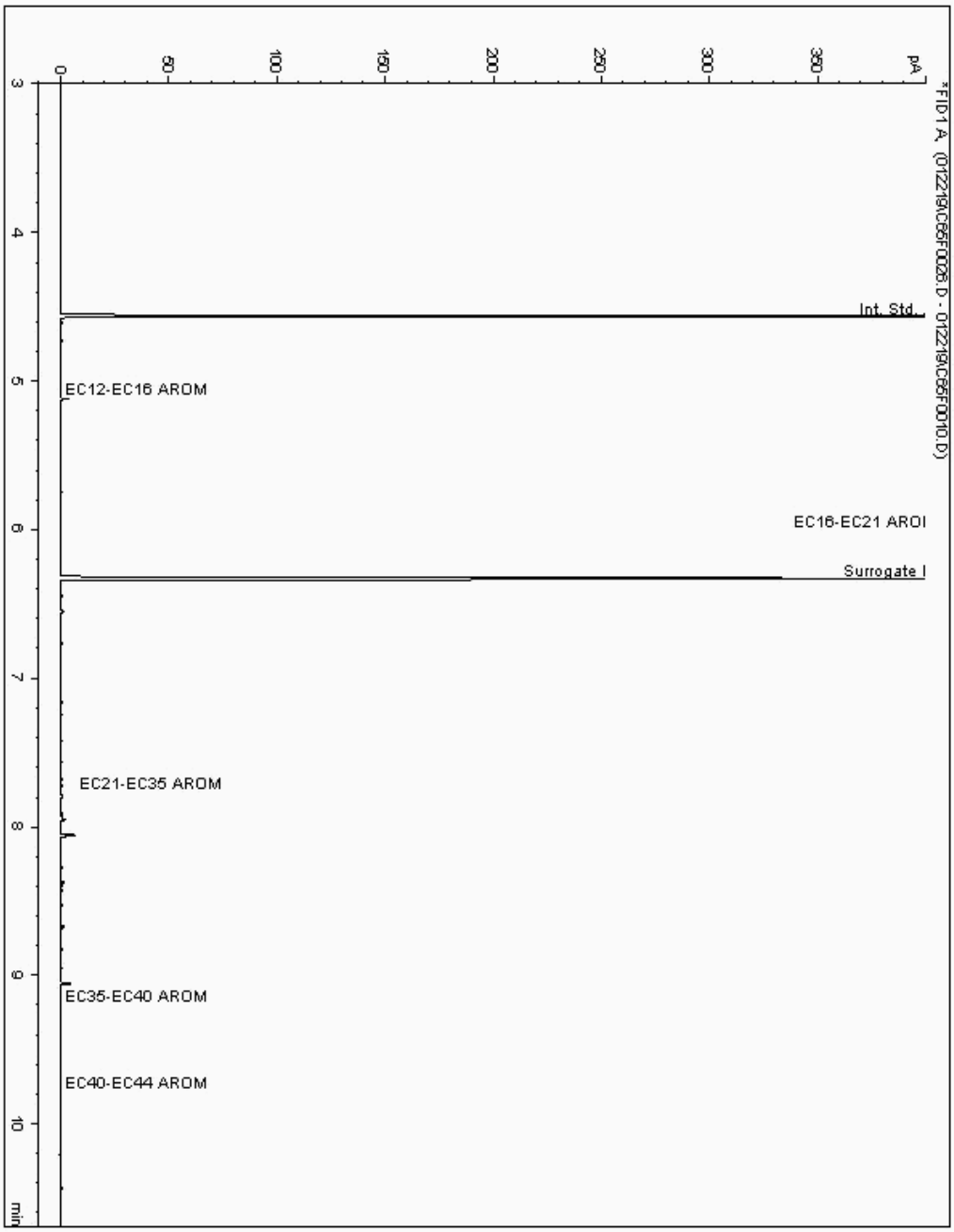
SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19163444 **Depth :** 0.70
Sample ID : WS49

Speciated TPH - AROM (C12 - C40)

Sample Identity: 17985683-
Date Acquired : 22/01/2019 19:15:29 PM
Units : ppb
Dilution: WS49[0.70] ->



CERTIFICATE OF ANALYSIS

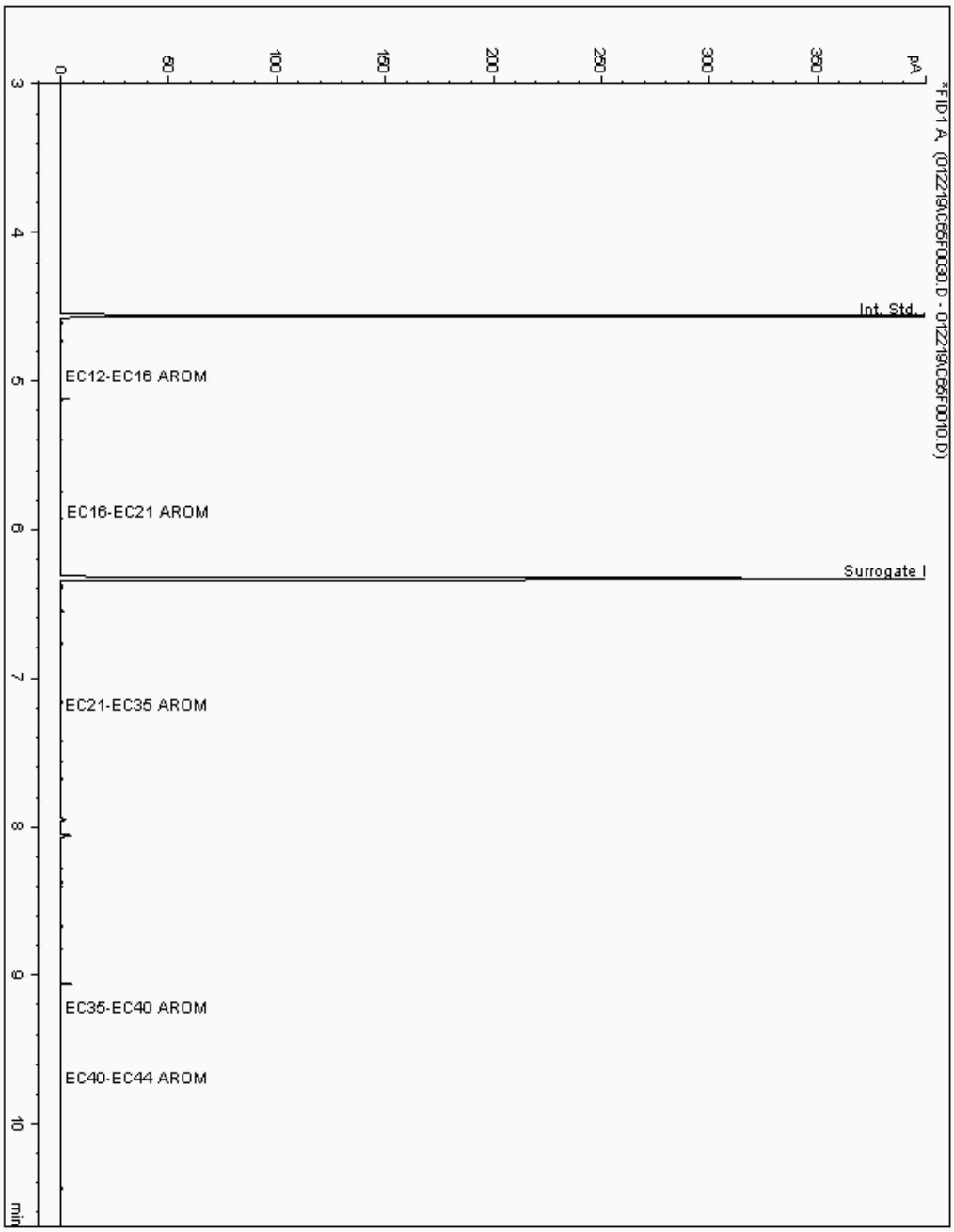
SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19163529 **Depth :** 0.50
Sample ID : WS47

Speciated TPH - AROM (C12 - C40)

Sample Identity: 17985583-
Date Acquired : 22/01/2019 20:29:25 PM
Units : ppb
Dilution: WS47[0.50] ->



CERTIFICATE OF ANALYSIS

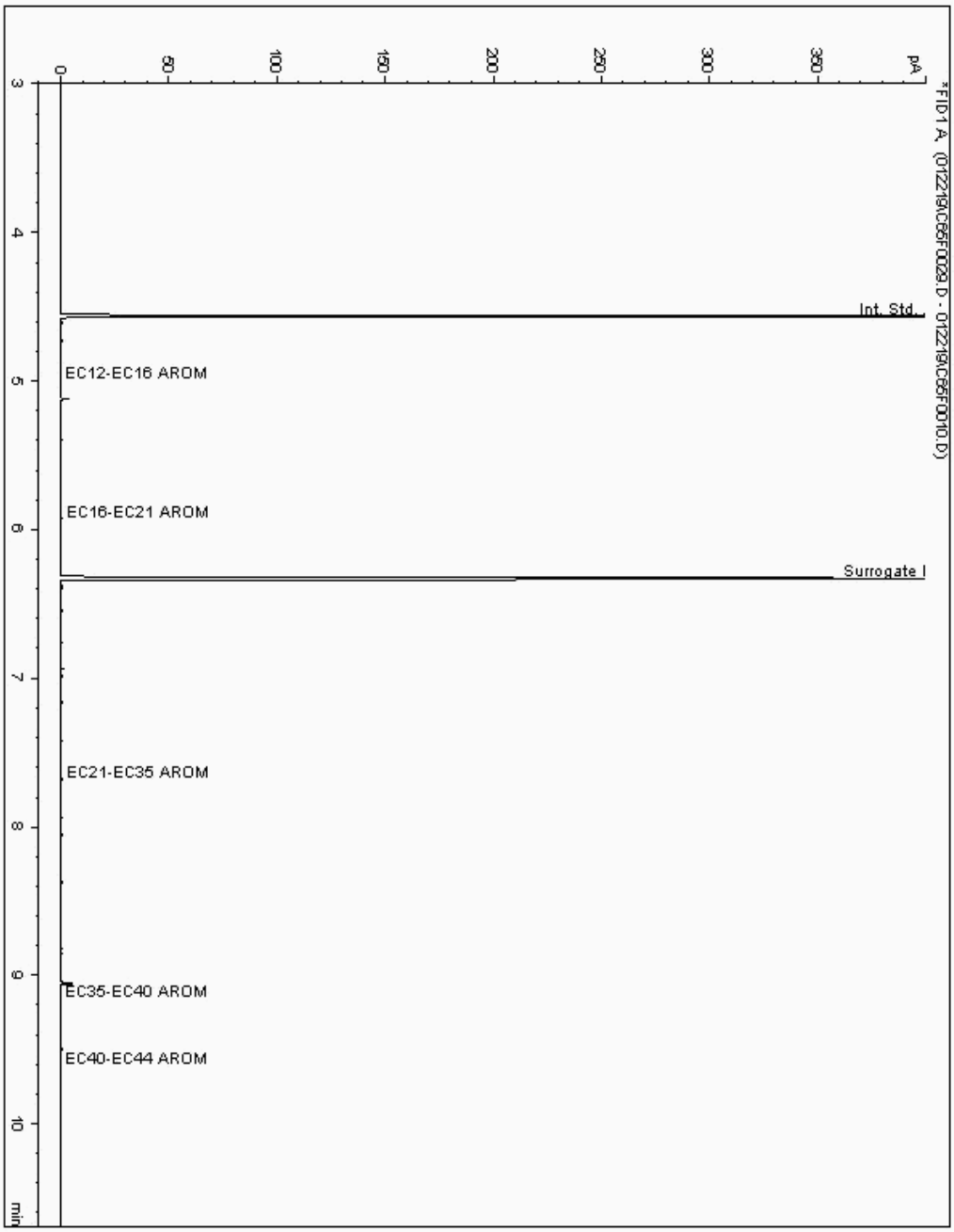
SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19163592 **Depth :** 0.90
Sample ID : WS44

Speciated TPH - AROM (C12 - C40)

Sample Identity: 17985508-
Date Acquired : 22/01/2019 20:08:45 PM
Units : ppb
Dilution: WS44[0.90] ->



CERTIFICATE OF ANALYSIS

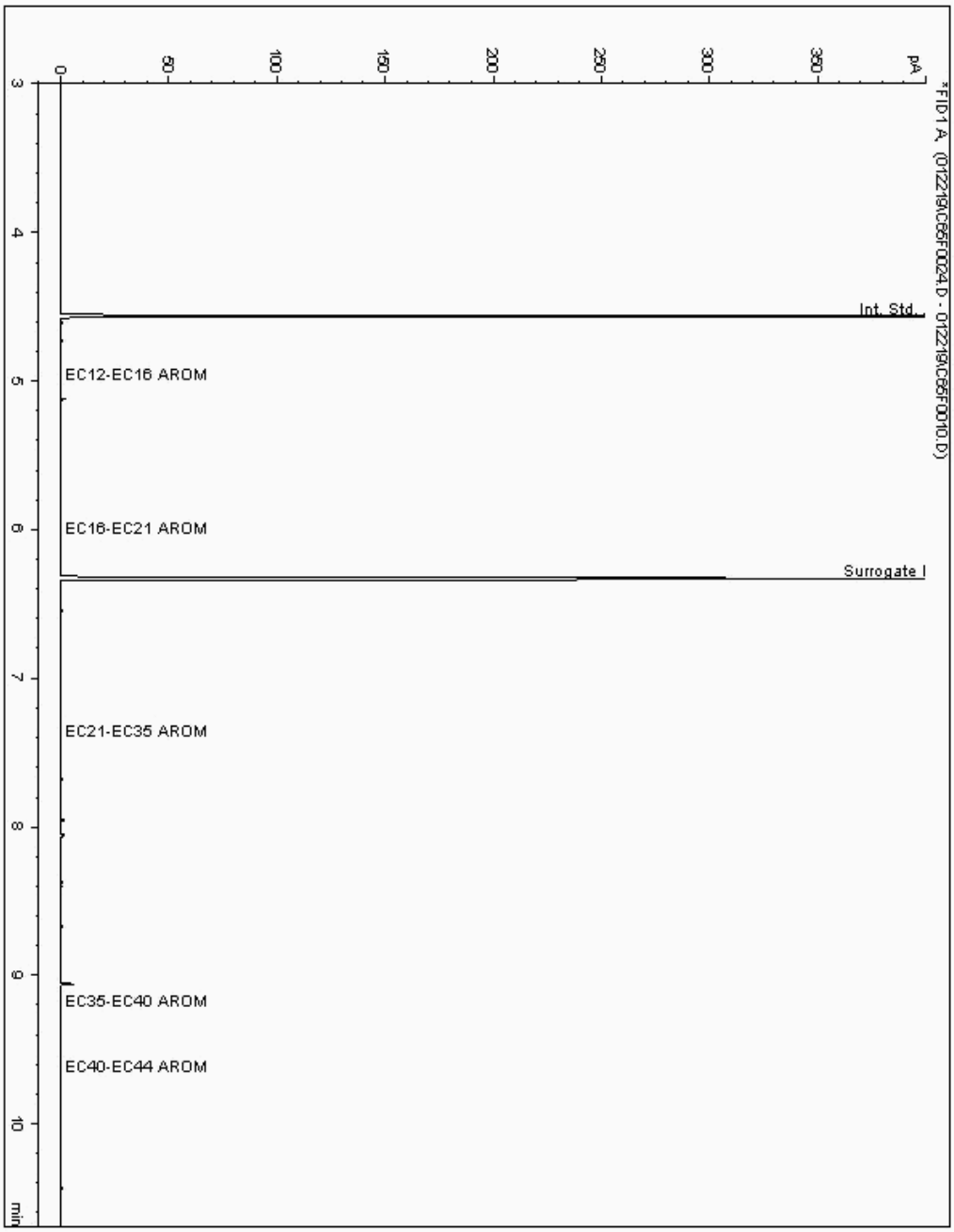
SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19163965 **Depth :** 0.30
Sample ID : WS48

Speciated TPH - AROM (C12 - C40)

Sample Identity: 17985609-
Date Acquired : 22/01/2019 18:34:29 PM
Units : ppb
Dilution: WS48[0.30] ->

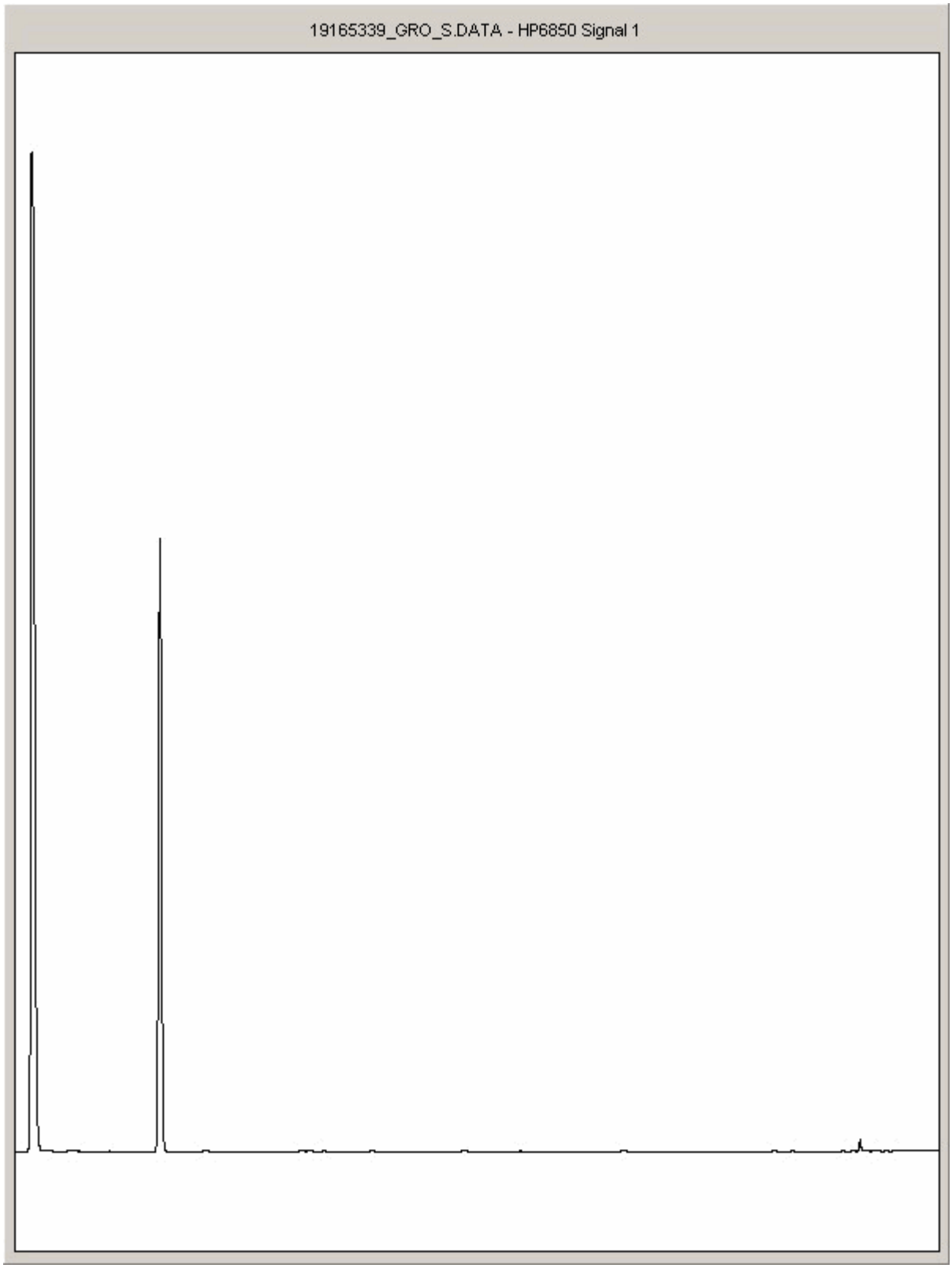


CERTIFICATE OF ANALYSIS

SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: GRO by GC-FID (S) **Sample No :** 19165339 **Depth :** 0.30
Sample ID : WS48



CERTIFICATE OF ANALYSIS

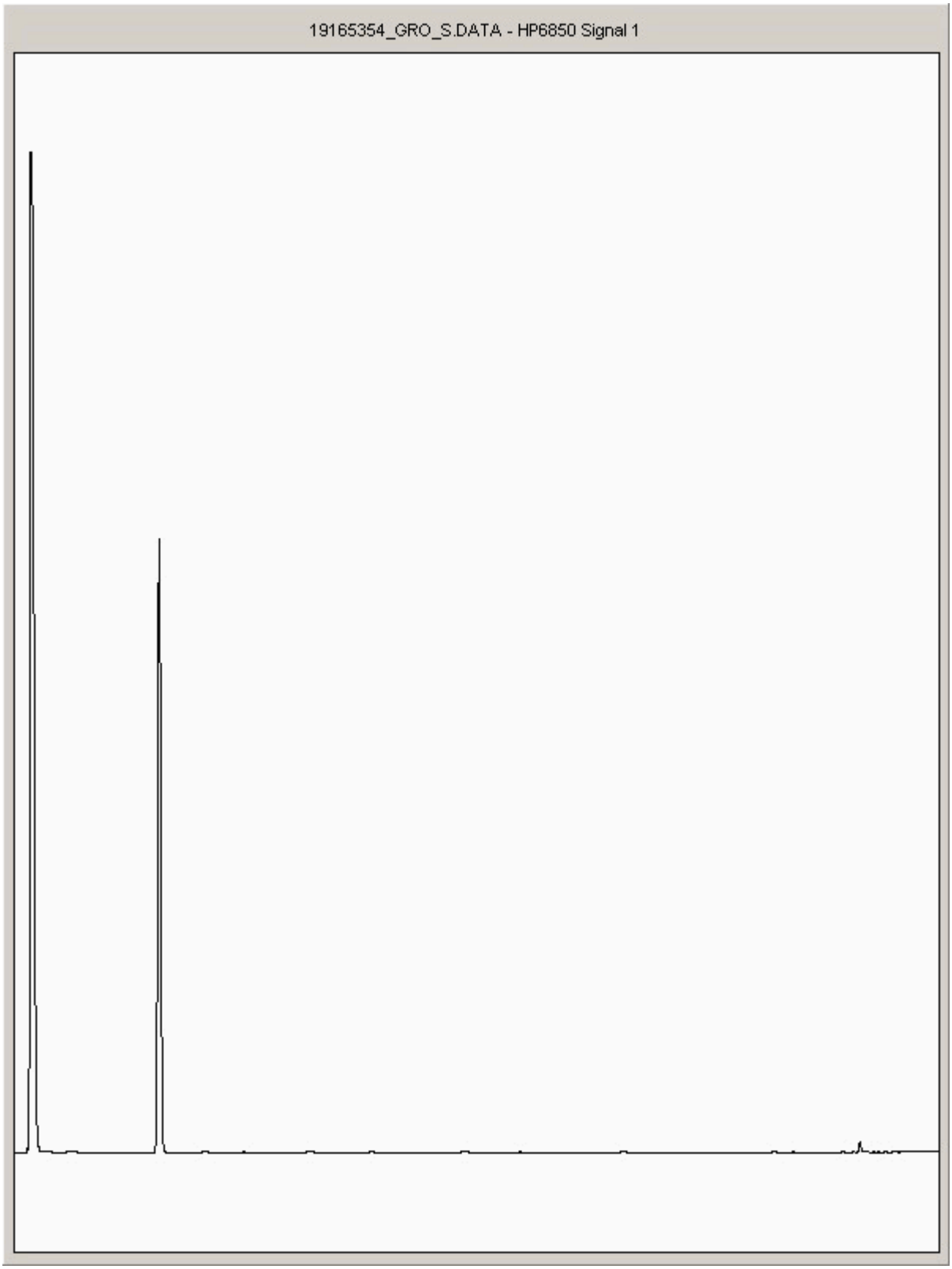
SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19165354
Sample ID : WS49

Depth : 0.70



CERTIFICATE OF ANALYSIS

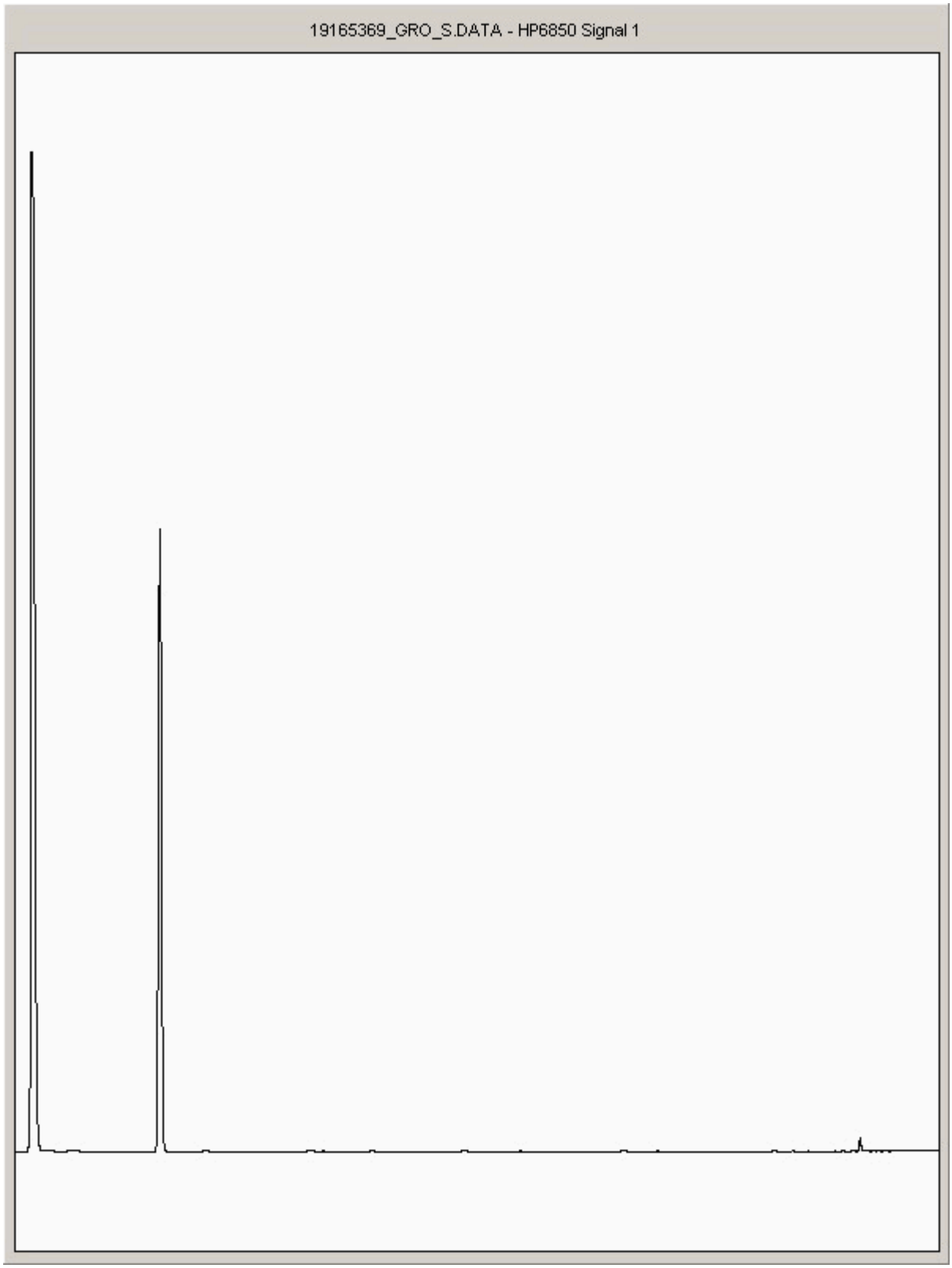
SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19165369
Sample ID : WS48

Depth : 3.50



CERTIFICATE OF ANALYSIS

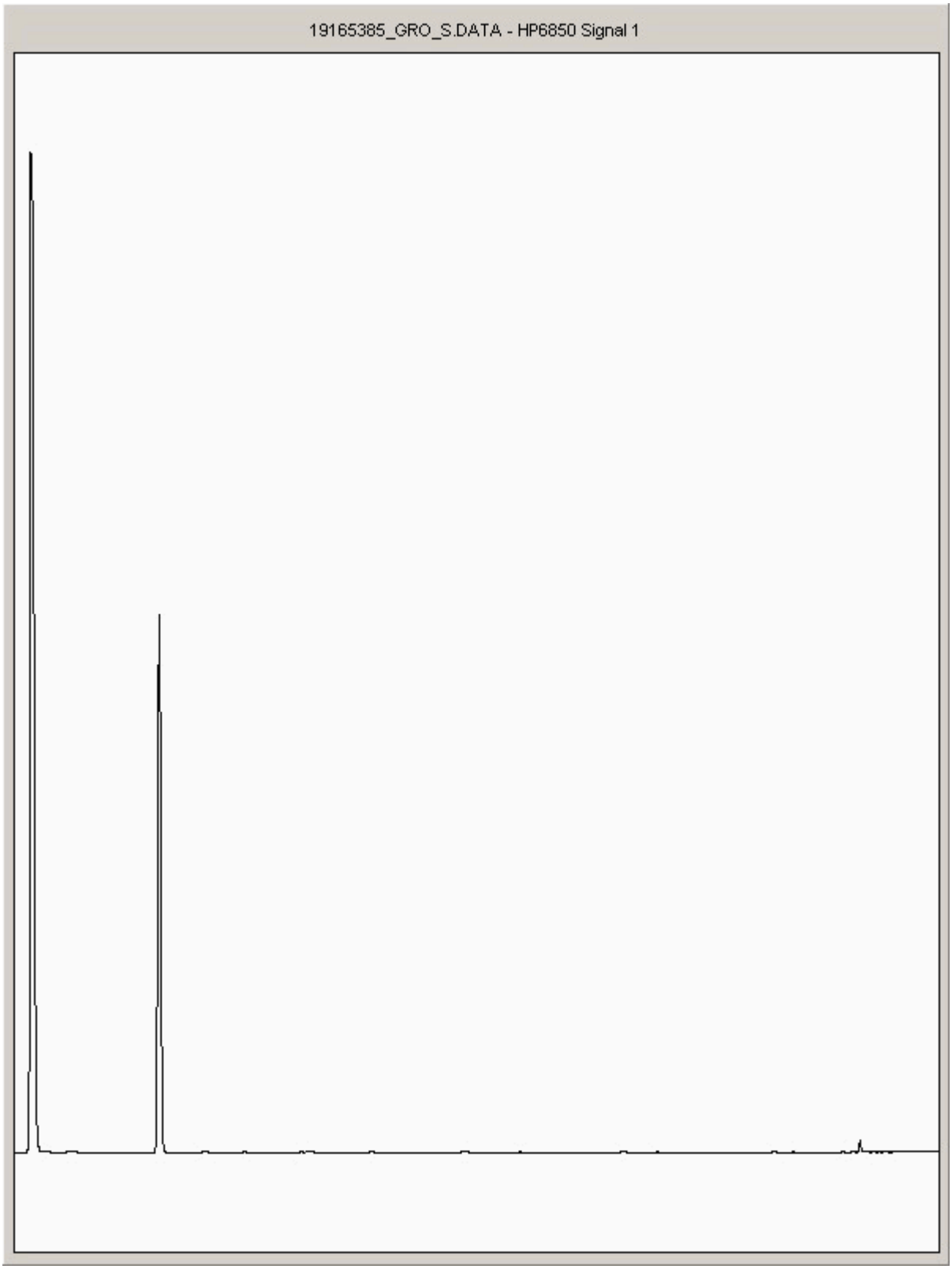
SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19165385
Sample ID : WS44

Depth : 0.90



CERTIFICATE OF ANALYSIS

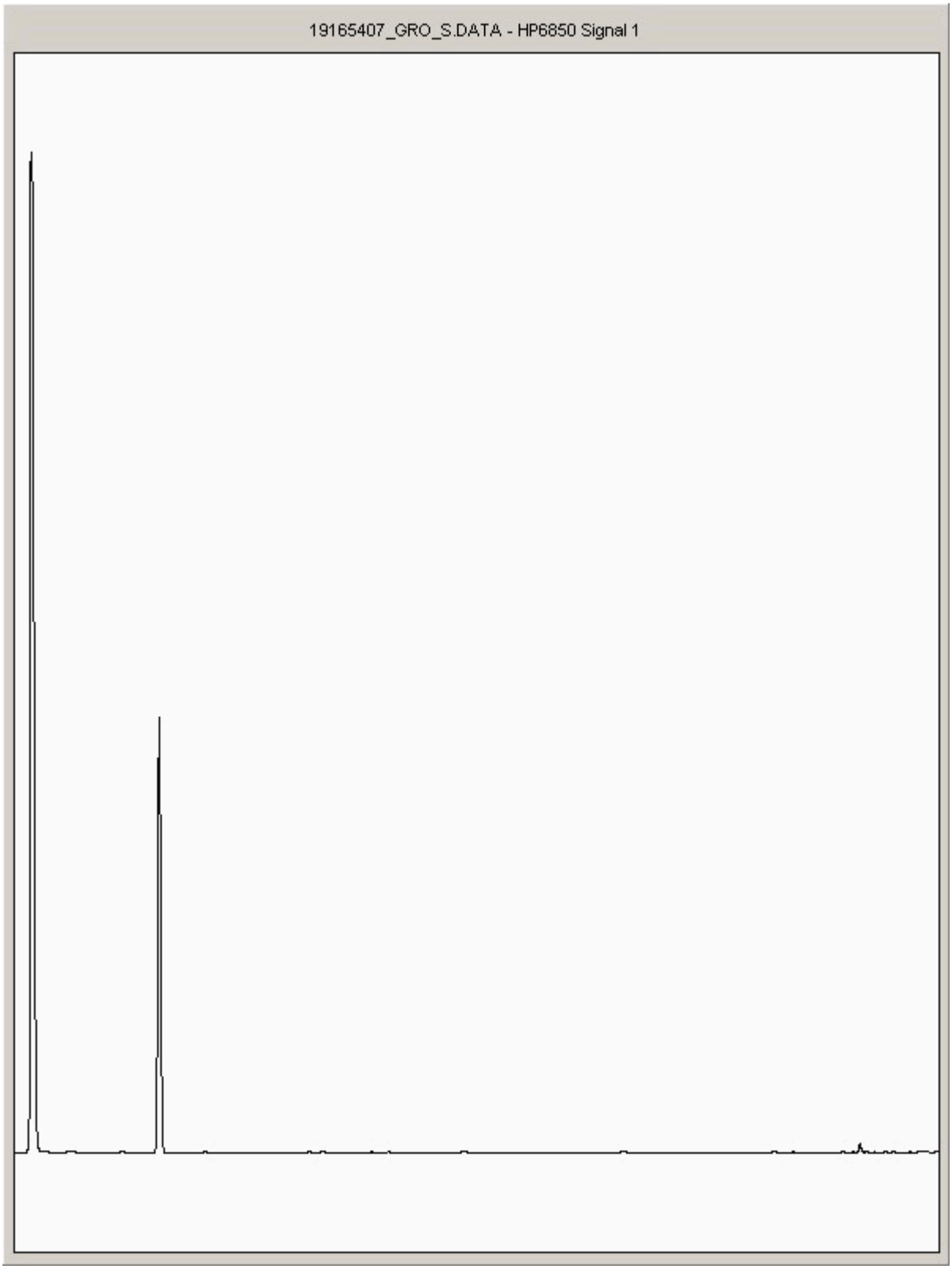
SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19165407
Sample ID : WS51

Depth : 1.20



CERTIFICATE OF ANALYSIS

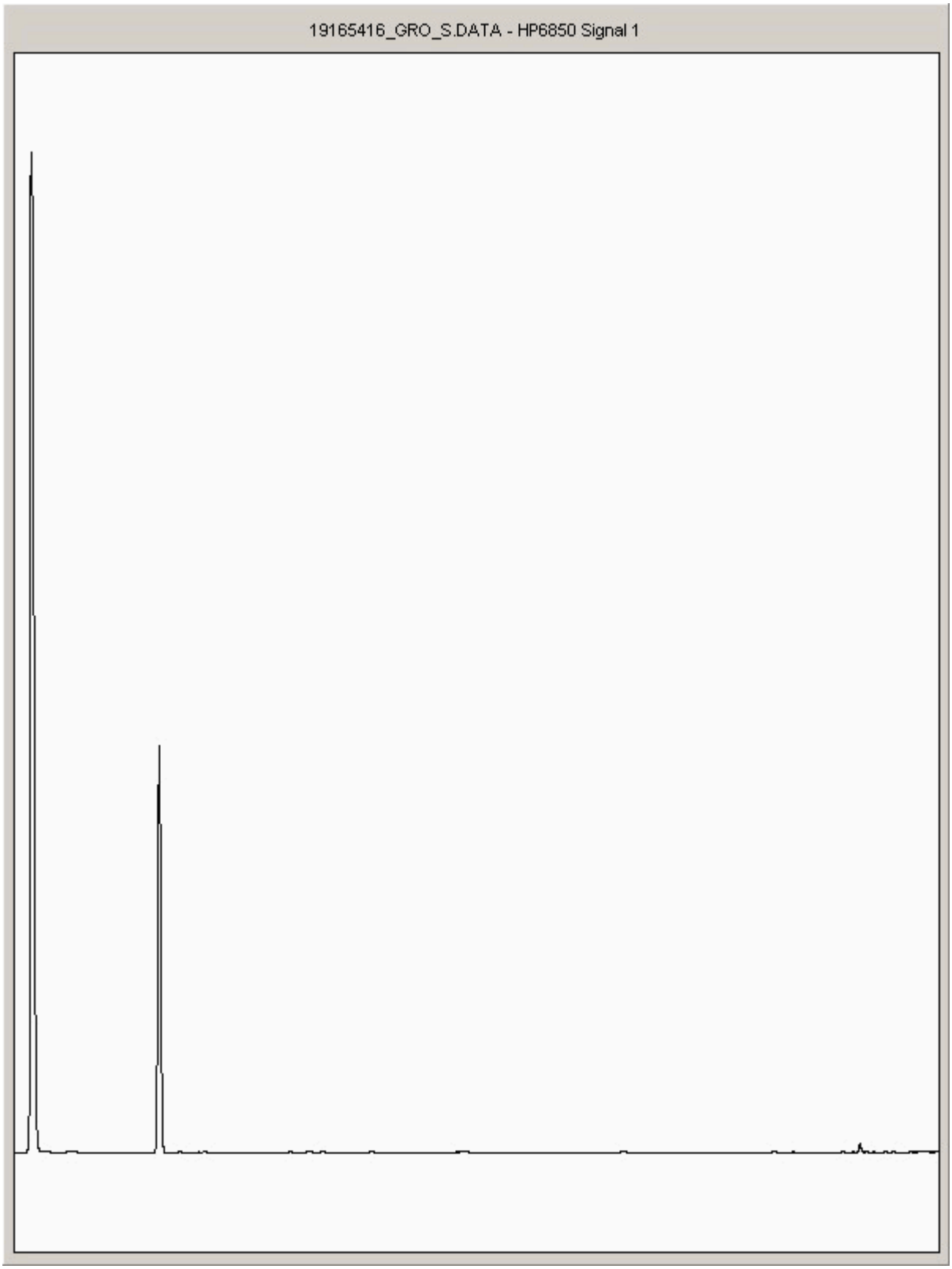
SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19165416
Sample ID : WS51

Depth : 2.30



CERTIFICATE OF ANALYSIS

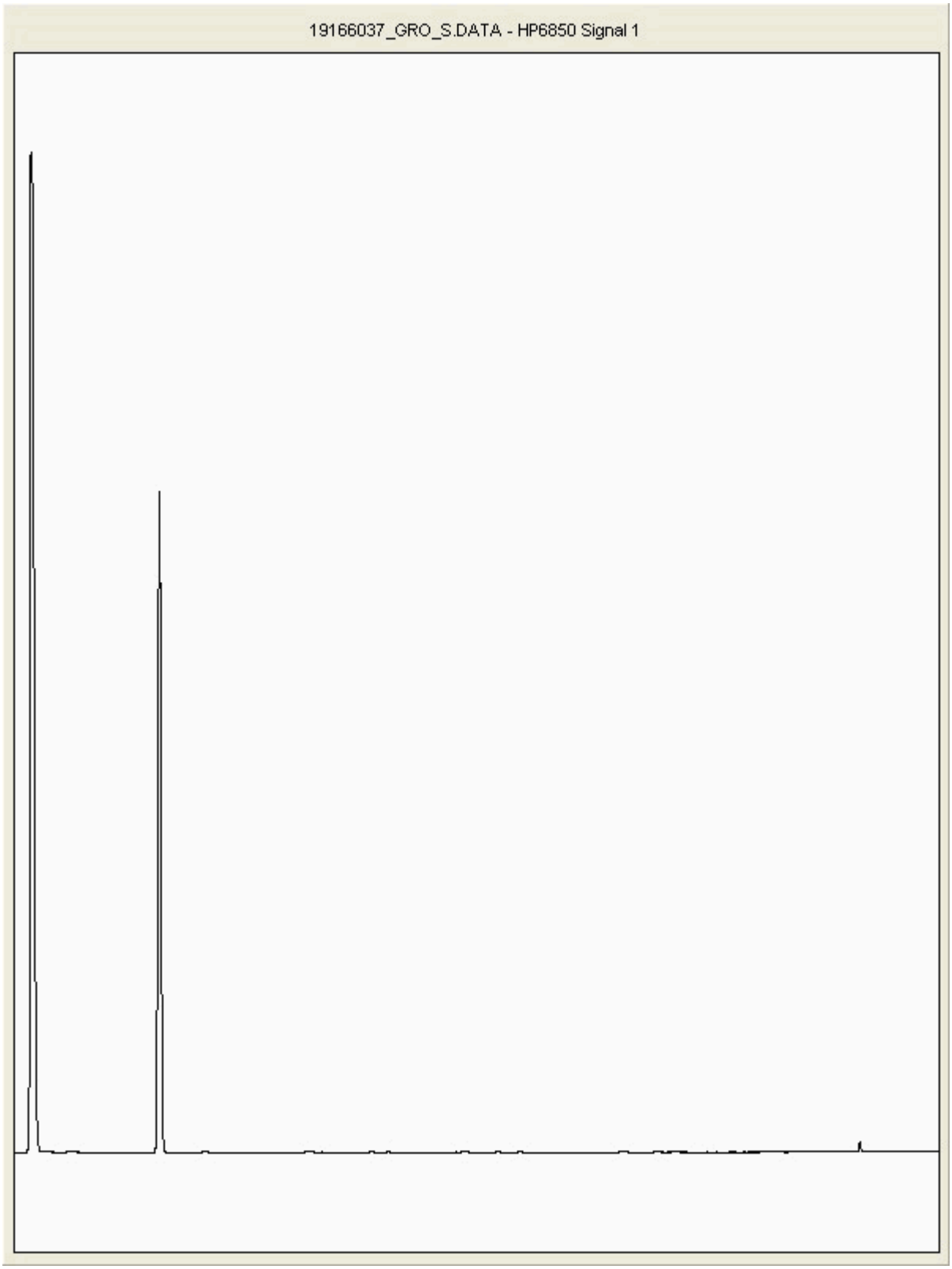
SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19166037
Sample ID : WS48

Depth : 4.50



CERTIFICATE OF ANALYSIS

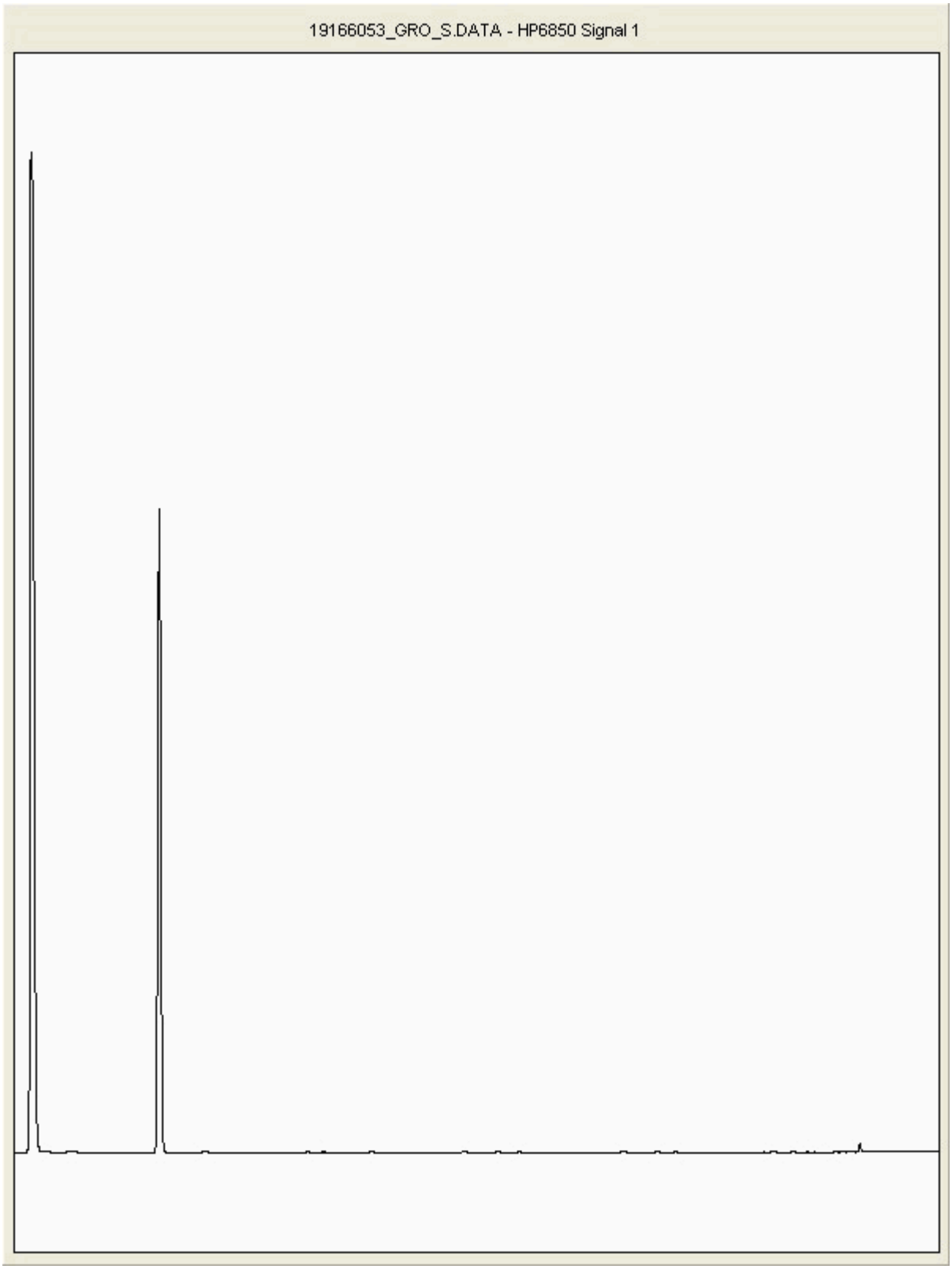
SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19166053
Sample ID : WS50

Depth : 1.50

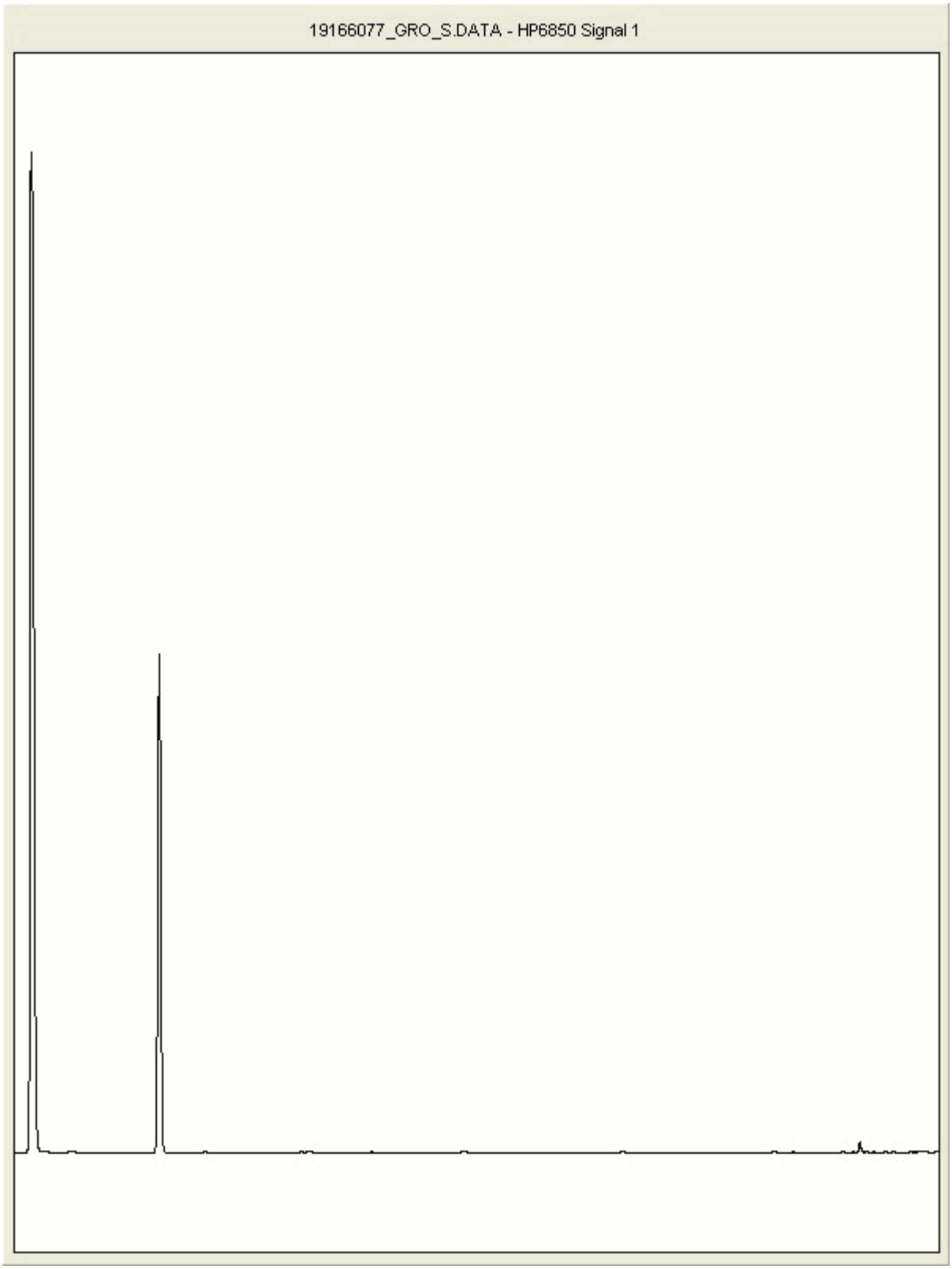


CERTIFICATE OF ANALYSIS

SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: GRO by GC-FID (S) **Sample No :** 19166077 **Depth :** 1.20
Sample ID : WS49



CERTIFICATE OF ANALYSIS

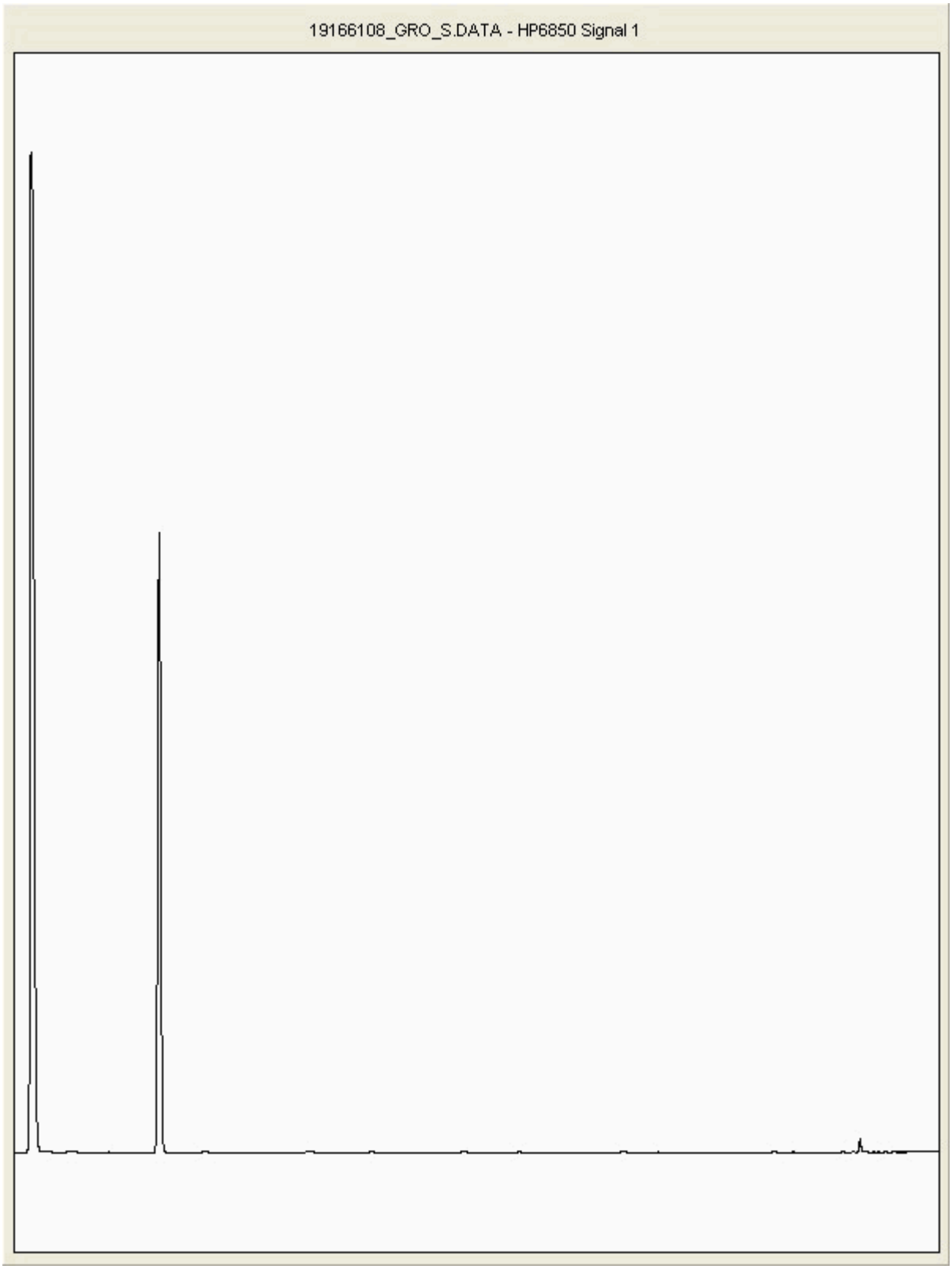
SDG:	190116-100	**Client Reference:**	A090070-474	**Report Number:**	490175
Location:	RG20 6NL	**Order Number:**	Comp016cs	**Superseded Report:**	

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19166108
Sample ID : WS47

Depth : 0.50



Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. Samples will be run in duplicate upon request, but an additional charge may be incurred.

3. If sufficient sample is received a sub sample will be retained free of charge for 30 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of one month after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

4. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

5. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

6. When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2005), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

7. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised. This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

8. If appropriate preserved bottles are not received preservation will take place on receipt. However, the integrity of the data may be compromised.

9. NDP - No determination possible due to insufficient/unsuitable sample.

10. Metals in water are performed on a filtered sample, and therefore represent dissolved metals - total metals must be requested separately.

11. Results relate only to the items tested.

12. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

13. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

14. **Product analyses** - Organic analyses on products can only be semi-quantitative due to the matrix effects and high dilution factors employed.

15. Phenols monohydric by HPLC include phenol, cresols (2-Methylphenol, 3-Methylphenol and 4-Methylphenol) and Xylenols (2,3 Dimethylphenol, 2,4 Dimethylphenol, 2,5 Dimethylphenol, 2,6 Dimethylphenol, 3,4 Dimethyphenol, 3,5 Dimethylphenol).

16. Total of 5 speciated phenols by HPLC includes Phenol, 2,3,5-Trimethyl Phenol, 2-Isopropylphenol, Cresols and Xylenols (as detailed in 15).

17. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

18. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

19. Mercury results quoted on soils will not include volatile mercury as the analysis is performed on a dried and crushed sample.

20. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

21. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis. The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

22. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

23. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l. Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only. It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

24. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

Sample Deviations

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
4	**Holding time exceeded before sample received**
5	**Samples exceeded holding time before presevation was performed**
§	**Sampled on date not provided**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to sampled on date**
&	**Sample Holding Time exceeded - Late arrival of instructions.**

Asbestos

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.

The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

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WYG Geo-Environment
Arndale Court
Headingley
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LS6 2UJ

Attention: Regulation

CERTIFICATE OF ANALYSIS

Date of report Generation:	06 March 2019
Customer:	H_WYG_LEE
Sample Delivery Group (SDG):	190122-79
Your Reference:	A090070-474
Location:	HE Compton
Report No:	495513

This report has been revised and directly supersedes 495510 in its entirety.

We received 36 samples on Tuesday January 22, 2019 and 17 of these samples were scheduled for analysis which was completed on Wednesday March 06, 2019. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Environmental Hawarden (Method codes TM) or ALS Environmental Aberdeen (Method codes S).

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:
Regulation 13

Regulation 13
Operations Manager

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CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
19170029	ws01		1.50	10/01/2019
19169991	WS08		0.30	10/01/2019
19169992	WS08		0.90	10/01/2019
19169993	WS08		1.50	10/01/2019
19169995	WS09		0.13 - 0.20	17/01/2019
19169994	WS09		0.20 - 0.30	17/01/2019
19169996	WS12		0.30	15/01/2019
19169997	WS12		1.00	15/01/2019
19169998	WS13		0.30	15/01/2019
19169999	WS13		0.50	15/01/2019
19170001	WS13		0.80	15/01/2019
19170002	WS14		0.30	10/01/2019
19170003	WS14		1.30	10/01/2019
19170004	WS15		0.17 - 0.20	15/01/2019
19170005	WS15		0.25	15/01/2019
19170006	WS17		0.30	11/01/2019
19170007	WS17		0.80	11/01/2019
19170008	WS17		1.30	11/01/2019
19170009	WS19		0.10	11/01/2019
19170010	WS19		0.40 - 0.50	10/01/2019
19170011	WS19		1.00	10/01/2019
19170012	WS19		2.40	17/01/2019
19170013	WS21		0.00 - 0.10	16/01/2019
19170014	WS21		0.10 - 0.20	16/01/2019
19170015	WS21		0.60 - 0.70	16/01/2019
19170017	WS21		1.50	17/01/2019
19170019	WS21		2.50	17/01/2019
19170020	WS21		3.10	17/01/2019
19170021	WS24		0.30	17/01/2019
19170022	WS24		0.70	17/01/2019
19170023	WS24		1.20	17/01/2019
19170024	WS25		0.00 - 0.10	16/01/2019
19170025	WS25		0.10 - 0.30	16/01/2019
19170026	WS27		0.05	16/01/2019
19170027	WS27		0.20	16/01/2019
19170028	WS27Asbestos		0.20	16/01/2019

Maximum Sample/Coolbox Temperature (°C) : **5.4**

ISO5667-3 Water quality - Sampling - Part3 -
During Transportation samples shall be stored in a cooling device capable of maintaining a temperature of (5±3)°C.

ALS have data which show that a cool box with 4 frozen icepacks is capable of maintaining pre-chilled samples at a temperature of (5±3)°C for a period of up to 24hrs.

Only received samples which have had analysis scheduled will be shown on the following pages.

Validated

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

Lab Sample No(s)			19169995				19169994				19169997				19169998				19169999				19170006		
Customer Sample Reference			WS09				WS09				WS12				WS13				WS13				WS17		
AGS Reference																									
Depth (m)			0.13 - 0.20				0.20 - 0.30				1.00				0.30				0.50				0.30		
Container			1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	Kone Cup	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	Kone Cup	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)			
Sample Type			S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Ammoniacal Nitrogen	All	NDPs: 7 Tests: 7	X			N							X			N				X					
Anions by Kone (soil)	All	NDPs: 0 Tests: 14		X				X			X			X				X			X				X	
Anions by Kone (w)	All	NDPs: 7 Tests: 7	X			N							X			N				X					
Asbestos ID in Solid Samples	All	NDPs: 0 Tests: 14	X				X			X			X				X			X					
Boron Water Soluble	All	NDPs: 0 Tests: 16		X				X			X			X				X			X				X	
CEN Readings	All	NDPs: 7 Tests: 7	X			N							X			N				X					
Conductivity (at 20 deg.C)	All	NDPs: 7 Tests: 7	X			N							X			N				X					
Cyanide Comp/Free/Total/Thiocyanate	All	NDPs: 7 Tests: 23	X	X		N		X			X		X	X		N		X		X	X				
Dissolved Metals by ICP-MS	All	NDPs: 7 Tests: 7	X			N							X			N				X					
Dissolved Organic/Inorganic Carbon	All	NDPs: 7 Tests: 7	X			N							X			N				X					
EPH CWG (Aliphatic) Filtered GC (W)	All	NDPs: 7 Tests: 7	X			N							X			N				X					
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 14		X				X			X			X				X			X				X	
EPH CWG (Aromatic) Filtered GC (W)	All	NDPs: 7 Tests: 7	X			N							X			N				X					
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 14		X				X			X			X				X			X				X	
Fluoride	All	NDPs: 7 Tests: 7	X			N							X			N				X					

19170017	WS21		1.50	250g Amber Jar (ALE210)	S				X																				X				X		
				1kg TUB	S		X				X		X				X		X		X		X		X		X				X				X
19170015	WS21		0.60 - 0.70	60g VOC (ALE215)	S																														
				250g Amber Jar (ALE210)	S				X						X						X								X				X		
				1kg TUB	S								X																						
19170014	WS21		0.10 - 0.20	Kone Cup	S	N				N						N		N		N		N		N		N				N				N	
				60g VOC (ALE215)	S																														
				250g Amber Jar (ALE210)	S				X						X						X								X				X		
				1kg TUB	S		X				X		X				X		X		X		X		X		X				X				X
19170012	WS19		2.40	60g VOC (ALE215)	S																														
				250g Amber Jar (ALE210)	S				X						X						X								X				X		
				1kg TUB	S								X																						
19170009	WS19		0.10	Kone Cup	S	N				N						N		N		N		N		N		N				N				N	
				60g VOC (ALE215)	S																														
				250g Amber Jar (ALE210)	S				X						X						X								X				X		
				1kg TUB	S		X				X		X				X		X		X		X		X		X				X				X
19170007	WS17		0.80	60g VOC (ALE215)	S																														
				250g Amber Jar (ALE210)	S				X						X						X								X				X		
				1kg TUB	S								X																						
19170006	WS17		0.30	Kone Cup	S	N				N						N		N		N		N		N		N				N				N	

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Results Legend

X **Test**

N **No Determination Possible**

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	19169995				19169994			19169997			19169998				19169999			19170006		
			Customer Sample Reference	WS09				WS09			WS12			WS13				WS13			WS17		
			AGS Reference																				
			Depth (m)	0.13 - 0.20				0.20 - 0.30			1.00			0.30				0.50			0.30		
			Container	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	Kone Cup	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	Kone Cup	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)
			Sample Type	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
GRO by GC-FID (S)	All	NDPs: 0 Tests: 14				X				X			X			X				X			X
GRO by GC-FID (W)	All	NDPs: 7 Tests: 7		X			N							X			N					X		
Mercury Dissolved	All	NDPs: 7 Tests: 7		X			N							X			N					X		
Metals in solid samples by OES	All	NDPs: 0 Tests: 16			X				X			X			X					X			X	
PAH by GCMS	All	NDPs: 0 Tests: 14			X				X			X			X					X			X	
PAH in waters by GC-MS (diss.filt)	All	NDPs: 7 Tests: 7		X			N							X			N					X		
PCB Congeners - Aqueous (W)	All	NDPs: 7 Tests: 7		X			N							X			N					X		
PCBs by GCMS	All	NDPs: 0 Tests: 14			X				X			X			X					X			X	
pH	All	NDPs: 0 Tests: 16			X				X			X			X					X			X	
pH Value of Filtered Water	All	NDPs: 7 Tests: 7		X			N							X			N					X		
Phenols by ms (w)	All	NDPs: 7 Tests: 7		X			N							X			N					X		
Phenols Spec MS (S)	All	NDPs: 0 Tests: 14			X				X			X			X					X			X	
Phosphate by Kone (w)	All	NDPs: 7 Tests: 7		X			N							X			N					X		
Sample description	All	NDPs: 0 Tests: 17			X				X			X			X					X			X	
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 10			X										X					X			X	

19170017	WS21		1.50	250g Amber Jar (ALE210)	S										X						X								X				X		X
				1kg TUB	S				X		X						X		X						X		X				X				
19170015	WS21		0.60 - 0.70	60g VOC (ALE215)	S		X																												
				250g Amber Jar (ALE210)	S								X		X						X		X						X				X		X
				1kg TUB	S																														
19170014	WS21		0.10 - 0.20	Kone Cup	S			N		N						N		N						N		N				N					
				60g VOC (ALE215)	S		X																												
				250g Amber Jar (ALE210)	S								X		X						X		X						X				X		X
				1kg TUB	S				X		X						X		X						X		X				X				
19170012	WS19		2.40	60g VOC (ALE215)	S		X																												
				250g Amber Jar (ALE210)	S								X		X						X		X						X				X		
				1kg TUB	S																														
19170009	WS19		0.10	Kone Cup	S			N		N						N		N						N		N				N					
				60g VOC (ALE215)	S		X																												
				250g Amber Jar (ALE210)	S								X		X						X		X						X				X		X
				1kg TUB	S				X		X						X		X						X		X				X				
19170007	WS17		0.80	60g VOC (ALE215)	S		X																												
				250g Amber Jar (ALE210)	S								X		X						X		X						X				X		X
				1kg TUB	S																														
19170006	WS17		0.30	Kone Cup	S			N		N						N		N						N		N				N					

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Results Legend

X **Test**

N **No Determination Possible**

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

Lab Sample No(s)					19169995				19169994				19169997				19169998				
Customer Sample Reference					WS09				WS09				WS12				WS13				
AGS Reference																					
Depth (m)					0.13 - 0.20				0.20 - 0.30				1.00				0.30				
Container					1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	Kone Cup	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)		1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)		1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	Kone Cup	
Sample Type					S	S	S	S	S	S	S		S	S	S		S	S	S	S	
Sulphide	All	NDPs: 7 Tests: 7			X			N									X			N	
SVOC MS (W) - Aqueous	All	NDPs: 7 Tests: 7			X			N									X			N	
Total Organic Carbon	All	NDPs: 0 Tests: 16				X				X				X				X			
TPH CWG Filtered (W)	All	NDPs: 7 Tests: 7			X			N									X			N	
TPH CWG GC (S)	All	NDPs: 0 Tests: 14				X				X				X				X			
VOC MS (S)	All	NDPs: 0 Tests: 14					X				X				X				X		
VOC MS (W)	All	NDPs: 7 Tests: 7			X			N									X			N	

Lab Sample No(s)					19169999				19170006												
Customer Sample Reference					WS13				WS17												
AGS Reference																					
Depth (m)					0.50				0.30												
Container					1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)		1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)										
Sample Type					S	S	S		S	S	S										
Sulphide	All	NDPs: 7 Tests: 7							X												
SVOC MS (W) - Aqueous	All	NDPs: 7 Tests: 7							X												
Total Organic Carbon	All	NDPs: 0 Tests: 16				X				X											
TPH CWG Filtered (W)	All	NDPs: 7 Tests: 7							X												
TPH CWG GC (S)	All	NDPs: 0 Tests: 14				X				X											
VOC MS (S)	All	NDPs: 0 Tests: 14					X				X										
VOC MS (W)	All	NDPs: 7 Tests: 7							X												

19170017	WS21		1.50	250g Amber Jar (ALE210)	S										X				
				1kg TUB	S		X		X				X						X
19170015	WS21		0.60 - 0.70	60g VOC (ALE215)	S												X		
				250g Amber Jar (ALE210)	S						X				X				
				1kg TUB	S														
19170014	WS21		0.10 - 0.20	Kone Cup	S	N		N				N						N	
				60g VOC (ALE215)	S												X		
				250g Amber Jar (ALE210)	S						X				X				
				1kg TUB	S		X		X				X						X
19170012	WS19		2.40	60g VOC (ALE215)	S												X		
				250g Amber Jar (ALE210)	S						X				X				
				1kg TUB	S														
19170009	WS19		0.10	Kone Cup	S	N		N				N						N	
				60g VOC (ALE215)	S												X		
				250g Amber Jar (ALE210)	S						X				X				
				1kg TUB	S		X		X				X						X
19170007	WS17		0.80	60g VOC (ALE215)	S												X		
				250g Amber Jar (ALE210)	S						X				X				
				1kg TUB	S														
19170006	WS17		0.30	Kone Cup	S	N		N				N						N	

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Results Legend

X **Test**

N **No Determination Possible**

Sample Types -
S - Soil/Solid
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DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
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Lab Sample No(s)			19170017	19170020	19170021	19170023			19170025				19170027	
Customer Sample Reference			WS21	WS21	WS24	WS24			WS25				WS27	
AGS Reference														
Depth (m)			1.50	3.10	0.30	1.20			0.10 - 0.30				0.20	
Container			60g VOC (ALE215)	Kone Cup	250g Amber Jar (ALE210)	250g Amber Jar (ALE210)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	Kone Cup	250g Amber Jar (ALE210)
Sample Type			S	S	S	S	S	S	S	S	S	S	S	S
Ammoniacal Nitrogen	All	NDPs: 7 Tests: 7		N									N	
										X				
Anions by Kone (soil)	All	NDPs: 0 Tests: 14						X			X			
Anions by Kone (w)	All	NDPs: 7 Tests: 7		N									N	
										X				
Asbestos ID in Solid Samples	All	NDPs: 0 Tests: 14												
							X			X				
Boron Water Soluble	All	NDPs: 0 Tests: 16												
					X	X		X			X			X
CEN Readings	All	NDPs: 7 Tests: 7		N									N	
										X				
Conductivity (at 20 deg.C)	All	NDPs: 7 Tests: 7		N									N	
										X				
Cyanide Comp/Free/Total/Thiocyanate	All	NDPs: 7 Tests: 23		N									N	
					X	X		X		X	X			X
Dissolved Metals by ICP-MS	All	NDPs: 7 Tests: 7		N									N	
										X				
Dissolved Organic/Inorganic Carbon	All	NDPs: 7 Tests: 7		N									N	
										X				
EPH CWG (Aliphatic) Filtered GC (W)	All	NDPs: 7 Tests: 7		N									N	
										X				
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 14						X			X			
EPH CWG (Aromatic) Filtered GC (W)	All	NDPs: 7 Tests: 7		N									N	
										X				
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 14						X			X			
Fluoride	All	NDPs: 7 Tests: 7		N									N	
										X				

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Results Legend

X **Test**

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Lab Sample No(s)			19170017	19170020	19170021	19170023			19170025				19170027	
Customer Sample Reference			WS21	WS21	WS24	WS24			WS25				WS27	
AGS Reference														
Depth (m)			1.50	3.10	0.30	1.20			0.10 - 0.30				0.20	
Container			60g VOC (ALE215)	Kone Cup	250g Amber Jar (ALE210)	250g Amber Jar (ALE210)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	Kone Cup	250g Amber Jar (ALE210)
Sample Type			S	S	S	S	S	S	S	S	S	S	S	S
GRO by GC-FID (S)	All	NDPs: 0 Tests: 14	X					X				X		
GRO by GC-FID (W)	All	NDPs: 7 Tests: 7		N						X			N	
Mercury Dissolved	All	NDPs: 7 Tests: 7		N						X			N	
Metals in solid samples by OES	All	NDPs: 0 Tests: 16			X	X		X			X			X
PAH by GCMS	All	NDPs: 0 Tests: 14						X			X			
PAH in waters by GC-MS (diss.filt)	All	NDPs: 7 Tests: 7		N						X			N	
PCB Congeners - Aqueous (W)	All	NDPs: 7 Tests: 7		N						X			N	
PCBs by GCMS	All	NDPs: 0 Tests: 14						X			X			
pH	All	NDPs: 0 Tests: 16			X	X		X			X			X
pH Value of Filtered Water	All	NDPs: 7 Tests: 7		N						X			N	
Phenols by ms (w)	All	NDPs: 7 Tests: 7		N						X			N	
Phenols Spec MS (S)	All	NDPs: 0 Tests: 14						X			X			
Phosphate by Kone (w)	All	NDPs: 7 Tests: 7		N						X			N	
Sample description	All	NDPs: 0 Tests: 17			X	X		X			X			X
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 10									X			

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Results Legend

X **Test**

N **No Determination Possible**

Sample Types -
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Lab Sample No(s)			19170017	19170020	19170021	19170023					19170025	19170027		
Customer Sample Reference			WS21	WS21	WS24	WS24					WS25	WS27		
AGS Reference														
Depth (m)			1.50	3.10	0.30	1.20					0.10 - 0.30	0.20		
Container			60g VOC (ALE215)	Kone Cup	250g Amber Jar (ALE210)	250g Amber Jar (ALE210)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	Kone Cup	250g Amber Jar (ALE210)
Sample Type			S	S	S	S	S	S	S	S	S	S	S	S
Sulphide	All	NDPs: 7 Tests: 7		N									N	
										X				
SVOC MS (W) - Aqueous	All	NDPs: 7 Tests: 7		N									N	
										X				
Total Organic Carbon	All	NDPs: 0 Tests: 16			X	X		X			X			X
TPH CWG Filtered (W)	All	NDPs: 7 Tests: 7		N									N	
										X				
TPH CWG GC (S)	All	NDPs: 0 Tests: 14						X			X			
VOC MS (S)	All	NDPs: 0 Tests: 14	X						X			X		
VOC MS (W)	All	NDPs: 7 Tests: 7		N									N	
										X				

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Sample Descriptions

Grain Sizes

very fine	<0.063mm	**fine**	0.063mm - 0.1mm	**medium**	0.1mm - 2mm	**coarse**	2mm - 10mm	**very coarse**	>10mm

Lab Sample No(s)	Customer Sample Ref.	Depth (m)	Colour	Description	Inclusions	Inclusions 2
19169994	WS09	0.20 - 0.30	Cream	Chalk	Vegetation	Stones
19169995	WS09	0.13 - 0.20	Grey	Gravel	Stones	Vegetation
19169997	WS12	1.00	White	Chalk	Vegetation	Stones
19169998	WS13	0.30	Dark Brown	Clay	Vegetation	Stones
19169999	WS13	0.50	Light Brown	Sandy Clay Loam	Stones	Vegetation
19170006	WS17	0.30	Cream	Chalk	Vegetation	Stones
19170007	WS17	0.80	Light Brown	Sandy Loam	Stones	Vegetation
19170009	WS19	0.10	Dark Brown	Sandy Loam	Vegetation	Stones
19170012	WS19	2.40	White	Chalk	Stones	Vegetation
19170014	WS21	0.10 - 0.20	Dark Brown	Sandy Loam	Vegetation	Stones
19170015	WS21	0.60 - 0.70	Cream	Chalk	Vegetation	Stones
19170017	WS21	1.50	Dark Brown	Sandy Loam	Vegetation	Stones
19170020	WS21	3.10	Cream	Chalk	Vegetation	Stones
19170021	WS24	0.30	Grey	Loamy Sand	Stones	Vegetation
19170023	WS24	1.20	White	Chalk	Vegetation	None
19170025	WS25	0.10 - 0.30	Dark Brown	Loamy Sand	Stones	Brick
19170027	WS27	0.20	Dark Brown	Loamy Sand	Stones	Vegetation

These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally ocurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.

Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

Validated

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	Depth (m)	Sample Type	Date Sampled	Sampled Time	Date Received	SDG Ref	Lab Sample No.(s)	AGS Reference
			WS09	0.13 - 0.20	Soil/Solid (S)	17/01/2019	.	22/01/2019	190122-79	19169995	
			WS09	0.20 - 0.30	Soil/Solid (S)	17/01/2019	.	22/01/2019	190122-79	19169994	
			WS12	1.00	Soil/Solid (S)	15/01/2019	.	22/01/2019	190122-79	19169997	
			WS13	0.30	Soil/Solid (S)	15/01/2019	.	22/01/2019	190122-79	19169998	
			WS13	0.50	Soil/Solid (S)	15/01/2019	.	22/01/2019	190122-79	19169999	
			WS17	0.30	Soil/Solid (S)	11/01/2019	.	22/01/2019	190122-79	19170006	
Moisture Content Ratio (% of as received sample)	%	PM024	21		19			19			16			16			19	
Organic Carbon, Total	<0.2 % 1 pH Units	TM132	10.1	#	0.209	#		<0.2	#		0.688	M		0.945	M		0.334	#
pH		TM133	9.18	#	8.98	#		9.05	#		8.69	M		8.56	M		9.19	#
Cyanide, Total	<1 mg/kg	TM153	<1	#	<1	#		<1	#		<1	M		<1	M		<1	#
PCB congener 28	<3 µg/kg	TM168	<3	#	<3	#		<3	#		<3	M		<3	M		<3	#
PCB congener 52	<3 µg/kg	TM168	<3	#	<3	#		<3	#		<3	M		<3	M		<3	#
PCB congener 101	<3 µg/kg	TM168	<3	#	<3	#		<3	#		<3	M		<3	M		<3	#
PCB congener 118	<3 µg/kg	TM168	<3	#	<3	#		<3	#		<3	M		<3	M		<3	#
PCB congener 138	<3 µg/kg	TM168	<3	#	<3	#		<3	#		<3	M		<3	M		<3	#
PCB congener 153	<3 µg/kg	TM168	<3	#	<3	#		<3	#		<3	M		<3	M		<3	#
PCB congener 180	<3 µg/kg	TM168	<3	#	<3	#		<3	#		<3	M		<3	M		<3	#
Sum of detected PCB 7 Congeners	<21 µg/kg	TM168	<21		<21			<21			<21			<21			<21	
Arsenic	<0.6 mg/kg	TM181	4.9	#	0.601	#		1.22	#		7.76	M		8.13	M		0.696	#
Cadmium	<0.02 mg/kg	TM181	0.115	#	0.0666	#		0.0955	#		0.397	M		0.586	M		0.11	#
Chromium	<0.9 mg/kg	TM181	5.08	#	1.11	#		1.1	#		23.4	M		24.9	M		2.18	#
Copper	<1.4 mg/kg	TM181	35.4	#	<1.4	#		2.21	#		11.9	M		17.9	M		2.24	#
Lead	<0.7 mg/kg	TM181	6.95	#	<0.7	#		<0.7	#		10.6	M		28.4	M		<0.7	#
Mercury	<0.14 mg/kg	TM181	<0.14	#	<0.14	#		<0.14	#		<0.14	M		<0.14	M		<0.14	#
Nickel	<0.2 mg/kg	TM181	15.2	#	1.19	#		2.71	#		21.7	M		25.3	M		2.38	#
Selenium	<1 mg/kg	TM181	<1	#	<1	#		<1	#		<1	#		<1	#		<1	#
Vanadium	<0.2 mg/kg	TM181	14.1	#	2.04	#		2.35	#		36.9	#		38.5	#		3.47	#
Zinc	<1.9 mg/kg	TM181	34	#	7.98	#		20.7	#		68.3	M		155	M		10.8	#
Boron, water soluble	<1 mg/kg	TM222	<1	#	<1	#		<1	#		<1	M		<1	M		<1	#
Chloride (soluble)	<5 mg/kg	TM243	9.36	#	5.48	#		6.01	#		8.42	M		10	M		32.1	#

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS17	WS19	WS19	WS21	WS21	WS21
			Depth (m)	0.80	0.10	2.40	0.10 - 0.20	0.60 - 0.70	1.50
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	11/01/2019	11/01/2019	17/01/2019	16/01/2019	16/01/2019	17/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019
			SDG Ref	190122-79	190122-79	190122-79	190122-79	190122-79	190122-79
			Lab Sample No.(s)	19170007	19170009	19170012	19170014	19170015	19170017
			AGS Reference						
Moisture Content Ratio (% of as received sample)	%	PM024		13	15	14	16	19	12
Organic Carbon, Total	<0.2 %	TM132		1.25 M	2.17 M	<0.2 #	0.917 M	<0.2 #	
pH	1 pH Units	TM133		8.41 M	8.5 M	9.18 #	8.22 M	8.73 #	
Cyanide, Total	<1 mg/kg	TM153		<1 @ M	<1 M	<1 #	<1 M	<1 #	
PCB congener 28	<3 µg/kg	TM168		<3 M	<3 M	<3 #	<3 M	<3 #	<3 M
PCB congener 52	<3 µg/kg	TM168		<3 M	<3 M	<3 #	<3 M	<3 #	<3 M
PCB congener 101	<3 µg/kg	TM168		<3 M	<3 M	<3 #	<3 M	<3 #	<3 M
PCB congener 118	<3 µg/kg	TM168		<3 M	<3 M	<3 #	<3 M	<3 #	<3 M
PCB congener 138	<3 µg/kg	TM168		<3 M	<3 M	<3 #	<3 M	<3 #	<3 M
PCB congener 153	<3 µg/kg	TM168		<3 M	<3 M	<3 #	<3 M	<3 #	<3 M
PCB congener 180	<3 µg/kg	TM168		<3 M	<3 M	<3 #	<3 M	<3 #	<3 M
Sum of detected PCB 7 Congeners	<21 µg/kg	TM168		<21	<21	<21	<21	<21	<21
Arsenic	<0.6 mg/kg	TM181		8.14 M	7.41 M	<0.6 #	3.65 M	0.665 #	
Cadmium	<0.02 mg/kg	TM181		0.441 M	0.364 M	0.0815 #	0.179 M	0.0958 #	
Chromium	<0.9 mg/kg	TM181		16.6 M	16.5 M	1.14 #	9.96 M	2.22 #	
Copper	<1.4 mg/kg	TM181		11.1 M	12.8 M	<1.4 #	5.75 M	1.84 #	
Lead	<0.7 mg/kg	TM181		16.2 M	19 M	<0.7 #	7.56 M	<0.7 #	
Mercury	<0.14 mg/kg	TM181		<0.14 M	<0.14 M	<0.14 #	<0.14 M	<0.14 #	
Nickel	<0.2 mg/kg	TM181		16.5 M	17.5 M	1.63 #	8.89 M	2.19 #	
Selenium	<1 mg/kg	TM181		<1 #	<1 #	<1 #	<1 #	<1 #	
Vanadium	<0.2 mg/kg	TM181		27.3 #	28 #	2.82 #	14.4 #	3.56 #	
Zinc	<1.9 mg/kg	TM181		59.8 M	63.4 M	9.82 #	32.7 M	12.9 #	
Boron, water soluble	<1 mg/kg	TM222		1.13 M	<1 M	<1 #	<1 M	<1 #	
Chloride (soluble)	<5 mg/kg	TM243		21.9 M	13.9 M	16.4 #	8.32 M	13.7 #	5.9 M

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3♦§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	Depth (m)	Sample Type	Date Sampled	Sampled Time	Date Received	SDG Ref	Lab Sample No.(s)	AGS Reference
			WS21	3.10	Soil/Solid (S)	17/01/2019	.	22/01/2019	190122-79	19170020	
			WS24	0.30	Soil/Solid (S)	17/01/2019	.	22/01/2019	190122-79	19170021	
			WS24	1.20	Soil/Solid (S)	17/01/2019	.	22/01/2019	190122-79	19170023	
			WS25	0.10 - 0.30	Soil/Solid (S)	16/01/2019	.	22/01/2019	190122-79	19170025	
			WS27	0.20	Soil/Solid (S)	16/01/2019	.	22/01/2019	190122-79	19170027	
Moisture Content Ratio (% of as received sample)	%	PM024	21		17			17		12	20
Organic Carbon, Total	<0.2 %	TM132	<0.2 #		1 M			<0.2 #		1.44 M	1.22 M
pH	1 pH Units	TM133	9.16 #		9.17 M			8.5 #		8.79 M	8.43 M
Cyanide, Total	<1 mg/kg	TM153	<1 #		<1 M			<1 #		<1 M	<1 M
PCB congener 28	<3 µg/kg	TM168						<3 #		<3 M	
PCB congener 52	<3 µg/kg	TM168						<3 #		<3 M	
PCB congener 101	<3 µg/kg	TM168						<3 #		<3 M	
PCB congener 118	<3 µg/kg	TM168						<3 #		<3 M	
PCB congener 138	<3 µg/kg	TM168						<3 #		<3 M	
PCB congener 153	<3 µg/kg	TM168						<3 #		<3 M	
PCB congener 180	<3 µg/kg	TM168						<3 #		<3 M	
Sum of detected PCB 7 Congeners	<21 µg/kg	TM168						<21		<21	
Arsenic	<0.6 mg/kg	TM181	<0.6 #		3.45 M			<0.6 #		5.77 M	5.3 M
Cadmium	<0.02 mg/kg	TM181	0.0816 #		0.17 M			0.0706 #		0.307 M	0.238 M
Chromium	<0.9 mg/kg	TM181	1.41 #		5.19 M			1.98 #		12.5 M	14.1 M
Copper	<1.4 mg/kg	TM181	<1.4 #		13.3 M			1.57 #		9.21 M	40.4 M
Lead	<0.7 mg/kg	TM181	<0.7 #		11.7 M			<0.7 #		19.7 M	20.6 M
Mercury	<0.14 mg/kg	TM181	<0.14 #		<0.14 M			<0.14 #		<0.14 M	<0.14 M
Nickel	<0.2 mg/kg	TM181	1.79 #		8.86 M			1.91 #		11.5 M	14.7 M
Selenium	<1 mg/kg	TM181	<1 #		<1 #			<1 #		<1 #	<1 #
Vanadium	<0.2 mg/kg	TM181	2.84 #		10.8 #			2.89 #		20.7 #	50 #
Zinc	<1.9 mg/kg	TM181	11 #		34.1 M			11.5 #		68.8 M	71.3 M
Boron, water soluble	<1 mg/kg	TM222	<1 #		<1 M			<1 #		<1 M	<1 M
Chloride (soluble)	<5 mg/kg	TM243						246 #		10.3 M	

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS09	WS09	WS12	WS13	WS13	WS17
			Depth (m)	0.13 - 0.20	0.20 - 0.30	1.00	0.30	0.50	0.30
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	17/01/2019	17/01/2019	15/01/2019	15/01/2019	15/01/2019	11/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019
			SDG Ref	190122-79	190122-79	190122-79	190122-79	190122-79	190122-79
			Lab Sample No.(s)	19169995	19169994	19169997	19169998	19169999	19170006
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		99.4	106	105	106	109	109
Acenaphthene-d10 % recovery**	%	TM218		104	108	109	109	112	109
Phenanthrene-d10 % recovery**	%	TM218		100	95.1	107	108	108	106
Chrysene-d12 % recovery**	%	TM218		97	102	112	114	113	98
Perylene-d12 % recovery**	%	TM218		81.9	110	104	109	106	92.1
Naphthalene	<9 µg/kg	TM218		<9 #	<9 #	<9 #	<9 M	<9 M	<9 #
Acenaphthylene	<12 µg/kg	TM218		<12 #	<12 #	<12 #	<12 M	<12 M	<12 #
Acenaphthene	<8 µg/kg	TM218		<8 #	<8 #	<8 #	<8 M	<8 M	<8 #
Fluorene	<10 µg/kg	TM218		<10 #	<10 #	<10 #	<10 M	<10 M	<10 #
Phenanthrene	<15 µg/kg	TM218		60.3 #	<15 #	<15 #	<15 M	<15 M	<15 #
Anthracene	<16 µg/kg	TM218		<16 #	<16 #	<16 #	<16 M	<16 M	<16 #
Fluoranthene	<17 µg/kg	TM218		174 #	<17 #	<17 #	<17 M	<17 M	<17 #
Pyrene	<15 µg/kg	TM218		160 #	<15 #	<15 #	<15 M	<15 M	<15 #
Benz(a)anthracene	<14 µg/kg	TM218		82.2 #	<14 #	<14 #	<14 M	<14 M	<14 #
Chrysene	<10 µg/kg	TM218		67.1 #	<10 #	<10 #	<10 M	<10 M	<10 #
Benzo(b)fluoranthene	<15 µg/kg	TM218		83.7 #	<15 #	<15 #	<15 M	<15 M	<15 #
Benzo(k)fluoranthene	<14 µg/kg	TM218		37.4 #	<14 #	<14 #	<14 M	<14 M	<14 #
Benzo(a)pyrene	<15 µg/kg	TM218		81.7 #	<15 #	<15 #	<15 M	<15 M	<15 #
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		39.8 #	<18 #	<18 #	<18 M	<18 M	<18 #
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		<23 #	<23 #	<23 #	<23 M	<23 M	<23 #
Benzo(g,h,i)perylene	<24 µg/kg	TM218		55.7 #	<24 #	<24 #	<24 M	<24 M	<24 #
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		842	<118	<118	<118	<118	<118

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS17	WS19	WS19	WS21	WS21	WS21
			Depth (m)	0.80	0.10	2.40	0.10 - 0.20	0.60 - 0.70	1.50
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	11/01/2019	11/01/2019	17/01/2019	16/01/2019	16/01/2019	17/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019
			SDG Ref	190122-79	190122-79	190122-79	190122-79	190122-79	190122-79
			Lab Sample No.(s)	19170007	19170009	19170012	19170014	19170015	19170017
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		108	106	109	106	104	108
Acenaphthene-d10 % recovery**	%	TM218		114	111	114	108	104	112
Phenanthrene-d10 % recovery**	%	TM218		110	110	112	107	98.3	109
Chrysene-d12 % recovery**	%	TM218		102	113	103	109	107	115
Perylene-d12 % recovery**	%	TM218		98.8	106	99.2	101	104	106
Naphthalene	µg/kg	TM218		<9 @ M	<9 M	<9 #	<9 M	<9 #	<9 M
Acenaphthylene	µg/kg	TM218		<12 @ M	<12 M	<12 #	<12 M	<12 #	<12 M
Acenaphthene	µg/kg	TM218		<8 @ M	<8 M	<8 #	<8 M	<8 #	<8 M
Fluorene	µg/kg	TM218		<10 @ M	<10 M	<10 #	<10 M	<10 #	<10 M
Phenanthrene	µg/kg	TM218		<15 @ M	38.3 M	<15 #	22.9 M	<15 #	<15 M
Anthracene	µg/kg	TM218		<16 @ M	<16 M	<16 #	<16 M	<16 #	<16 M
Fluoranthene	µg/kg	TM218		29 @ M	127 M	<17 #	82.9 M	<17 #	<17 M
Pyrene	µg/kg	TM218		23.9 @ M	116 M	<15 #	78.2 M	<15 #	<15 M
Benz(a)anthracene	µg/kg	TM218		<14 @ M	66.5 M	<14 #	46.3 M	<14 #	<14 M
Chrysene	µg/kg	TM218		11.8 @ M	66.5 M	<10 #	53.2 M	<10 #	<10 M
Benzo(b)fluoranthene	µg/kg	TM218		<15 @ M	55 M	<15 #	56 M	<15 #	<15 M
Benzo(k)fluoranthene	µg/kg	TM218		<14 @ M	36.1 M	<14 #	27 M	<14 #	<14 M
Benzo(a)pyrene	µg/kg	TM218		<15 @ M	73.1 M	<15 #	51.9 M	<15 #	<15 M
Indeno(1,2,3-cd)pyrene	µg/kg	TM218		<18 @ M	39.7 M	<18 #	27.3 M	<18 #	<18 M
Dibenzo(a,h)anthracene	µg/kg	TM218		<23 @ M	<23 M	<23 #	<23 M	<23 #	<23 M
Benzo(g,h,i)perylene	µg/kg	TM218		<24 @ M	55.4 M	<24 #	39.9 M	<24 #	<24 M
PAH, Total Detected USEPA 16	µg/kg	TM218		<118	674	<118	486	<118	<118

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	Depth (m)	Sample Type	Date Sampled	Sampled Time	Date Received	SDG Ref	Lab Sample No.(s)	AGS Reference
			WS24	1.20	Soil/Solid (S)	17/01/2019	.	22/01/2019	190122-79	19170023	
			WS25	0.10 - 0.30	Soil/Solid (S)	16/01/2019	.	22/01/2019	190122-79	19170025	
Naphthalene-d8 % recovery**	%	TM218	110								
Acenaphthene-d10 % recovery**	%	TM218	109								
Phenanthrene-d10 % recovery**	%	TM218	105								
Chrysene-d12 % recovery**	%	TM218	100								
Perylene-d12 % recovery**	%	TM218	103								
Naphthalene	<9 µg/kg	TM218	<9 #								
Acenaphthylene	<12 µg/kg	TM218	<12 #								
Acenaphthene	<8 µg/kg	TM218	<8 #								
Fluorene	<10 µg/kg	TM218	<10 #								
Phenanthrene	<15 µg/kg	TM218	<15 #								
Anthracene	<16 µg/kg	TM218	<16 #								
Fluoranthene	<17 µg/kg	TM218	<17 #								
Pyrene	<15 µg/kg	TM218	<15 #								
Benz(a)anthracene	<14 µg/kg	TM218	<14 #								
Chrysene	<10 µg/kg	TM218	<10 #								
Benzo(b)fluoranthene	<15 µg/kg	TM218	<15 #								
Benzo(k)fluoranthene	<14 µg/kg	TM218	<14 #								
Benzo(a)pyrene	<15 µg/kg	TM218	<15 #								
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218	<18 #								
Dibenzo(a,h)anthracene	<23 µg/kg	TM218	<23 #								
Benzo(g,h,i)perylene	<24 µg/kg	TM218	<24 #								
PAH, Total Detected USEPA 16	<118 µg/kg	TM218	<118								

Component	LOD/Units	Method	WS24	WS25				
Naphthalene-d8 % recovery**	%	TM218	110	104				
Acenaphthene-d10 % recovery**	%	TM218	109	110				
Phenanthrene-d10 % recovery**	%	TM218	105	111				
Chrysene-d12 % recovery**	%	TM218	100	117				
Perylene-d12 % recovery**	%	TM218	103	108				
Naphthalene	<9 µg/kg	TM218	<9 #	<9 M				
Acenaphthylene	<12 µg/kg	TM218	<12 #	28.7 M				
Acenaphthene	<8 µg/kg	TM218	<8 #	14.5 M				
Fluorene	<10 µg/kg	TM218	<10 #	12.5 M				
Phenanthrene	<15 µg/kg	TM218	<15 #	187 M				
Anthracene	<16 µg/kg	TM218	<16 #	68.1 M				
Fluoranthene	<17 µg/kg	TM218	<17 #	722 M				
Pyrene	<15 µg/kg	TM218	<15 #	650 M				
Benz(a)anthracene	<14 µg/kg	TM218	<14 #	393 M				
Chrysene	<10 µg/kg	TM218	<10 #	356 M				
Benzo(b)fluoranthene	<15 µg/kg	TM218	<15 #	446 M				
Benzo(k)fluoranthene	<14 µg/kg	TM218	<14 #	243 M				
Benzo(a)pyrene	<15 µg/kg	TM218	<15 #	468 M				
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218	<18 #	244 M				
Dibenzo(a,h)anthracene	<23 µg/kg	TM218	<23 #	70.2 M				
Benzo(g,h,i)perylene	<24 µg/kg	TM218	<24 #	359 M				
PAH, Total Detected USEPA 16	<118 µg/kg	TM218	<118	4260				

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Phenols Spec MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS09	WS09	WS12	WS13	WS13	WS17
			Depth (m)	0.13 - 0.20	0.20 - 0.30	1.00	0.30	0.50	0.30
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	17/01/2019	17/01/2019	15/01/2019	15/01/2019	15/01/2019	11/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019
			SDG Ref	190122-79	190122-79	190122-79	190122-79	190122-79	190122-79
			Lab Sample No.(s)	19169995	19169994	19169997	19169998	19169999	19170006
			AGS Reference						
4-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4,6-Trichlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4-Dichlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Pentachlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Phenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
4-Chloro-3-methylphenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4-Dimethylphenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2-Chlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Sum of Detected Phenols	<9 µg/kg	TM072		<9	<9	<9	<9	<9	<9

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Phenols Spec MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS17	WS19	WS19	WS21	WS21	WS21
			Depth (m)	0.80	0.10	2.40	0.10 - 0.20	0.60 - 0.70	1.50
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	11/01/2019	11/01/2019	17/01/2019	16/01/2019	16/01/2019	17/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019
			SDG Ref	190122-79	190122-79	190122-79	190122-79	190122-79	190122-79
			Lab Sample No.(s)	19170007	19170009	19170012	19170014	19170015	19170017
			AGS Reference						
4-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4,6-Trichlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4-Dichlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Pentachlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Phenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
4-Chloro-3-methylphenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4-Dimethylphenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2-Chlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Sum of Detected Phenols	<9 µg/kg	TM072		<9	<9	<9	<9	<9	<9

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Phenols Spec MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS24	WS25				
			Depth (m)	1.20	0.10 - 0.30				
			Sample Type	Soil/Solid (S)	Soil/Solid (S)				
			Date Sampled	17/01/2019	16/01/2019				
			Sampled Time	.	.				
			Date Received	22/01/2019	22/01/2019				
			SDG Ref	190122-79	190122-79				
			Lab Sample No.(s)	19170023	19170025				
			AGS Reference						
4-Nitrophenol	<1 µg/kg	TM072		<1	<1				
2,4,6-Trichlorophenol	<1 µg/kg	TM072		<1	<1				
2-Nitrophenol	<1 µg/kg	TM072		<1	<1				
2,4-Dichlorophenol	<1 µg/kg	TM072		<1	<1				
Pentachlorophenol	<1 µg/kg	TM072		<1	<1				
Phenol	<1 µg/kg	TM072		<1	1.61				
4-Chloro-3-methylphenol	<1 µg/kg	TM072		<1	<1				
2,4-Dimethylphenol	<1 µg/kg	TM072		<1	1.28				
2-Chlorophenol	<1 µg/kg	TM072		<1	<1				
Sum of Detected Phenols	<9 µg/kg	TM072		<9	<9				

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3♦§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS09	WS13	WS13	WS17	WS17	WS19
			Depth (m)	0.13 - 0.20	0.30	0.50	0.30	0.80	0.10
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	17/01/2019	15/01/2019	15/01/2019	11/01/2019	11/01/2019	11/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019
			SDG Ref	190122-79	190122-79	190122-79	190122-79	190122-79	190122-79
			Lab Sample No.(s)	19169995	19169998	19169999	19170006	19170007	19170009
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Pentachlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Nitrobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Isophorone	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachloroethane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Diethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dibenzofuran	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Carbazole	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Azobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
3-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS09	WS13	WS13	WS17	WS17	WS19
			Depth (m)	0.13 - 0.20	0.30	0.50	0.30	0.80	0.10
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	17/01/2019	15/01/2019	15/01/2019	11/01/2019	11/01/2019	11/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019
			SDG Ref	190122-79	190122-79	190122-79	190122-79	190122-79	190122-79
			Lab Sample No.(s)	19169995	19169998	19169999	19170006	19170007	19170009
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylnaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Acenaphthylene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Acenaphthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(a)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(b)fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(k)fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(a)pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Chrysene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Fluorene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Phenanthrene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Naphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Bis(2-chloroisopropyl) ether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3♦§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS21	WS21	WS21	WS25		
			Depth (m)	0.10 - 0.20	0.60 - 0.70	1.50	0.10 - 0.30		
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)		
			Date Sampled	16/01/2019	16/01/2019	17/01/2019	16/01/2019		
			Sampled Time	.	.	.	.		
			Date Received	22/01/2019	22/01/2019	22/01/2019	22/01/2019		
			SDG Ref	190122-79	190122-79	190122-79	190122-79		
			Lab Sample No.(s)	19170014	19170015	19170017	19170025		
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100	<100	<100		
Pentachlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100	<100	<100		
Nitrobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
Isophorone	<100 µg/kg	TM157		<100	<100	<100	<100		
Hexachloroethane	<100 µg/kg	TM157		<100	<100	<100	<100		
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100	<100	<100		
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100	<100	<100		
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100		
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100		
Diethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100		
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100		
Dibenzofuran	<100 µg/kg	TM157		<100	<100	<100	<100		
Carbazole	<100 µg/kg	TM157		<100	<100	<100	<100		
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100		
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100	<100	<100		
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100	<100	<100		
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100	<100	<100		
Azobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Chloroaniline	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100		
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100		
3-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100		
2-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
2-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100		
2-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100		
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS21	WS21	WS21	WS25		
			Depth (m)	0.10 - 0.20	0.60 - 0.70	1.50	0.10 - 0.30		
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)		
			Date Sampled	16/01/2019	16/01/2019	17/01/2019	16/01/2019		
			Sampled Time	-	-	-	-		
			Date Received	22/01/2019	22/01/2019	22/01/2019	22/01/2019		
			SDG Ref	190122-79	190122-79	190122-79	190122-79		
			Lab Sample No.(s)	19170014	19170015	19170017	19170025		
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100		
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100		
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100	<100	<100		
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100		
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100		
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100		
2-Methylnaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100		
Acenaphthylene	<100 µg/kg	TM157		<100	<100	<100	<100		
Acenaphthene	<100 µg/kg	TM157		<100	<100	<100	<100		
Anthracene	<100 µg/kg	TM157		<100	<100	<100	205		
Benzo(a)anthracene	<100 µg/kg	TM157		<100	<100	<100	1230		
Benzo(b)fluoranthene	<100 µg/kg	TM157		<100	<100	<100	1060		
Benzo(k)fluoranthene	<100 µg/kg	TM157		<100	<100	<100	992		
Benzo(a)pyrene	<100 µg/kg	TM157		<100	<100	<100	992		
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	<100	<100	764		
Chrysene	<100 µg/kg	TM157		<100	<100	<100	1120		
Fluoranthene	<100 µg/kg	TM157		<100	<100	<100	2040		
Fluorene	<100 µg/kg	TM157		<100	<100	<100	<100		
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	<100	<100	1270		
Phenanthrene	<100 µg/kg	TM157		<100	<100	<100	752		
Pyrene	<100 µg/kg	TM157		<100	<100	<100	1940		
Naphthalene	<100 µg/kg	TM157		<100	<100	<100	<100		
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100		
Bis(2-chloroisopropyl) ether	<100 µg/kg	TM157		<100	<100	<100	<100		

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS09	WS09	WS12	WS13	WS13	WS17
			Depth (m)	0.13 - 0.20	0.20 - 0.30	1.00	0.30	0.50	0.30
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	17/01/2019	17/01/2019	15/01/2019	15/01/2019	15/01/2019	11/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019
			SDG Ref	190122-79	190122-79	190122-79	190122-79	190122-79	190122-79
			Lab Sample No.(s)	19169995	19169994	19169997	19169998	19169999	19170006
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		101	116	97 @	126 @	130 @	110 @
GRO TOT (Moisture Corrected)	<100 µg/kg	TM089		<100	<100	162 @ #	<100 @ M	<100 @	<100 @
Aliphatics >C5-C6	<10 µg/kg	TM089		<10	<10	16.1 @	<10 @	<10 @	<10 @
Aliphatics >C6-C8	<10 µg/kg	TM089		<10	<10	34.7 @	<10 @	<10 @	<10 @
Aliphatics >C8-C10	<10 µg/kg	TM089		<10	<10	38.4 @	<10 @	<10 @	<10 @
Aliphatics >C10-C12	<10 µg/kg	TM089		<10	<10	28.5 @	<10 @	<10 @	<10 @
Aliphatics >C12-C16	<100 µg/kg	TM173		<100	<100	<100	<100	<100	<100
Aliphatics >C16-C21	<100 µg/kg	TM173		<100	<100	<100	<100	<100	<100
Aliphatics >C21-C35	<100 µg/kg	TM173		11300	<100	340	1450	228	<100
Aliphatics >C35-C44	<100 µg/kg	TM173		<100	<100	<100	213	119	<100
Total Aliphatics >C12-C44	<100 µg/kg	TM173		11300	<100	340	1670	347	<100
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10	<10	<10 @	<10 @	<10 @	<10 @
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<10	<10 @	<10 @	<10 @	<10 @
Aromatics >EC8-EC10	<10 µg/kg	TM089		<10	<10	26 @	<10 @	<10 @	<10 @
Aromatics >EC10-EC12	<10 µg/kg	TM089		<10	<10	18.6 @	<10 @	<10 @	<10 @
Aromatics >EC12-EC16	<100 µg/kg	TM173		<100	<100	<100	<100	<100	<100
Aromatics >EC16-EC21	<100 µg/kg	TM173		<100	<100	<100	<100	<100	<100
Aromatics >EC21-EC35	<100 µg/kg	TM173		3670	<100	<100	574	987	<100
Aromatics >EC35-EC44	<100 µg/kg	TM173		<100	<100	1490	<100	2610	<100
Aromatics >EC40-EC44	<100 µg/kg	TM173		<100	<100	740	<100	1450	<100
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		3670	<100	1490	574	3590	<100
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173		15000	<100	1990	2240	3940	<100

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3♦§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS17	WS19	WS19	WS21	WS21	WS21
			Depth (m)	0.80	0.10	2.40	0.10 - 0.20	0.60 - 0.70	1.50
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	11/01/2019	11/01/2019	17/01/2019	16/01/2019	16/01/2019	17/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019
			SDG Ref	190122-79	190122-79	190122-79	190122-79	190122-79	190122-79
			Lab Sample No.(s)	19170007	19170009	19170012	19170014	19170015	19170017
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		122 @	115 @	127	97.3	104	111
GRO TOT (Moisture Corrected)	<100 µg/kg	TM089		<100 @	<100 @	<100	<100	<100	<100
Aliphatics >C5-C6	<10 µg/kg	TM089		<10 @	<10 @	<10	<10	<10	<10
Aliphatics >C6-C8	<10 µg/kg	TM089		<10 @	<10 @	<10	<10	<10	<10
Aliphatics >C8-C10	<10 µg/kg	TM089		<10 @	<10 @	<10	<10	<10	<10
Aliphatics >C10-C12	<10 µg/kg	TM089		<10 @	<10 @	<10	<10	<10	<10
Aliphatics >C12-C16	<100 µg/kg	TM173		<100	<100	<100	<100	<100	<100
Aliphatics >C16-C21	<100 µg/kg	TM173		<100	<100	<100	<100	<100	<100
Aliphatics >C21-C35	<100 µg/kg	TM173		3010	3620	2350	2620	<100	1030
Aliphatics >C35-C44	<100 µg/kg	TM173		<100	<100	11400	<100	<100	<100
Total Aliphatics >C12-C44	<100 µg/kg	TM173		3010	3620	13700	2620	<100	1030
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10 @	<10 @	<10	<10	<10	<10
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10 @	<10 @	<10	<10	<10	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089		<10 @	<10 @	<10	<10	<10	<10
Aromatics >EC10-EC12	<10 µg/kg	TM089		<10 @	<10 @	<10	<10	<10	<10
Aromatics >EC12-EC16	<100 µg/kg	TM173		<100	<100	<100	<100	<100	<100
Aromatics >EC16-EC21	<100 µg/kg	TM173		<100	<100	<100	<100	<100	<100
Aromatics >EC21-EC35	<100 µg/kg	TM173		<100	4770	2730	<100	<100	555
Aromatics >EC35-EC44	<100 µg/kg	TM173		<100	916	13100	<100	<100	1230
Aromatics >EC40-EC44	<100 µg/kg	TM173		<100	<100	6440	<100	<100	<100
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		<100	5680	15800	<100	<100	1790
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173		3010	9300	29500	2620	<100	2810

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS24	WS25				
			Depth (m)	1.20	0.10 - 0.30				
			Sample Type	Soil/Solid (S)	Soil/Solid (S)				
			Date Sampled	17/01/2019	16/01/2019				
			Sampled Time	.	.				
			Date Received	22/01/2019	22/01/2019				
			SDG Ref	190122-79	190122-79				
			Lab Sample No.(s)	19170023	19170025				
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		111	105				
GRO TOT (Moisture Corrected)	<100 µg/kg	TM089		<100	<100				
Aliphatics >C5-C6	<10 µg/kg	TM089		<10	<10				
Aliphatics >C6-C8	<10 µg/kg	TM089		<10	<10				
Aliphatics >C8-C10	<10 µg/kg	TM089		<10	<10				
Aliphatics >C10-C12	<10 µg/kg	TM089		<10	<10				
Aliphatics >C12-C16	<100 µg/kg	TM173		<100	107				
Aliphatics >C16-C21	<100 µg/kg	TM173		<100	1740				
Aliphatics >C21-C35	<100 µg/kg	TM173		<100	14300				
Aliphatics >C35-C44	<100 µg/kg	TM173		<100	2720				
Total Aliphatics >C12-C44	<100 µg/kg	TM173		<100	18900				
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10	<10				
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<10				
Aromatics >EC8-EC10	<10 µg/kg	TM089		<10	<10				
Aromatics >EC10-EC12	<10 µg/kg	TM089		<10	<10				
Aromatics >EC12-EC16	<100 µg/kg	TM173		<100	1140				
Aromatics >EC16-EC21	<100 µg/kg	TM173		<100	14500				
Aromatics >EC21-EC35	<100 µg/kg	TM173		<100	67100				
Aromatics >EC35-EC44	<100 µg/kg	TM173		1350	27900				
Aromatics >EC40-EC44	<100 µg/kg	TM173		764	9700				
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		1350	111000				
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173		1350	130000				

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS09	WS09	WS12	WS13	WS13	WS17
			Depth (m)	0.13 - 0.20	0.20 - 0.30	1.00	0.30	0.50	0.30
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	17/01/2019	17/01/2019	15/01/2019	15/01/2019	15/01/2019	11/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019
			SDG Ref	190122-79	190122-79	190122-79	190122-79	190122-79	190122-79
			Lab Sample No.(s)	19169995	19169994	19169997	19169998	19169999	19170006
			AGS Reference						
Dibromofluoromethane**	%	TM116		126	107	105 @	108 @	114 @	113 @
Toluene-d8**	%	TM116		96.3	96.3	96.4 @	98.4 @	97.5 @	103 @
4-Bromofluorobenzene**	%	TM116		78.9	96.2	105 @	94.2 @	91.7 @	79.5 @
Dichlorodifluoromethane	<6 µg/kg	TM116		<6 #			<6 @ M	<6 @ M	<6 @ #
Chloromethane	<7 µg/kg	TM116		<7 #			<7 @ #	<7 @ #	<7 3 @ #
Vinyl Chloride	<6 µg/kg	TM116		<6 #			<6 @ M	<6 @ M	<6 @ #
Bromomethane	<10 µg/kg	TM116		<10 #			<10 @ M	<10 @ M	<10 @ #
Chloroethane	<10 µg/kg	TM116		<10 #			<10 @ M	<10 @ M	<10 @ #
Trichlorofluorormethane	<6 µg/kg	TM116		<6 #			<6 @ M	<6 @ M	<6 3 @ #
1,1-Dichloroethene	<10 µg/kg	TM116		<10 #			<10 @ #	<10 @ #	<10 @ #
Carbon Disulphide	<7 µg/kg	TM116		<7 #			<7 @ M	<7 @ M	<7 @ #
Dichloromethane	<10 µg/kg	TM116		<10 #			<10 @ #	<10 @ #	<10 3 @ #
Methyl Tertiary Butyl Ether	<10 µg/kg	TM116		<10 #	<10 #	<10 @ #	<10 @ M	<10 @ M	<10 @ #
trans-1,2-Dichloroethene	<10 µg/kg	TM116		<10 #			<10 @ M	<10 @ M	<10 @ #
1,1-Dichloroethane	<8 µg/kg	TM116		<8 #			<8 @ M	<8 @ M	<8 3 @ #
cis-1,2-Dichloroethene	<6 µg/kg	TM116		<6 #			<6 @ M	<6 @ M	<6 3 @ #
2,2-Dichloropropane	<10 µg/kg	TM116		<10			<10 @	<10 @	<10 @
Bromochloromethane	<10 µg/kg	TM116		<10 #			<10 @ M	<10 @ M	<10 @ #
Chloroform	<8 µg/kg	TM116		<8 #			<8 @ M	<8 @ M	<8 3 @ #
1,1,1-Trichloroethane	<7 µg/kg	TM116		<7 #			<7 @ M	<7 @ M	<7 3 @ #
1,1-Dichloropropene	<10 µg/kg	TM116		<10 #			<10 @ M	<10 @ M	<10 @ #
Carbontetrachloride	<10 µg/kg	TM116		<10 #			<10 @ M	<10 @ M	<10 @ #
1,2-Dichloroethane	<5 µg/kg	TM116		<5 #			<5 @ M	<5 @ M	<5 3 @ #
Benzene	<9 µg/kg	TM116		<9 #	<9 #	<9 @ #	<9 @ M	<9 @ M	<9 @ #
Trichloroethene	<9 µg/kg	TM116		<9 #			<9 @ #	<9 @ #	<9 3 @ #
1,2-Dichloropropane	<10 µg/kg	TM116		<10 #			<10 @ M	<10 @ M	<10 @ #
Dibromomethane	<9 µg/kg	TM116		<9 #			<9 @ M	<9 @ M	<9 @ #
Bromodichloromethane	<7 µg/kg	TM116		<7 #			<7 @ M	<7 @ M	<7 @ #
cis-1,3-Dichloropropene	<10 µg/kg	TM116		<10 #			<10 @ M	<10 @ M	<10 @ #
Toluene	<7 µg/kg	TM116		<7 #	<7 #	<7 @ #	<7 @ M	<7 @ M	<7 @ #
trans-1,3-Dichloropropene	<10 µg/kg	TM116		<10			<10 @	<10 @	<10 @
1,1,2-Trichloroethane	<10 µg/kg	TM116		<10 #			<10 @ M	<10 @ M	<10 @ #

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS09	WS09	WS12	WS13	WS13	WS17
			Depth (m)	0.13 - 0.20	0.20 - 0.30	1.00	0.30	0.50	0.30
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	17/01/2019	17/01/2019	15/01/2019	15/01/2019	15/01/2019	11/01/2019
			Sampled Time	-	-	-	-	-	-
			Date Received	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019
			SDG Ref	190122-79	190122-79	190122-79	190122-79	190122-79	190122-79
			Lab Sample No.(s)	19169995	19169994	19169997	19169998	19169999	19170006
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<7 #			<7 @ M	<7 @ M	<7 @ #
Tetrachloroethene	<5 µg/kg	TM116		<5 #			<5 @ M	<5 @ M	<5 @ #
Dibromochloromethane	<10 µg/kg	TM116		<10 M			<10 @ M	<10 @ M	<10 @ #
1,2-Dibromoethane	<10 µg/kg	TM116		<10 M			<10 @ M	<10 @ M	<10 @ #
Chlorobenzene	<5 µg/kg	TM116		<5 M			<5 @ M	<5 @ M	<5 @ #
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<10 M			<10 @ M	<10 @ M	<10 @ #
Ethylbenzene	<4 µg/kg	TM116		<4 M	<4 #	<4 @ #	<4 @ M	<4 @ M	<4 @ #
p/m-Xylene	<10 µg/kg	TM116		<10 #	<10 #	<10 @ #	<10 @ #	<10 @ #	<10 @ #
o-Xylene	<10 µg/kg	TM116		<10 M	<10 #	<10 @ #	<10 @ M	<10 @ M	<10 @ #
Styrene	<10 µg/kg	TM116		<10 #			<10 @ #	<10 @ #	<10 @ #
Bromoform	<10 µg/kg	TM116		<10 M			<10 @ M	<10 @ M	<10 @ #
Isopropylbenzene	<5 µg/kg	TM116		<5 #			<5 @ #	<5 @ #	<5 @ #
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<10 #			<10 @ #	<10 @ #	<10 @ #
1,2,3-Trichloropropane	<16 µg/kg	TM116		<16 M			<16 @ M	<16 @ M	<16 @ #
Bromobenzene	<10 µg/kg	TM116		<10 M			<10 @ M	<10 @ M	<10 @ #
Propylbenzene	<10 µg/kg	TM116		<10 M			<10 @ M	<10 @ M	<10 @ #
2-Chlorotoluene	<9 µg/kg	TM116		<9 M			<9 @ M	<9 @ M	<9 @ #
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<8 M			<8 @ M	<8 @ M	<8 @ #
4-Chlorotoluene	<10 µg/kg	TM116		<10 M			<10 @ M	<10 @ M	<10 @ #
tert-Butylbenzene	<14 µg/kg	TM116		<14 M			<14 @ M	<14 @ M	<14 @ #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<9 #			<9 @ #	<9 @ #	<9 @ #
sec-Butylbenzene	<10 µg/kg	TM116		<10			<10 @	<10 @	<10 @
4-Isopropyltoluene	<10 µg/kg	TM116		<10 M			<10 @ M	<10 @ M	<10 @ #
1,3-Dichlorobenzene	<8 µg/kg	TM116		<8 M			<8 @ M	<8 @ M	<8 @ #
1,4-Dichlorobenzene	<5 µg/kg	TM116		<5 M			<5 @ M	<5 @ M	<5 @ #
n-Butylbenzene	<11 µg/kg	TM116		<11			<11 @	<11 @	<11 @
1,2-Dichlorobenzene	<10 µg/kg	TM116		<10 M			<10 @ M	<10 @ M	<10 @ #
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<14 M			<14 @ M	<14 @ M	<14 @ #
Tert-amyl methyl ether	<10 µg/kg	TM116		<10 #			<10 @ #	<10 @ #	<10 @ #
1,2,4-Trichlorobenzene	<20 µg/kg	TM116		<20			<20 @	<20 @	<20 @
Hexachlorobutadiene	<20 µg/kg	TM116		<20			<20 @	<20 @	<20 @
Naphthalene	<13 µg/kg	TM116		<13 M			<13 @ M	<13 @ M	<13 @ #

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	Depth (m)	Sample Type	Date Sampled	Sampled Time	Date Received	SDG Ref	Lab Sample No.(s)	AGS Reference
			WS09	0.13 - 0.20	Soil/Solid (S)	17/01/2019	.	22/01/2019	190122-79	19169995	
			WS09	0.20 - 0.30	Soil/Solid (S)	17/01/2019	.	22/01/2019	190122-79	19169994	
			WS12	1.00	Soil/Solid (S)	15/01/2019	.	22/01/2019	190122-79	19169997	
			WS13	0.30	Soil/Solid (S)	15/01/2019	.	22/01/2019	190122-79	19169998	
			WS13	0.50	Soil/Solid (S)	15/01/2019	.	22/01/2019	190122-79	19169999	
			WS17	0.30	Soil/Solid (S)	11/01/2019	.	22/01/2019	190122-79	19170006	
1,2,3-Trichlorobenzene	<20 µg/kg	TM116	<20 #								
Sum of Detected Xylenes	<0.02 mg/kg	TM116	<0.02	<0.02	<0.02 @	<0.02 @	<0.02 @	<0.02 @			
Sum of BTEX	<40 µg/kg	TM116	<40	<40	<40 @	<40 @	<40 @	<40 @			

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS17	WS19	WS19	WS21	WS21	WS21
			Depth (m)	0.80	0.10	2.40	0.10 - 0.20	0.60 - 0.70	1.50
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	11/01/2019	11/01/2019	17/01/2019	16/01/2019	16/01/2019	17/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019
			SDG Ref	190122-79	190122-79	190122-79	190122-79	190122-79	190122-79
			Lab Sample No.(s)	19170007	19170009	19170012	19170014	19170015	19170017
			AGS Reference						
Dibromofluoromethane**	%	TM116		101 @	105 @	107	105	112	126
Toluene-d8**	%	TM116		94.5 @	88 @	94.8	94.1	102	103
4-Bromofluorobenzene**	%	TM116		82.6 @	79.4 @	105	67.9	78.5	74.9
Dichlorodifluoromethane	<6 µg/kg	TM116		<6 @ M	<6 @ M		<6 M	<6 #	<6 M
Chloromethane	<7 µg/kg	TM116		<7 @ #	<7 @ #		<7 #	<7 3 #	<7 3 #
Vinyl Chloride	<6 µg/kg	TM116		<6 @ M	<6 @ M		<6 M	<6 #	<6 M
Bromomethane	<10 µg/kg	TM116		<10 @ M	<10 @ M		<10 M	<10 #	<10 M
Chloroethane	<10 µg/kg	TM116		<10 @ M	<10 @ M		<10 M	<10 #	<10 M
Trichlorofluoromethane	<6 µg/kg	TM116		<6 @ M	<6 @ M		<6 M	<6 3 #	<6 3 M
1,1-Dichloroethene	<10 µg/kg	TM116		<10 @ #	<10 @ #		<10 #	<10 #	<10 #
Carbon Disulphide	<7 µg/kg	TM116		<7 @ M	<7 @ M		<7 M	<7 #	<7 M
Dichloromethane	<10 µg/kg	TM116		<10 @ #	<10 @ #		<10 #	<10 3 #	<10 3 #
Methyl Tertiary Butyl Ether	<10 µg/kg	TM116		<10 @ M	<10 @ M	<10 #	<10 M	<10 #	<10 M
trans-1,2-Dichloroethene	<10 µg/kg	TM116		<10 @ M	<10 @ M		<10 M	<10 #	<10 M
1,1-Dichloroethane	<8 µg/kg	TM116		<8 @ M	<8 @ M		<8 M	<8 3 #	<8 3 M
cis-1,2-Dichloroethene	<6 µg/kg	TM116		<6 @ M	<6 @ M		<6 M	<6 3 #	<6 3 M
2,2-Dichloropropane	<10 µg/kg	TM116		<10 @	<10 @		<10	<10	<10
Bromochloromethane	<10 µg/kg	TM116		<10 @ M	<10 @ M		<10 M	<10 #	<10 M
Chloroform	<8 µg/kg	TM116		<8 @ M	<8 @ M		<8 M	<8 3 #	<8 3 M
1,1,1-Trichloroethane	<7 µg/kg	TM116		<7 @ M	<7 @ M		<7 M	<7 3 #	<7 3 M
1,1-Dichloropropene	<10 µg/kg	TM116		<10 @ M	<10 @ M		<10 M	<10 #	<10 M
Carbontetrachloride	<10 µg/kg	TM116		<10 @ M	<10 @ M		<10 M	<10 #	<10 M
1,2-Dichloroethane	<5 µg/kg	TM116		<5 @ M	<5 @ M		<5 M	<5 3 #	<5 3 M
Benzene	<9 µg/kg	TM116		<9 @ M	<9 @ M	<9 #	<9 M	<9 #	<9 M
Trichloroethene	<9 µg/kg	TM116		<9 @ #	<9 @ #		<9 #	<9 3 #	<9 3 #
1,2-Dichloropropane	<10 µg/kg	TM116		<10 @ M	<10 @ M		<10 M	<10 #	<10 M
Dibromomethane	<9 µg/kg	TM116		<9 @ M	<9 @ M		<9 M	<9 #	<9 M
Bromodichloromethane	<7 µg/kg	TM116		<7 @ M	<7 @ M		<7 M	<7 #	<7 M
cis-1,3-Dichloropropene	<10 µg/kg	TM116		<10 @ M	<10 @ M		<10 M	<10 #	<10 M
Toluene	<7 µg/kg	TM116		<7 @ M	<7 @ M	<7 #	<7 M	<7 #	<7 M
trans-1,3-Dichloropropene	<10 µg/kg	TM116		<10 @	<10 @		<10	<10	<10
1,1,2-Trichloroethane	<10 µg/kg	TM116		<10 @ M	<10 @ M		<10 M	<10 #	<10 M

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS17	WS19	WS19	WS21	WS21	WS21
			Depth (m)	0.80	0.10	2.40	0.10 - 0.20	0.60 - 0.70	1.50
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	11/01/2019	11/01/2019	17/01/2019	16/01/2019	16/01/2019	17/01/2019
			Sampled Time	-	-	-	-	-	-
			Date Received	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019
			SDG Ref	190122-79	190122-79	190122-79	190122-79	190122-79	190122-79
			Lab Sample No.(s)	19170007	19170009	19170012	19170014	19170015	19170017
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<7 @ M	<7 @ M		<7 M	<7 #	<7 M
Tetrachloroethene	<5 µg/kg	TM116		<5 @ M	<5 @ M		<5 M	<5 #	<5 M
Dibromochloromethane	<10 µg/kg	TM116		<10 @ M	<10 @ M		<10 M	<10 #	<10 M
1,2-Dibromoethane	<10 µg/kg	TM116		<10 @ M	<10 @ M		<10 M	<10 #	<10 M
Chlorobenzene	<5 µg/kg	TM116		<5 @ M	<5 @ M		<5 M	<5 #	<5 M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<10 @ M	<10 @ M		<10 M	<10 #	<10 M
Ethylbenzene	<4 µg/kg	TM116		<4 @ M	<4 @ M	<4 #	<4 M	<4 #	<4 M
p/m-Xylene	<10 µg/kg	TM116		<10 @ #	<10 @ #	<10 #	<10 #	<10 #	<10 #
o-Xylene	<10 µg/kg	TM116		<10 @ M	<10 @ M	<10 #	<10 M	<10 #	<10 M
Styrene	<10 µg/kg	TM116		<10 @ #	<10 @ #		<10 #	<10 #	<10 #
Bromoform	<10 µg/kg	TM116		<10 @ M	<10 @ M		<10 M	<10 #	<10 M
Isopropylbenzene	<5 µg/kg	TM116		<5 @ #	<5 @ #		<5 #	<5 #	<5 #
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<10 @ #	<10 @ #		<10 #	<10 #	<10 #
1,2,3-Trichloropropane	<16 µg/kg	TM116		<16 @ M	<16 @ M		<16 M	<16 #	<16 M
Bromobenzene	<10 µg/kg	TM116		<10 @ M	<10 @ M		<10 M	<10 #	<10 M
Propylbenzene	<10 µg/kg	TM116		<10 @ M	<10 @ M		<10 M	<10 #	<10 M
2-Chlorotoluene	<9 µg/kg	TM116		<9 @ M	<9 @ M		<9 M	<9 #	<9 M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<8 @ M	<8 @ M		<8 M	<8 #	<8 M
4-Chlorotoluene	<10 µg/kg	TM116		<10 @ M	<10 @ M		<10 M	<10 #	<10 M
tert-Butylbenzene	<14 µg/kg	TM116		<14 @ M	<14 @ M		<14 M	<14 #	<14 M
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<9 @ #	<9 @ #		<9 #	<9 #	<9 #
sec-Butylbenzene	<10 µg/kg	TM116		<10 @	<10 @		<10	<10	<10
4-Isopropyltoluene	<10 µg/kg	TM116		<10 @ M	<10 @ M		<10 M	<10 #	<10 M
1,3-Dichlorobenzene	<8 µg/kg	TM116		<8 @ M	<8 @ M		<8 M	<8 #	<8 M
1,4-Dichlorobenzene	<5 µg/kg	TM116		<5 @ M	<5 @ M		<5 M	<5 #	<5 M
n-Butylbenzene	<11 µg/kg	TM116		<11 @	<11 @		<11	<11	<11
1,2-Dichlorobenzene	<10 µg/kg	TM116		<10 @ M	<10 @ M		<10 M	<10 #	<10 M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<14 @ M	<14 @ M		<14 M	<14 #	<14 M
Tert-amyl methyl ether	<10 µg/kg	TM116		<10 @ #	<10 @ #		<10 #	<10 #	<10 #
1,2,4-Trichlorobenzene	<20 µg/kg	TM116		<20 @	<20 @		<20	<20	<20
Hexachlorobutadiene	<20 µg/kg	TM116		<20 @	<20 @		<20	<20	<20
Naphthalene	<13 µg/kg	TM116		<13 @ M	<13 @ M		<13 M	<13 #	<13 M

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	Depth (m)	Sample Type	Date Sampled	Sampled Time	Date Received	SDG Ref	Lab Sample No.(s)	AGS Reference
			WS17	0.80	Soil/Solid (S)	11/01/2019	.	22/01/2019	190122-79	19170007	
			WS19	0.10	Soil/Solid (S)	11/01/2019	.	22/01/2019	190122-79	19170009	
			WS19	2.40	Soil/Solid (S)	17/01/2019	.	22/01/2019	190122-79	19170012	
			WS21	0.10 - 0.20	Soil/Solid (S)	16/01/2019	.	22/01/2019	190122-79	19170014	
			WS21	0.60 - 0.70	Soil/Solid (S)	16/01/2019	.	22/01/2019	190122-79	19170015	
			WS21	1.50	Soil/Solid (S)	17/01/2019	.	22/01/2019	190122-79	19170017	
1,2,3-Trichlorobenzene	<20 µg/kg	TM116	<20 @ #	<20 @ #		<20 #	<20 #	<20 #			
Sum of Detected Xylenes	<0.02 mg/kg	TM116	<0.02 @	<0.02 @	<0.02	<0.02	<0.02	<0.02			
Sum of BTEX	<40 µg/kg	TM116	<40 @	<40 @	<40	<40	<40	<40			

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	Depth (m)	Sample Type	Date Sampled	Sampled Time	Date Received	SDG Ref	Lab Sample No.(s)	AGS Reference
			WS24	1.20	Soil/Solid (S)	17/01/2019	.	22/01/2019	190122-79	19170023	
			WS25	0.10 - 0.30	Soil/Solid (S)	16/01/2019	.	22/01/2019	190122-79	19170025	
Dibromofluoromethane**	%	TM116	106								
Toluene-d8**	%	TM116	101								
4-Bromofluorobenzene**	%	TM116	91.5								
Dichlorodifluoromethane	<6 µg/kg	TM116									
Chloromethane	<7 µg/kg	TM116									
Vinyl Chloride	<6 µg/kg	TM116									
Bromomethane	<10 µg/kg	TM116									
Chloroethane	<10 µg/kg	TM116									
Trichlorofluorormethane	<6 µg/kg	TM116									
1,1-Dichloroethene	<10 µg/kg	TM116									
Carbon Disulphide	<7 µg/kg	TM116									
Dichloromethane	<10 µg/kg	TM116									
Methyl Tertiary Butyl Ether	<10 µg/kg	TM116	<10 #								
trans-1,2-Dichloroethene	<10 µg/kg	TM116									
1,1-Dichloroethane	<8 µg/kg	TM116									
cis-1,2-Dichloroethene	<6 µg/kg	TM116									
2,2-Dichloropropane	<10 µg/kg	TM116									
Bromochloromethane	<10 µg/kg	TM116									
Chloroform	<8 µg/kg	TM116									
1,1,1-Trichloroethane	<7 µg/kg	TM116									
1,1-Dichloropropene	<10 µg/kg	TM116									
Carbontetrachloride	<10 µg/kg	TM116									
1,2-Dichloroethane	<5 µg/kg	TM116									
Benzene	<9 µg/kg	TM116	<9 #								
Trichloroethene	<9 µg/kg	TM116									
1,2-Dichloropropane	<10 µg/kg	TM116									
Dibromomethane	<9 µg/kg	TM116									
Bromodichloromethane	<7 µg/kg	TM116									
cis-1,3-Dichloropropene	<10 µg/kg	TM116									
Toluene	<7 µg/kg	TM116	<7 #								
trans-1,3-Dichloropropene	<10 µg/kg	TM116									
1,1,2-Trichloroethane	<10 µg/kg	TM116									

Component	Customer Sample Ref.	Depth (m)	Sample Type	Date Sampled	Sampled Time	Date Received	SDG Ref	Lab Sample No.(s)	AGS Reference
	WS24	1.20	Soil/Solid (S)	17/01/2019	.	22/01/2019	190122-79	19170023	
	WS25	0.10 - 0.30	Soil/Solid (S)	16/01/2019	.	22/01/2019	190122-79	19170025	
Dibromofluoromethane**	106 %								
Toluene-d8**	101 %								
4-Bromofluorobenzene**	91.5 %								
Dichlorodifluoromethane									
Chloromethane									
Vinyl Chloride									
Bromomethane									
Chloroethane									
Trichlorofluorormethane									
1,1-Dichloroethene									
Carbon Disulphide									
Dichloromethane									
Methyl Tertiary Butyl Ether	<10 #								
trans-1,2-Dichloroethene									
1,1-Dichloroethane									
cis-1,2-Dichloroethene									
2,2-Dichloropropane									
Bromochloromethane									
Chloroform									
1,1,1-Trichloroethane									
1,1-Dichloropropene									
Carbontetrachloride									
1,2-Dichloroethane									
Benzene	<9 #								
Trichloroethene									
1,2-Dichloropropane									
Dibromomethane									
Bromodichloromethane									
cis-1,3-Dichloropropene									
Toluene	<7 #								
trans-1,3-Dichloropropene									
1,1,2-Trichloroethane									

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS24	WS25
			Depth (m)	1.20	0.10 - 0.30
			Sample Type	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	17/01/2019	16/01/2019
			Sampled Time	-	-
			Date Received	22/01/2019	22/01/2019
			SDG Ref	190122-79	190122-79
			Lab Sample No.(s)	19170023	19170025
			AGS Reference		
1,3-Dichloropropane	<7 µg/kg	TM116			<140 @ M
Tetrachloroethene	<5 µg/kg	TM116			<100 @ M
Dibromochloromethane	<10 µg/kg	TM116			<200 @ M
1,2-Dibromoethane	<10 µg/kg	TM116			<200 @ M
Chlorobenzene	<5 µg/kg	TM116			<100 @ M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116			<200 @ M
Ethylbenzene	<4 µg/kg	TM116		<4 #	<80 @ M
p/m-Xylene	<10 µg/kg	TM116		<10 #	<200 @ #
o-Xylene	<10 µg/kg	TM116		<10 #	<200 @ M
Styrene	<10 µg/kg	TM116			<200 @ #
Bromoform	<10 µg/kg	TM116			<200 @ M
Isopropylbenzene	<5 µg/kg	TM116			<100 @ #
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116			<200 @ #
1,2,3-Trichloropropane	<16 µg/kg	TM116			<320 @ M
Bromobenzene	<10 µg/kg	TM116			<200 @ M
Propylbenzene	<10 µg/kg	TM116			<200 @ M
2-Chlorotoluene	<9 µg/kg	TM116			<180 @ M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116			<160 @ M
4-Chlorotoluene	<10 µg/kg	TM116			<200 @ M
tert-Butylbenzene	<14 µg/kg	TM116			<280 @ M
1,2,4-Trimethylbenzene	<9 µg/kg	TM116			<180 @ #
sec-Butylbenzene	<10 µg/kg	TM116			<200 @
4-Isopropyltoluene	<10 µg/kg	TM116			<200 @ M
1,3-Dichlorobenzene	<8 µg/kg	TM116			<160 @ M
1,4-Dichlorobenzene	<5 µg/kg	TM116			<100 @ M
n-Butylbenzene	<11 µg/kg	TM116			<220 @
1,2-Dichlorobenzene	<10 µg/kg	TM116			<200 @ M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116			<280 @ M
Tert-amyl methyl ether	<10 µg/kg	TM116			<200 @ #
1,2,4-Trichlorobenzene	<20 µg/kg	TM116			<400 @
Hexachlorobutadiene	<20 µg/kg	TM116			<400 @
Naphthalene	<13 µg/kg	TM116			<260 @ M

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS24	WS25			
			Depth (m)	1.20	0.10 - 0.30			
			Sample Type	Soil/Solid (S)	Soil/Solid (S)			
			Date Sampled	17/01/2019	16/01/2019			
			Sampled Time	-	-			
			Date Received	22/01/2019	22/01/2019			
			SDG Ref	190122-79	190122-79			
			Lab Sample No.(s)	19170023	19170025			
			AGS Reference					
1,2,3-Trichlorobenzene	<20 µg/kg	TM116			<400 @ #			
Sum of Detected Xylenes	<0.02 mg/kg	TM116		<0.02	<0.4 @			
Sum of BTEX	<40 µg/kg	TM116		<40	<800 @			

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Asbestos Identification - Solid Samples

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
*	Subcontracted test.
(F)	Trigger breach confirmed
1-5&♦§@	Sample deviation (see appendix)

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS09 0.13 - 0.20 SOLID 17/01/2019 00:00:00 22/01/2019 06:00:00 190122-79 19169995 TM048	30/01/2019	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS09 0.20 - 0.30 SOLID 17/01/2019 00:00:00 22/01/2019 06:00:00 190122-79 19169994 TM048	29/01/2019	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS12 1.00 SOLID 15/01/2019 00:00:00 22/01/2019 06:00:00 190122-79 19169997 TM048	30/01/19	Andrzej Ferfecki	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS13 0.30 SOLID 15/01/2019 00:00:00 22/01/2019 06:00:00 190122-79 19169998 TM048	30/01/2019	Barbara Urbanek-Walsh	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS13 0.50 SOLID 15/01/2019 00:00:00 22/01/2019 06:00:00 190122-79 19169999 TM048	30/01/19	Andrzej Ferfecki	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS17 0.30 SOLID 11/01/2019 00:00:00 22/01/2019 06:00:00 190122-79 19170006 TM048	29/01/2019	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS17 0.80 SOLID 11/01/2019 00:00:00 22/01/2019 06:00:00 190122-79 19170007 TM048	30/01/19	Andrzej Ferfecki	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS19 0.10 SOLID 11/01/2019 00:00:00 22/01/2019 06:00:00 190122-79 19170009 TM048	29/01/2019	Lucy Caroe	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Detected

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS19 2.40 SOLID 17/01/2019 00:00:00 22/01/2019 06:00:00 190122-79 19170012 TM048	29/01/2019	Lucy Caroe	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS21 0.10 - 0.20 SOLID 16/01/2019 00:00:00 22/01/2019 06:00:00 190122-79 19170014 TM048	29/01/2019	Lucy Caroe	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS21 0.60 - 0.70 SOLID 16/01/2019 00:00:00 22/01/2019 06:00:00 190122-79 19170015 TM048	29/01/2019	Lucy Caroe	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS21 1.50 SOLID 17/01/2019 00:00:00 22/01/2019 06:00:00 190122-79 19170017 TM048	30/01/2019	James Richards	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS24 1.20 SOLID 17/01/2019 00:00:00 22/01/2019 06:00:00 190122-79 19170023 TM048	29/01/2019	Lucy Caroe	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS25 0.10 - 0.30 SOLID 16/01/2019 00:00:00 22/01/2019 06:00:00 190122-79 19170025 TM048	30/01/2019	Barbara Urbanek-Walsh	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.114	**Natural Moisture Content (%)**	26.6
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	79
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19169995
Sampled Date	17-Jan-2019
Customer Sample Ref.	WS09
Depth (m)	0.13 - 0.20

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
Conductivity (at 20 deg.C)	0.0687	<0.000014	0.687	<0.00014	-	-	-
Fluoride	<0.5	<0.5	<5	<5	-	-	-
Sulphate (soluble)	8.1	<2	81	<20	-	-	-
Sulphide	<0.01	<0.01	<0.1	<0.1	-	-	-
Chloride	<2	<2	<20	<20	-	-	-
Dissolved Organic Carbon	3.88	<3	38.8	<30	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Phosphate (Ortho as P)	<0.02	<0.02	<0.2	<0.2	-	-	-
Naphthalene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
PCB congener 28	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Acenaphthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Arsenic	0.00942	<0.0005	0.0942	<0.005	-	-	-
PCB congener 52	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Acenaphthylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Nitrate as NO3	0.806	<0.3	8.06	<3	-	-	-
PCB congener 101	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Fluoranthene (diss.filt)	0.0000738	<0.000005	0.000738	<0.00005	-	-	-
PCB congener 118	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Anthracene (diss.filt)	0.0000209	<0.000005	0.000209	<0.00005	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	9.86
Conductivity (µS/cm)	67.20
Temperature (ºC)	18.00
Volume Leachant (Litres)	0.876

Mcerts Certification does not apply to leachates

06/03/2019 09:18:19

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.114	**Natural Moisture Content (%)**	26.6
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	79
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19169995
Sampled Date	17-Jan-2019
Customer Sample Ref.	WS09
Depth (m)	0.13 - 0.20

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
PCB congener 138	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
2-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Boron	0.0186	<0.01	0.186	<0.1	-	-	-
PCB congener 153	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenanthrene (diss.filt)	0.000076	<0.000005	0.00076	<0.00005	-	-	-
2,4-dimethylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Fluorene (diss.filt)	0.00000696	<0.000005	0.0000696	<0.00005	-	-	-
PCB congener 180	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Total of 7 Congener PCBs	<0.000105	<0.000105	<0.00105	<0.00105	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Pyrene (diss.filt)	0.0000481	<0.000005	0.000481	<0.00005	-	-	-
4-chlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(a)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(b)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,4,6-trichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(a)pyrene (diss.filt)	<0.000002	<0.000002	<0.00002	<0.00002	-	-	-
Copper	0.00218	<0.0003	0.0218	<0.003	-	-	-
2,4,5-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Lead	<0.0002	<0.0002	<0.002	<0.002	-	-	-
4-nitrophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(g,h,i)perylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,3,5,6-tetrachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,3,4,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.000226	<0.000082	0.00226	<0.00082	-	-	-
2,4-Dinitrophenol	<0.005	<0.005	<0.05	<0.05	-	-	-
Nickel	<0.0004	<0.0004	<0.004	<0.004	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	9.86
Conductivity (µS/cm)	67.20
Temperature (°C)	18.00
Volume Leachant (Litres)	0.876

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.114	**Natural Moisture Content (%)**	26.6
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	79
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19169995
Sampled Date	17-Jan-2019
Customer Sample Ref.	WS09
Depth (m)	0.13 - 0.20

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
DNOC	<0.006	<0.006	<0.06	<0.06	-	-	-
Pentachlorophenol	<0.002	<0.002	<0.02	<0.02	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Dinoseb	<0.004	<0.004	<0.04	<0.04	-	-	-
Zinc	<0.001	<0.001	<0.01	<0.01	-	-	-
SVOC MS (W) - Aqueous							
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,6-Trichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dimethylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	9.86
Conductivity (µS/cm)	67.20
Temperature (ºC)	18.00
Volume Leachant (Litres)	0.876

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.114	**Natural Moisture Content (%)**	26.6
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	79
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19169995
Sampled Date	17-Jan-2019
Customer Sample Ref.	WS09
Depth (m)	0.13 - 0.20

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.006	<0.006	<0.06	<0.06	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.03	<0.03	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Benzene by GC	<0.007	<0.007	<0.07	<0.07	-	-	-
Toluene by GC	<0.004	<0.004	<0.04	<0.04	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.05	<0.05	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.08	<0.08	-	-	-
o Xylene by GC	<0.003	<0.003	<0.03	<0.03	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.11	<0.11	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.28	<0.28	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	<0	-	<0	-	-	-
Toluene-d8	-	<0	-	<0	-	-	-
4-Bromofluorobenzene	-	<0	-	<0	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	9.86
Conductivity (µS/cm)	67.20
Temperature (ºC)	18.00
Volume Leachant (Litres)	0.876

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.114	**Natural Moisture Content (%)**	26.6
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	79
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19169995
Sampled Date	17-Jan-2019
Customer Sample Ref.	WS09
Depth (m)	0.13 - 0.20

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
Dichlorodifluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.01	<0.01	-	-	-
Dichloromethane	<0.003	<0.003	<0.03	<0.03	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroform	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	9.86
Conductivity (µS/cm)	67.20
Temperature (ºC)	18.00
Volume Leachant (Litres)	0.876

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.114	**Natural Moisture Content (%)**	26.6
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	79
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19169995
Sampled Date	17-Jan-2019
Customer Sample Ref.	WS09
Depth (m)	0.13 - 0.20

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Styrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromoform	<0.001	<0.001	<0.01	<0.01	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Propylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	9.86
Conductivity (µS/cm)	67.20
Temperature (ºC)	18.00
Volume Leachant (Litres)	0.876

Mcerts Certification does not apply to leachates

06/03/2019 09:18:19

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.107	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19169998
Sampled Date	15-Jan-2019
Customer Sample Ref.	WS13
Depth (m)	0.30

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
Conductivity (at 20 deg.C)	0.11	<0.000014	1.1	<0.00014	-	-	-
Fluoride	<0.5	<0.5	<5	<5	-	-	-
Sulphate (soluble)	3.9	<2	39	<20	-	-	-
Sulphide	<0.01	<0.01	<0.1	<0.1	-	-	-
Chloride	<2	<2	<20	<20	-	-	-
Dissolved Organic Carbon	3.77	<3	37.7	<30	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Phosphate (Ortho as P)	<0.02	<0.02	<0.2	<0.2	-	-	-
Naphthalene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
PCB congener 28	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Acenaphthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Arsenic	<0.0005	<0.0005	<0.005	<0.005	-	-	-
PCB congener 52	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Acenaphthylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Nitrate as NO3	1.45	<0.3	14.5	<3	-	-	-
PCB congener 101	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Fluoranthene (diss.filt)	0.000106	<0.000005	0.00106	<0.00005	-	-	-
PCB congener 118	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Anthracene (diss.filt)	0.0000167	<0.000005	0.000167	<0.00005	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	8.22
Conductivity (µS/cm)	116.00
Temperature (ºC)	17.70
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

06/03/2019 09:18:19

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.107	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19169998
Sampled Date	15-Jan-2019
Customer Sample Ref.	WS13
Depth (m)	0.30

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
PCB congener 138	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
2-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Boron	0.011	<0.01	0.11	<0.1	-	-	-
PCB congener 153	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenanthrene (diss.filt)	0.0000944	<0.000005	0.000944	<0.00005	-	-	-
2,4-dimethylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Fluorene (diss.filt)	0.0000063	<0.000005	0.000063	<0.00005	-	-	-
PCB congener 180	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Total of 7 Congener PCBs	<0.000105	<0.000105	<0.00105	<0.00105	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Pyrene (diss.filt)	0.0000644	<0.000005	0.000644	<0.00005	-	-	-
4-chlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(a)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(b)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,4,6-trichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(a)pyrene (diss.filt)	<0.000002	<0.000002	<0.00002	<0.00002	-	-	-
Copper	0.000997	<0.0003	0.00997	<0.003	-	-	-
2,4,5-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Lead	<0.0002	<0.0002	<0.002	<0.002	-	-	-
4-nitrophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(g,h,i)perylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,3,5,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,3,4,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.000288	<0.000082	0.00288	<0.00082	-	-	-
2,4-Dinitrophenol	<0.005	<0.005	<0.05	<0.05	-	-	-
Nickel	<0.0004	<0.0004	<0.004	<0.004	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	8.22
Conductivity (µS/cm)	116.00
Temperature (°C)	17.70
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

06/03/2019 09:18:19

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.107	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19169998
Sampled Date	15-Jan-2019
Customer Sample Ref.	WS13
Depth (m)	0.30

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
DNOC	<0.006	<0.006	<0.06	<0.06	-	-	-
Pentachlorophenol	<0.002	<0.002	<0.02	<0.02	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Dinoseb	<0.004	<0.004	<0.04	<0.04	-	-	-
Zinc	<0.001	<0.001	<0.01	<0.01	-	-	-
SVOC MS (W) - Aqueous							
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	8.22
Conductivity (µS/cm)	116.00
Temperature (ºC)	17.70
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

06/03/2019 09:18:19

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.107	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19169998
Sampled Date	15-Jan-2019
Customer Sample Ref.	WS13
Depth (m)	0.30

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.0055	<0.0055	<0.055	<0.055	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.03	<0.03	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Benzene by GC	<0.007	<0.007	<0.07	<0.07	-	-	-
Toluene by GC	<0.004	<0.004	<0.04	<0.04	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.05	<0.05	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.08	<0.08	-	-	-
o Xylene by GC	<0.003	<0.003	<0.03	<0.03	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.11	<0.11	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.28	<0.28	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	<0	-	<0	-	-	-
Toluene-d8	-	<0	-	<0	-	-	-
4-Bromofluorobenzene	-	<0	-	<0	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	8.22
Conductivity (µS/cm)	116.00
Temperature (ºC)	17.70
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

06/03/2019 09:18:19

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.107	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19169998
Sampled Date	15-Jan-2019
Customer Sample Ref.	WS13
Depth (m)	0.30

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
Dichlorodifluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.01	<0.01	-	-	-
Dichloromethane	<0.003	<0.003	<0.03	<0.03	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroform	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	8.22
Conductivity (µS/cm)	116.00
Temperature (ºC)	17.70
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

06/03/2019 09:18:19

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.107	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19169998
Sampled Date	15-Jan-2019
Customer Sample Ref.	WS13
Depth (m)	0.30

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Styrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromoform	<0.001	<0.001	<0.01	<0.01	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Propylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	8.22
Conductivity (µS/cm)	116.00
Temperature (ºC)	17.70
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

06/03/2019 09:18:19

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.111	**Natural Moisture Content (%)**	23.5
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	81
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170006
Sampled Date	11-Jan-2019
Customer Sample Ref.	WS17
Depth (m)	0.30

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	0.056	<0.01	0.56	<0.1	-	-	-
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
Conductivity (at 20 deg.C)	0.062	<0.000014	0.62	<0.00014	-	-	-
Fluoride	<0.5	<0.5	<5	<5	-	-	-
Sulphate (soluble)	2.9	<2	29	<20	-	-	-
Sulphide	<0.01	<0.01	<0.1	<0.1	-	-	-
Chloride	<2	<2	<20	<20	-	-	-
Dissolved Organic Carbon	3.93	<3	39.3	<30	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Phosphate (Ortho as P)	<0.02	<0.02	<0.2	<0.2	-	-	-
Naphthalene (diss.filt)	0.0000242	<0.00001	0.000242	<0.0001	-	-	-
PCB congener 28	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Acenaphthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Arsenic	0.000739	<0.0005	0.00739	<0.005	-	-	-
PCB congener 52	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Acenaphthylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Nitrate as NO3	1.7	<0.3	17	<3	-	-	-
PCB congener 101	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Fluoranthene (diss.filt)	0.0000604	<0.000005	0.000604	<0.00005	-	-	-
PCB congener 118	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Anthracene (diss.filt)	0.0000284	<0.000005	0.000284	<0.00005	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	9.29
Conductivity (µS/cm)	64.00
Temperature (ºC)	17.80
Volume Leachant (Litres)	0.879

Mcerts Certification does not apply to leachates

06/03/2019 09:18:19

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.111	**Natural Moisture Content (%)**	23.5
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	81
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170006
Sampled Date	11-Jan-2019
Customer Sample Ref.	WS17
Depth (m)	0.30

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
PCB congener 138	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
2-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Boron	0.0172	<0.01	0.172	<0.1	-	-	-
PCB congener 153	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenanthrene (diss.filt)	0.000118	<0.000005	0.00118	<0.00005	-	-	-
2,4-dimethylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Fluorene (diss.filt)	0.0000205	<0.000005	0.000205	<0.00005	-	-	-
PCB congener 180	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Total of 7 Congener PCBs	<0.000105	<0.000105	<0.00105	<0.00105	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Pyrene (diss.filt)	0.00004	<0.000005	0.0004	<0.00005	-	-	-
4-chlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(a)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(b)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,4,6-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)pyrene (diss.filt)	<0.000002	<0.000002	<0.00002	<0.00002	-	-	-
Copper	0.00128	<0.0003	0.0128	<0.003	-	-	-
2,4,5-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Lead	<0.0002	<0.0002	<0.002	<0.002	-	-	-
4-nitrophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(g,h,i)perylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,3,5,6-tetrachlorophenol	0.0053	<0.0005	0.053	<0.005	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,3,4,6-tetrachlorophenol	0.00405	<0.0005	0.0405	<0.005	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.000292	<0.000082	0.00292	<0.00082	-	-	-
2,4-Dinitrophenol	<0.005	<0.005	<0.05	<0.05	-	-	-
Nickel	<0.0004	<0.0004	<0.004	<0.004	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	9.29
Conductivity (µS/cm)	64.00
Temperature (ºC)	17.80
Volume Leachant (Litres)	0.879

Mcerts Certification does not apply to leachates

06/03/2019 09:18:19

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.111	**Natural Moisture Content (%)**	23.5
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	81
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170006
Sampled Date	11-Jan-2019
Customer Sample Ref.	WS17
Depth (m)	0.30

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
DNOC	<0.006	<0.006	<0.06	<0.06	-	-	-
Pentachlorophenol	<0.002	<0.002	<0.02	<0.02	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Dinoseb	<0.004	<0.004	<0.04	<0.04	-	-	-
Zinc	0.00529	<0.001	0.0529	<0.01	-	-	-
SVOC MS (W) - Aqueous							
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	9.29
Conductivity (µS/cm)	64.00
Temperature (°C)	17.80
Volume Leachant (Litres)	0.879

Mcerts Certification does not apply to leachates

06/03/2019 09:18:19

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.111	**Natural Moisture Content (%)**	23.5
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	81
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170006
Sampled Date	11-Jan-2019
Customer Sample Ref.	WS17
Depth (m)	0.30

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.0055	<0.0055	<0.055	<0.055	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	0.056	<0.05	0.56	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	0.012	<0.01	0.12	<0.1	-	-	-
Aliphatics >C8-C10	0.016	<0.01	0.16	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.03	<0.03	-	-	-
Aromatics >EC8 -EC10	0.011	<0.01	0.11	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Benzene by GC	<0.007	<0.007	<0.07	<0.07	-	-	-
Toluene by GC	<0.004	<0.004	<0.04	<0.04	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.05	<0.05	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.08	<0.08	-	-	-
o Xylene by GC	<0.003	<0.003	<0.03	<0.03	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.11	<0.11	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.28	<0.28	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	<0	-	<0	-	-	-
Toluene-d8	-	<0	-	<0	-	-	-
4-Bromofluorobenzene	-	<0	-	<0	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	9.29
Conductivity (µS/cm)	64.00
Temperature (ºC)	17.80
Volume Leachant (Litres)	0.879

Mcerts Certification does not apply to leachates

06/03/2019 09:18:19

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.111	**Natural Moisture Content (%)**	23.5
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	81
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170006
Sampled Date	11-Jan-2019
Customer Sample Ref.	WS17
Depth (m)	0.30

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
Dichlorodifluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.01	<0.01	-	-	-
Dichloromethane	<0.003	<0.003	<0.03	<0.03	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroform	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	9.29
Conductivity (µS/cm)	64.00
Temperature (ºC)	17.80
Volume Leachant (Litres)	0.879

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.111	**Natural Moisture Content (%)**	23.5
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	81
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170006
Sampled Date	11-Jan-2019
Customer Sample Ref.	WS17
Depth (m)	0.30

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Styrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromoform	<0.001	<0.001	<0.01	<0.01	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Propylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	9.29
Conductivity (µS/cm)	64.00
Temperature (ºC)	17.80
Volume Leachant (Litres)	0.879

Mcerts Certification does not apply to leachates

06/03/2019 09:18:19

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.106	**Natural Moisture Content (%)**	17.6
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	85
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170009
Sampled Date	11-Jan-2019
Customer Sample Ref.	WS19
Depth (m)	0.10

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
Conductivity (at 20 deg.C)	0.126	<0.000014	1.26	<0.00014	-	-	-
Fluoride	<0.5	<0.5	<5	<5	-	-	-
Sulphate (soluble)	<2	<2	<20	<20	-	-	-
Sulphide	<0.01	<0.01	<0.1	<0.1	-	-	-
Chloride	<2	<2	<20	<20	-	-	-
Dissolved Organic Carbon	6.86	<3	68.6	<30	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Phosphate (Ortho as P)	<0.02	<0.02	<0.2	<0.2	-	-	-
Naphthalene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
PCB congener 28	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Acenaphthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Arsenic	0.000579	<0.0005	0.00579	<0.005	-	-	-
PCB congener 52	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Acenaphthylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Nitrate as NO3	6.05	<0.3	60.5	<3	-	-	-
PCB congener 101	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Fluoranthene (diss.filt)	0.0000755	<0.000005	0.000755	<0.00005	-	-	-
PCB congener 118	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Anthracene (diss.filt)	0.0000167	<0.000005	0.000167	<0.00005	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	7.27
Conductivity (µS/cm)	123.00
Temperature (ºC)	18.10
Volume Leachant (Litres)	0.884

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.106	**Natural Moisture Content (%)**	17.6
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	85
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170009
Sampled Date	11-Jan-2019
Customer Sample Ref.	WS19
Depth (m)	0.10

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
PCB congener 138	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
2-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Boron	<0.01	<0.01	<0.1	<0.1	-	-	-
PCB congener 153	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenanthrene (diss.filt)	0.0000843	<0.000005	0.000843	<0.00005	-	-	-
2,4-dimethylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Fluorene (diss.filt)	0.00000731	<0.000005	0.0000731	<0.00005	-	-	-
PCB congener 180	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene (diss.filt)	0.00000867	<0.000005	0.0000867	<0.00005	-	-	-
Total of 7 Congener PCBs	<0.000105	<0.000105	<0.00105	<0.00105	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Pyrene (diss.filt)	0.0000493	<0.000005	0.000493	<0.00005	-	-	-
4-chlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(a)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(b)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,4,6-trichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(a)pyrene (diss.filt)	<0.000002	<0.000002	<0.00002	<0.00002	-	-	-
Copper	0.00287	<0.0003	0.0287	<0.003	-	-	-
2,4,5-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Lead	<0.0002	<0.0002	<0.002	<0.002	-	-	-
4-nitrophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(g,h,i)perylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,3,5,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,3,4,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.000242	<0.000082	0.00242	<0.00082	-	-	-
2,4-Dinitrophenol	<0.005	<0.005	<0.05	<0.05	-	-	-
Nickel	0.000471	<0.0004	0.00471	<0.004	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	7.27
Conductivity (µS/cm)	123.00
Temperature (ºC)	18.10
Volume Leachant (Litres)	0.884

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.106	**Natural Moisture Content (%)**	17.6
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	85
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170009
Sampled Date	11-Jan-2019
Customer Sample Ref.	WS19
Depth (m)	0.10

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
DNOC	<0.006	<0.006	<0.06	<0.06	-	-	-
Pentachlorophenol	<0.002	<0.002	<0.02	<0.02	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Dinoseb	<0.004	<0.004	<0.04	<0.04	-	-	-
Zinc	<0.001	<0.001	<0.01	<0.01	-	-	-
SVOC MS (W) - Aqueous							
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	7.27
Conductivity (µS/cm)	123.00
Temperature (°C)	18.10
Volume Leachant (Litres)	0.884

Mcerts Certification does not apply to leachates

06/03/2019 09:18:19

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.106	**Natural Moisture Content (%)**	17.6
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	85
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170009
Sampled Date	11-Jan-2019
Customer Sample Ref.	WS19
Depth (m)	0.10

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.006	<0.006	<0.06	<0.06	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.03	<0.03	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Benzene by GC	<0.007	<0.007	<0.07	<0.07	-	-	-
Toluene by GC	<0.004	<0.004	<0.04	<0.04	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.05	<0.05	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.08	<0.08	-	-	-
o Xylene by GC	<0.003	<0.003	<0.03	<0.03	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.11	<0.11	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.28	<0.28	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	<0	-	<0	-	-	-
Toluene-d8	-	<0	-	<0	-	-	-
4-Bromofluorobenzene	-	<0	-	<0	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	7.27
Conductivity (µS/cm)	123.00
Temperature (ºC)	18.10
Volume Leachant (Litres)	0.884

Mcerts Certification does not apply to leachates

06/03/2019 09:18:19

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.106	**Natural Moisture Content (%)**	17.6
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	85
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170009
Sampled Date	11-Jan-2019
Customer Sample Ref.	WS19
Depth (m)	0.10

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
Dichlorodifluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.01	<0.01	-	-	-
Dichloromethane	<0.003	<0.003	<0.03	<0.03	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroform	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	7.27
Conductivity (µS/cm)	123.00
Temperature (ºC)	18.10
Volume Leachant (Litres)	0.884

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.106	**Natural Moisture Content (%)**	17.6
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	85
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170009
Sampled Date	11-Jan-2019
Customer Sample Ref.	WS19
Depth (m)	0.10

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Styrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromoform	<0.001	<0.001	<0.01	<0.01	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Propylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	7.27
Conductivity (µS/cm)	123.00
Temperature (ºC)	18.10
Volume Leachant (Litres)	0.884

Mcerts Certification does not apply to leachates

06/03/2019 09:18:19

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.107	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170014
Sampled Date	16-Jan-2019
Customer Sample Ref.	WS21
Depth (m)	0.10 - 0.20

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
Conductivity (at 20 deg.C)	0.131	<0.000014	1.31	<0.00014	-	-	-
Fluoride	<0.5	<0.5	<5	<5	-	-	-
Sulphate (soluble)	<2	<2	<20	<20	-	-	-
Sulphide	<0.01	<0.01	<0.1	<0.1	-	-	-
Chloride	2.2	<2	22	<20	-	-	-
Dissolved Organic Carbon	7.23	<3	72.3	<30	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Phosphate (Ortho as P)	0.06	<0.02	0.6	<0.2	-	-	-
Naphthalene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
PCB congener 28	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Acenaphthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Arsenic	0.000901	<0.0005	0.00901	<0.005	-	-	-
PCB congener 52	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Acenaphthylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Nitrate as NO3	4.21	<0.3	42.1	<3	-	-	-
PCB congener 101	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Fluoranthene (diss.filt)	0.0000921	<0.000005	0.000921	<0.00005	-	-	-
PCB congener 118	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Anthracene (diss.filt)	0.0000204	<0.000005	0.000204	<0.00005	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	7.61
Conductivity (µS/cm)	111.00
Temperature (ºC)	17.90
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

06/03/2019 09:18:19

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.107	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170014
Sampled Date	16-Jan-2019
Customer Sample Ref.	WS21
Depth (m)	0.10 - 0.20

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
PCB congener 138	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
2-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Boron	0.0468	<0.01	0.468	<0.1	-	-	-
PCB congener 153	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenanthrene (diss.filt)	0.000094	<0.000005	0.00094	<0.00005	-	-	-
2,4-dimethylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Fluorene (diss.filt)	0.0000107	<0.000005	0.000107	<0.00005	-	-	-
PCB congener 180	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene (diss.filt)	0.00000923	<0.000005	0.0000923	<0.00005	-	-	-
Total of 7 Congener PCBs	<0.000105	<0.000105	<0.00105	<0.00105	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Pyrene (diss.filt)	0.0000548	<0.000005	0.000548	<0.00005	-	-	-
4-chlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(a)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(b)fluoranthene (diss.filt)	0.00000719	<0.000005	0.0000719	<0.00005	-	-	-
2-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,4,6-trichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(a)pyrene (diss.filt)	<0.000002	<0.000002	<0.00002	<0.00002	-	-	-
Copper	0.00415	<0.0003	0.0415	<0.003	-	-	-
2,4,5-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Lead	<0.0002	<0.0002	<0.002	<0.002	-	-	-
4-nitrophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(g,h,i)perylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,3,5,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,3,4,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.000288	<0.000082	0.00288	<0.00082	-	-	-
2,4-Dinitrophenol	<0.005	<0.005	<0.05	<0.05	-	-	-
Nickel	0.000671	<0.0004	0.00671	<0.004	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	7.61
Conductivity (µS/cm)	111.00
Temperature (°C)	17.90
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

06/03/2019 09:18:19

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.107	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170014
Sampled Date	16-Jan-2019
Customer Sample Ref.	WS21
Depth (m)	0.10 - 0.20

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
DNOC	<0.006	<0.006	<0.06	<0.06	-	-	-
Pentachlorophenol	<0.002	<0.002	<0.02	<0.02	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Dinoseb	<0.004	<0.004	<0.04	<0.04	-	-	-
Zinc	0.0409	<0.001	0.409	<0.01	-	-	-
SVOC MS (W) - Aqueous							
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	7.61
Conductivity (µS/cm)	111.00
Temperature (ºC)	17.90
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

06/03/2019 09:18:19

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.107	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170014
Sampled Date	16-Jan-2019
Customer Sample Ref.	WS21
Depth (m)	0.10 - 0.20

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.0055	<0.0055	<0.055	<0.055	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.03	<0.03	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Benzene by GC	<0.007	<0.007	<0.07	<0.07	-	-	-
Toluene by GC	<0.004	<0.004	<0.04	<0.04	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.05	<0.05	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.08	<0.08	-	-	-
o Xylene by GC	<0.003	<0.003	<0.03	<0.03	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.11	<0.11	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.28	<0.28	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	<0	-	<0	-	-	-
Toluene-d8	-	<0	-	<0	-	-	-
4-Bromofluorobenzene	-	<0	-	<0	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	7.61
Conductivity (µS/cm)	111.00
Temperature (ºC)	17.90
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

06/03/2019 09:18:19

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.107	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170014
Sampled Date	16-Jan-2019
Customer Sample Ref.	WS21
Depth (m)	0.10 - 0.20

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
Dichlorodifluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.01	<0.01	-	-	-
Dichloromethane	<0.003	<0.003	<0.03	<0.03	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroform	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	7.61
Conductivity (µS/cm)	111.00
Temperature (ºC)	17.90
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

06/03/2019 09:18:19

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.107	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170014
Sampled Date	16-Jan-2019
Customer Sample Ref.	WS21
Depth (m)	0.10 - 0.20

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Styrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromoform	<0.001	<0.001	<0.01	<0.01	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Propylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	7.61
Conductivity (µS/cm)	111.00
Temperature (ºC)	17.90
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

06/03/2019 09:18:19

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.102	**Natural Moisture Content (%)**	13.6
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	88
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170017
Sampled Date	17-Jan-2019
Customer Sample Ref.	WS21
Depth (m)	1.50

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
Conductivity (at 20 deg.C)	0.0537	<0.000014	0.537	<0.00014	-	-	-
Fluoride	<0.5	<0.5	<5	<5	-	-	-
Sulphate (soluble)	<2	<2	<20	<20	-	-	-
Sulphide	<0.01	<0.01	<0.1	<0.1	-	-	-
Chloride	2.2	<2	22	<20	-	-	-
Dissolved Organic Carbon	4.42	<3	44.2	<30	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Phosphate (Ortho as P)	0.158	<0.02	1.58	<0.2	-	-	-
Naphthalene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
PCB congener 28	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Acenaphthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Arsenic	0.00368	<0.0005	0.0368	<0.005	-	-	-
PCB congener 52	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Acenaphthylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Nitrate as NO3	2.1	<0.3	21	<3	-	-	-
PCB congener 101	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Fluoranthene (diss.filt)	0.0000604	<0.000005	0.000604	<0.00005	-	-	-
PCB congener 118	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Anthracene (diss.filt)	0.0000153	<0.000005	0.000153	<0.00005	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	8.84
Conductivity (µS/cm)	83.70
Temperature (ºC)	18.20
Volume Leachant (Litres)	0.888

Mcerts Certification does not apply to leachates

06/03/2019 09:18:19

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.102	**Natural Moisture Content (%)**	13.6
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	88
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170017
Sampled Date	17-Jan-2019
Customer Sample Ref.	WS21
Depth (m)	1.50

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
PCB congener 138	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
2-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Boron	0.0613	<0.01	0.613	<0.1	-	-	-
PCB congener 153	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenanthrene (diss.filt)	0.0000768	<0.000005	0.000768	<0.00005	-	-	-
2,4-dimethylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Cadmium	0.0000926	<0.00008	0.000926	<0.0008	-	-	-
Fluorene (diss.filt)	0.00000886	<0.000005	0.0000886	<0.00005	-	-	-
PCB congener 180	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Total of 7 Congener PCBs	<0.000105	<0.000105	<0.00105	<0.00105	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Pyrene (diss.filt)	0.0000366	<0.000005	0.000366	<0.00005	-	-	-
4-chlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(a)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Chromium	0.0188	<0.001	0.188	<0.01	-	-	-
2,4-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(b)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,4,6-trichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(a)pyrene (diss.filt)	<0.000002	<0.000002	<0.00002	<0.00002	-	-	-
Copper	0.00947	<0.0003	0.0947	<0.003	-	-	-
2,4,5-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Lead	0.007	<0.0002	0.07	<0.002	-	-	-
4-nitrophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(g,h,i)perylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,3,5,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,3,4,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.000198	<0.000082	0.00198	<0.00082	-	-	-
2,4-Dinitrophenol	<0.005	<0.005	<0.05	<0.05	-	-	-
Nickel	0.0104	<0.0004	0.104	<0.004	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	8.84
Conductivity (µS/cm)	83.70
Temperature (°C)	18.20
Volume Leachant (Litres)	0.888

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.102	**Natural Moisture Content (%)**	13.6
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	88
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170017
Sampled Date	17-Jan-2019
Customer Sample Ref.	WS21
Depth (m)	1.50

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
DNOC	<0.006	<0.006	<0.06	<0.06	-	-	-
Pentachlorophenol	<0.002	<0.002	<0.02	<0.02	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Dinoseb	<0.004	<0.004	<0.04	<0.04	-	-	-
Zinc	0.231	<0.001	2.31	<0.01	-	-	-
SVOC MS (W) - Aqueous							
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	8.84
Conductivity (µS/cm)	83.70
Temperature (°C)	18.20
Volume Leachant (Litres)	0.888

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CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.102	**Natural Moisture Content (%)**	13.6
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	88
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170017
Sampled Date	17-Jan-2019
Customer Sample Ref.	WS21
Depth (m)	1.50

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.0065	<0.0065	<0.065	<0.065	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.03	<0.03	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Benzene by GC	<0.007	<0.007	<0.07	<0.07	-	-	-
Toluene by GC	<0.004	<0.004	<0.04	<0.04	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.05	<0.05	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.08	<0.08	-	-	-
o Xylene by GC	<0.003	<0.003	<0.03	<0.03	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.11	<0.11	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.28	<0.28	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	<0	-	<0	-	-	-
Toluene-d8	-	<0	-	<0	-	-	-
4-Bromofluorobenzene	-	<0	-	<0	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	8.84
Conductivity (µS/cm)	83.70
Temperature (ºC)	18.20
Volume Leachant (Litres)	0.888

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.102	**Natural Moisture Content (%)**	13.6
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	88
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170017
Sampled Date	17-Jan-2019
Customer Sample Ref.	WS21
Depth (m)	1.50

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
Dichlorodifluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.01	<0.01	-	-	-
Dichloromethane	<0.003	<0.003	<0.03	<0.03	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroform	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	8.84
Conductivity (µS/cm)	83.70
Temperature (ºC)	18.20
Volume Leachant (Litres)	0.888

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.102	**Natural Moisture Content (%)**	13.6
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	88
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170017
Sampled Date	17-Jan-2019
Customer Sample Ref.	WS21
Depth (m)	1.50

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Styrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromoform	<0.001	<0.001	<0.01	<0.01	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Propylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	8.84
Conductivity (µS/cm)	83.70
Temperature (ºC)	18.20
Volume Leachant (Litres)	0.888

Mcerts Certification does not apply to leachates

06/03/2019 09:18:19

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.102	**Natural Moisture Content (%)**	13.6
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	88
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170025
Sampled Date	16-Jan-2019
Customer Sample Ref.	WS25
Depth (m)	0.10 - 0.30

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
Conductivity (at 20 deg.C)	0.114	<0.000014	1.14	<0.00014	-	-	-
Fluoride	<0.5	<0.5	<5	<5	-	-	-
Sulphate (soluble)	5.6	<2	56	<20	-	-	-
Sulphide	<0.01	<0.01	<0.1	<0.1	-	-	-
Chloride	2.6	<2	26	<20	-	-	-
Dissolved Organic Carbon	7.18	<3	71.8	<30	-	-	-
Mercury Dissolved (CVAF)	0.0000211	<0.00001	0.000211	<0.0001	-	-	-
Phosphate (Ortho as P)	0.221	<0.02	2.21	<0.2	-	-	-
Naphthalene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
PCB congener 28	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Acenaphthene (diss.filt)	0.0000199	<0.000005	0.000199	<0.00005	-	-	-
Arsenic	0.00485	<0.0005	0.0485	<0.005	-	-	-
PCB congener 52	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Acenaphthylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Nitrate as NO3	3.84	<0.3	38.4	<3	-	-	-
PCB congener 101	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Fluoranthene (diss.filt)	0.00015	<0.000005	0.0015	<0.00005	-	-	-
PCB congener 118	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Anthracene (diss.filt)	0.0000385	<0.000005	0.000385	<0.00005	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	8.47
Conductivity (µS/cm)	106.00
Temperature (ºC)	18.00
Volume Leachant (Litres)	0.888

Mcerts Certification does not apply to leachates

06/03/2019 09:18:19

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.102	**Natural Moisture Content (%)**	13.6
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	88
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170025
Sampled Date	16-Jan-2019
Customer Sample Ref.	WS25
Depth (m)	0.10 - 0.30

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
PCB congener 138	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
2-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Boron	0.0543	<0.01	0.543	<0.1	-	-	-
PCB congener 153	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenanthrene (diss.filt)	0.000266	<0.000005	0.00266	<0.00005	-	-	-
2,4-dimethylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Fluorene (diss.filt)	0.0000336	<0.000005	0.000336	<0.00005	-	-	-
PCB congener 180	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene (diss.filt)	0.0000238	<0.000005	0.000238	<0.00005	-	-	-
Total of 7 Congener PCBs	<0.000105	<0.000105	<0.00105	<0.00105	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Pyrene (diss.filt)	0.000113	<0.000005	0.00113	<0.00005	-	-	-
4-chlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(a)anthracene (diss.filt)	0.0000145	<0.000005	0.000145	<0.00005	-	-	-
Chromium	0.00116	<0.001	0.0116	<0.01	-	-	-
2,4-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(b)fluoranthene (diss.filt)	0.0000308	<0.000005	0.000308	<0.00005	-	-	-
2-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene (diss.filt)	0.0000137	<0.000005	0.000137	<0.00005	-	-	-
2,4,6-trichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(a)pyrene (diss.filt)	0.0000169	<0.000002	0.000169	<0.00002	-	-	-
Copper	0.0043	<0.0003	0.043	<0.003	-	-	-
2,4,5-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Lead	0.000722	<0.0002	0.00722	<0.002	-	-	-
4-nitrophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(g,h,i)perylene (diss.filt)	0.0000178	<0.000005	0.000178	<0.00005	-	-	-
2,3,5,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	0.0000163	<0.000005	0.000163	<0.00005	-	-	-
2,3,4,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.000755	<0.000082	0.00755	<0.00082	-	-	-
2,4-Dinitrophenol	<0.005	<0.005	<0.05	<0.05	-	-	-
Nickel	0.000764	<0.0004	0.00764	<0.004	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	8.47
Conductivity (µS/cm)	106.00
Temperature (°C)	18.00
Volume Leachant (Litres)	0.888

Mcerts Certification does not apply to leachates

06/03/2019 09:18:19

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.102	**Natural Moisture Content (%)**	13.6
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	88
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170025
Sampled Date	16-Jan-2019
Customer Sample Ref.	WS25
Depth (m)	0.10 - 0.30

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
DNOC	<0.006	<0.006	<0.06	<0.06	-	-	-
Pentachlorophenol	<0.002	<0.002	<0.02	<0.02	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Dinoseb	<0.004	<0.004	<0.04	<0.04	-	-	-
Zinc	0.0187	<0.001	0.187	<0.01	-	-	-
SVOC MS (W) - Aqueous							
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,6-Trichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dimethylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	8.47
Conductivity (µS/cm)	106.00
Temperature (°C)	18.00
Volume Leachant (Litres)	0.888

Mcerts Certification does not apply to leachates

06/03/2019 09:18:19

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.102	**Natural Moisture Content (%)**	13.6
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	88
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170025
Sampled Date	16-Jan-2019
Customer Sample Ref.	WS25
Depth (m)	0.10 - 0.30

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.006	<0.006	<0.06	<0.06	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.03	<0.03	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Benzene by GC	<0.007	<0.007	<0.07	<0.07	-	-	-
Toluene by GC	<0.004	<0.004	<0.04	<0.04	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.05	<0.05	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.08	<0.08	-	-	-
o Xylene by GC	<0.003	<0.003	<0.03	<0.03	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.11	<0.11	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.28	<0.28	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	<0	-	<0	-	-	-
Toluene-d8	-	<0	-	<0	-	-	-
4-Bromofluorobenzene	-	<0	-	<0	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	8.47
Conductivity (µS/cm)	106.00
Temperature (ºC)	18.00
Volume Leachant (Litres)	0.888

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.102	**Natural Moisture Content (%)**	13.6
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	88
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170025
Sampled Date	16-Jan-2019
Customer Sample Ref.	WS25
Depth (m)	0.10 - 0.30

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
Dichlorodifluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.01	<0.01	-	-	-
Dichloromethane	<0.003	<0.003	<0.03	<0.03	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroform	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	8.47
Conductivity (µS/cm)	106.00
Temperature (ºC)	18.00
Volume Leachant (Litres)	0.888

Mcerts Certification does not apply to leachates

06/03/2019 09:18:19

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.102	**Natural Moisture Content (%)**	13.6
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	88
Particle Size <4mm	>95%		

Case	
SDG	190122-79
Lab Sample Number(s)	19170025
Sampled Date	16-Jan-2019
Customer Sample Ref.	WS25
Depth (m)	0.10 - 0.30

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Styrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromoform	<0.001	<0.001	<0.01	<0.01	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Propylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	31-Jan-2019
pH (pH Units)	8.47
Conductivity (µS/cm)	106.00
Temperature (ºC)	18.00
Volume Leachant (Litres)	0.888

Mcerts Certification does not apply to leachates

06/03/2019 09:18:19

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Notification of NDPs (No determination possible)

Date Received : 22/01/2019 14:35:25

Sample No	Customer Sample Ref.	Depth (m)	Test	Comment
19169995	WS09	0.13 - 0.20	Fluoride	Sample moisture too high
19169995	WS09	0.13 - 0.20	pH Value of Filtered Water	Sample moisture too high
19169995	WS09	0.13 - 0.20	Sulphide	Sample moisture too high
19169995	WS09	0.13 - 0.20	VOC MS (W)	Sample moisture too high
19169995	WS09	0.13 - 0.20	PAH in waters by GC-MS (diss.filt)	Sample moisture too high
19169995	WS09	0.13 - 0.20	PCB Congeners - Aqueous (W)	Sample moisture too high
19169995	WS09	0.13 - 0.20	TPH CWG Filtered (W)	Sample moisture too high
19169995	WS09	0.13 - 0.20	EPH CWG (Aliphatic) Filtered GC (W)	Sample moisture too high
19169995	WS09	0.13 - 0.20	EPH CWG (Aromatic) Filtered GC (W)	Sample moisture too high
19169995	WS09	0.13 - 0.20	GRO by GC-FID (W)	Sample moisture too high
19169995	WS09	0.13 - 0.20	SVOC MS (W) - Aqueous	Sample moisture too high
19169995	WS09	0.13 - 0.20	Mercury Dissolved	Sample moisture too high
19169995	WS09	0.13 - 0.20	Dissolved Metals by ICP-MS	Sample moisture too high
19169995	WS09	0.13 - 0.20	Phenols by ms (w)	Sample moisture too high
19169995	WS09	0.13 - 0.20	Phosphate by Kone (w)	Sample moisture too high
19169995	WS09	0.13 - 0.20	Cyanide Comp/Free/Total/Thiocyanate	Sample moisture too high
19169995	WS09	0.13 - 0.20	Dissolved Organic/Inorganic Carbon	Sample moisture too high
19169995	WS09	0.13 - 0.20	Conductivity (at 20 deg.C)	Sample moisture too high
19169995	WS09	0.13 - 0.20	Anions by Kone (w)	Sample moisture too high
19169995	WS09	0.13 - 0.20	Ammoniacal Nitrogen	Sample moisture too high
19169998	WS13	0.30	Fluoride	Sample moisture too high
19169998	WS13	0.30	pH Value of Filtered Water	Sample moisture too high
19169998	WS13	0.30	Sulphide	Sample moisture too high
19169998	WS13	0.30	VOC MS (W)	Sample moisture too high
19169998	WS13	0.30	PAH in waters by GC-MS (diss.filt)	Sample moisture too high
19169998	WS13	0.30	PCB Congeners - Aqueous (W)	Sample moisture too high
19169998	WS13	0.30	TPH CWG Filtered (W)	Sample moisture too high
19169998	WS13	0.30	EPH CWG (Aliphatic) Filtered GC (W)	Sample moisture too high
19169998	WS13	0.30	EPH CWG (Aromatic) Filtered GC (W)	Sample moisture too high
19169998	WS13	0.30	GRO by GC-FID (W)	Sample moisture too high
19169998	WS13	0.30	SVOC MS (W) - Aqueous	Sample moisture too high
19169998	WS13	0.30	Mercury Dissolved	Sample moisture too high
19169998	WS13	0.30	Dissolved Metals by ICP-MS	Sample moisture too high
19169998	WS13	0.30	Phenols by ms (w)	Sample moisture too high
19169998	WS13	0.30	Phosphate by Kone (w)	Sample moisture too high
19169998	WS13	0.30	Cyanide Comp/Free/Total/Thiocyanate	Sample moisture too high
19169998	WS13	0.30	Dissolved Organic/Inorganic Carbon	Sample moisture too high
19169998	WS13	0.30	Conductivity (at 20 deg.C)	Sample moisture too high
19169998	WS13	0.30	Anions by Kone (w)	Sample moisture too high
19169998	WS13	0.30	Ammoniacal Nitrogen	Sample moisture too high
19170006	WS17	0.30	Fluoride	Sample moisture too high
19170006	WS17	0.30	pH Value of Filtered Water	Sample moisture too high
19170006	WS17	0.30	Sulphide	Sample moisture too high
19170006	WS17	0.30	VOC MS (W)	Sample moisture too high
19170006	WS17	0.30	PAH in waters by GC-MS (diss.filt)	Sample moisture too high
19170006	WS17	0.30	PCB Congeners - Aqueous (W)	Sample moisture too high
19170006	WS17	0.30	TPH CWG Filtered (W)	Sample moisture too high
19170006	WS17	0.30	EPH CWG (Aliphatic) Filtered GC (W)	Sample moisture too high
19170006	WS17	0.30	EPH CWG (Aromatic) Filtered GC (W)	Sample moisture too high
19170006	WS17	0.30	GRO by GC-FID (W)	Sample moisture too high
19170006	WS17	0.30	SVOC MS (W) - Aqueous	Sample moisture too high
19170006	WS17	0.30	Mercury Dissolved	Sample moisture too high
19170006	WS17	0.30	Dissolved Metals by ICP-MS	Sample moisture too high
19170006	WS17	0.30	Phenols by ms (w)	Sample moisture too high
19170006	WS17	0.30	Phosphate by Kone (w)	Sample moisture too high
19170006	WS17	0.30	Cyanide Comp/Free/Total/Thiocyanate	Sample moisture too high
19170006	WS17	0.30	Dissolved Organic/Inorganic Carbon	Sample moisture too high
19170006	WS17	0.30	Conductivity (at 20 deg.C)	Sample moisture too high
19170006	WS17	0.30	Anions by Kone (w)	Sample moisture too high
19170006	WS17	0.30	Ammoniacal Nitrogen	Sample moisture too high
19170009	WS19	0.10	Fluoride	Sample moisture too high
19170009	WS19	0.10	pH Value of Filtered Water	Sample moisture too high
19170009	WS19	0.10	Sulphide	Sample moisture too high

19170009	WS19	0.10	VOC MS (W)	Sample moisture too high
19170009	WS19	0.10	PAH in waters by GC-MS (diss.filt)	Sample moisture too high
19170009	WS19	0.10	PCB Congeners - Aqueous (W)	Sample moisture too high
19170009	WS19	0.10	TPH CWG Filtered (W)	Sample moisture too high
19170009	WS19	0.10	EPH CWG (Aliphatic) Filtered GC (W)	Sample moisture too high
19170009	WS19	0.10	EPH CWG (Aromatic) Filtered GC (W)	Sample moisture too high
19170009	WS19	0.10	GRO by GC-FID (W)	Sample moisture too high
19170009	WS19	0.10	SVOC MS (W) - Aqueous	Sample moisture too high
19170009	WS19	0.10	Mercury Dissolved	Sample moisture too high
19170009	WS19	0.10	Dissolved Metals by ICP-MS	Sample moisture too high
19170009	WS19	0.10	Phenols by ms (w)	Sample moisture too high
19170009	WS19	0.10	Phosphate by Kone (w)	Sample moisture too high
19170009	WS19	0.10	Cyanide Comp/Free/Total/Thiocyanate	Sample moisture too high
19170009	WS19	0.10	Dissolved Organic/Inorganic Carbon	Sample moisture too high
19170009	WS19	0.10	Conductivity (at 20 deg.C)	Sample moisture too high
19170009	WS19	0.10	Anions by Kone (w)	Sample moisture too high
19170009	WS19	0.10	Ammoniacal Nitrogen	Sample moisture too high
19170014	WS21	0.10 - 0.20	Fluoride	Sample moisture too high
19170014	WS21	0.10 - 0.20	pH Value of Filtered Water	Sample moisture too high
19170014	WS21	0.10 - 0.20	Sulphide	Sample moisture too high
19170014	WS21	0.10 - 0.20	VOC MS (W)	Sample moisture too high
19170014	WS21	0.10 - 0.20	PAH in waters by GC-MS (diss.filt)	Sample moisture too high
19170014	WS21	0.10 - 0.20	PCB Congeners - Aqueous (W)	Sample moisture too high
19170014	WS21	0.10 - 0.20	TPH CWG Filtered (W)	Sample moisture too high
19170014	WS21	0.10 - 0.20	EPH CWG (Aliphatic) Filtered GC (W)	Sample moisture too high
19170014	WS21	0.10 - 0.20	EPH CWG (Aromatic) Filtered GC (W)	Sample moisture too high
19170014	WS21	0.10 - 0.20	GRO by GC-FID (W)	Sample moisture too high
19170014	WS21	0.10 - 0.20	SVOC MS (W) - Aqueous	Sample moisture too high
19170014	WS21	0.10 - 0.20	Mercury Dissolved	Sample moisture too high
19170014	WS21	0.10 - 0.20	Dissolved Metals by ICP-MS	Sample moisture too high
19170014	WS21	0.10 - 0.20	Phenols by ms (w)	Sample moisture too high
19170014	WS21	0.10 - 0.20	Phosphate by Kone (w)	Sample moisture too high
19170014	WS21	0.10 - 0.20	Cyanide Comp/Free/Total/Thiocyanate	Sample moisture too high
19170014	WS21	0.10 - 0.20	Dissolved Organic/Inorganic Carbon	Sample moisture too high
19170014	WS21	0.10 - 0.20	Conductivity (at 20 deg.C)	Sample moisture too high
19170014	WS21	0.10 - 0.20	Anions by Kone (w)	Sample moisture too high
19170014	WS21	0.10 - 0.20	Ammoniacal Nitrogen	Sample moisture too high
19170017	WS21	1.50	Fluoride	Sample moisture too high
19170017	WS21	1.50	pH Value of Filtered Water	Sample moisture too high
19170017	WS21	1.50	Sulphide	Sample moisture too high
19170017	WS21	1.50	VOC MS (W)	Sample moisture too high
19170017	WS21	1.50	PAH in waters by GC-MS (diss.filt)	Sample moisture too high
19170017	WS21	1.50	PCB Congeners - Aqueous (W)	Sample moisture too high
19170017	WS21	1.50	TPH CWG Filtered (W)	Sample moisture too high
19170017	WS21	1.50	EPH CWG (Aliphatic) Filtered GC (W)	Sample moisture too high
19170017	WS21	1.50	EPH CWG (Aromatic) Filtered GC (W)	Sample moisture too high
19170017	WS21	1.50	GRO by GC-FID (W)	Sample moisture too high
19170017	WS21	1.50	SVOC MS (W) - Aqueous	Sample moisture too high
19170017	WS21	1.50	Mercury Dissolved	Sample moisture too high
19170017	WS21	1.50	Dissolved Metals by ICP-MS	Sample moisture too high
19170017	WS21	1.50	Phenols by ms (w)	Sample moisture too high
19170017	WS21	1.50	Phosphate by Kone (w)	Sample moisture too high
19170017	WS21	1.50	Cyanide Comp/Free/Total/Thiocyanate	Sample moisture too high
19170017	WS21	1.50	Dissolved Organic/Inorganic Carbon	Sample moisture too high
19170017	WS21	1.50	Conductivity (at 20 deg.C)	Sample moisture too high
19170017	WS21	1.50	Anions by Kone (w)	Sample moisture too high
19170017	WS21	1.50	Ammoniacal Nitrogen	Sample moisture too high
19170025	WS25	0.10 - 0.30	Fluoride	Sample moisture too high
19170025	WS25	0.10 - 0.30	pH Value of Filtered Water	Sample moisture too high
19170025	WS25	0.10 - 0.30	Sulphide	Sample moisture too high
19170025	WS25	0.10 - 0.30	VOC MS (W)	Sample moisture too high
19170025	WS25	0.10 - 0.30	PAH in waters by GC-MS (diss.filt)	Sample moisture too high
19170025	WS25	0.10 - 0.30	PCB Congeners - Aqueous (W)	Sample moisture too high
19170025	WS25	0.10 - 0.30	TPH CWG Filtered (W)	Sample moisture too high
19170025	WS25	0.10 - 0.30	EPH CWG (Aliphatic) Filtered GC (W)	Sample moisture too high
19170025	WS25	0.10 - 0.30	EPH CWG (Aromatic) Filtered GC (W)	Sample moisture too high
19170025	WS25	0.10 - 0.30	GRO by GC-FID (W)	Sample moisture too high
19170025	WS25	0.10 - 0.30	SVOC MS (W) - Aqueous	Sample moisture too high

19170025	WS25	0.10 - 0.30	Mercury Dissolved	Sample moisture too high
19170025	WS25	0.10 - 0.30	Dissolved Metals by ICP-MS	Sample moisture too high
19170025	WS25	0.10 - 0.30	Phenols by ms (w)	Sample moisture too high
19170025	WS25	0.10 - 0.30	Phosphate by Kone (w)	Sample moisture too high
19170025	WS25	0.10 - 0.30	Cyanide Comp/Free/Total/Thiocyanate	Sample moisture too high
19170025	WS25	0.10 - 0.30	Dissolved Organic/Inorganic Carbon	Sample moisture too high
19170025	WS25	0.10 - 0.30	Conductivity (at 20 deg.C)	Sample moisture too high
19170025	WS25	0.10 - 0.30	Anions by Kone (w)	Sample moisture too high
19170025	WS25	0.10 - 0.30	Ammoniacal Nitrogen	Sample moisture too high
19169995	WS09	0.13 - 0.20	Nitrite by Kone (w)	Sample moisture too high
19169998	WS13	0.30	Nitrite by Kone (w)	Sample moisture too high
19170006	WS17	0.30	Nitrite by Kone (w)	Sample moisture too high
19170009	WS19	0.10	Nitrite by Kone (w)	Sample moisture too high
19170014	WS21	0.10 - 0.20	Nitrite by Kone (w)	Sample moisture too high
19170017	WS21	1.50	Nitrite by Kone (w)	Sample moisture too high
19170025	WS25	0.10 - 0.30	Nitrite by Kone (w)	Sample moisture too high
19169995	WS09	0.13 - 0.20	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19169995	WS09	0.13 - 0.20	CEN Readings	Sample moisture too high
19169995	WS09	0.13 - 0.20	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19169995	WS09	0.13 - 0.20	CEN Readings	Sample moisture too high
19169995	WS09	0.13 - 0.20	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19169995	WS09	0.13 - 0.20	CEN Readings	Sample moisture too high
19169995	WS09	0.13 - 0.20	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19169995	WS09	0.13 - 0.20	CEN Readings	Sample moisture too high
19169995	WS09	0.13 - 0.20	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19169995	WS09	0.13 - 0.20	CEN Readings	Sample moisture too high
19169998	WS13	0.30	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19169998	WS13	0.30	CEN Readings	Sample moisture too high
19169998	WS13	0.30	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19169998	WS13	0.30	CEN Readings	Sample moisture too high
19169998	WS13	0.30	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19169998	WS13	0.30	CEN Readings	Sample moisture too high
19169998	WS13	0.30	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19169998	WS13	0.30	CEN Readings	Sample moisture too high
19169998	WS13	0.30	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19169998	WS13	0.30	CEN Readings	Sample moisture too high
19170006	WS17	0.30	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19170006	WS17	0.30	CEN Readings	Sample moisture too high
19170006	WS17	0.30	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19170006	WS17	0.30	CEN Readings	Sample moisture too high
19170006	WS17	0.30	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19170006	WS17	0.30	CEN Readings	Sample moisture too high
19170006	WS17	0.30	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19170006	WS17	0.30	CEN Readings	Sample moisture too high
19170006	WS17	0.30	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19170006	WS17	0.30	CEN Readings	Sample moisture too high
19170009	WS19	0.10	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19170009	WS19	0.10	CEN Readings	Sample moisture too high
19170009	WS19	0.10	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19170009	WS19	0.10	CEN Readings	Sample moisture too high
19170009	WS19	0.10	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19170009	WS19	0.10	CEN Readings	Sample moisture too high
19170009	WS19	0.10	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19170009	WS19	0.10	CEN Readings	Sample moisture too high
19170009	WS19	0.10	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19170009	WS19	0.10	CEN Readings	Sample moisture too high
19170014	WS21	0.10 - 0.20	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19170014	WS21	0.10 - 0.20	CEN Readings	Sample moisture too high
19170014	WS21	0.10 - 0.20	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19170014	WS21	0.10 - 0.20	CEN Readings	Sample moisture too high
19170014	WS21	0.10 - 0.20	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19170014	WS21	0.10 - 0.20	CEN Readings	Sample moisture too high
19170014	WS21	0.10 - 0.20	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19170014	WS21	0.10 - 0.20	CEN Readings	Sample moisture too high
19170014	WS21	0.10 - 0.20	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19170014	WS21	0.10 - 0.20	CEN Readings	Sample moisture too high
19170017	WS21	1.50	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19170017	WS21	1.50	CEN Readings	Sample moisture too high

19170017	WS21	1.50	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19170017	WS21	1.50	CEN Readings	Sample moisture too high
19170017	WS21	1.50	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19170017	WS21	1.50	CEN Readings	Sample moisture too high
19170017	WS21	1.50	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19170017	WS21	1.50	CEN Readings	Sample moisture too high
19170017	WS21	1.50	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19170017	WS21	1.50	CEN Readings	Sample moisture too high
19170025	WS25	0.10 - 0.30	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19170025	WS25	0.10 - 0.30	CEN Readings	Sample moisture too high
19170025	WS25	0.10 - 0.30	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19170025	WS25	0.10 - 0.30	CEN Readings	Sample moisture too high
19170025	WS25	0.10 - 0.30	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19170025	WS25	0.10 - 0.30	CEN Readings	Sample moisture too high
19170025	WS25	0.10 - 0.30	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19170025	WS25	0.10 - 0.30	CEN Readings	Sample moisture too high
19170025	WS25	0.10 - 0.30	CEN 2:1 Leachate (1 Stage)	Sample moisture too high
19170025	WS25	0.10 - 0.30	CEN Readings	Sample moisture too high

Table of Results - Appendix

Method No	Reference	Description
PM001		Preparation of Samples for Metals Analysis
PM024	Modified BS 1377	Soil preparation including homogenisation, moisture screens of soils for Asbestos Containing Material
PM115		Leaching Procedure for CEN One Stage Leach Test 2:1 & 10:1 1 Step
TM048	HSG 248, Asbestos: The analysts' guide for sampling, analysis and clearance procedures	Identification of Asbestos in Bulk Material
TM061	Method for the Determination of EPH,Massachusetts Dept.of EP, 1998	Determination of Extractable Petroleum Hydrocarbons by GC-FID (C10-C40)
TM072	Modified: US EPA Method 8141A	Determination of Phenols by GC-MS
TM089	Modified: US EPA Methods 8020 & 602	Determination of Gasoline Range Hydrocarbons (GRO) by Headspace GC-FID (C4-C12)
TM090	Method 5310, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 415.1 & 9060	Determination of Total Organic Carbon/Total Inorganic Carbon in Water and Waste Water
TM099	BS 2690: Part 7:1968 / BS 6068: Part2.11:1984	Determination of Ammonium in Water Samples using the Kone Analyser
TM101	Method 4500B & C, AWWA/APHA, 20th Ed., 1999	Determination of Sulphide in soil and water samples using the Kone Analyser
TM104	Method 4500F, AWWA/APHA, 20th Ed., 1999	Determination of Fluoride using the Kone Analyser
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS
TM120	Method 2510B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part 9:1970	Determination of Electrical Conductivity using a Conductivity Meter
TM132	In - house Method	ELTRA CS800 Operators Guide
TM133	BS 1377: Part 3 1990;BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter
TM152	Method 3125B, AWWA/APHA, 20th Ed., 1999	Analysis of Aqueous Samples by ICP-MS
TM153	Method 4500A,B,C, I, M AWWA/APHA, 20th Ed., 1999	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate using the Skalar SANS+ System Segmented Flow Analyser
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone
TM168	EPA Method 8082, Polychlorinated Biphenyls by Gas Chromatography	Determination of WHO12 and EC7 Polychlorinated Biphenyl Congeners by GC-MS in Soils
TM173	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Determination of Speciated Extractable Petroleum Hydrocarbons in Soils by GC-FID
TM174	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Determination of Speciated Extractable Petroleum Hydrocarbons in Waters by GC-FID
TM176	EPA 8270D Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of SVOCs in Water by GCMS
TM178	Modified: US EPA Method 8100	Determination of Polynuclear Aromatic Hydrocarbons (PAH) by GC-MS in Waters
TM181	US EPA Method 6010B	Determination of Routine Metals in Soil by iCap 6500 Duo ICP-OES
TM183	BS EN 23506:2002, (BS 6068-2.74:2002) ISBN 0 580 38924 3	Determination of Trace Level Mercury in Waters and Leachates by PSA Cold Vapour Atomic Fluorescence Spectrometry
TM184	EPA Methods 325.1 & 325.2,	The Determination of Anions in Aqueous Matrices using the Kone Spectrophotometric Analysers
TM197	Modified: US EPA Method 8082.EA Method 174 and 5109631	Determination of WHO12 and EC7 Polychlorinated Biphenyl Congeners by GC-MS in Waters
TM205		Determination of Phenols in Waste Waters using Solid Phase Extraction, Acetylation, Gas Chromatography and Mass Selective Detection
TM208	Modified: US EPA Method 8260b & 624	Determination of Volatile Organic Compounds by Headspace / GC-MS in Waters
TM218	Shaker extraction - EPA method 3546.	The determination of PAH in soil samples by GC-MS
TM222	In-House Method	Determination of Hot Water Soluble Boron in Soils (10:1 Water:soil) by IRIS Emission Spectrometer
TM227	Standard methods for the examination of waters and wastewaters 20th Edition, AWWA/APHA Method 4500.	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate
TM243		Mixed Anions In Soils By Kone
TM245	By GC-FID	Determination of GRO by Headspace in waters
TM256	The measurement of Electrical Conductivity and the Laboratory determination of pH Value of Natural, Treated and Wastewaters. HMSO, 1978. ISBN 011 751428 4.	Determination of pH in Water and Leachate using the GLpH pH Meter

NA = not applicable.

Chemical testing (unless subcontracted) performed at ALS Environmental Hawarden (Method codes TM) or ALS Environmental Aberdeen (Method codes S).

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Test Completion Dates

Lab Sample No(s)	19169994	19169995	19169997	19169998	19169999	19170006	19170007	19170009	19170012	19170014
Customer Sample Ref.	WS09	WS09	WS12	WS13	WS13	WS17	WS17	WS19	WS19	WS21
AGS Ref.										
Depth	0.20 - 0.30	0.13 - 0.20	1.00	0.30	0.50	0.30	0.80	0.10	2.40	0.10 - 0.20
Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Ammoniacal Nitrogen		03-Feb-2019		03-Feb-2019		03-Feb-2019		03-Feb-2019		03-Feb-2019
Anions by Kone (soil)	01-Feb-2019	01-Feb-2019	01-Feb-2019	01-Feb-2019	01-Feb-2019	01-Feb-2019	01-Feb-2019	01-Feb-2019	01-Feb-2019	01-Feb-2019
Anions by Kone (w)		06-Feb-2019		06-Feb-2019		06-Feb-2019		06-Feb-2019		06-Feb-2019
Asbestos ID in Solid Samples	29-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019	29-Jan-2019	30-Jan-2019	29-Jan-2019	29-Jan-2019	29-Jan-2019
Boron Water Soluble	31-Jan-2019	30-Jan-2019	31-Jan-2019	31-Jan-2019	30-Jan-2019	30-Jan-2019	31-Jan-2019	30-Jan-2019	31-Jan-2019	30-Jan-2019
CEN 10:1 Leachate (1 Stage)		31-Jan-2019		31-Jan-2019		31-Jan-2019		31-Jan-2019		31-Jan-2019
CEN Readings		01-Feb-2019		01-Feb-2019		01-Feb-2019		01-Feb-2019		01-Feb-2019
Conductivity (at 20 deg.C)		04-Feb-2019		04-Feb-2019		04-Feb-2019		04-Feb-2019		04-Feb-2019
Cyanide Comp/Free/Total/Thiocyanate	28-Jan-2019	05-Feb-2019	29-Jan-2019	04-Feb-2019	29-Jan-2019	05-Feb-2019	30-Jan-2019	05-Feb-2019	30-Jan-2019	05-Feb-2019
Dissolved Metals by ICP-MS		04-Feb-2019		04-Feb-2019		04-Feb-2019		04-Feb-2019		04-Feb-2019
Dissolved Organic/Inorganic Carbon		04-Feb-2019		04-Feb-2019		04-Feb-2019		04-Feb-2019		04-Feb-2019
EPH CWG (Aliphatic) Filtered GC (W)		04-Feb-2019		04-Feb-2019		04-Feb-2019		04-Feb-2019		04-Feb-2019
EPH CWG (Aliphatic) GC (S)	30-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019
EPH CWG (Aromatic) Filtered GC (W)		04-Feb-2019		04-Feb-2019		04-Feb-2019		04-Feb-2019		04-Feb-2019
EPH CWG (Aromatic) GC (S)	30-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019
Fluoride		04-Feb-2019		04-Feb-2019		04-Feb-2019		04-Feb-2019		04-Feb-2019
GRO by GC-FID (S)	06-Feb-2019	06-Feb-2019	02-Feb-2019	02-Feb-2019	06-Feb-2019	31-Jan-2019	06-Feb-2019	06-Feb-2019	06-Feb-2019	31-Jan-2019
GRO by GC-FID (W)		04-Feb-2019		04-Feb-2019		04-Feb-2019		04-Feb-2019		04-Feb-2019
Mercury Dissolved		02-Feb-2019		04-Feb-2019		02-Feb-2019		02-Feb-2019		02-Feb-2019
Metals in solid samples by OES	31-Jan-2019	31-Jan-2019	31-Jan-2019	01-Feb-2019	01-Feb-2019	01-Feb-2019	01-Feb-2019	30-Jan-2019	01-Feb-2019	31-Jan-2019
Nitrite by Kone (w)		04-Feb-2019		04-Feb-2019		04-Feb-2019		04-Feb-2019		04-Feb-2019
PAH by GCMS	30-Jan-2019	29-Jan-2019	29-Jan-2019	29-Jan-2019	29-Jan-2019	30-Jan-2019	30-Jan-2019	29-Jan-2019	30-Jan-2019	29-Jan-2019
PAH in waters by GC-MS (diss.filt)		04-Feb-2019		04-Feb-2019		04-Feb-2019		04-Feb-2019		04-Feb-2019
PCB Congeners - Aqueous (W)		05-Feb-2019		05-Feb-2019		05-Feb-2019		05-Feb-2019		05-Feb-2019
PCBs by GCMS	31-Jan-2019	31-Jan-2019	31-Jan-2019	31-Jan-2019	31-Jan-2019	31-Jan-2019	31-Jan-2019	31-Jan-2019	31-Jan-2019	31-Jan-2019
pH	30-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019
pH Value of Filtered Water		04-Feb-2019		04-Feb-2019		04-Feb-2019		04-Feb-2019		04-Feb-2019
Phenols by ms (w)		06-Feb-2019		06-Feb-2019		06-Feb-2019		06-Feb-2019		06-Feb-2019
Phenols Spec MS (S)	30-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019	30-Jan-2019
Phosphate by Kone (w)		04-Feb-2019		04-Feb-2019		04-Feb-2019		04-Feb-2019		04-Feb-2019
Sample description	24-Jan-2019	25-Jan-2019	06-Mar-2019	25-Jan-2019	25-Jan-2019	24-Jan-2019	29-Jan-2019	24-Jan-2019	26-Feb-2019	24-Jan-2019
Semi Volatile Organic Compounds		29-Jan-2019		29-Jan-2019	30-Jan-2019	30-Jan-2019	31-Jan-2019	30-Jan-2019		30-Jan-2019
Sulphide		05-Feb-2019		05-Feb-2019		05-Feb-2019		05-Feb-2019		05-Feb-2019
SVOC MS (W) - Aqueous		04-Feb-2019		04-Feb-2019		04-Feb-2019		04-Feb-2019		04-Feb-2019
Total Organic Carbon	01-Feb-2019	01-Feb-2019	01-Feb-2019	02-Feb-2019	01-Feb-2019	01-Feb-2019	02-Feb-2019	01-Feb-2019	02-Feb-2019	01-Feb-2019
TPH CWG Filtered (W)		04-Feb-2019		04-Feb-2019		04-Feb-2019		04-Feb-2019		04-Feb-2019
TPH CWG GC (S)	06-Feb-2019	06-Feb-2019	02-Feb-2019	02-Feb-2019	06-Feb-2019	31-Jan-2019	06-Feb-2019	06-Feb-2019	06-Feb-2019	31-Jan-2019
VOC MS (S)	31-Jan-2019	31-Jan-2019	31-Jan-2019	31-Jan-2019	31-Jan-2019	31-Jan-2019	31-Jan-2019	31-Jan-2019	31-Jan-2019	31-Jan-2019
VOC MS (W)		03-Feb-2019		03-Feb-2019		03-Feb-2019		03-Feb-2019		03-Feb-2019

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Lab Sample No(s)	19170015	19170017	19170020	19170021	19170023	19170025	19170027
Customer Sample Ref.	WS21	WS21	WS21	WS24	WS24	WS25	WS27
AGS Ref.							
Depth	0.60 - 0.70	1.50	3.10	0.30	1.20	0.10 - 0.30	0.20
Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Ammoniacal Nitrogen		03-Feb-2019				03-Feb-2019	
Anions by Kone (soil)	01-Feb-2019	01-Feb-2019			01-Feb-2019	01-Feb-2019	
Anions by Kone (w)		06-Feb-2019				06-Feb-2019	
Asbestos ID in Solid Samples	29-Jan-2019	30-Jan-2019			29-Jan-2019	30-Jan-2019	
Boron Water Soluble	30-Jan-2019		30-Jan-2019	31-Jan-2019	30-Jan-2019	30-Jan-2019	31-Jan-2019
CEN 10:1 Leachate (1 Stage)		31-Jan-2019				31-Jan-2019	
CEN Readings		01-Feb-2019				01-Feb-2019	
Conductivity (at 20 deg.C)		04-Feb-2019				04-Feb-2019	
Cyanide Comp/Free/Total/Thiocyanate	28-Jan-2019	04-Feb-2019	28-Jan-2019	29-Jan-2019	29-Jan-2019	04-Feb-2019	30-Jan-2019
Dissolved Metals by ICP-MS		04-Feb-2019				04-Feb-2019	
Dissolved Organic/Inorganic Carbon		04-Feb-2019				04-Feb-2019	
EPH CWG (Aliphatic) Filtered GC (W)		04-Feb-2019				04-Feb-2019	
EPH CWG (Aliphatic) GC (S)	30-Jan-2019	30-Jan-2019			30-Jan-2019	30-Jan-2019	
EPH CWG (Aromatic) Filtered GC (W)		04-Feb-2019				04-Feb-2019	
EPH CWG (Aromatic) GC (S)	30-Jan-2019	30-Jan-2019			30-Jan-2019	30-Jan-2019	
Fluoride		04-Feb-2019				04-Feb-2019	
GRO by GC-FID (S)	31-Jan-2019	31-Jan-2019			31-Jan-2019	31-Jan-2019	
GRO by GC-FID (W)		04-Feb-2019				04-Feb-2019	
Mercury Dissolved		04-Feb-2019				04-Feb-2019	
Metals in solid samples by OES	01-Feb-2019		30-Jan-2019	31-Jan-2019	01-Feb-2019	31-Jan-2019	01-Feb-2019
Nitrite by Kone (w)		04-Feb-2019				04-Feb-2019	
PAH by GCMS	30-Jan-2019	29-Jan-2019			30-Jan-2019	29-Jan-2019	
PAH in waters by GC-MS (diss.filt)		04-Feb-2019				04-Feb-2019	
PCB Congeners - Aqueous (W)		05-Feb-2019				05-Feb-2019	
PCBs by GCMS	31-Jan-2019	31-Jan-2019			31-Jan-2019	31-Jan-2019	
pH	30-Jan-2019		29-Jan-2019	29-Jan-2019	30-Jan-2019	29-Jan-2019	30-Jan-2019
pH Value of Filtered Water		04-Feb-2019				04-Feb-2019	
Phenols by ms (w)		06-Feb-2019				06-Feb-2019	
Phenols Spec MS (S)	30-Jan-2019	30-Jan-2019			30-Jan-2019	30-Jan-2019	
Phosphate by Kone (w)		04-Feb-2019				04-Feb-2019	
Sample description	24-Jan-2019	24-Jan-2019	24-Jan-2019	25-Jan-2019	06-Mar-2019	25-Jan-2019	29-Jan-2019
Semi Volatile Organic Compounds	29-Jan-2019	30-Jan-2019				30-Jan-2019	
Sulphide		05-Feb-2019				05-Feb-2019	
SVOC MS (W) - Aqueous		04-Feb-2019				04-Feb-2019	
Total Organic Carbon	01-Feb-2019		01-Feb-2019	01-Feb-2019	01-Feb-2019	01-Feb-2019	01-Feb-2019
TPH CWG Filtered (W)		04-Feb-2019				04-Feb-2019	
TPH CWG GC (S)	31-Jan-2019	31-Jan-2019			31-Jan-2019	31-Jan-2019	
VOC MS (S)	31-Jan-2019	31-Jan-2019			31-Jan-2019	31-Jan-2019	
VOC MS (W)		03-Feb-2019				03-Feb-2019	

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

ASSOCIATED AQC DATA

Ammoniacal Nitrogen

Component	Method Code	QC 1950
Ammoniacal Nitrogen as N	TM099	**100.8** 93.14 : 108.60

Anions by Kone (soil)

Component	Method Code	QC 1960	QC 1969	QC 1984
Chloride (soluble)	TM243	70.00 : 130.00	70.00 : 130.00	70.00 : 130.00
Water Soluble Sulphate as SO4 2:1 Extract	TM243	70.00 : 130.00	70.00 : 130.00	70.00 : 130.00

Anions by Kone (w)

Component	Method Code	QC 1942
Chloride	TM184	**110.0** 92.93 : 115.43
Phosphate (Ortho as PO4)	TM184	96.40 : 108.40
Sulphate (soluble)	TM184	**105.2** 90.53 : 113.03
TON as NO3	TM184	**103.0** 96.26 : 111.21

Boron Water Soluble

Component	Method Code	QC 1935	QC 1912
Water Soluble Boron	TM222	**99.5** 86.05 : 109.75	**96.0** 86.05 : 109.75

Conductivity (at 20 deg.C)

Component	Method Code	QC 1944
Conductivity (at 20 deg.C)	TM120	**102.26** 98.50 : 107.52

Cyanide Comp/Free/Total/Thiocyanate

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Cyanide Comp/Free/Total/Thiocyanate

Component	Method Code	QC 1969	QC 1990	QC 1958	QC 1905	QC 1938
Free Cyanide	TM153	**97.3** 87.60 : 108.63	**97.7** 87.60 : 108.63	**93.1** 87.60 : 108.63		
Free Cyanide (W)	TM227				**97.25** 93.25 : 112.75	**94.25** 93.25 : 112.75
Thiocyanate	TM153	**100.0** 92.90 : 108.39	**97.6** 92.90 : 108.39	**95.81** 92.90 : 108.39		
Thiocyanate (W)	TM227				**100.75** 96.25 : 111.25	**102.0** 96.25 : 111.25
Total Cyanide	TM153	**102.86** 87.00 : 103.00	**105.71** 87.00 : 103.00	**102.14** 87.00 : 103.00		
Total Cyanide (W)	TM227				**97.0** 92.25 : 111.75	**96.0** 92.25 : 111.75

Dissolved Metals by ICP-MS

Component	Method Code	QC 1911
Aluminium	TM152	**108.0** 94.19 : 114.31
Antimony	TM152	**107.0** 79.80 : 122.00
Arsenic	TM152	**107.33** 90.42 : 111.32
Barium	TM152	**105.83** 90.79 : 113.16
Beryllium	TM152	**109.5** 93.25 : 120.04
Bismuth	TM152	**107.67** 94.65 : 117.05
Borate	TM152	**111.11** 88.00 : 112.00
Boron	TM152	**111.33** 86.68 : 117.67
Cadmium	TM152	**109.67** 94.60 : 112.40
Calcium	TM152	**104.67** 83.40 : 121.11
Chromium	TM152	**107.5** 93.28 : 110.91
Cobalt	TM152	**104.67** 84.39 : 114.26
Copper	TM152	**108.0** 88.86 : 118.72
Iron	TM152	**108.0** 92.00 : 113.00
Lead	TM152	**107.0** 89.25 : 115.12
Lithium	TM152	**107.0** 89.26 : 119.04
Magnesium	TM152	**104.67** 86.35 : 113.36
Manganese	TM152	**107.0** 94.24 : 112.74
Molybdenum	TM152	**106.0** 87.00 : 108.89

Dissolved Metals by ICP-MS

		QC 1911
Nickel	TM152	**107.83** 92.11 : 110.56
Phosphorus	TM152	**107.67** 90.52 : 115.47
Potassium	TM152	**104.67** 90.23 : 109.87
Selenium	TM152	**109.33** 88.44 : 113.86
Silver	TM152	**93.0** 87.04 : 107.38
Sodium	TM152	**104.67** 97.63 : 110.31
Strontium	TM152	**108.0** 90.72 : 114.82
Tellurium	TM152	**106.67** 90.72 : 112.62
Thallium	TM152	**107.83** 86.08 : 122.48
Tin	TM152	**105.83** 91.00 : 109.00
Titanium	TM152	**99.83** 91.87 : 102.47
Tungsten	TM152	**102.17** 78.12 : 132.82
Uranium	TM152	**108.0** 90.58 : 113.28
Vanadium	TM152	**106.5** 88.43 : 114.30
Zinc	TM152	**110.0** 86.52 : 115.27

Dissolved Organic/Inorganic Carbon

Component	Method Code	QC 1990	QC 1940
Dissolved Inorganic Carbon	TM090	**101.33** 91.15 : 111.35	**101.83** 94.43 : 110.53
Dissolved Organic Carbon	TM090	**106.83** 97.18 : 109.58	**106.0** 99.25 : 108.95

EPH CWG (Aliphatic) GC (S)

Component	Method Code	QC 1981	QC 1997	QC 1962
Total Aliphatics >C12-C35	TM173	**94.79** 70.61 : 106.16	**80.21** 66.17 : 105.28	**82.5** 70.61 : 106.16

EPH CWG (Aromatic) GC (S)

EPH CWG (Aromatic) GC (S)

Component	Method Code	QC 1981	QC 1997	QC 1962
Total Aromatics >EC12-EC35	TM173	**84.0** 67.75 : 104.04	**84.67** 65.78 : 102.90	**78.0** 67.75 : 104.04

Fluoride

Component	Method Code	QC 1912
Fluoride	TM104	**105.33** 95.51 : 107.24

GRO by GC-FID (S)

Component	Method Code	QC 1946	QC 1918	QC 1938	QC 1931
QC	TM089	**91.4** 70.34 : 111.95	**108.69** 72.28 : 114.54	**91.02** 70.34 : 111.95	**96.78** 72.28 : 114.54

GRO by GC-FID (W)

Component	Method Code	QC 1997	QC 1969
Benzene by GC	TM245	**102.0** 79.00 : 121.00	**104.0** 79.00 : 121.00
Ethylbenzene by GC	TM245	**102.0** 79.00 : 121.00	**103.0** 79.00 : 121.00
m & p Xylene by GC	TM245	**103.25** 82.77 : 123.19	**103.75** 82.77 : 123.19
MTBE GC-FID	TM245	**100.5** 79.00 : 121.00	**103.0** 79.00 : 121.00
o Xylene by GC	TM245	**102.0** 76.03 : 118.19	**103.0** 76.03 : 118.19
QC	TM245	**121.61** 76.13 : 145.89	**128.8** 76.13 : 145.89
Toluene by GC	TM245	**104.0** 79.00 : 121.00	**105.5** 79.00 : 121.00

Mercury Dissolved

Component	Method Code	QC 1977	QC 1934
Mercury Dissolved (CVAF)	TM183	**96.6** 75.00 : 111.00	**89.2** 75.00 : 111.00

Metals in solid samples by OES

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Metals in solid samples by OES

Component	Method Code	QC 1980	QC 1904	QC 1931	QC 1931	QC 1959	QC 1956
Aluminium	TM181	**91.15** 77.46 : 123.98	**99.12** 77.46 : 123.98	**89.38** 77.46 : 123.98	**89.38** 77.46 : 123.98	**83.54** 77.46 : 123.98	**86.11** 77.46 : 123.98
Antimony	TM181	**93.5** 87.04 : 111.16	**97.56** 87.04 : 111.16	**91.06** 87.04 : 111.16	**93.09** 87.04 : 111.16	**92.68** 87.04 : 111.16	**93.09** 87.04 : 111.16
Arsenic	TM181	**96.8** 87.34 : 110.87	**103.49** 87.34 : 110.87	**94.77** 87.34 : 110.87	**98.55** 87.34 : 110.87	**98.26** 87.34 : 110.87	**98.26** 87.34 : 110.87
Barium	TM181	**97.25** 80.73 : 115.16	**90.73** 80.73 : 115.16	**79.91** 80.73 : 115.16	**93.58** 80.73 : 115.16	**94.5** 80.73 : 115.16	**93.58** 80.73 : 115.16
Beryllium	TM181	**94.03** 89.47 : 112.97	**98.88** 89.47 : 112.97	**89.18** 89.47 : 112.97	**95.9** 89.47 : 112.97	**97.76** 89.47 : 112.97	**96.64** 89.47 : 112.97
Boron	TM181	**83.09** 76.57 : 104.15	**91.4** 76.57 : 104.15	**75.36** 76.57 : 104.15	**79.66** 76.57 : 104.15	**89.4** 76.57 : 104.15	**153.01** 76.57 : 104.15
Cadmium	TM181	**90.95** 82.98 : 105.97	**95.88** 82.98 : 105.97	**86.01** 82.98 : 105.97	**88.07** 82.98 : 105.97	**86.83** 82.98 : 105.97	**90.12** 82.98 : 105.97
Chromium	TM181	**92.09** 77.55 : 104.47	**95.54** 77.55 : 104.47	**86.0** 77.55 : 104.47	**94.52** 77.55 : 104.47	**94.73** 77.55 : 104.47	**95.94** 77.55 : 104.47
Cobalt	TM181	**86.48** 83.30 : 102.38	**88.68** 83.30 : 102.38	**81.45** 83.30 : 102.38	**83.65** 83.30 : 102.38	**89.31** 83.30 : 102.38	**83.65** 83.30 : 102.38
Copper	TM181	**94.19** 88.76 : 109.59	**96.13** 88.76 : 109.59	**93.13** 88.76 : 109.59	**95.6** 88.76 : 109.59	**94.89** 88.76 : 109.59	**94.54** 88.76 : 109.59
Iron	TM181	**90.48** 81.43 : 115.79	**88.1** 81.43 : 115.79	**77.54** 81.43 : 115.79	**77.78** 81.43 : 115.79	**96.03** 81.43 : 115.79	**70.87** 81.43 : 115.79
Lead	TM181	**86.71** 81.95 : 107.63	**88.96** 81.95 : 107.63	**87.39** 81.95 : 107.63	**90.09** 81.95 : 107.63	**94.82** 81.95 : 107.63	**88.96** 81.95 : 107.63
Manganese	TM181	**106.94** 97.73 : 122.27	**113.89** 97.73 : 122.27	**103.06** 97.73 : 122.27	**108.89** 97.73 : 122.27	**106.39** 97.73 : 122.27	**108.61** 97.73 : 122.27
Mercury	TM181	**93.48** 82.73 : 106.36	**99.52** 82.73 : 106.36	**93.0** 82.73 : 106.36	**97.58** 82.73 : 106.36	**96.86** 82.73 : 106.36	**95.89** 82.73 : 106.36
Molybdenum	TM181	**90.95** 86.61 : 111.07	**90.95** 86.61 : 111.07	**83.95** 86.61 : 111.07	**84.77** 86.61 : 111.07	**91.77** 86.61 : 111.07	**85.19** 86.61 : 111.07
Nickel	TM181	**90.46** 83.87 : 104.87	**90.95** 83.87 : 104.87	**86.55** 83.87 : 104.87	**90.46** 83.87 : 104.87	**91.2** 83.87 : 104.87	**91.2** 83.87 : 104.87
Phosphorus	TM181	**104.65** 92.65 : 125.47	**114.14** 92.65 : 125.47	**101.21** 92.65 : 125.47	**109.7** 92.65 : 125.47	**107.27** 92.65 : 125.47	**106.87** 92.65 : 125.47
Selenium	TM181	**92.94** 88.36 : 111.25	**96.86** 88.36 : 111.25	**89.41** 88.36 : 111.25	**98.04** 88.36 : 111.25	**98.82** 88.36 : 111.25	**97.65** 88.36 : 111.25
Strontium	TM181	**87.31** 83.94 : 111.48	**96.66** 83.94 : 111.48	**87.08** 83.94 : 111.48	**90.65** 83.94 : 111.48	**87.97** 83.94 : 111.48	**91.09** 83.94 : 111.48
Thallium	TM181	**92.04** 88.60 : 116.73	**93.81** 88.60 : 116.73	**86.28** 88.60 : 116.73	**88.05** 88.60 : 116.73	**89.82** 88.60 : 116.73	**87.61** 88.60 : 116.73
Tin	TM181	**97.72** 89.77 : 112.62	**100.76** 89.77 : 112.62	**92.4** 89.77 : 112.62	**95.06** 89.77 : 112.62	**102.28** 89.77 : 112.62	**96.2** 89.77 : 112.62
Titanium	TM181	**69.39** 66.29 : 105.96	**81.68** 66.29 : 105.96	**70.92** 66.29 : 105.96	**74.89** 66.29 : 105.96	**80.92** 66.29 : 105.96	**83.21** 66.29 : 105.96
Vanadium	TM181	**91.94** 84.11 : 113.29	**95.97** 84.11 : 113.29	**87.18** 84.11 : 113.29	**90.11** 84.11 : 113.29	**89.38** 84.11 : 113.29	**91.21** 84.11 : 113.29
Zinc	TM181	**94.46** 86.34 : 113.56	**97.13** 86.34 : 113.56	**88.5** 86.34 : 113.56	**98.97** 86.34 : 113.56	**97.74** 86.34 : 113.56	**97.33** 86.34 : 113.56

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Metals in solid samples by OES

Component	Method Code	QC 1907	QC 1908
Aluminium	TM181	**93.81** 77.46 : 123.98	**100.0** 77.46 : 123.98
Antimony	TM181	**94.31** 87.04 : 111.16	**94.72** 87.04 : 111.16
Arsenic	TM181	**98.26** 87.34 : 110.87	**94.77** 87.34 : 110.87
Barium	TM181	**92.66** 80.73 : 115.16	**95.41** 80.73 : 115.16
Beryllium	TM181	**97.01** 89.47 : 112.97	**98.51** 89.47 : 112.97
Boron	TM181	**85.39** 76.57 : 104.15	**88.83** 76.57 : 104.15
Cadmium	TM181	**92.59** 82.98 : 105.97	**90.95** 82.98 : 105.97
Chromium	TM181	**92.9** 77.55 : 104.47	**95.74** 77.55 : 104.47
Cobalt	TM181	**88.36** 83.30 : 102.38	**88.68** 83.30 : 102.38
Copper	TM181	**94.72** 88.76 : 109.59	**92.96** 88.76 : 109.59
Iron	TM181	**94.44** 81.43 : 115.79	**97.62** 81.43 : 115.79
Lead	TM181	**90.09** 81.95 : 107.63	**94.37** 81.95 : 107.63
Manganese	TM181	**111.39** 97.73 : 122.27	**105.83** 97.73 : 122.27
Mercury	TM181	**94.2** 82.73 : 106.36	**97.1** 82.73 : 106.36
Molybdenum	TM181	**92.18** 86.61 : 111.07	**93.83** 86.61 : 111.07
Nickel	TM181	**90.46** 83.87 : 104.87	**90.22** 83.87 : 104.87
Phosphorus	TM181	**112.12** 92.65 : 125.47	**113.94** 92.65 : 125.47
Selenium	TM181	**97.65** 88.36 : 111.25	**101.57** 88.36 : 111.25
Strontium	TM181	**88.64** 83.94 : 111.48	**88.2** 83.94 : 111.48
Thallium	TM181	**96.46** 88.60 : 116.73	**99.56** 88.60 : 116.73
Tin	TM181	**112.93** 89.77 : 112.62	**98.86** 89.77 : 112.62
Titanium	TM181	**74.96** 66.29 : 105.96	**79.39** 66.29 : 105.96
Vanadium	TM181	**89.38** 84.11 : 113.29	**89.38** 84.11 : 113.29
Zinc	TM181	**97.33** 86.34 : 113.56	**98.36** 86.34 : 113.56

PAH by GCMS

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

PAH by GCMS

Component	Method Code	QC 1938	QC 1987	QC 1943
Acenaphthene	TM218	**95.0** 84.53 : 114.86	**101.5** 76.79 : 103.90	**102.5** 84.53 : 114.86
Acenaphthylene	TM218	**92.5** 80.13 : 113.99	**99.0** 78.40 : 108.66	**98.5** 80.13 : 113.99
Anthracene	TM218	**95.5** 71.15 : 111.65	**105.5** 76.15 : 110.07	**102.5** 71.15 : 111.65
Benz(a)anthracene	TM218	**95.0** 74.78 : 122.48	**113.0** 73.77 : 119.26	**84.5** 74.78 : 122.48
Benzo(a)pyrene	TM218	**90.5** 70.68 : 115.92	**110.5** 73.20 : 114.18	**81.0** 70.68 : 115.92
Benzo(b)fluoranthene	TM218	**88.5** 73.56 : 121.32	**106.5** 75.36 : 117.58	**84.5** 73.56 : 121.32
Benzo(ghi)perylene	TM218	**84.5** 71.68 : 115.27	**106.5** 70.73 : 116.12	**80.5** 71.68 : 115.27
Benzo(k)fluoranthene	TM218	**98.5** 73.30 : 120.87	**115.0** 75.98 : 116.59	**88.0** 73.30 : 120.87
Chrysene	TM218	**92.5** 77.24 : 120.84	**110.5** 74.82 : 114.18	**87.0** 77.24 : 120.84
Dibenzo(ah)anthracene	TM218	**89.5** 72.03 : 116.78	**106.5** 69.17 : 115.30	**83.0** 72.03 : 116.78
Fluoranthene	TM218	**90.0** 78.65 : 113.45	**110.0** 75.88 : 112.84	**92.0** 78.65 : 113.45
Fluorene	TM218	**92.5** 76.95 : 117.18	**101.5** 78.50 : 114.02	**100.5** 76.95 : 117.18
Indeno(123cd)pyrene	TM218	**87.5** 68.53 : 118.42	**117.0** 80.09 : 117.12	**80.0** 68.53 : 118.42
Naphthalene	TM218	**93.0** 78.80 : 115.10	**94.0** 75.24 : 111.26	**94.5** 78.80 : 115.10
Phenanthrene	TM218	**93.0** 76.49 : 119.30	**102.5** 77.07 : 107.43	**97.5** 76.49 : 119.30
Pyrene	TM218	**89.5** 76.20 : 119.96	**104.5** 78.74 : 112.56	**89.0** 76.20 : 119.96

PAH in waters by GC-MS (diss.filt)

Component	Method Code	QC 1940
Acenaphthene (diss.filt)	TM178	**108.4** 94.40 : 118.40
Acenaphthylene (diss.filt)	TM178	**103.6** 92.00 : 116.00
Anthracene (diss.filt)	TM178	**100.8** 88.80 : 115.20
Benzo(a)anthracene (diss.filt)	TM178	**96.4** 85.20 : 118.80
Benzo(a)pyrene (diss.filt)	TM178	**103.6** 90.40 : 119.20
Benzo(b)fluoranthene (diss.filt)	TM178	**102.8** 86.40 : 122.40
Benzo(g,h,i)perylene (diss.filt)	TM178	**95.6** 92.00 : 116.00
Benzo(k)fluoranthene (diss.filt)	TM178	**111.6** 92.00 : 125.60
Chrysene (diss.filt)	TM178	**110.0** 95.20 : 121.60

PAH in waters by GC-MS (diss.filt)

		QC 1940
Dibenzo(a,h)anthracene (diss.filt)	TM178	**94.8** 88.80 : 112.80
Fluoranthene (diss.filt)	TM178	**103.6** 87.60 : 118.80
Fluorene (diss.filt)	TM178	**104.0** 93.60 : 117.60
Indeno(1,2,3-cd)pyrene (diss.filt)	TM178	**98.8** 85.60 : 114.40
Naphthalene (diss.filt)	TM178	**106.0** 87.20 : 123.20
Phenanthrene (diss.filt)	TM178	**104.0** 94.00 : 118.00
Pyrene (diss.filt)	TM178	**102.8** 87.20 : 120.80

PCB Congeners - Aqueous (W)

Component	Method Code	QC 1965
PCB congener 101	TM197	**106.4** 85.28 : 119.60
PCB congener 105	TM197	**107.6** 81.16 : 119.80
PCB congener 114	TM197	**107.2** 88.32 : 118.08
PCB congener 118	TM197	**107.2** 87.76 : 117.04
PCB congener 123	TM197	**103.6** 86.80 : 117.28
PCB congener 126	TM197	**104.0** 84.56 : 116.00
PCB congener 138	TM197	**105.2** 83.00 : 117.80
PCB congener 153	TM197	**104.8** 84.12 : 117.00
PCB congener 156	TM197	**105.6** 82.24 : 119.20
PCB congener 157	TM197	**99.2** 84.96 : 116.40
PCB congener 167	TM197	**101.2** 81.64 : 119.32
PCB congener 169	TM197	**99.6** 84.60 : 117.96
PCB congener 180	TM197	**100.0** 80.40 : 119.04
PCB congener 189	TM197	**93.6** 81.56 : 119.00
PCB congener 28	TM197	**104.8** 83.20 : 117.04
PCB congener 52	TM197	**107.2** 81.84 : 119.52
PCB congener 77	TM197	**102.0** 81.96 : 117.24
PCB congener 81	TM197	**104.4** 82.28 : 120.20

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PCBs by GCMS

Component	Method Code	QC 1970	QC 1997	QC 1907
PCB congener 101	TM168	**85.6** 79.46 : 109.70	**78.3** 73.09 : 112.63	**84.7** 79.46 : 109.70
PCB congener 105	TM168	**89.6** 77.82 : 109.32	**85.3** 70.08 : 112.92	**92.4** 77.82 : 109.32
PCB congener 114	TM168	**89.0** 78.15 : 110.49	**82.6** 71.45 : 111.53	**91.5** 78.15 : 110.49
PCB congener 118	TM168	**86.8** 78.85 : 110.11	**84.6** 70.76 : 113.78	**88.1** 78.85 : 110.11
PCB congener 123	TM168	**98.2** 77.04 : 109.44	**93.5** 69.96 : 112.50	**101.0** 77.04 : 109.44
PCB congener 126	TM168	**91.6** 77.79 : 112.65	**86.1** 70.61 : 116.15	**95.7** 77.79 : 112.65
PCB congener 138	TM168	**93.1** 82.92 : 114.57	**86.8** 69.88 : 115.78	**96.2** 82.92 : 114.57
PCB congener 153	TM168	**88.3** 78.13 : 108.55	**83.0** 73.32 : 111.54	**91.6** 78.13 : 108.55
PCB congener 156	TM168	**89.8** 79.00 : 111.76	**81.2** 73.48 : 118.60	**93.3** 79.00 : 111.76
PCB congener 157	TM168	**92.5** 78.17 : 110.03	**85.1** 70.22 : 115.22	**96.5** 78.17 : 110.03
PCB congener 167	TM168	**88.7** 79.50 : 110.52	**81.9** 70.04 : 118.16	**93.1** 79.50 : 110.52
PCB congener 169	TM168	**92.0** 67.65 : 121.47	**85.5** 64.01 : 129.89	**96.2** 67.65 : 121.47
PCB congener 180	TM168	**88.1** 78.72 : 110.94	**81.7** 67.10 : 120.80	**91.8** 78.72 : 110.94
PCB congener 189	TM168	**90.7** 69.53 : 116.81	**82.6** 65.53 : 126.07	**96.1** 69.53 : 116.81
PCB congener 28	TM168	**85.5** 77.37 : 110.55	**83.7** 73.86 : 116.94	**86.6** 77.37 : 110.55
PCB congener 52	TM168	**91.4** 82.53 : 112.65	**87.9** 78.72 : 119.28	**93.4** 82.53 : 112.65
PCB congener 77	TM168	**85.8** 73.92 : 120.16	**83.1** 74.04 : 120.60	**87.7** 73.92 : 120.16
PCB congener 81	TM168	**87.3** 75.24 : 110.52	**80.4** 71.38 : 116.14	**87.8** 75.24 : 110.52

pH

Component	Method Code	QC 1945	QC 1976	QC 1907	QC 1917	QC 1923
pH	TM133	**99.89** 98.63 : 101.37	**100.34** 97.41 : 101.91	**100.23** 98.63 : 101.37	**100.69** 97.41 : 101.91	**99.66** 97.41 : 101.91

pH Value of Filtered Water

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

pH Value of Filtered Water

Component	Method Code	QC 1900
pH Value of Filtered Water	TM256	**101.08** 99.73 : 102.16

Phenols by ms (w)

Component	Method Code	QC 1993
2,3,4,6-tetrachlorophenol	TM205	**107.62** 67.00 : 128.50
2,4,5-trichlorophenol	TM205	**122.88** 70.75 : 134.50
2,4,6-trichlorophenol	TM205	**130.0** 69.88 : 134.38
2,4-dichlorophenol	TM205	**120.88** 69.88 : 134.38
2,4-dimethylphenol	TM205	**120.62** 67.50 : 138.00
2,6-dichlorophenol	TM205	**125.0** 70.13 : 133.13
2-chlorophenol	TM205	**119.88** 68.50 : 133.00
2-methylphenol	TM205	**116.25** 70.63 : 137.38
2-nitrophenol	TM205	**127.5** 58.88 : 126.38
3-methylphenol	TM205	**121.38** 71.25 : 138.75
4-chloro-3-methylphenol	TM205	**125.0** 74.25 : 138.00
4-methylphenol	TM205	**118.63** 74.13 : 137.13
4-nitrophenol	TM205	**121.12** 68.50 : 136.75
Pentachlorophenol	TM205	**89.63** 47.74 : 105.49
Phenol	TM205	**119.13** 67.27 : 72.73

Phosphate by Kone (w)

Component	Method Code	QC 1931	QC 1950	QC 1960
Phosphate (Ortho as PO4)	TM184	**101.2** 96.40 : 109.60	**101.2** 96.40 : 109.60	**101.6** 96.40 : 109.60

Semi Volatile Organic Compounds

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Semi Volatile Organic Compounds

Component	Method Code	QC 1922	QC 1950	QC 1964
4-Bromophenylphenylether (Soil)	TM157	**88.0** 66.75 : 125.25	**88.0** 66.75 : 125.25	**97.5** 66.75 : 125.25
Benzo(a)anthracene (Soil)	TM157	**97.5** 67.40 : 120.50	**93.0** 67.40 : 120.50	**96.0** 67.40 : 120.50
Hexachlorobutadiene (Soil)	TM157	**93.0** 68.25 : 126.75	**95.0** 68.25 : 126.75	**104.0** 68.25 : 126.75
Naphthalene (Soil)	TM157	**89.5** 67.55 : 125.45	**90.0** 67.55 : 125.45	**97.0** 67.55 : 125.45
Nitrobenzene (Soil)	TM157	**94.5** 66.50 : 123.50	**94.0** 66.50 : 123.50	**100.0** 66.50 : 123.50
Phenol (Soil)	TM157	**92.5** 69.92 : 114.02	**93.0** 69.92 : 114.02	**99.5** 69.92 : 114.02

Sulphide

Component	Method Code	QC 1980
Sulphide	TM101	**104.67** 88.90 : 112.50

SVOC MS (W) - Aqueous

Component	Method Code	QC 1935	QC 1962
4-Bromophenylphenylether	TM176	**76.08** 55.76 : 105.20	**77.6** 55.76 : 105.20
Benzo(a)anthracene	TM176	**69.2** 59.28 : 107.76	**77.76** 59.28 : 107.76
Benzo(a)pyrene	TM176	**65.28** 54.40 : 105.76	**69.52** 54.40 : 105.76
Butylbenzyl phthalate	TM176	**79.36** 49.84 : 109.84	**91.2** 49.84 : 109.84
Hexachlorobutadiene	TM176	**64.56** 48.64 : 95.68	**65.76** 48.64 : 95.68
Naphthalene	TM176	**74.96** 63.04 : 111.04	**82.4** 63.04 : 111.04
Nitrobenzene	TM176	**69.84** 59.92 : 108.40	**77.28** 59.92 : 108.40
Phenol	TM176	**42.48** 38.16 : 63.60	**48.56** 38.16 : 63.60

Total Organic Carbon

Component	Method Code	QC 1902	QC 1917	QC 1990
Total Organic Carbon	TM132	**88.28** 88.47 : 112.82	**93.75** 88.47 : 112.82	**98.44** 88.47 : 112.82

VOC MS (S)

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

VOC MS (S)

Component	Method Code	QC 1909	QC 1961	QC 1922	QC 1974
1,1,1,2-tetrachloroethane	TM116	**101.4** 77.56 : 115.55	**113.0** 79.10 : 119.66	**96.8** 79.10 : 119.66	**98.8** 77.56 : 115.55
1,1,1-Trichloroethane	TM116	**117.8** 73.73 : 118.05	**98.0** 88.88 : 119.66	**103.2** 87.51 : 115.37	**97.8** 73.73 : 118.05
1,1,2-Trichloroethane	TM116	**107.0** 77.12 : 116.04	**100.4** 75.16 : 112.70	**90.8** 75.16 : 112.70	**96.8** 77.12 : 116.04
1,1-Dichloroethane	TM116	**128.2** 74.46 : 129.15	**91.2** 77.84 : 124.12	**108.6** 77.84 : 124.12	**104.0** 74.46 : 129.15
1,2-Dichloroethane	TM116	**127.2** 87.98 : 127.86	**112.4** 86.58 : 129.62	**115.2** 86.58 : 129.62	**108.4** 87.98 : 127.86
1,4-Dichlorobenzene	TM116	**105.4** 72.76 : 126.34	**105.0** 71.61 : 124.63	**105.6** 71.61 : 124.63	**98.0** 72.76 : 126.34
2-Chlorotoluene	TM116	**99.8** 72.40 : 116.20	**103.0** 66.81 : 118.43	**93.0** 66.81 : 118.43	**89.8** 72.40 : 116.20
4-Chlorotoluene	TM116	**104.8** 66.90 : 112.46	**101.2** 65.88 : 114.76	**93.2** 65.88 : 114.76	**95.2** 66.90 : 112.46
Benzene	TM116	**112.6** 81.05 : 117.28	**99.8** 93.16 : 123.63	**98.0** 88.66 : 121.07	**100.2** 81.05 : 117.28
Carbon Disulphide	TM116	**128.4** 74.91 : 122.14	**88.2** 75.11 : 124.81	**110.6** 75.11 : 124.81	**95.6** 74.91 : 122.14
Carbontetrachloride	TM116	**115.6** 80.31 : 124.50	**109.2** 82.35 : 126.46	**111.0** 82.35 : 126.46	**101.0** 80.31 : 124.50
Chlorobenzene	TM116	**103.2** 75.00 : 115.53	**114.4** 82.88 : 122.42	**94.6** 82.88 : 122.42	**102.0** 75.00 : 115.53
Chloroform	TM116	**133.4** 87.40 : 122.49	**103.4** 82.52 : 123.25	**110.8** 82.52 : 123.25	**109.6** 87.40 : 122.49
Chloromethane	TM116	**127.6** 58.11 : 136.20	**82.4** 52.88 : 131.36	**125.6** 52.88 : 131.36	**101.6** 58.11 : 136.20
Cis-1,2-Dichloroethene	TM116	**127.2** 80.67 : 126.72	**98.6** 78.27 : 128.90	**101.8** 78.27 : 128.90	**106.2** 80.67 : 126.72
Dibromomethane	TM116	**100.0** 67.80 : 121.75	**105.0** 71.69 : 119.43	**95.6** 71.69 : 119.43	**94.2** 67.80 : 121.75
Dichloromethane	TM116	**136.4** 81.11 : 133.25	**103.0** 81.68 : 125.21	**115.0** 89.49 : 128.89	**112.0** 81.11 : 133.25
Ethylbenzene	TM116	**97.2** 75.92 : 110.41	**101.8** 83.56 : 122.99	**85.8** 75.93 : 116.76	**94.8** 75.92 : 110.41
Hexachlorobutadiene	TM116	**107.2** 12.82 : 152.73	**70.0** 7.32 : 139.00	**137.8** 7.32 : 139.00	**34.8** 12.82 : 152.73
Isopropylbenzene	TM116	**110.4** 54.21 : 117.17	**92.2** 52.15 : 132.52	**91.0** 52.15 : 132.52	**89.6** 54.21 : 117.17
Naphthalene	TM116	**111.4** 80.86 : 128.81	**115.4** 79.29 : 125.59	**104.6** 80.29 : 135.77	**105.0** 80.86 : 128.81
o-Xylene	TM116	**92.2** 67.52 : 107.60	**96.6** 68.16 : 107.61	**79.6** 68.16 : 107.61	**95.2** 67.52 : 107.60
p/m-Xylene	TM116	**93.2** 68.32 : 108.91	**101.0** 77.41 : 112.71	**85.2** 73.52 : 108.71	**93.1** 68.32 : 108.91
Sec-Butylbenzene	TM116	**102.6** 44.91 : 118.40	**81.4** 44.71 : 117.87	**103.0** 44.71 : 117.87	**72.0** 44.91 : 118.40
Tetrachloroethene	TM116	**105.0** 76.95 : 121.02	**129.8** 81.43 : 126.65	**103.6** 81.43 : 126.65	**101.4** 76.95 : 121.02
Toluene	TM116	**102.0** 74.24 : 107.42	**95.0** 87.82 : 116.21	**88.0** 85.50 : 114.89	**95.2** 74.24 : 107.42

CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

VOC MS (S)

		QC 1909	QC 1961	QC 1922	QC 1974
Trichloroethene	TM116	**113.4** 77.61 : 111.54	**100.4** 79.80 : 112.33	**96.8** 79.80 : 112.33	**97.6** 77.61 : 111.54
Trichlorofluoromethane	TM116	**135.0** 71.31 : 128.41	**106.6** 72.76 : 118.80	**120.2** 88.86 : 128.82	**105.0** 71.31 : 128.41
Vinyl Chloride	TM116	**120.4** 68.26 : 133.45	**78.4** 64.90 : 133.10	**100.0** 64.90 : 133.10	**90.8** 68.26 : 133.45

VOC MS (W)

Component	Method Code	QC 1908
1,1,1,2-Tetrachloroethane	TM208	**100.5** 78.82 : 115.90
1,1,1-Trichloroethane	TM208	**96.5** 79.61 : 114.35
1,1-Dichloroethane	TM208	**99.0** 79.99 : 118.57
1,2-Dichloroethane	TM208	**105.0** 79.35 : 124.02
2-Chlorotoluene	TM208	**100.5** 79.67 : 114.74
4-Chlorotoluene	TM208	**103.0** 80.15 : 113.42
Benzene	TM208	**100.5** 84.37 : 119.68
Bromomethane	TM208	**96.5** 68.41 : 115.99
Carbontetrachloride	TM208	**102.5** 79.73 : 118.91
Chlorobenzene	TM208	**105.5** 89.49 : 115.83
Chloroform	TM208	**105.5** 82.31 : 120.71
Chloromethane	TM208	**102.0** 62.46 : 124.98
Cis-1,2-Dichloroethene	TM208	**106.0** 84.04 : 126.19
Dichloromethane	TM208	**106.0** 81.20 : 120.83
Ethylbenzene	TM208	**98.0** 80.54 : 112.31
Hexachlorobutadiene	TM208	**80.0** 59.76 : 107.25
o-Xylene	TM208	**101.5** 79.22 : 112.31
p/m-Xylene	TM208	**100.75** 79.85 : 111.06
Tert-butyl methyl ether	TM208	**80.5** 70.94 : 119.66
Tetrachloroethene	TM208	**102.5** 76.79 : 118.34
Toluene	TM208	**101.0** 81.59 : 111.56
Trichloroethene	TM208	**102.0** 79.53 : 112.32

VOC MS (W)

		QC 1908
Vinyl Chloride	TM208	**90.0** 68.68 : 119.35

The above information details the reference name of the analytical quality control sample (AQC) that has been run with the samples contained in this report for the different methods of analysis.
The figure detailed is the percentage recovery result for the AQC.
The subscript numbers below are the percentage recovery lower control limit (LCL) and the upper control limit (UCL). The percentage recovery result for the AQC should be between these limits to be statistically in control.

CERTIFICATE OF ANALYSIS

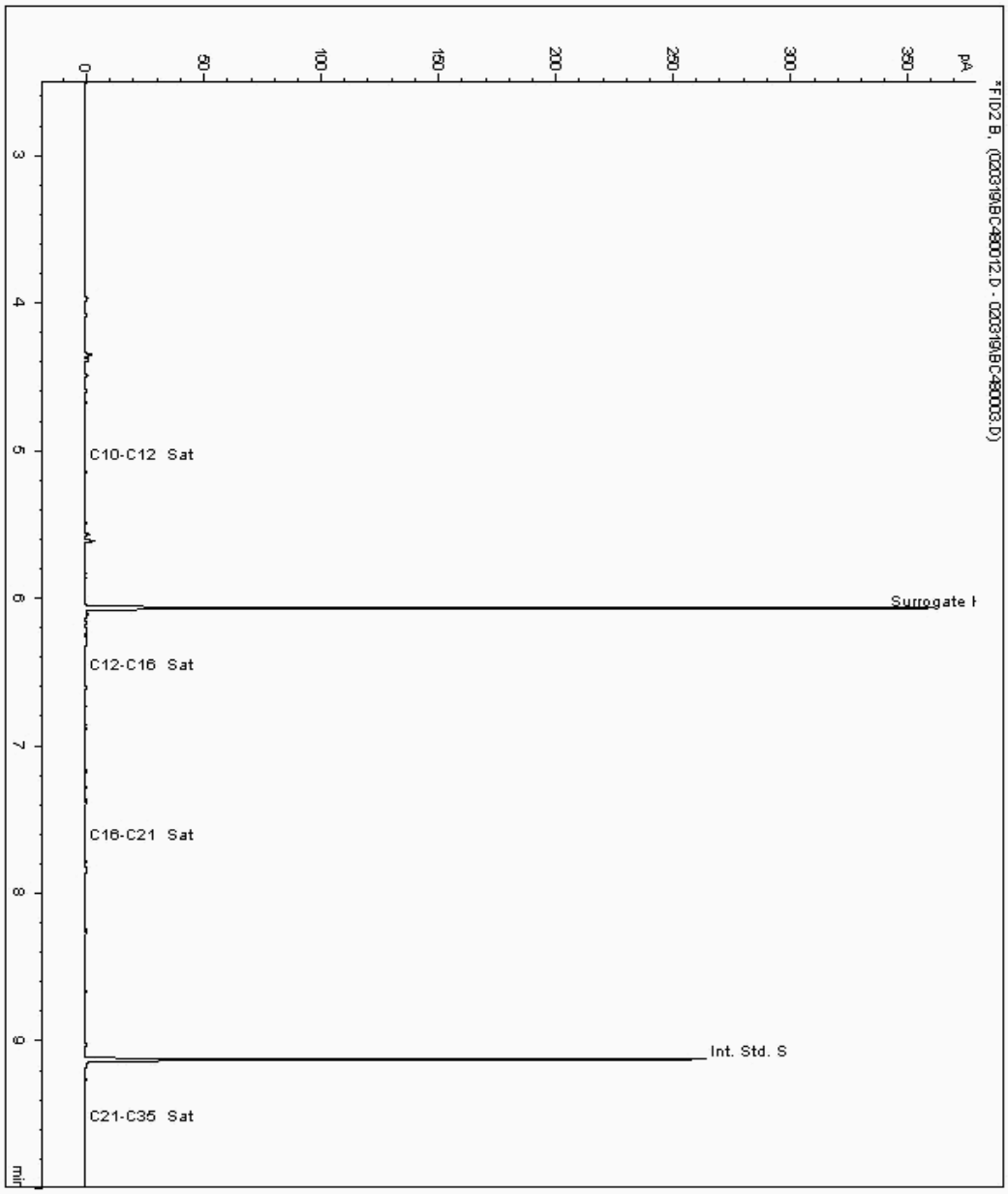
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19253200 **Depth :** 0.13 - 0.20
Sample ID : WS09

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18075033-
Date Acquired : 03/02/2019 15:47:47 PM
Units : ppb
Dilution : WS09 [0.13 - 0.20] CEN 10 ->
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

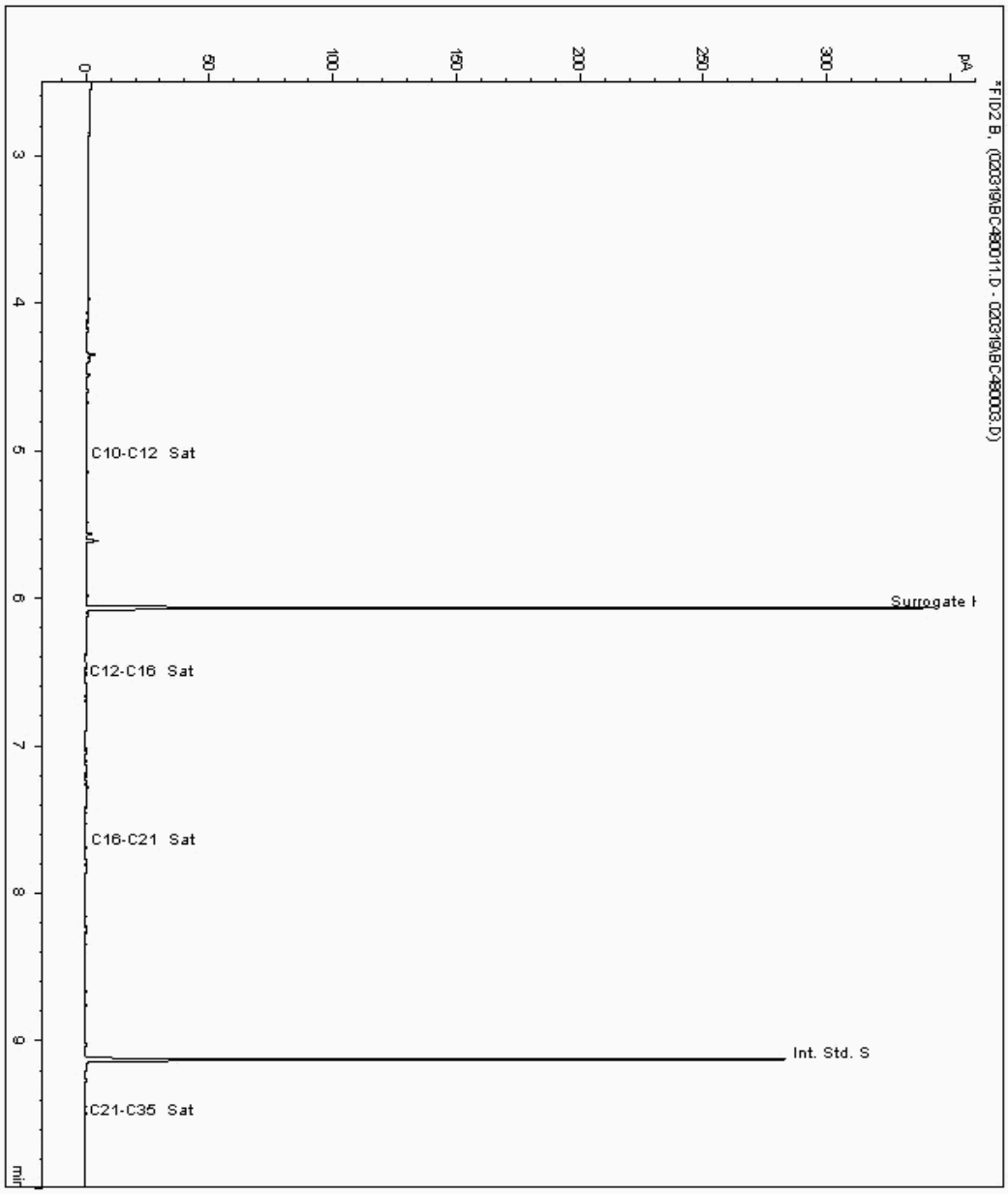
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19253211 **Depth :** 0.10
Sample ID : WS19

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18075193-
Date Acquired : 03/02/2019 15:24:43 PM
Units : ppb
Dilution : WS19 [0.10] CEN 10 1 ->
CF : 1
Multiplier : 0.025

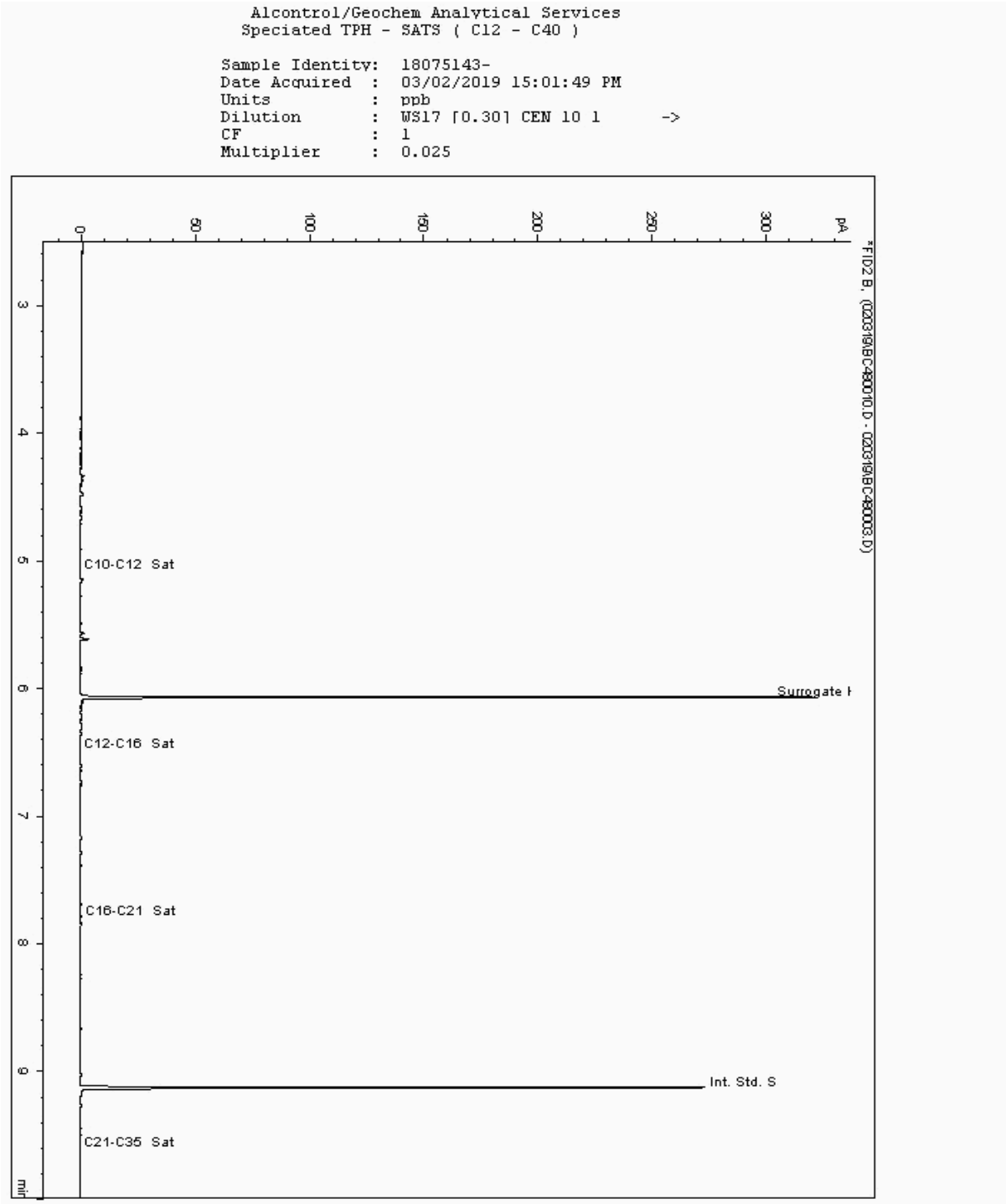


CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19253223 **Depth :** 0.30
Sample ID : WS17

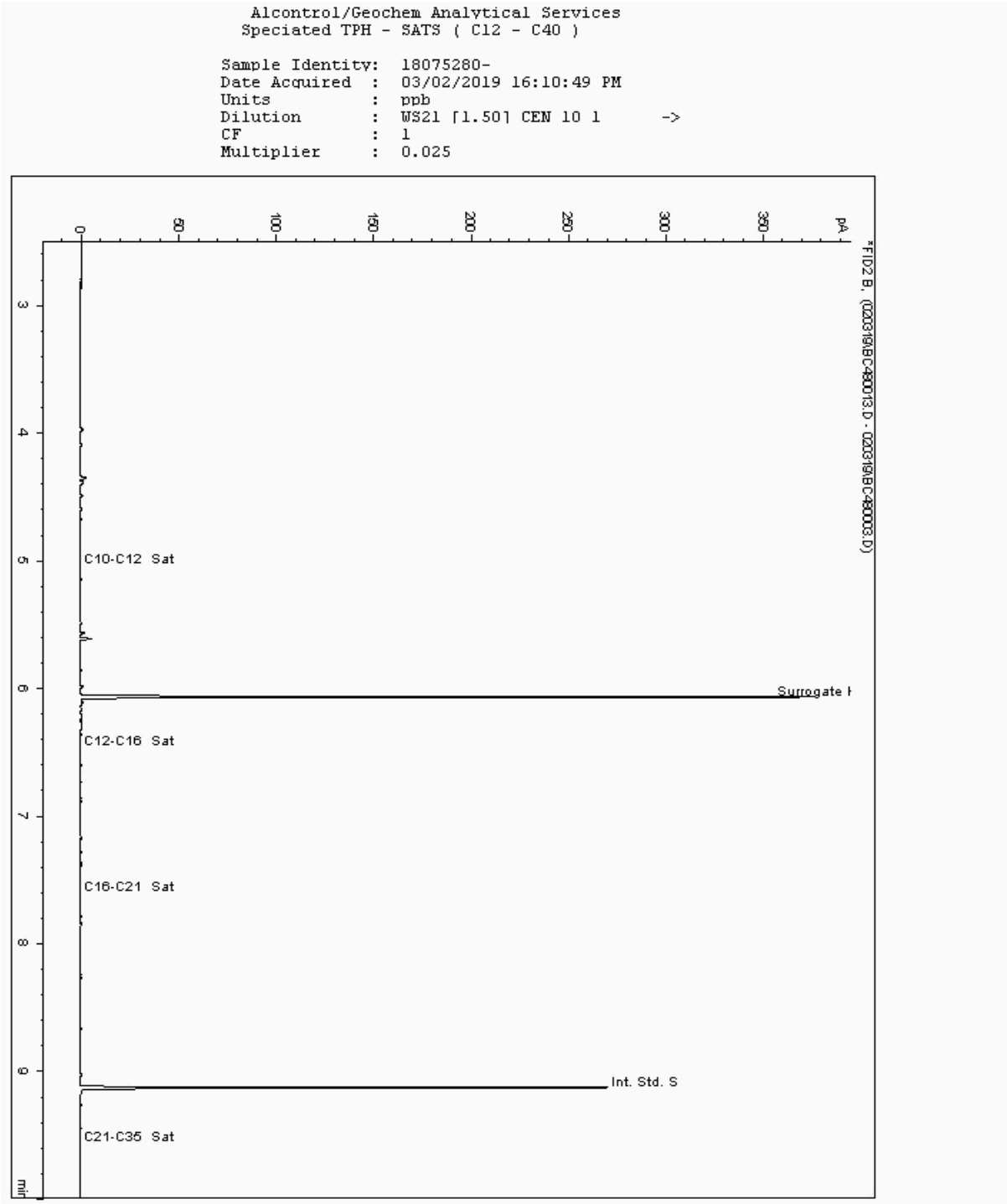


CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19254683 **Depth :** 1.50
Sample ID : WS21



CERTIFICATE OF ANALYSIS

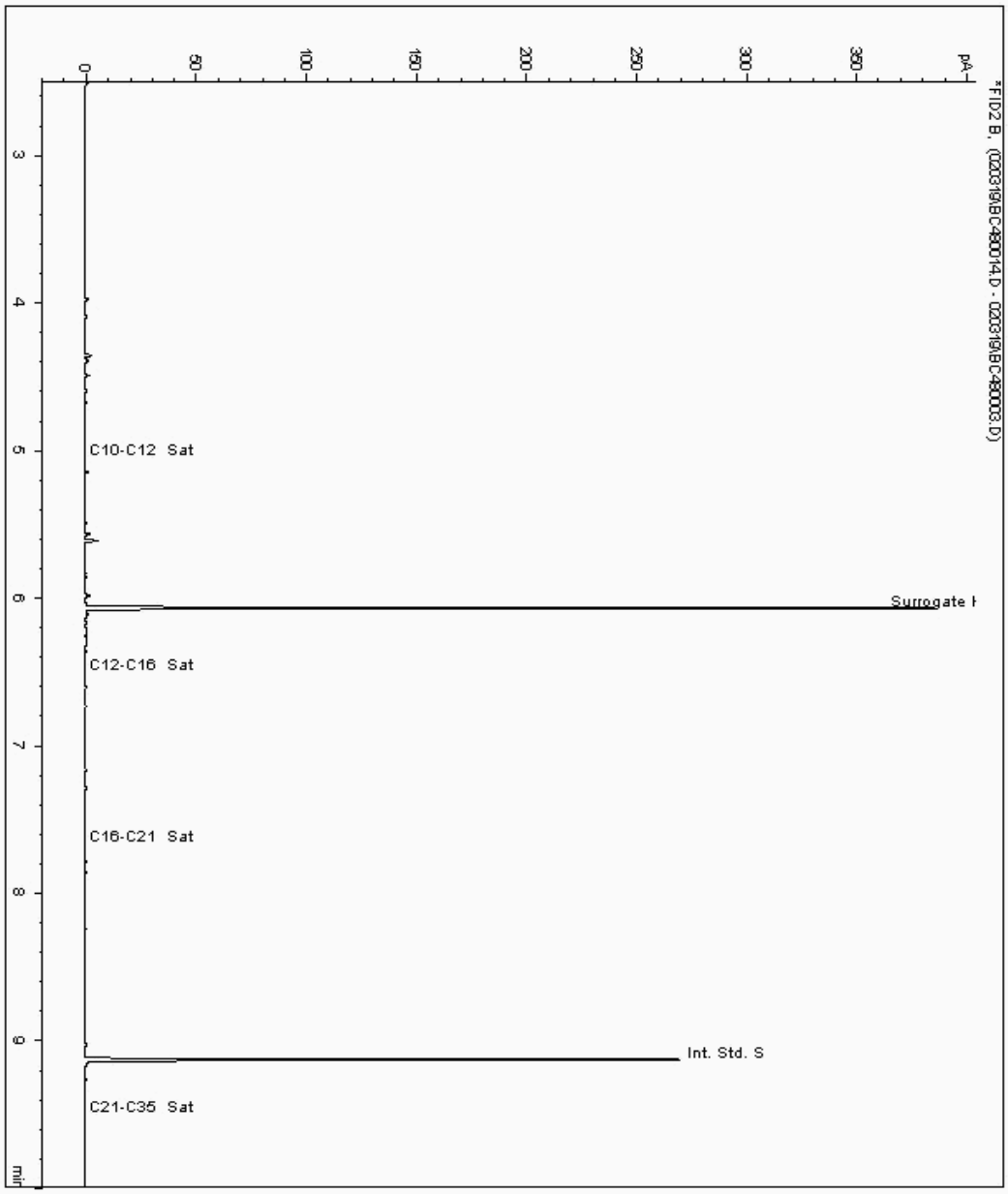
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19254696 **Depth :** 0.10 - 0.30
Sample ID : WS25

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18075303-
Date Acquired : 03/02/2019 16:33:47 PM
Units : ppb
Dilution : WS25 [0.10 - 0.30] CEN 10 ->
CF : 1
Multiplier : 0.032



CERTIFICATE OF ANALYSIS

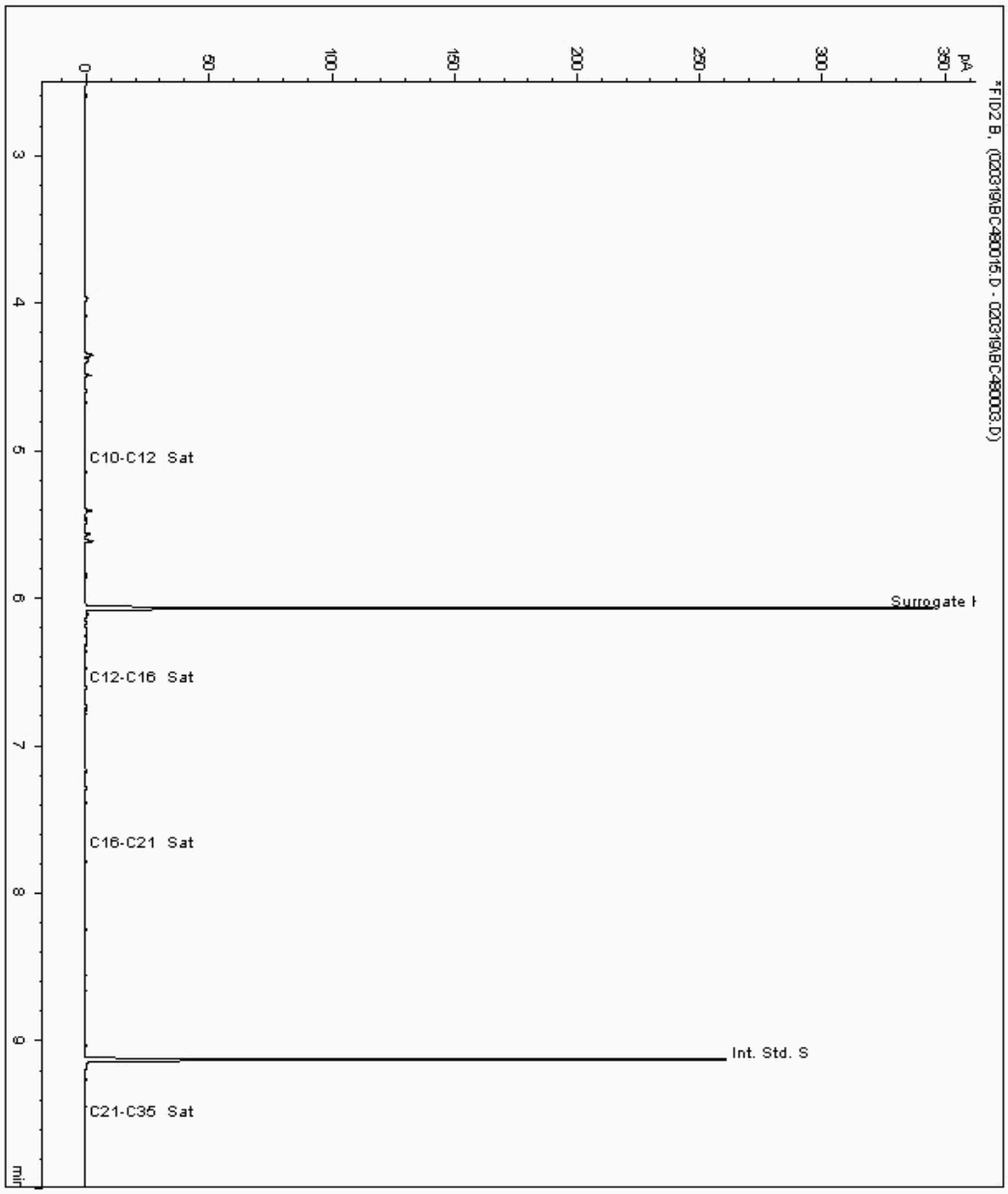
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19254709 **Depth :** 0.30
Sample ID : WS13

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18075093-
Date Acquired : 03/02/2019 16:56:51 PM
Units : ppb
Dilution : WS13 [0.30] CEN 10 1 ->
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

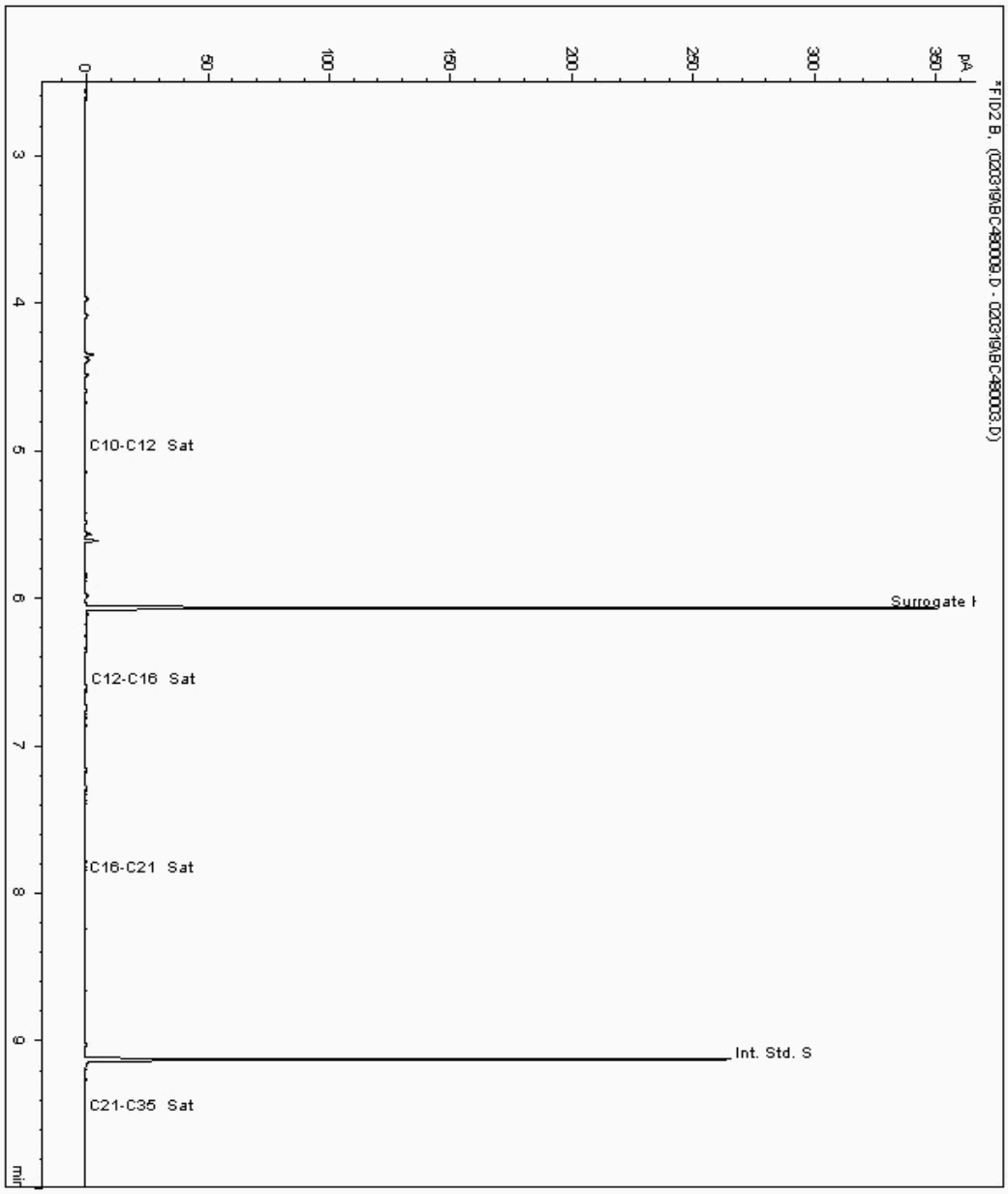
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19254741 **Depth :** 0.10 - 0.20
Sample ID : WS21

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18075241-
Date Acquired : 03/02/2019 14:38:45 PM
Units : ppb
Dilution : WS21 [0.10 - 0.20] CEN 10 ->
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

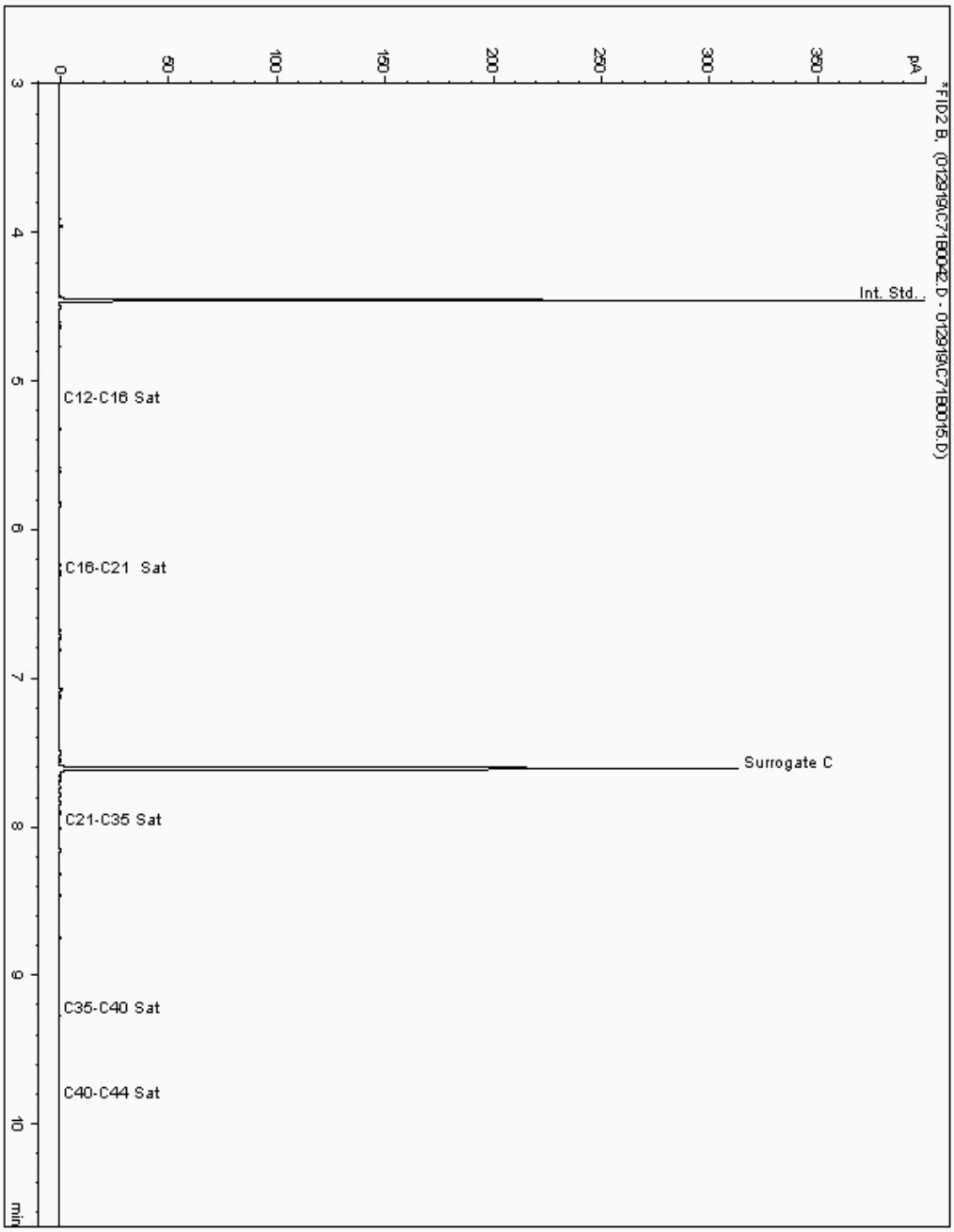
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19188635 **Depth :** 0.30
Sample ID : WS17

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18023401-
Date Acquired : 29/01/2019 19:56:45 PM
Units : ppb
Dilution: WS17[0.30] ->

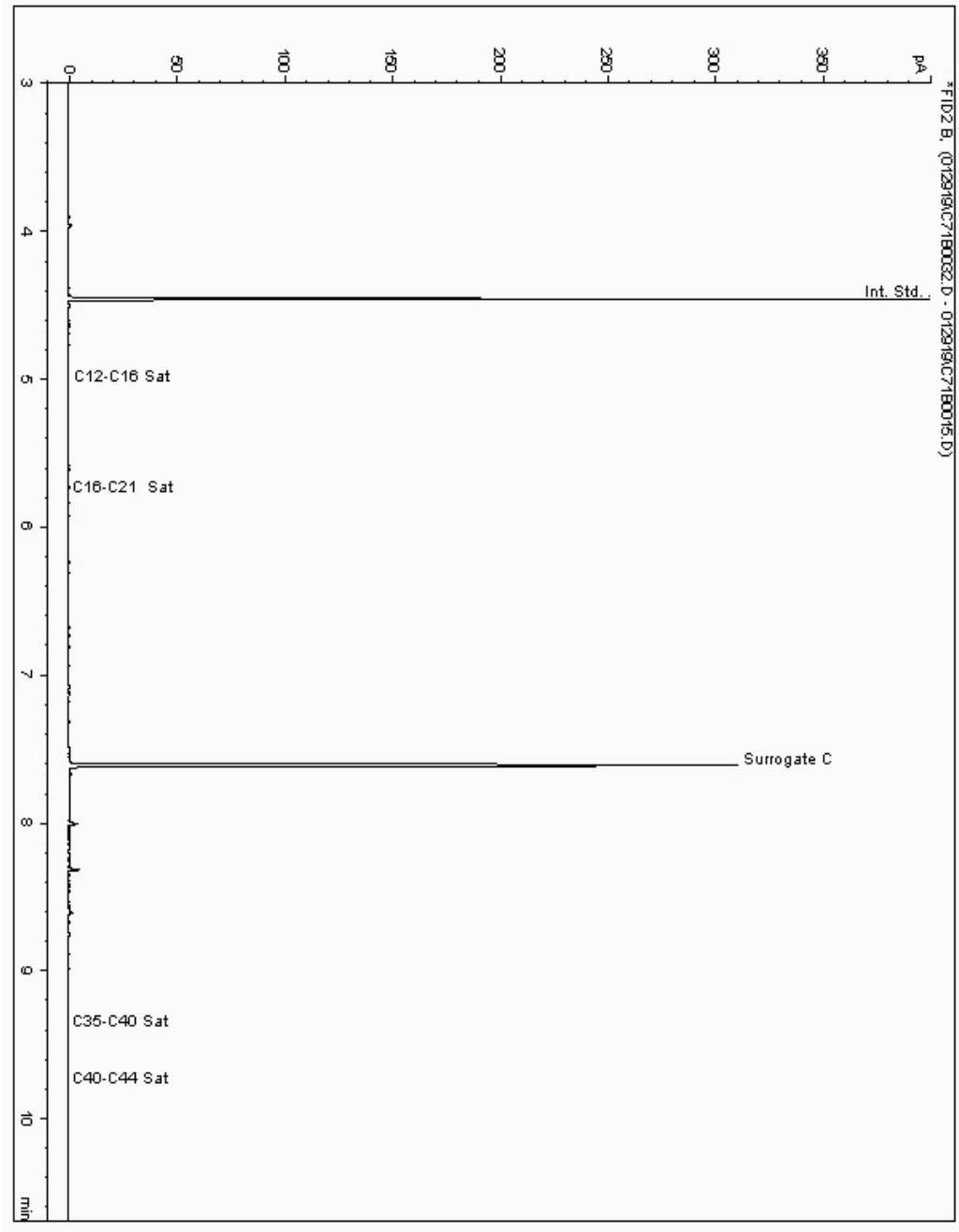


CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19188787 **Depth :** 0.10
Sample ID : WS19



CERTIFICATE OF ANALYSIS

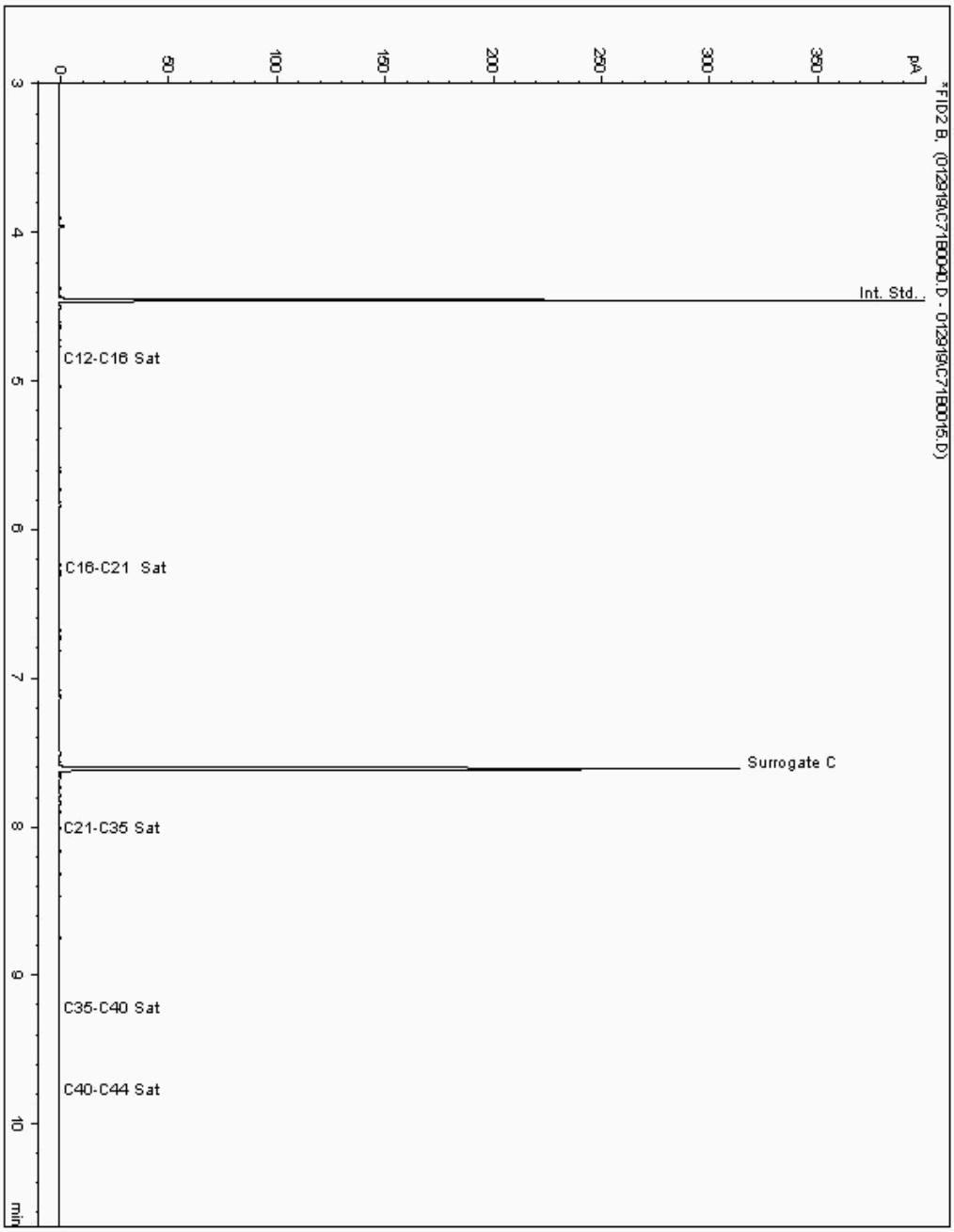
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19188909 **Depth :** 0.20 - 0.30
Sample ID : WS09

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18022979-
Date Acquired : 29/01/2019 19:16:03 PM
Units : ppb
Dilution: WS09[0.20 - 0.30] ->



CERTIFICATE OF ANALYSIS

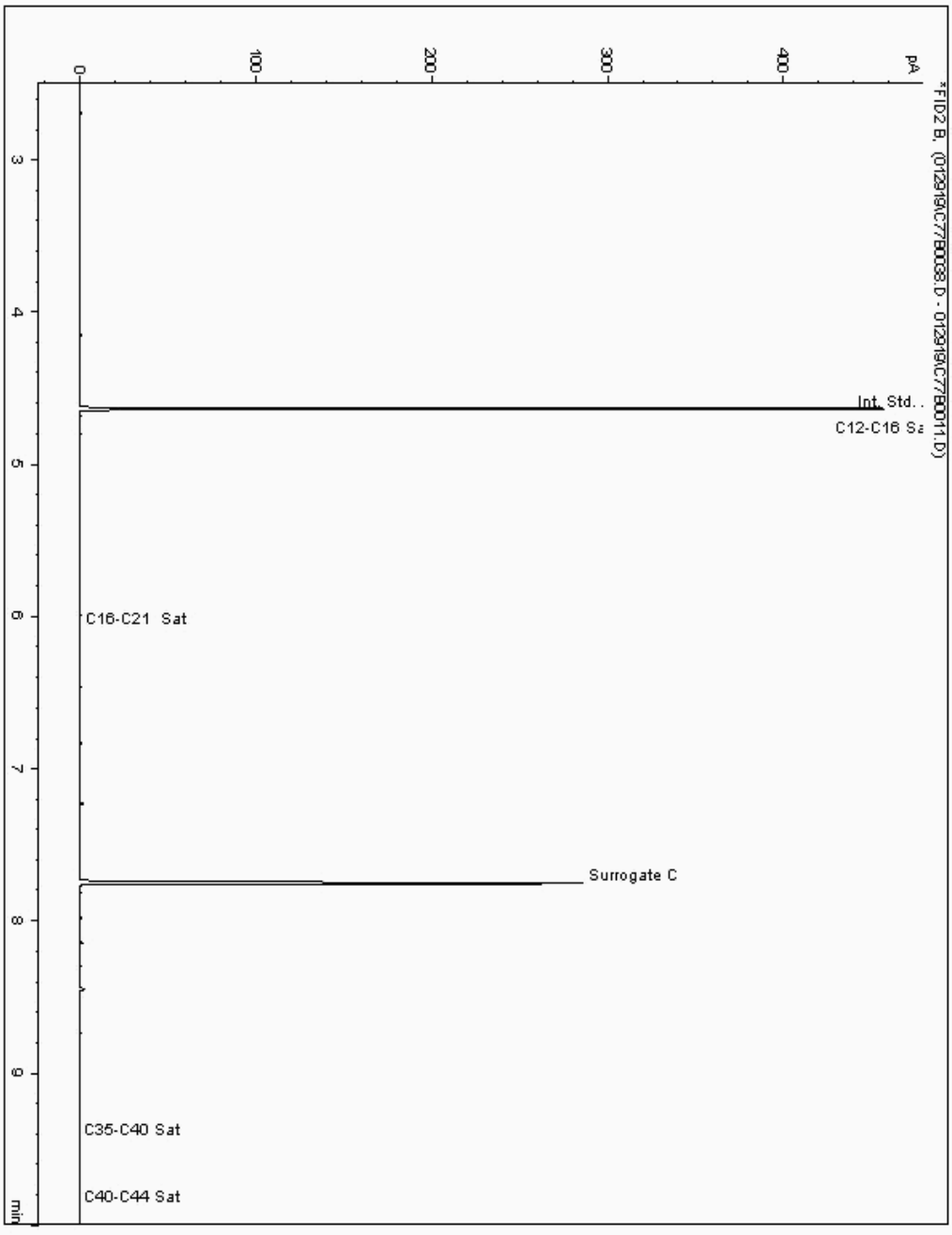
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19188987 **Depth :** 1.50
Sample ID : WS21

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18023602-
Date Acquired : 1/30/2019 2:39:35 AM
Units : ppb
Dilution :
CF : 1
Multiplier : 1.040



CERTIFICATE OF ANALYSIS

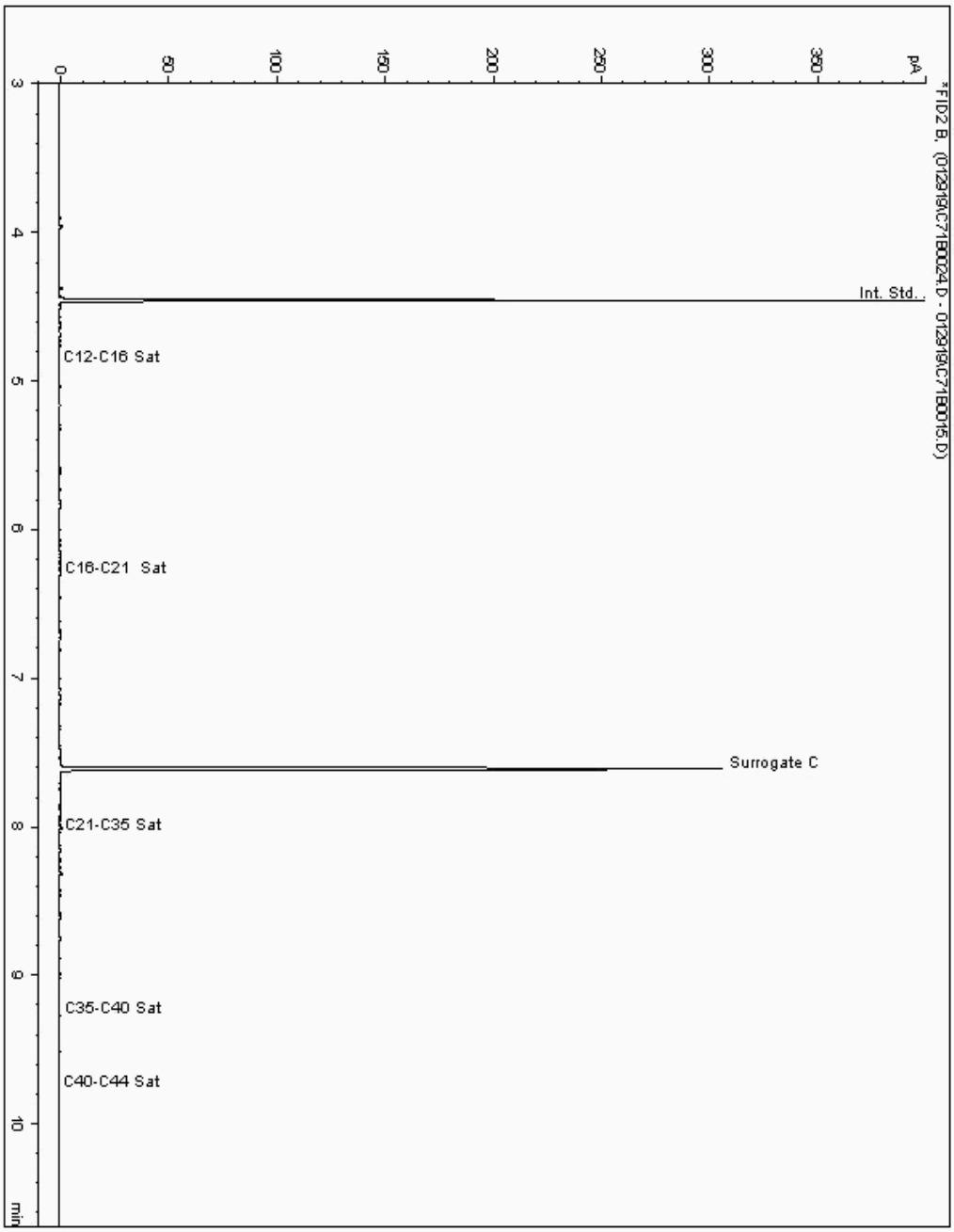
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19189116 **Depth :** 0.60 - 0.70
Sample ID : WS21

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18023188-
Date Acquired : 29/01/2019 14:39:29 PM
Units : ppb
Dilution: WS21[0.60 - 0.70] ->



CERTIFICATE OF ANALYSIS

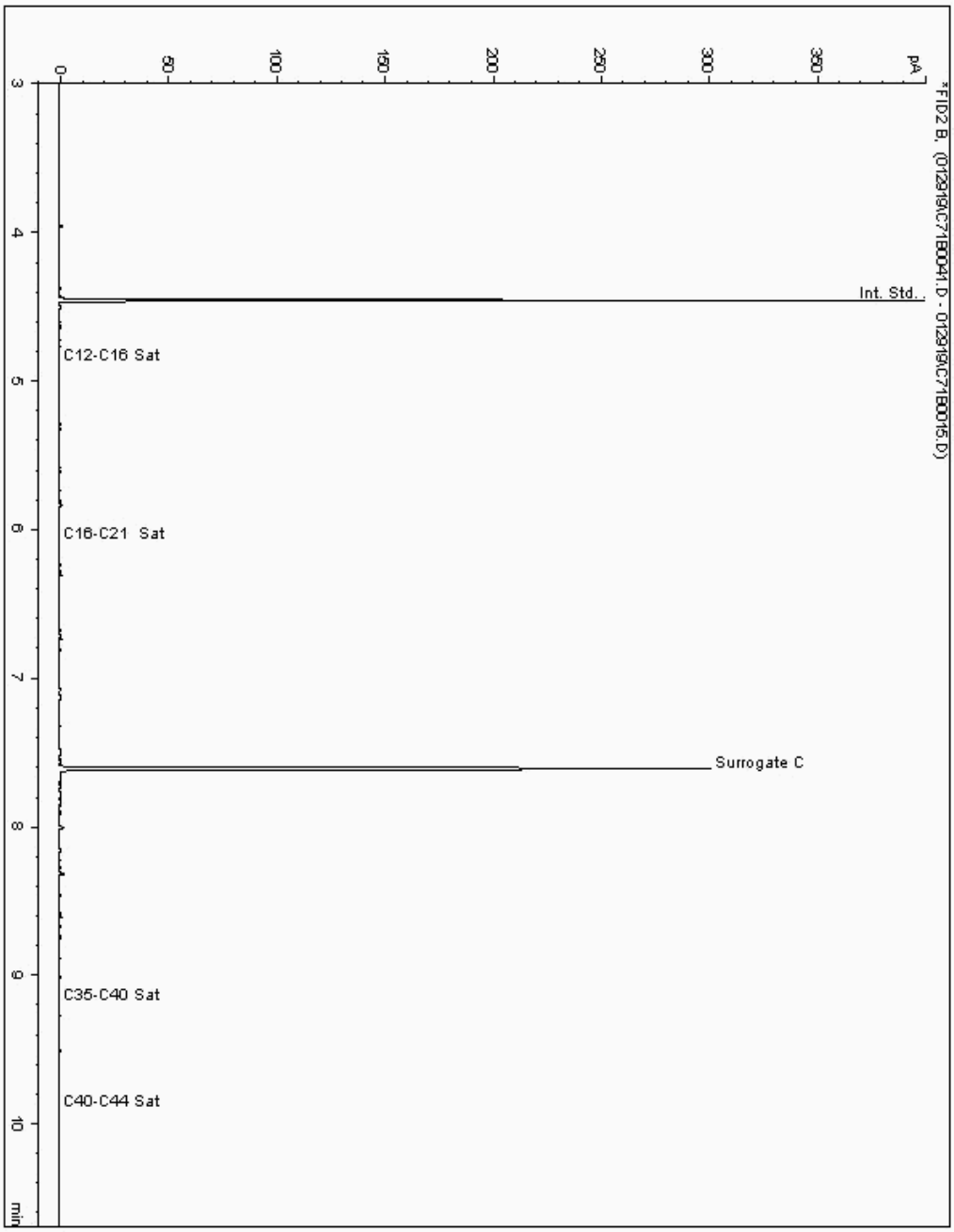
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19189202 **Depth :** 0.10 - 0.20
Sample ID : WS21

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18023560-
Date Acquired : 29/01/2019 19:36:23 PM
Units : ppb
Dilution: WS21[0.10 - 0.20] ->



CERTIFICATE OF ANALYSIS

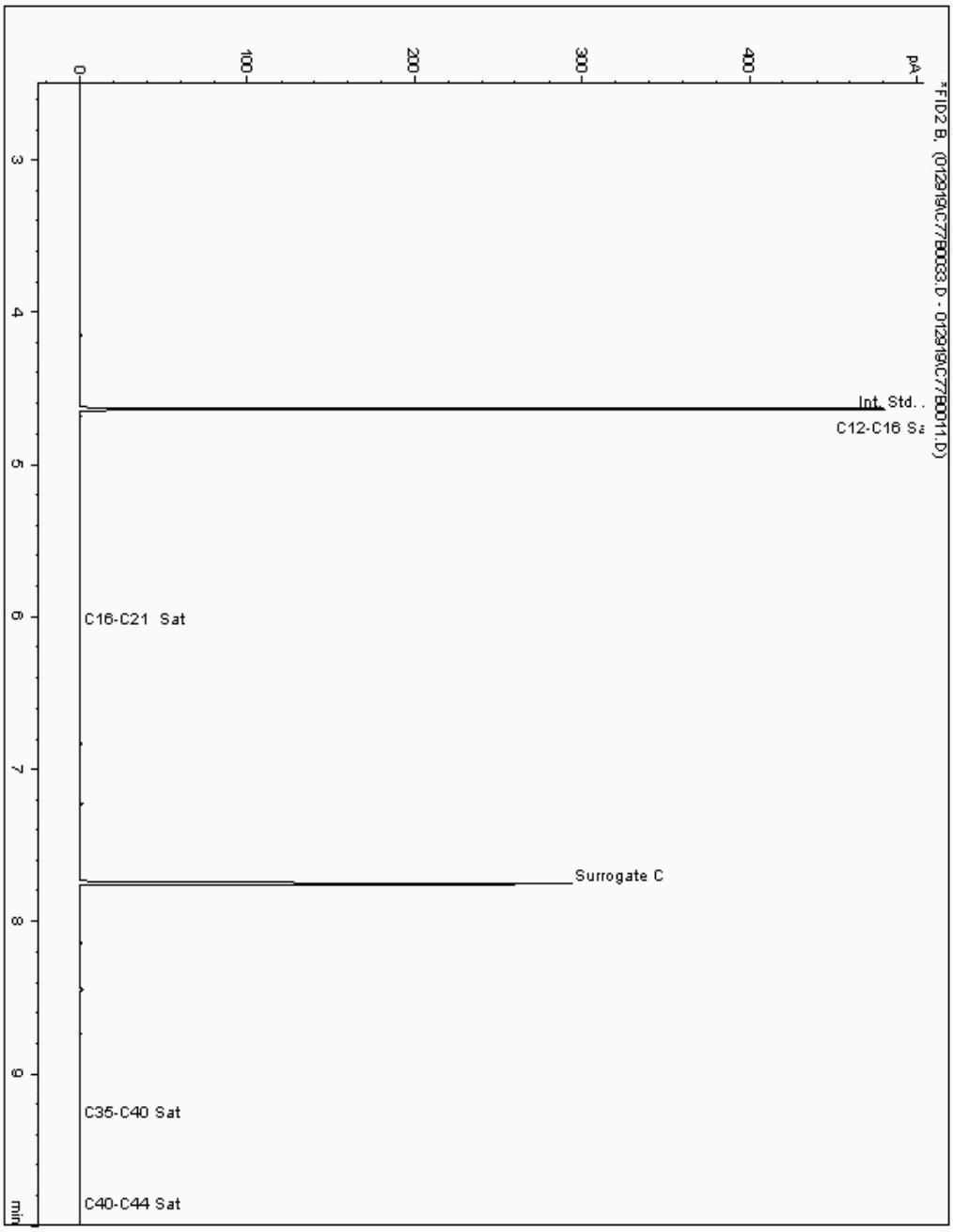
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19193279 **Depth :** 0.50
Sample ID : WS13

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18023045-
Date Acquired : 1/30/2019 12:59:12 AM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.980



CERTIFICATE OF ANALYSIS

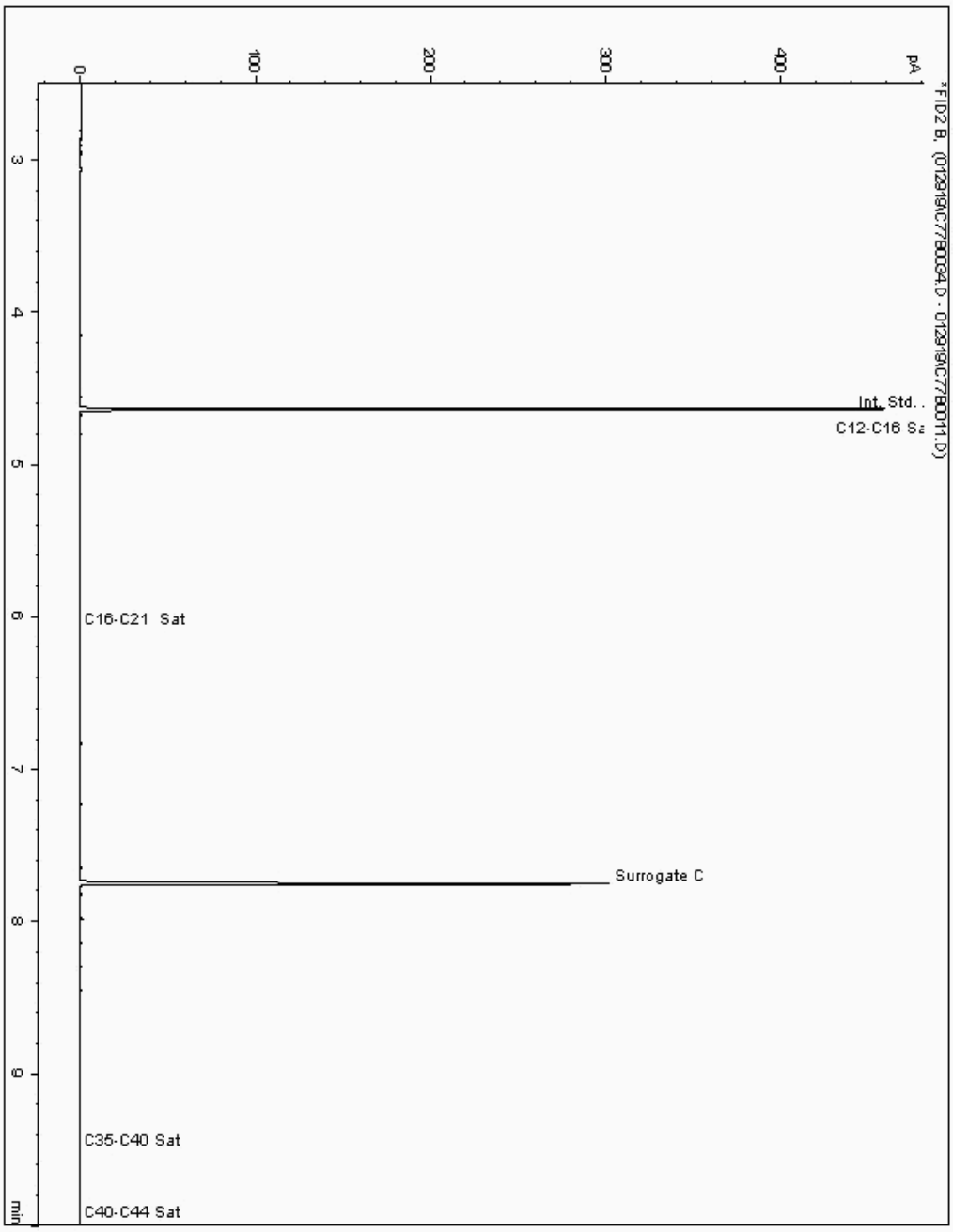
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19193412 **Depth :** 1.20
Sample ID : WS24

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18023246-
Date Acquired : 1/30/2019 1:19:23 AM
Units : ppb
Dilution :
CF : 1
Multiplier : 1.010



CERTIFICATE OF ANALYSIS

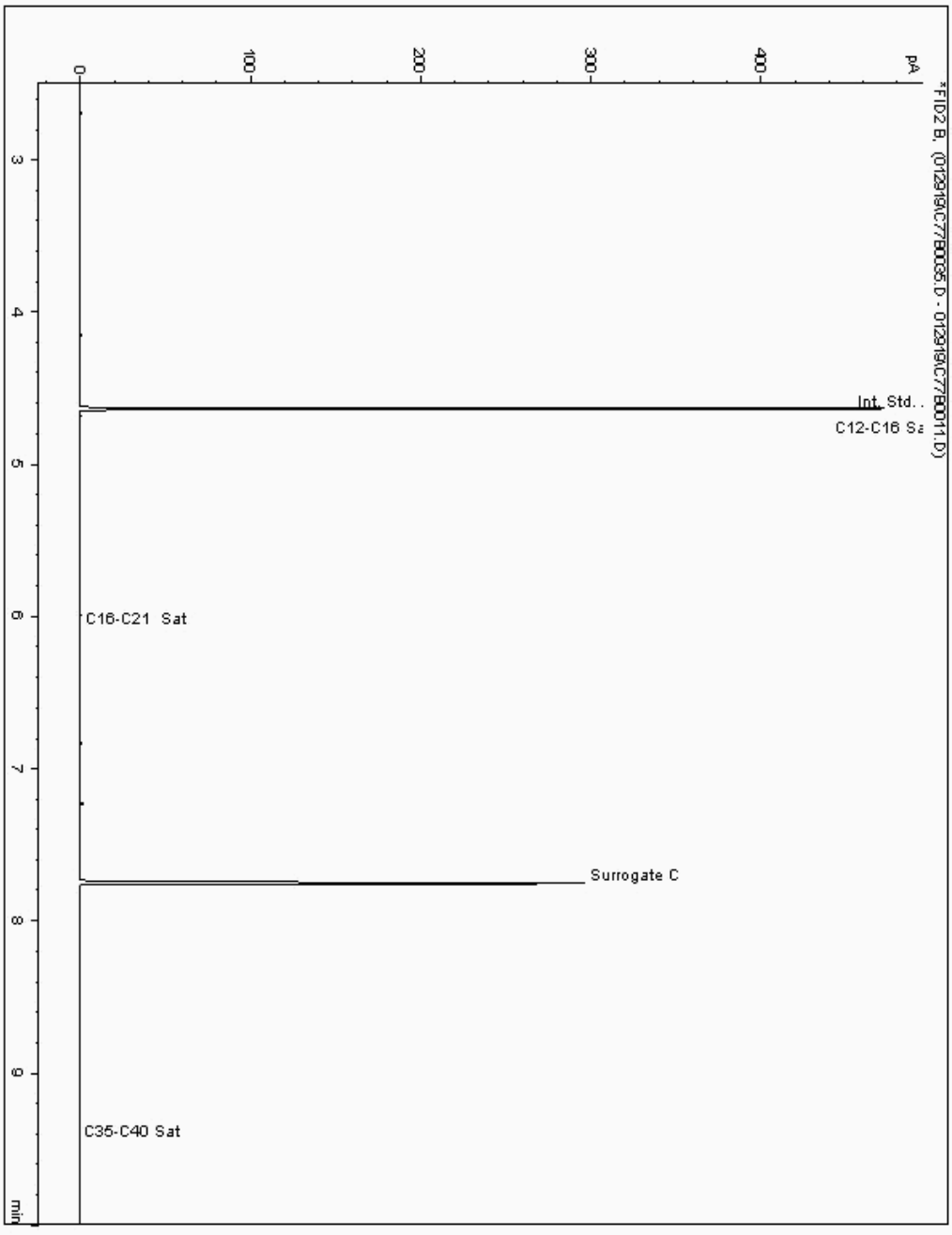
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19193683 **Depth :** 1.00
Sample ID : WS12

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18023020-
Date Acquired : 1/30/2019 1:39:28 AM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.970

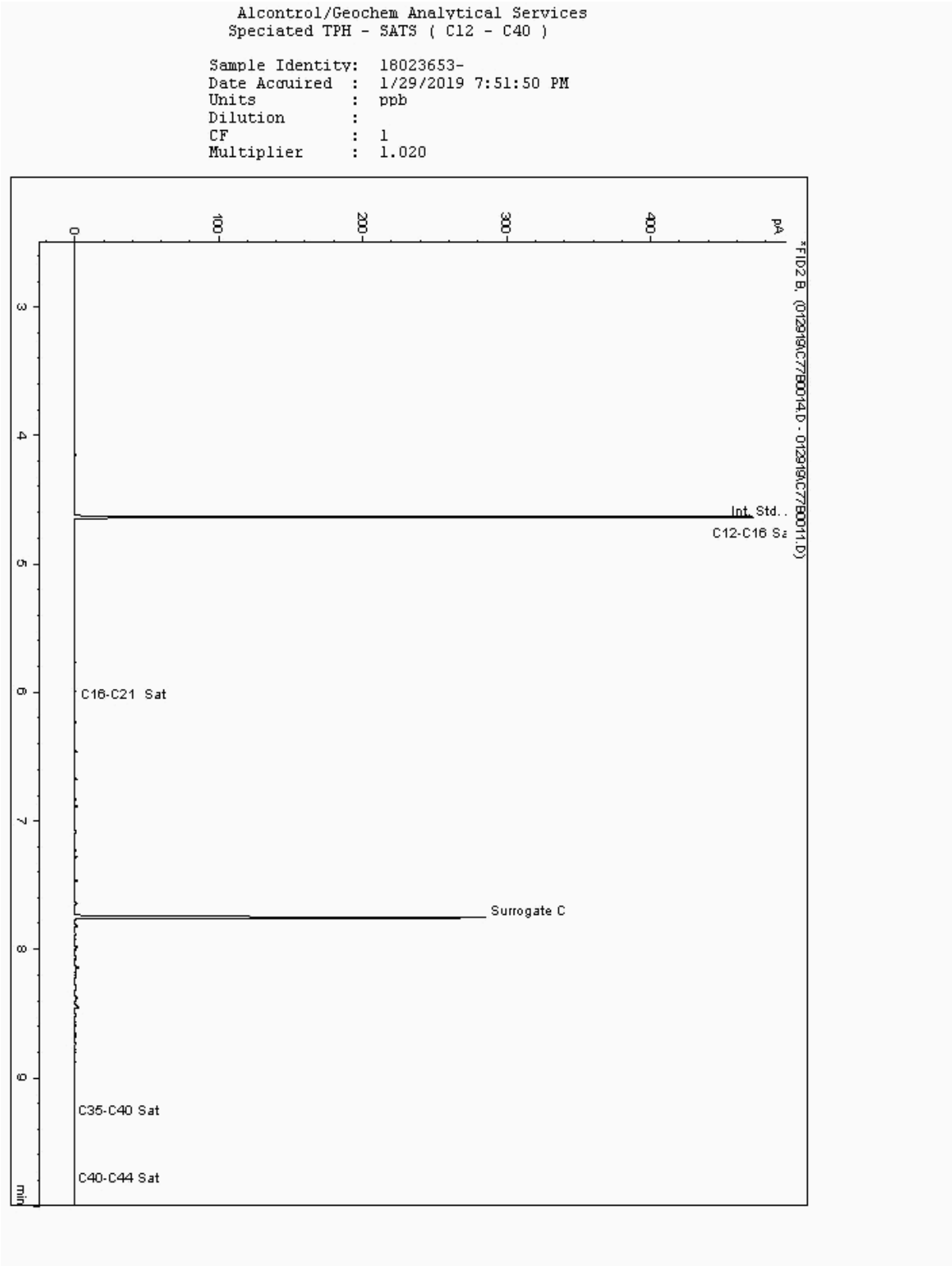


CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19193807 **Depth :** 0.10 - 0.30
Sample ID : WS25



CERTIFICATE OF ANALYSIS

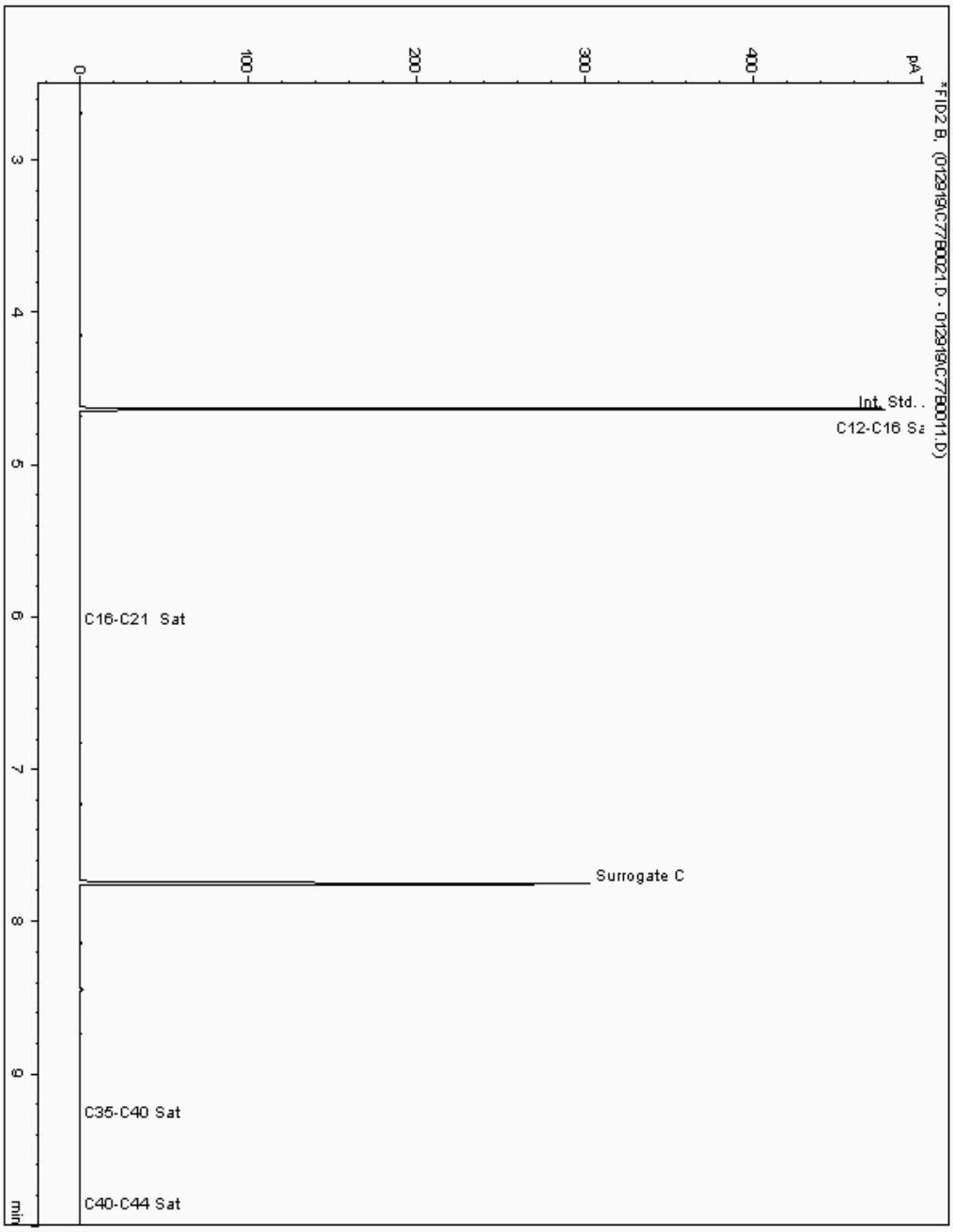
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19194059 **Depth :** 0.30
Sample ID : WS13

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18023345-
Date Acquired : 1/29/2019 9:47:45 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 1.030



CERTIFICATE OF ANALYSIS

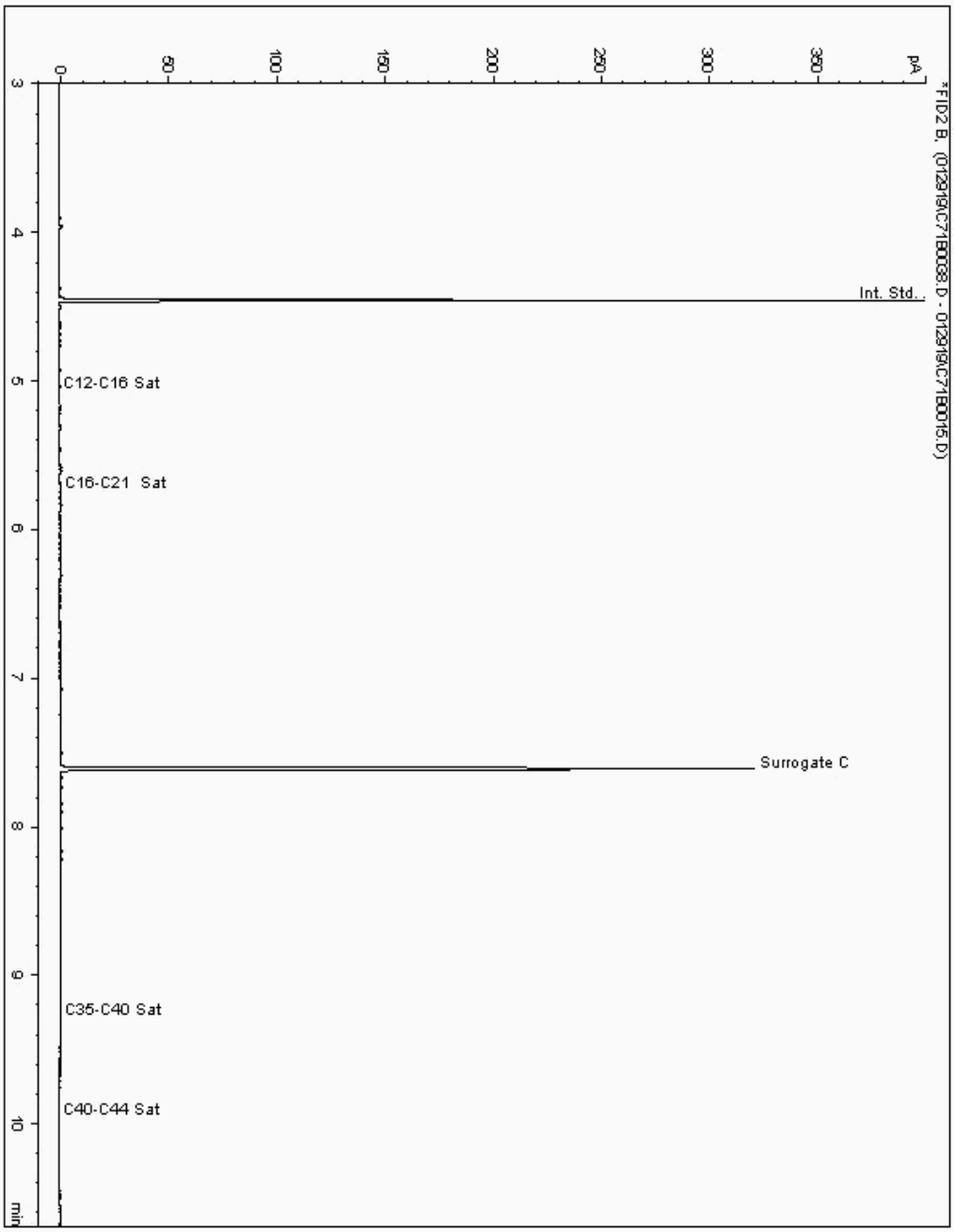
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19194453 **Depth :** 0.13 - 0.20
Sample ID : WS09

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18023314-
Date Acquired : 29/01/2019 18:34:55 PM
Units : ppb
Dilution: WS09[0.13 - 0.20] ->



CERTIFICATE OF ANALYSIS

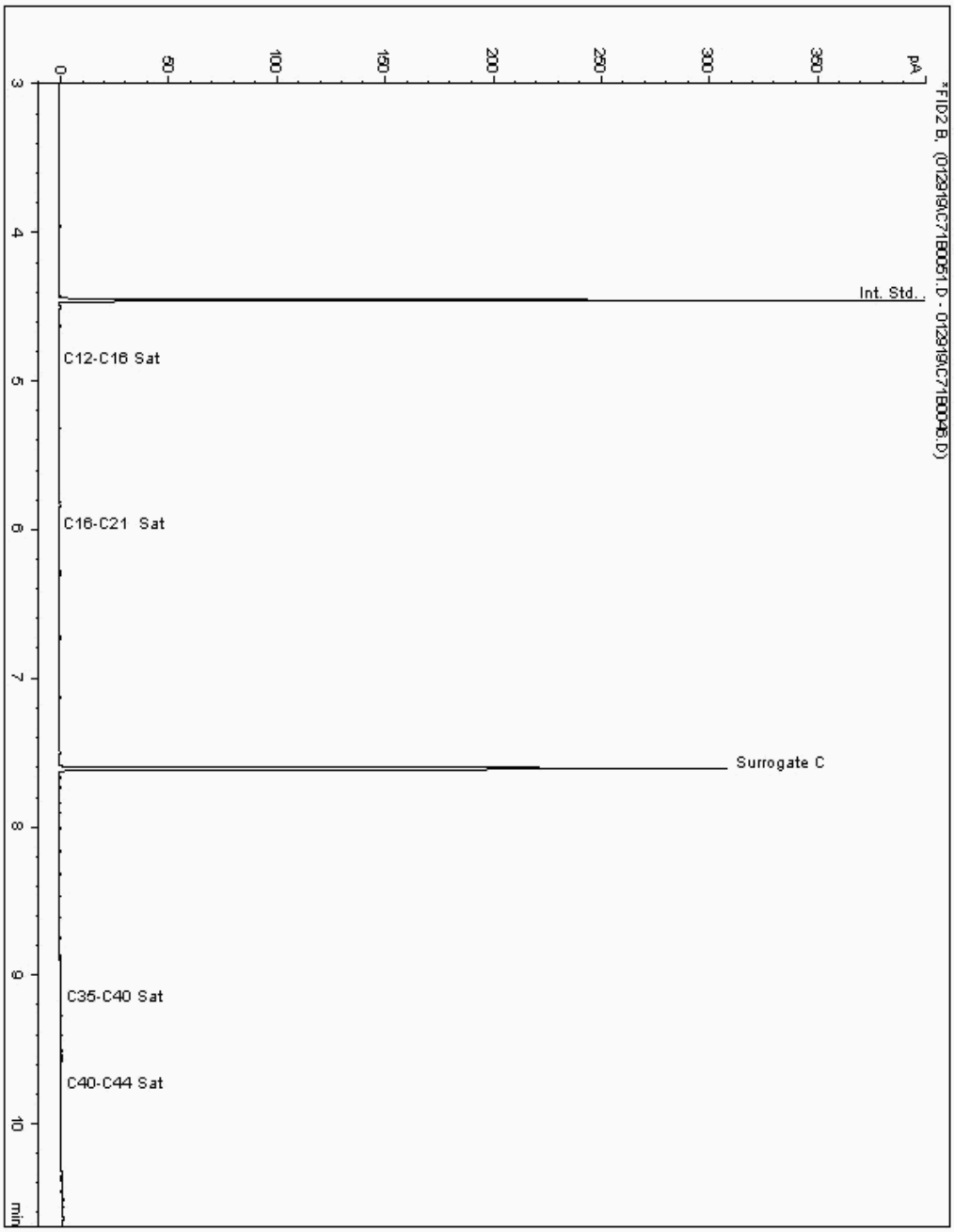
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19218123 **Depth :** 2.40
Sample ID : WS19

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18023140-
Date Acquired : 30/01/2019 08:29:04 PM
Units : ppb
Dilution: WS19[2.40] ->



CERTIFICATE OF ANALYSIS

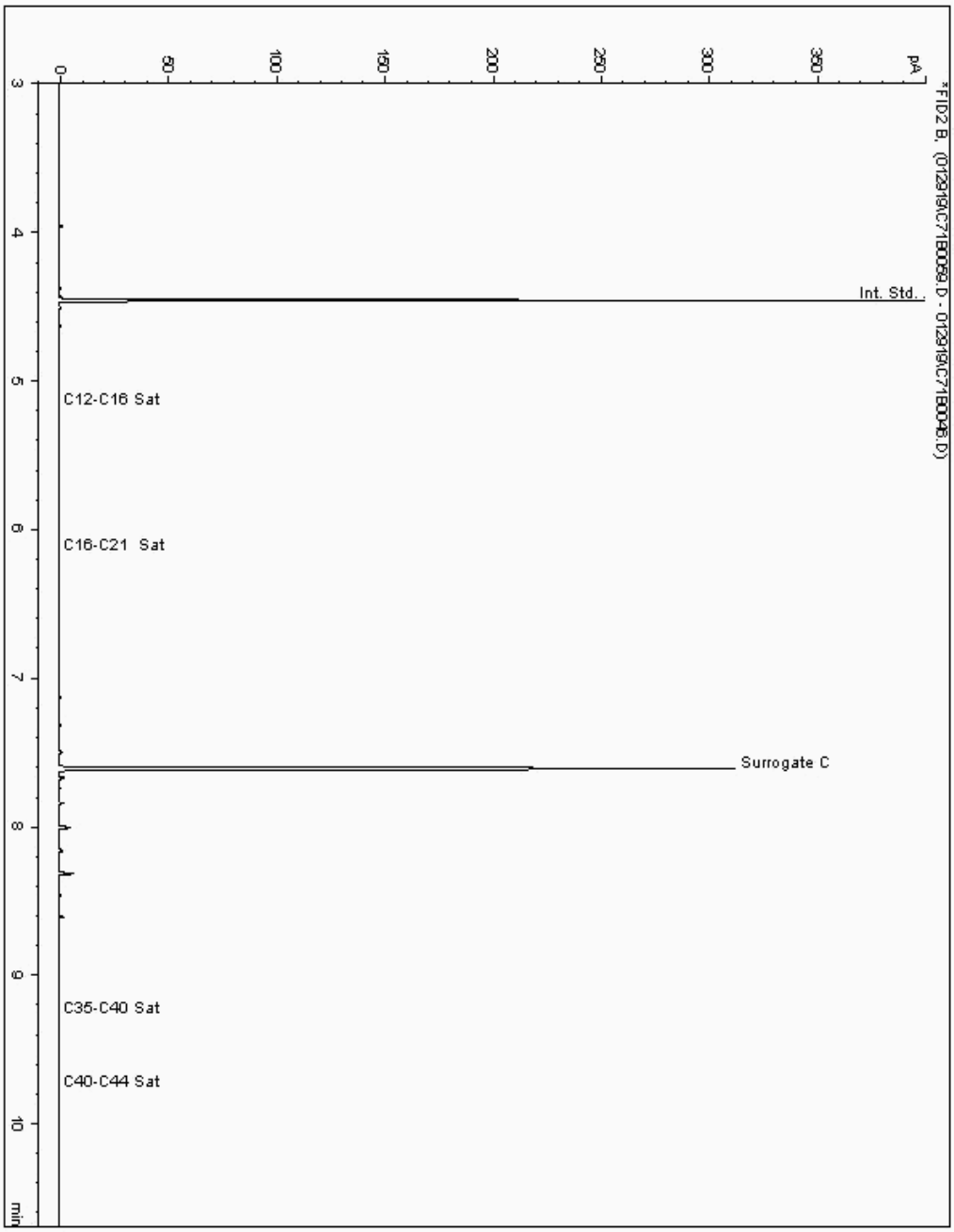
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19218146 **Depth :** 0.80
Sample ID : WS17

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18023086-
Date Acquired : 30/01/2019 10:39:02 PM
Units : ppb
Dilution: WS17[0.80] ->



CERTIFICATE OF ANALYSIS

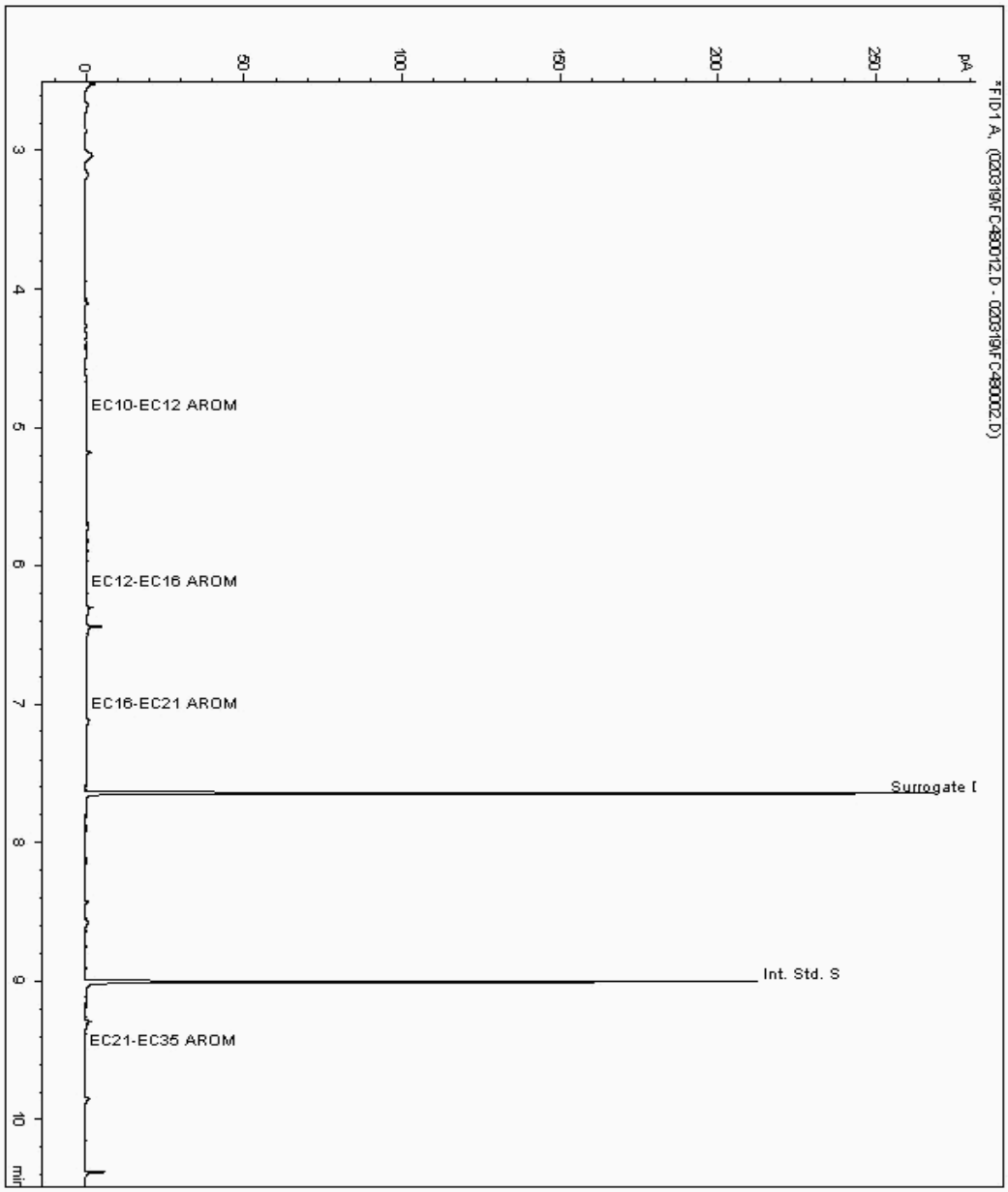
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19253200 **Depth :** 0.13 - 0.20
Sample ID : WS09

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18075034-
Date Acquired : 03/02/2019 15:47:46 PM
Units : ppb
Dilution : WS09 [0.13 - 0.20] CEN 10 ->
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

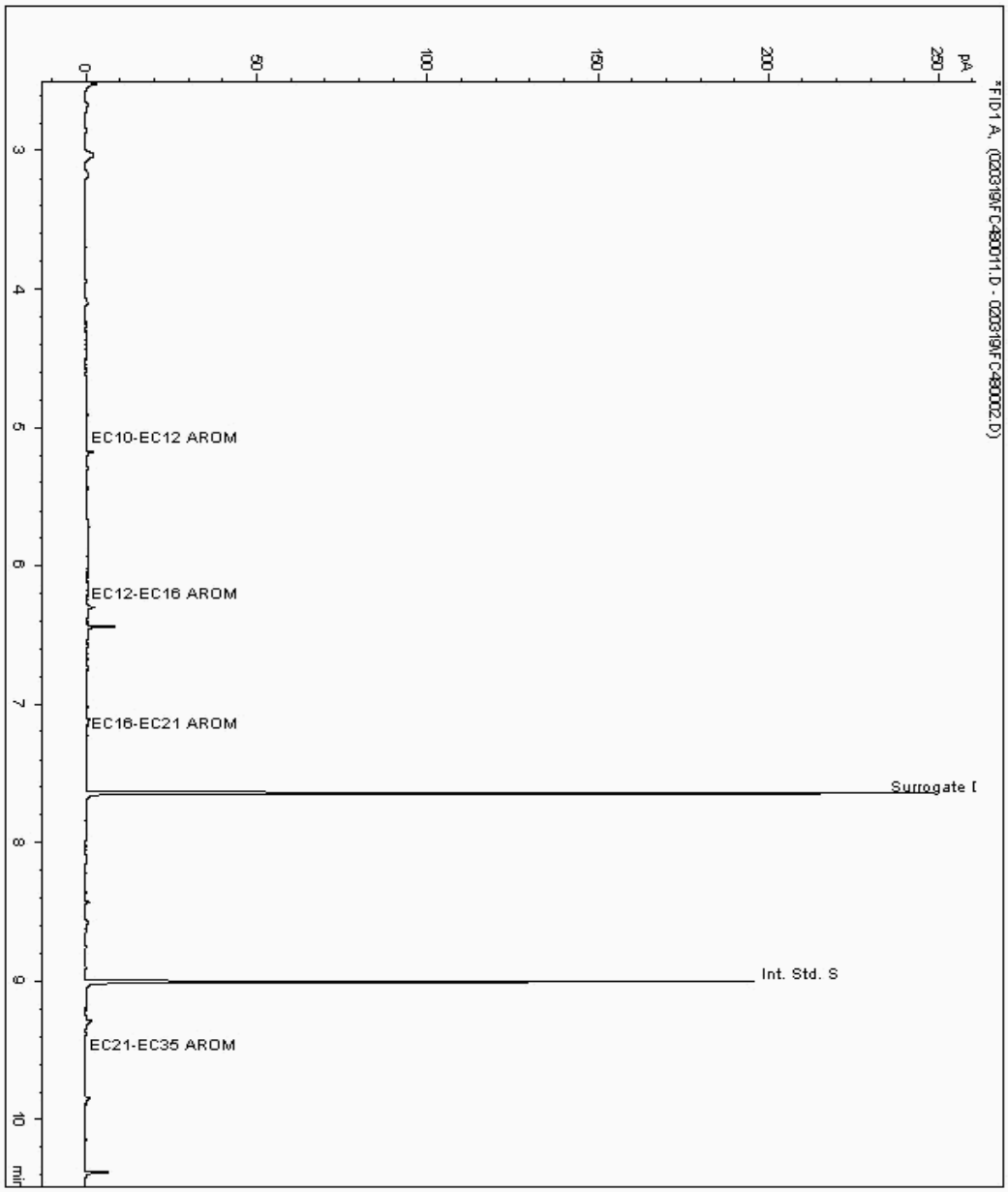
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19253211 **Depth :** 0.10
Sample ID : WS19

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18075194-
Date Acquired : 03/02/2019 15:24:44 PM
Units : ppb
Dilution : WS19 [0.10] CEN 10 1 ->
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

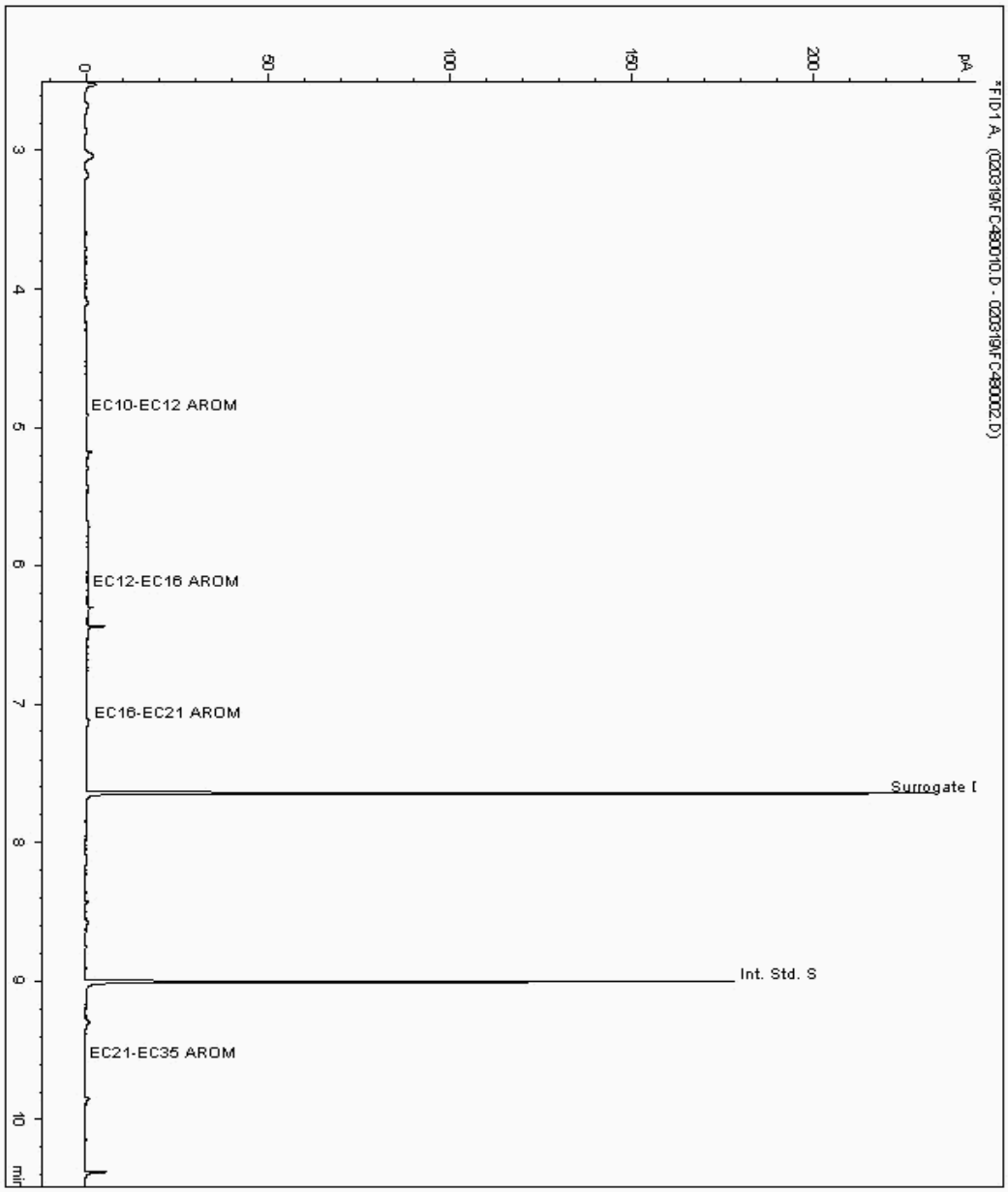
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19253223 **Depth :** 0.30
Sample ID : WS17

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18075144-
Date Acquired : 03/02/2019 15:01:48 PM
Units : ppb
Dilution : WS17 [0.30] CEN 10 1 ->
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

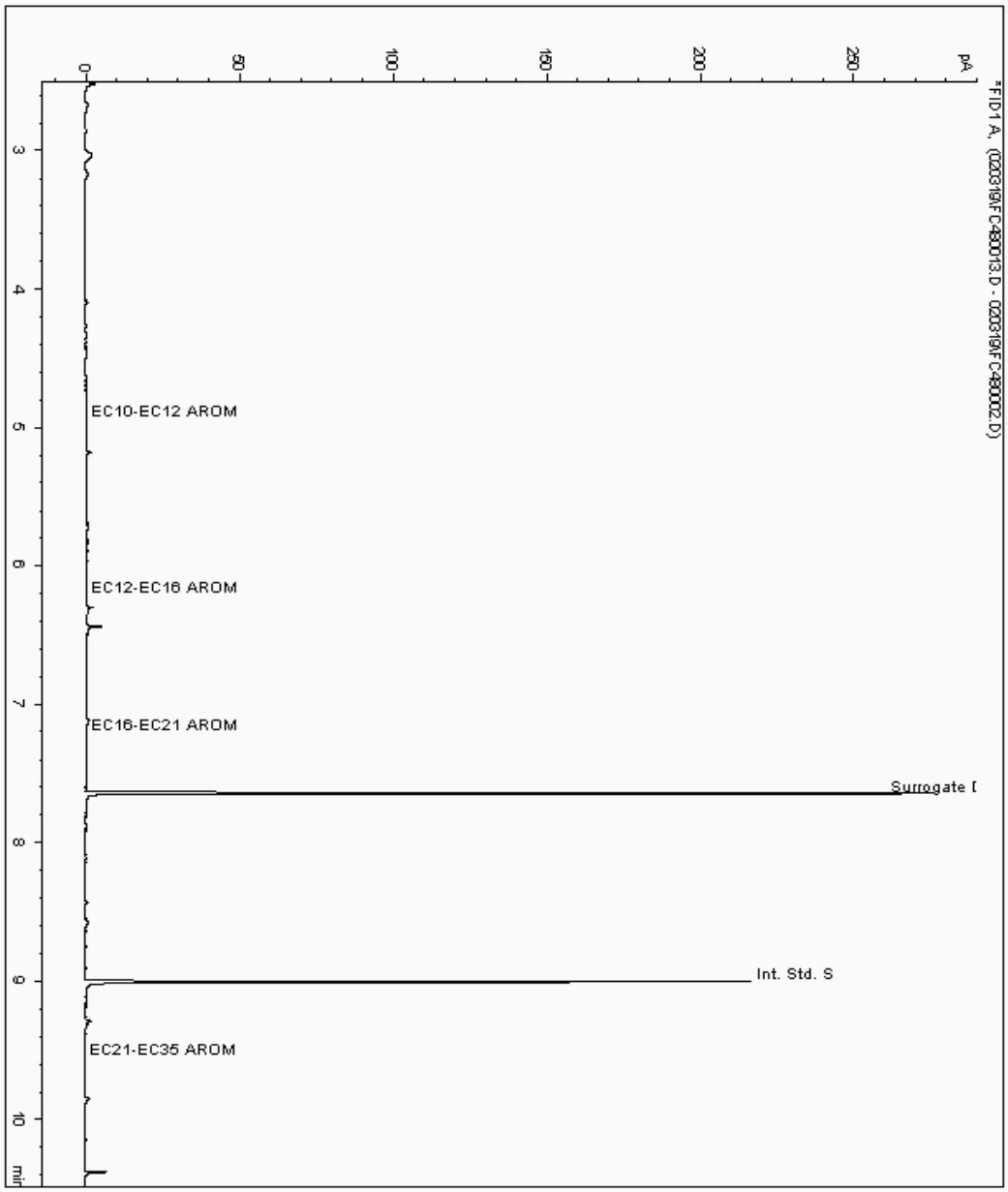
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19254683 **Depth :** 1.50
Sample ID : WS21

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18075281-
Date Acquired : 03/02/2019 16:10:50 PM
Units : ppb
Dilution : WS21 [1.50] CEN 10 1 ->
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

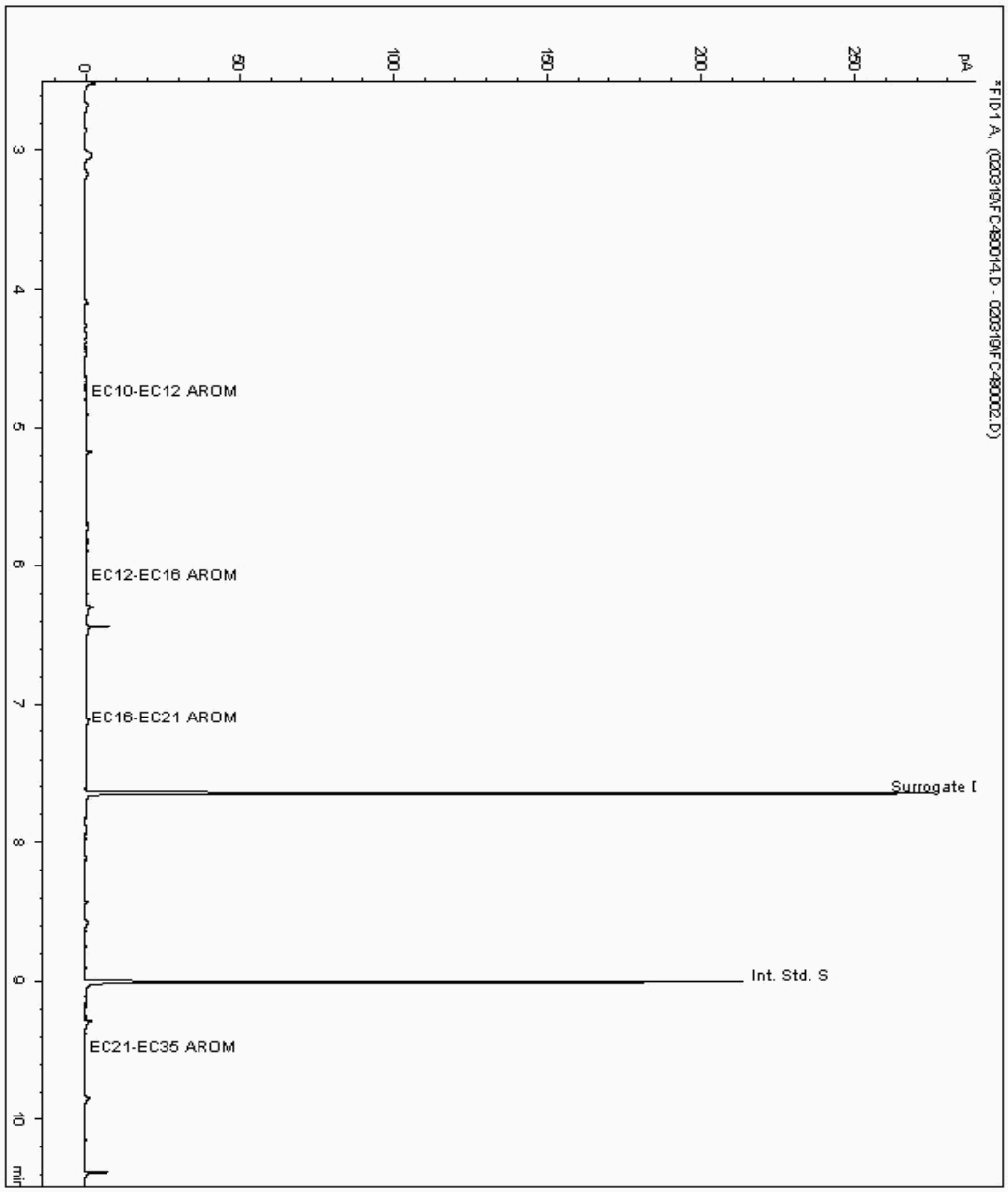
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19254696 **Depth :** 0.10 - 0.30
Sample ID : WS25

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18075304-
Date Acquired : 03/02/2019 16:33:46 PM
Units : ppb
Dilution : WS25 [0.10 - 0.30] CEN 10 ->
CF : 1
Multiplier : 0.032



CERTIFICATE OF ANALYSIS

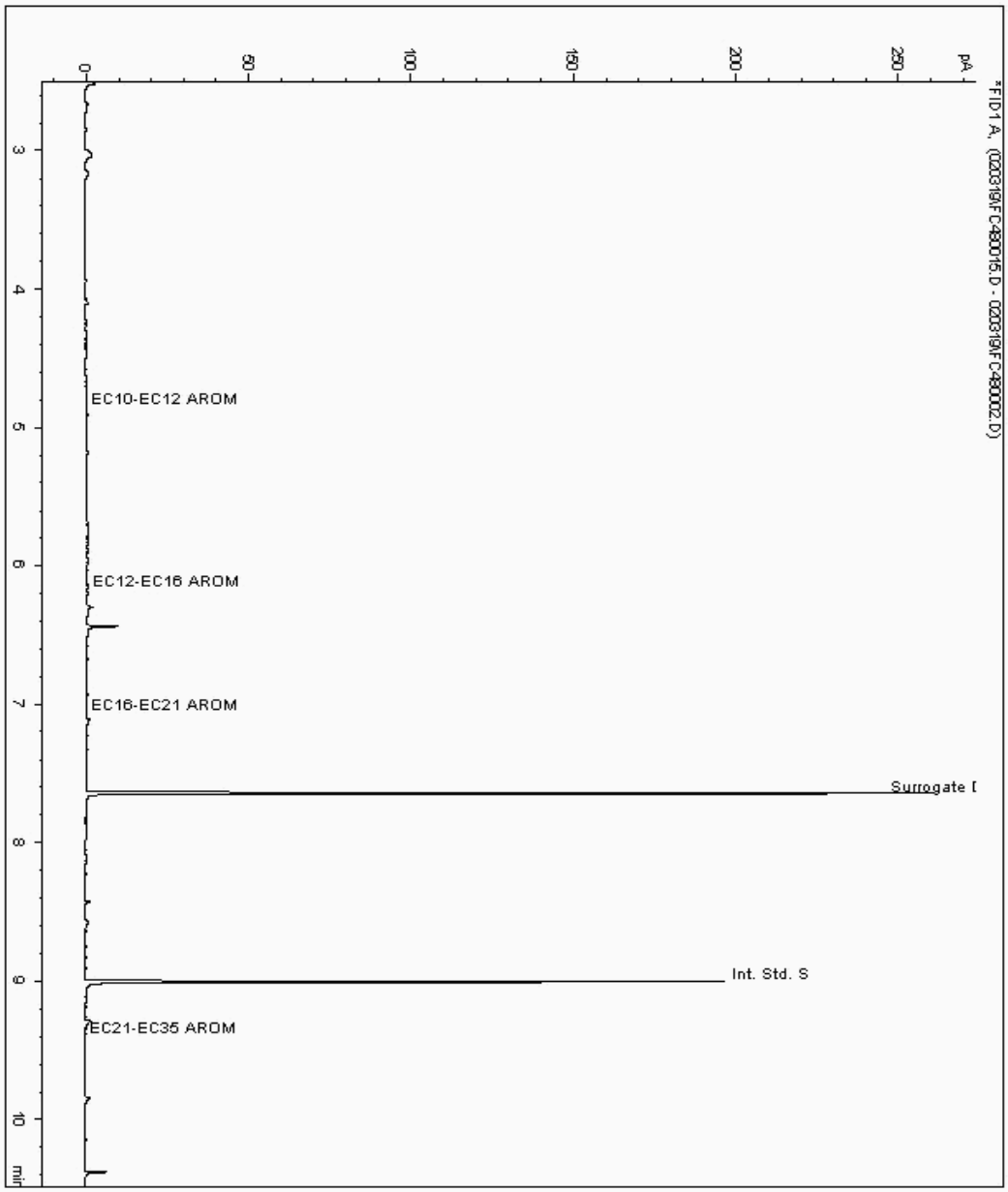
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19254709 **Depth :** 0.30
Sample ID : WS13

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18075094-
Date Acquired : 03/02/2019 16:56:50 PM
Units : ppb
Dilution : WS13 [0.30] CEN 10 1 ->
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

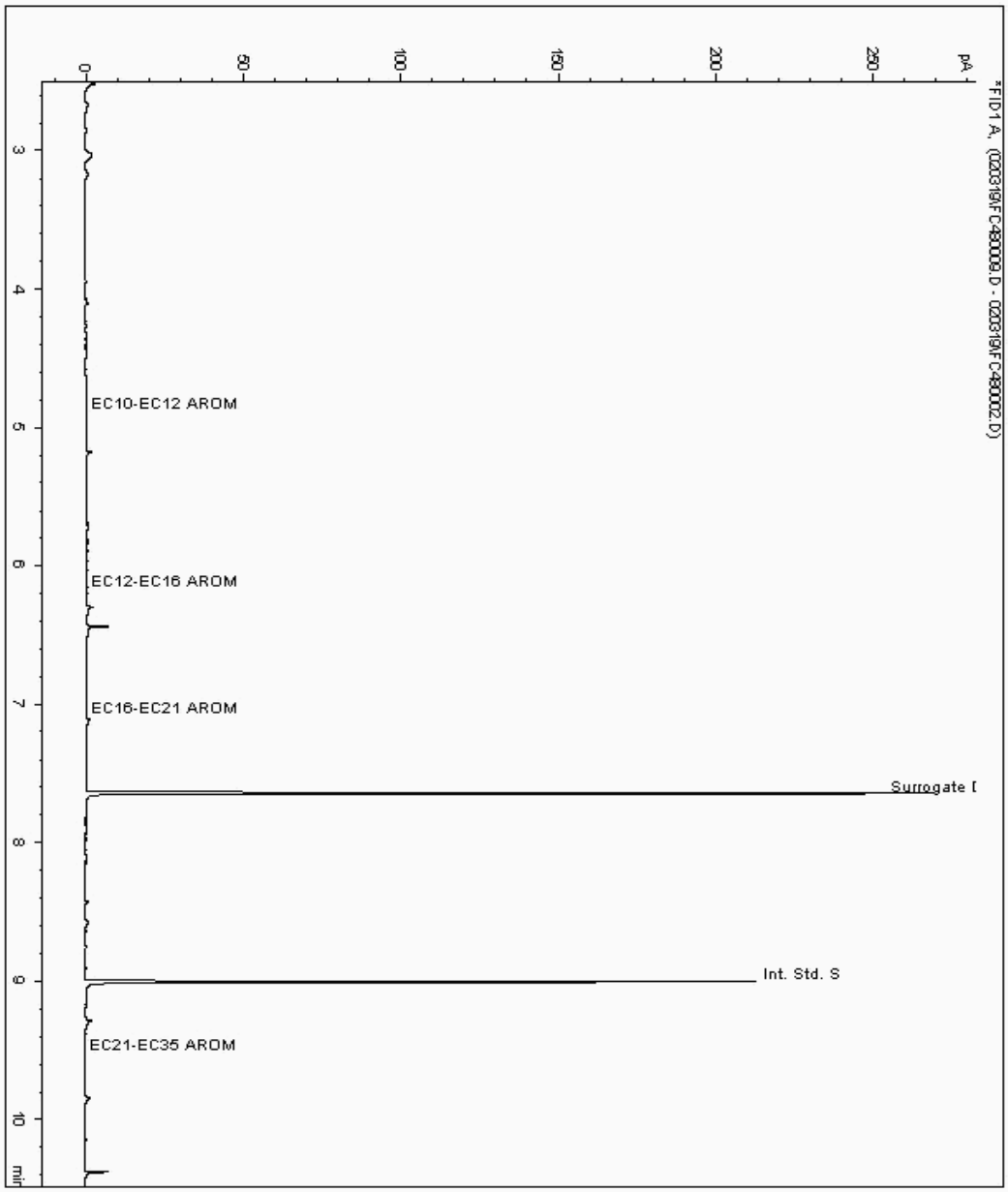
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19254741 **Depth :** 0.10 - 0.20
Sample ID : WS21

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18075242-
Date Acquired : 03/02/2019 14:38:46 PM
Units : ppb
Dilution : WS21 [0.10 - 0.20] CEN 10 ->
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

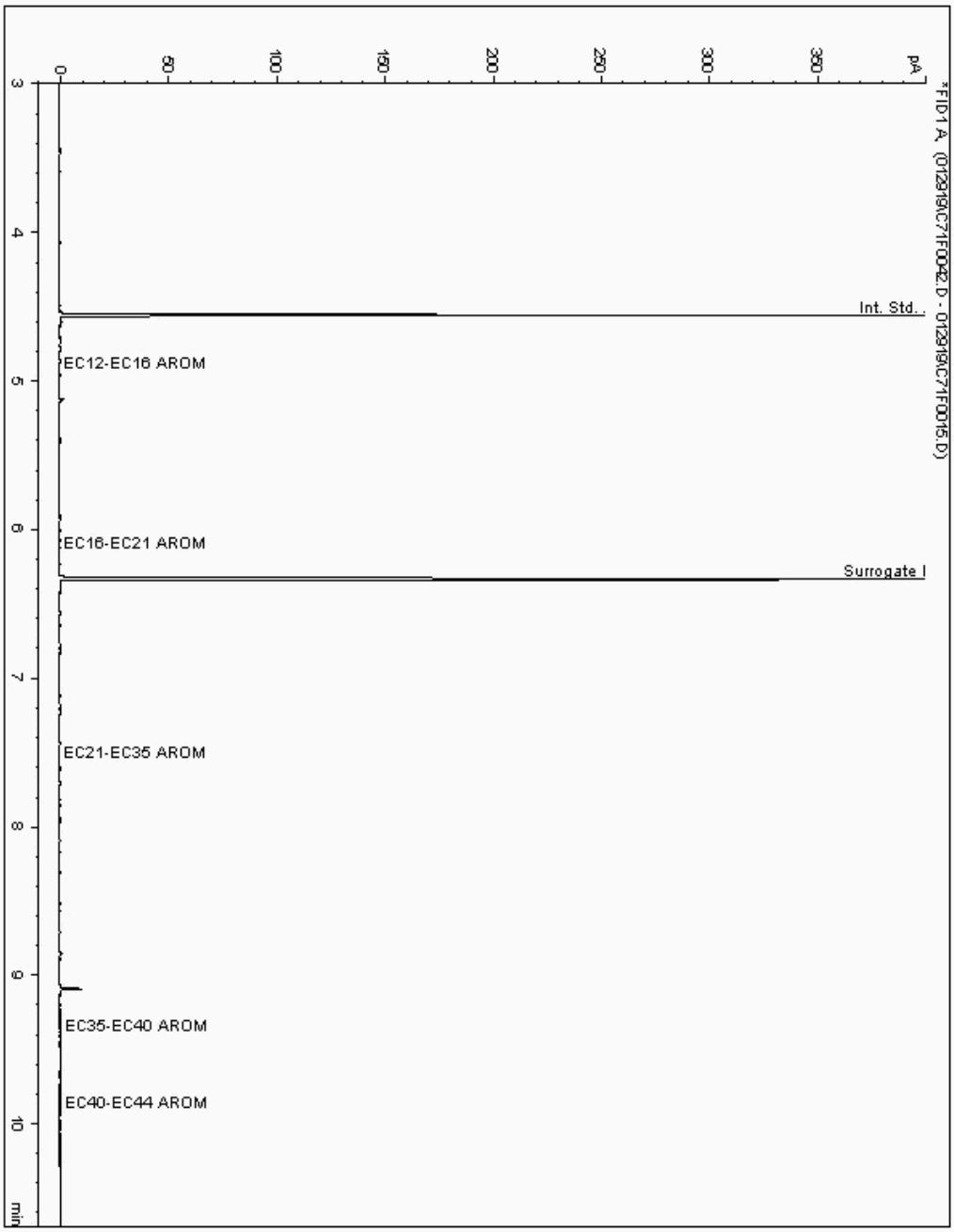
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19188635 **Depth :** 0.30
Sample ID : WS17

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18023402-
Date Acquired : 29/01/2019 19:56:45 PM
Units : ppb
Dilution: WS17[0.30] ->



CERTIFICATE OF ANALYSIS

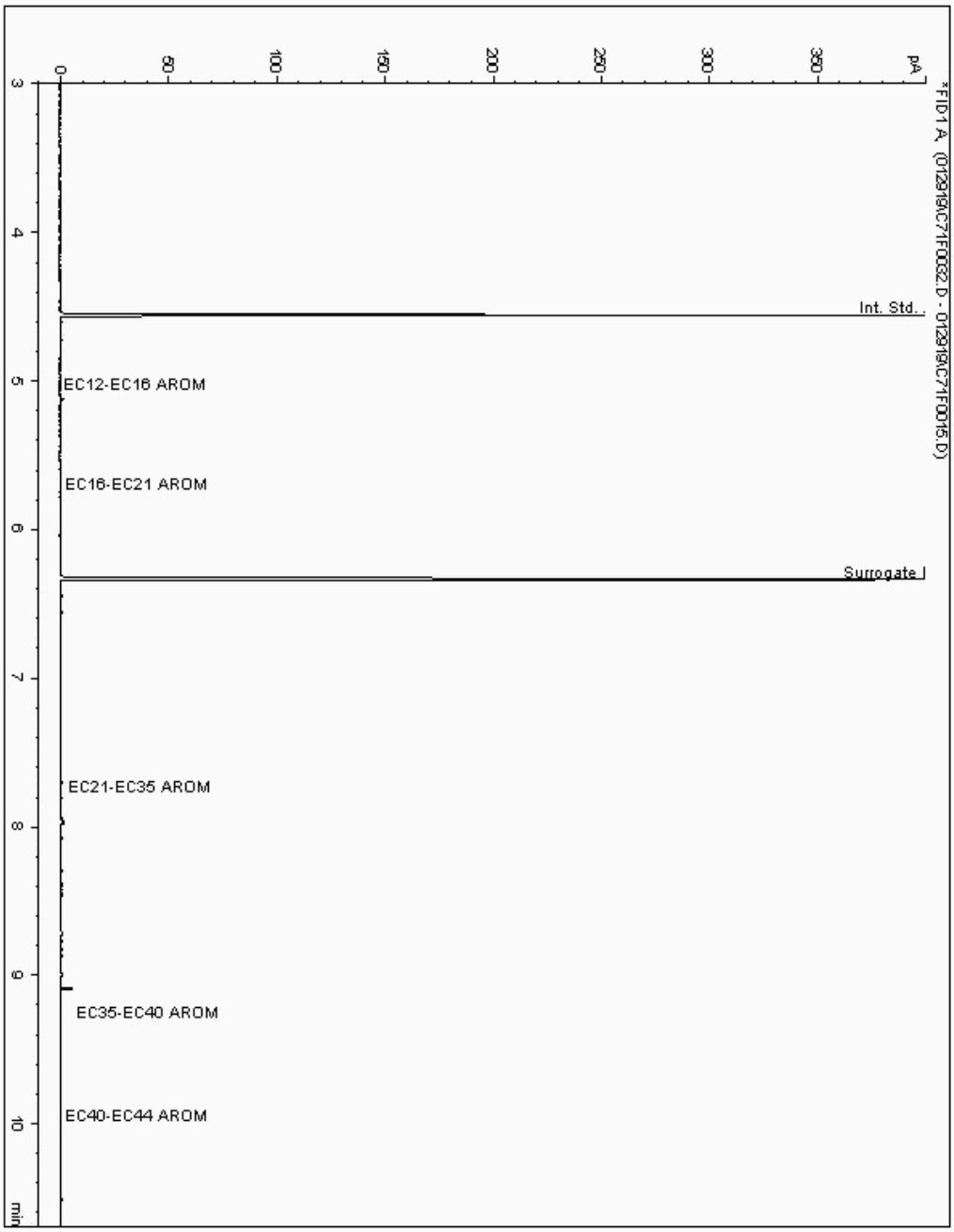
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19188787 **Depth :** 0.10
Sample ID : WS19

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18023495-
Date Acquired : 29/01/2019 16:57:34 PM
Units : ppb
Dilution: WS19[0.10] ->



CERTIFICATE OF ANALYSIS

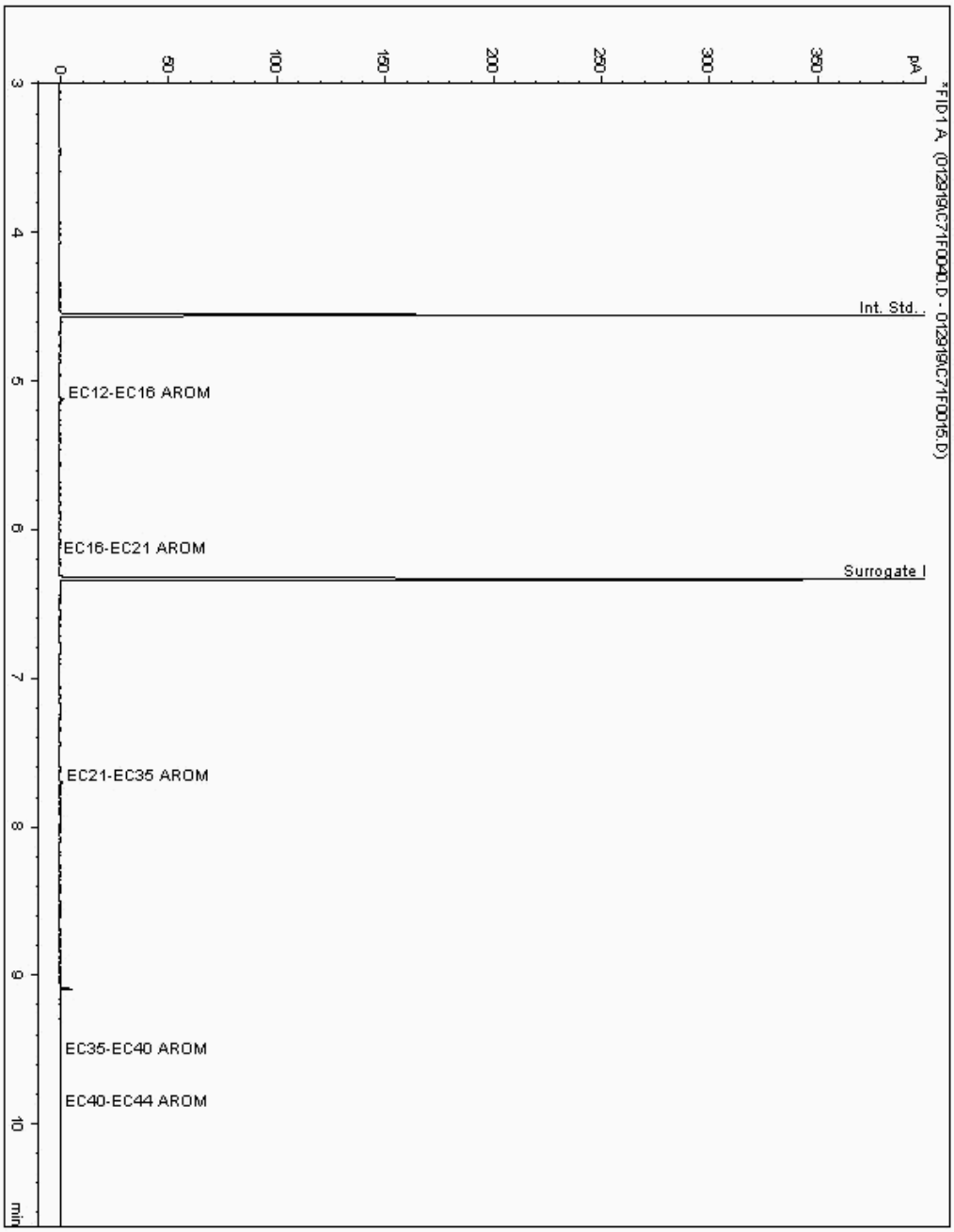
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19188909 **Depth :** 0.20 - 0.30
Sample ID : WS09

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18022980-
Date Acquired : 29/01/2019 19:16:03 PM
Units : ppb
Dilution: WS09[0.20 - 0.30] ->



CERTIFICATE OF ANALYSIS

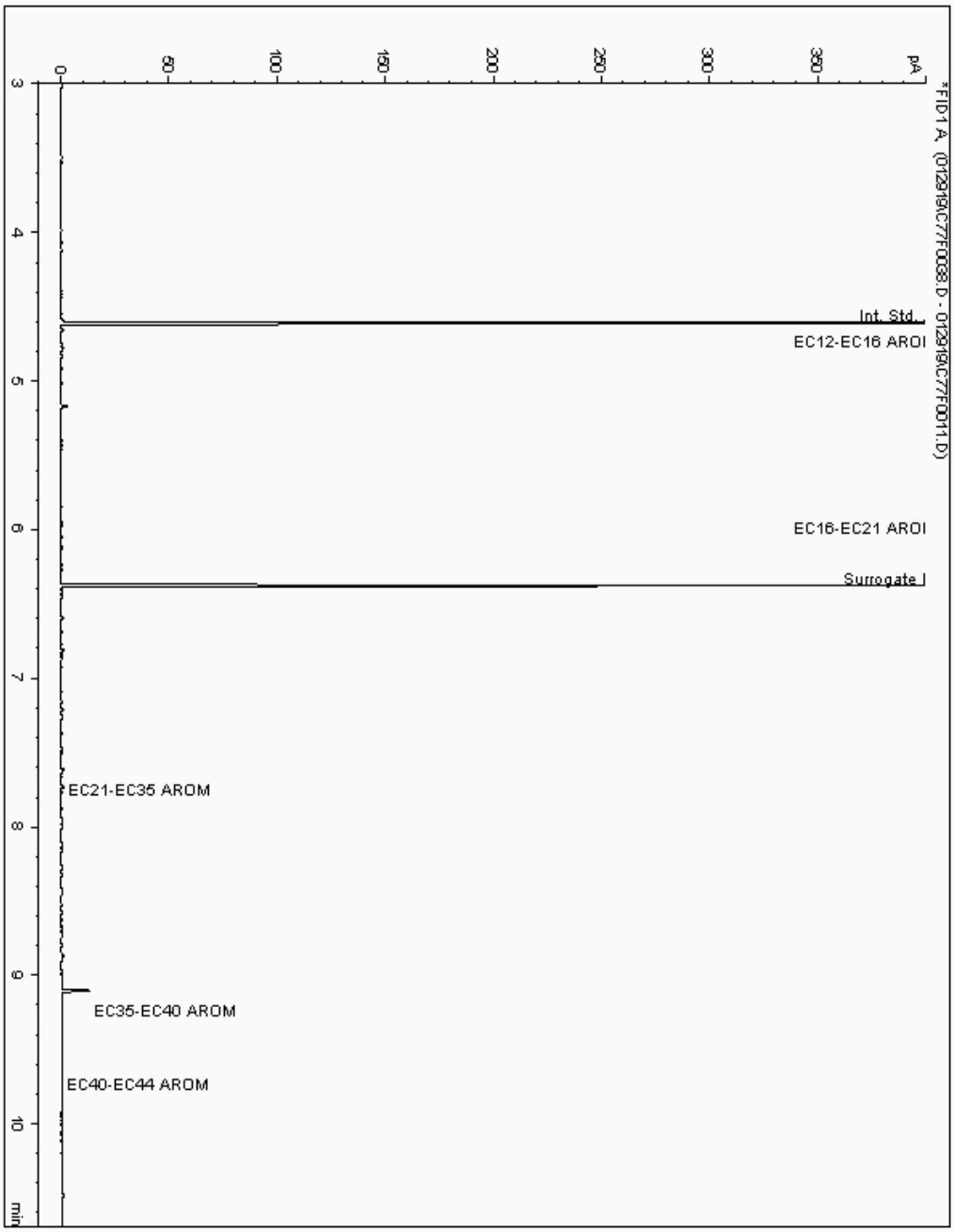
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19188987 **Depth :** 1.50
Sample ID : WS21

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18023603-
Date Acquired : 1/30/2019 2:39:35 AM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

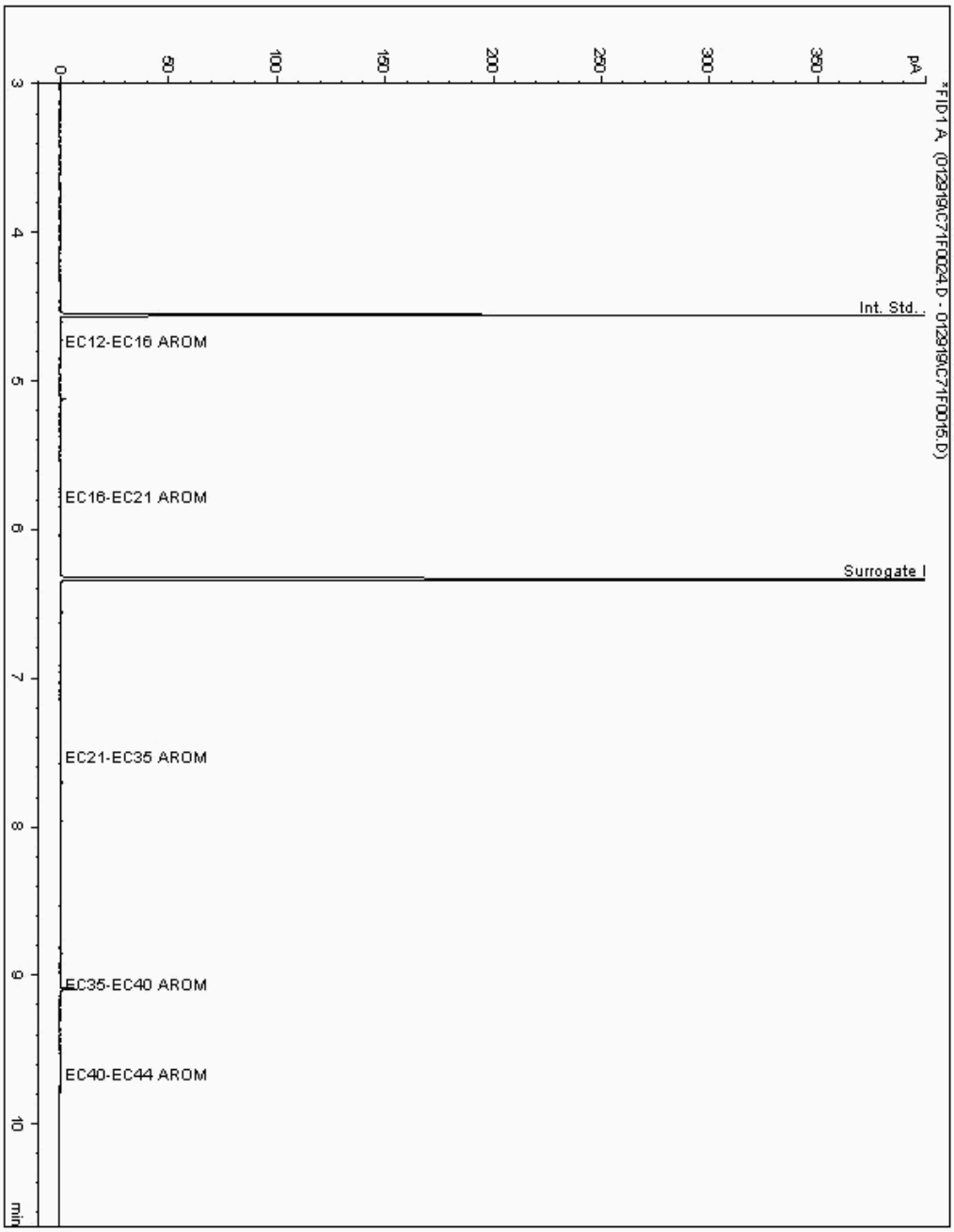
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19189116 **Depth :** 0.60 - 0.70
Sample ID : WS21

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18023189-
Date Acquired : 29/01/2019 14:39:29 PM
Units : ppb
Dilution: WS21[0.60 - 0.70] ->



CERTIFICATE OF ANALYSIS

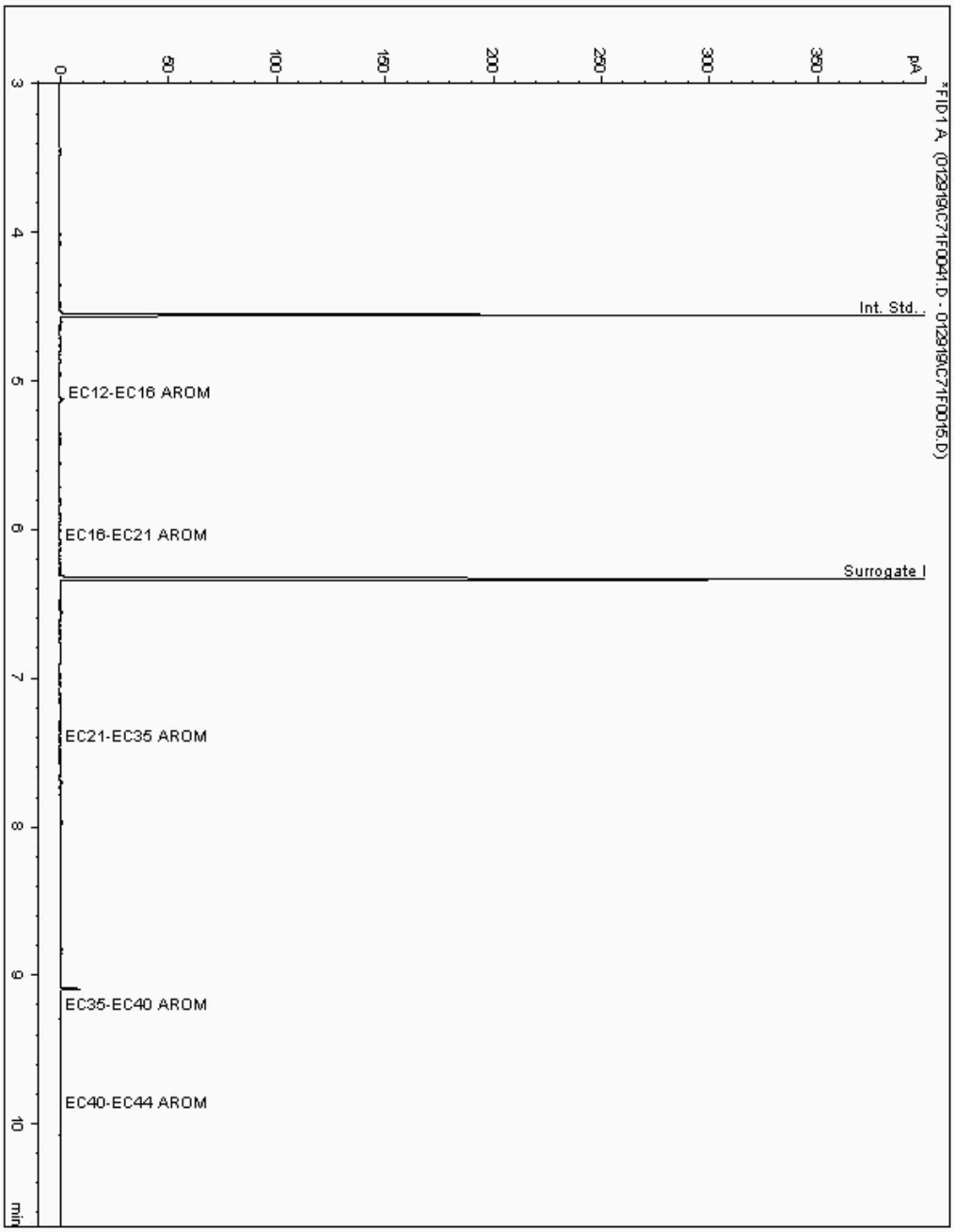
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19189202 **Depth :** 0.10 - 0.20
Sample ID : WS21

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18023561-
Date Acquired : 29/01/2019 19:36:22 PM
Units : ppb
Dilution: WS21[0.10 - 0.20] ->



CERTIFICATE OF ANALYSIS

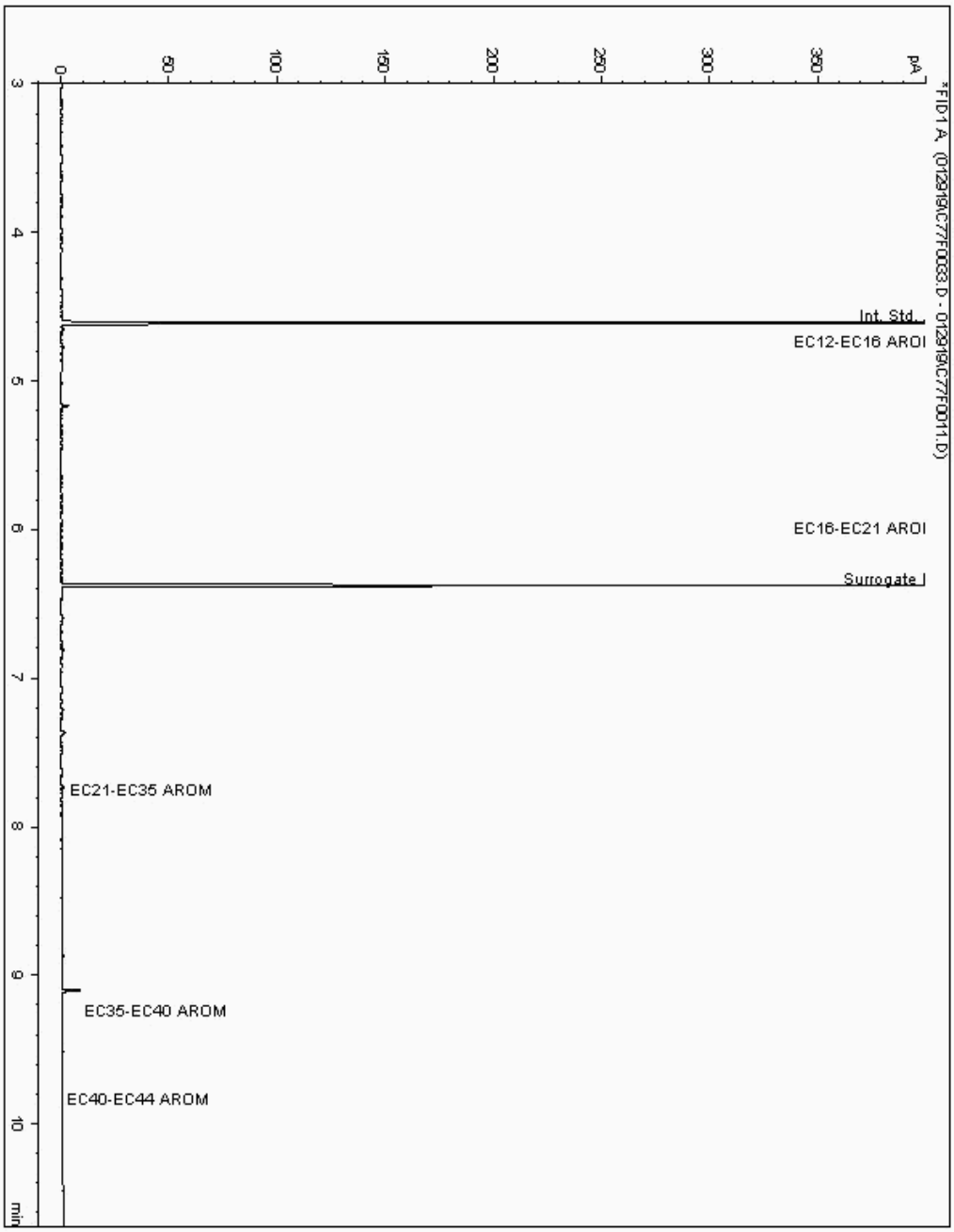
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19193279 **Depth :** 0.50
Sample ID : WS13

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18023046-
Date Acquired : 1/30/2019 12:59:12 AM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

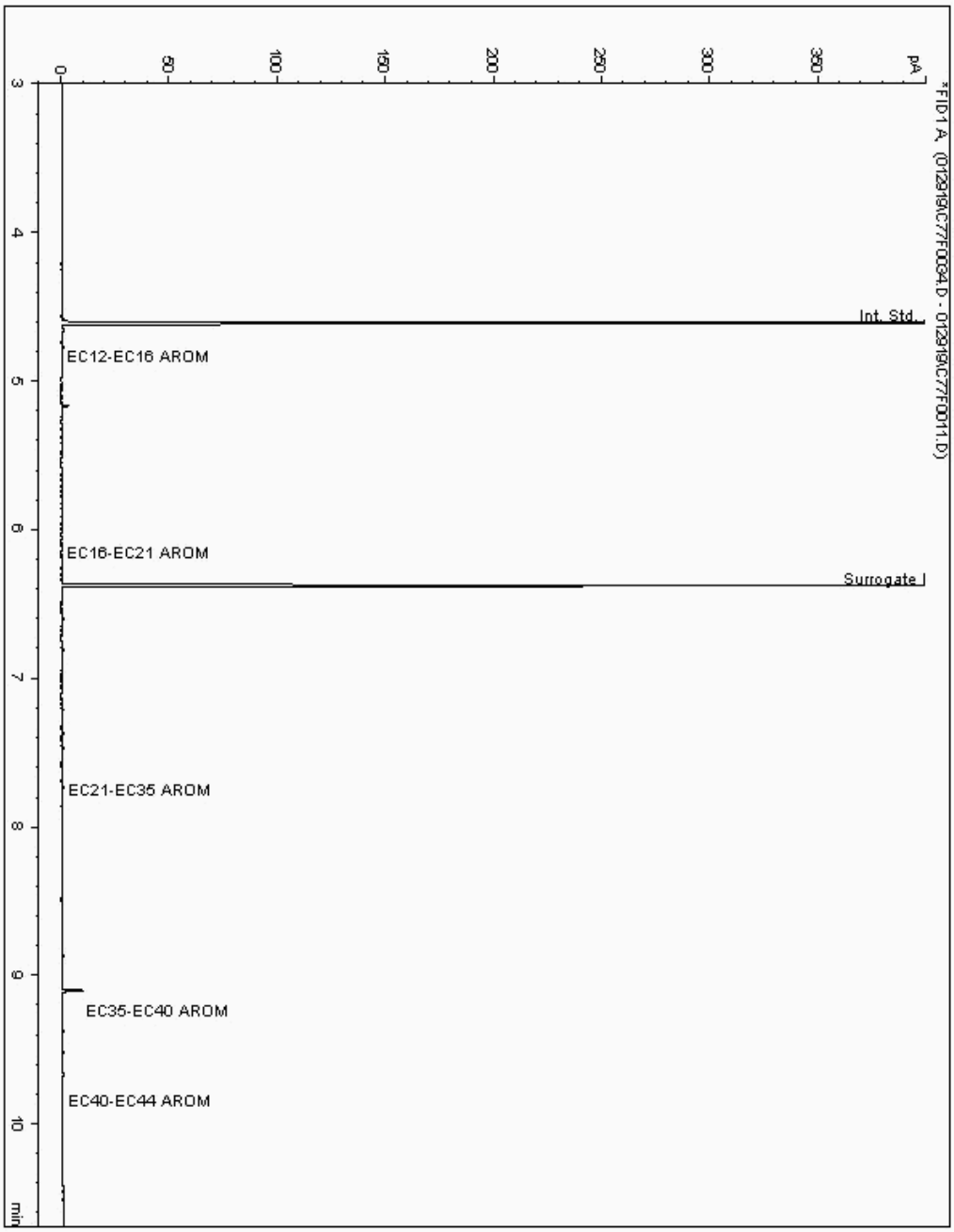
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19193412 **Depth :** 1.20
Sample ID : WS24

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18023247-
Date Acquired : 1/30/2019 1:19:23 AM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

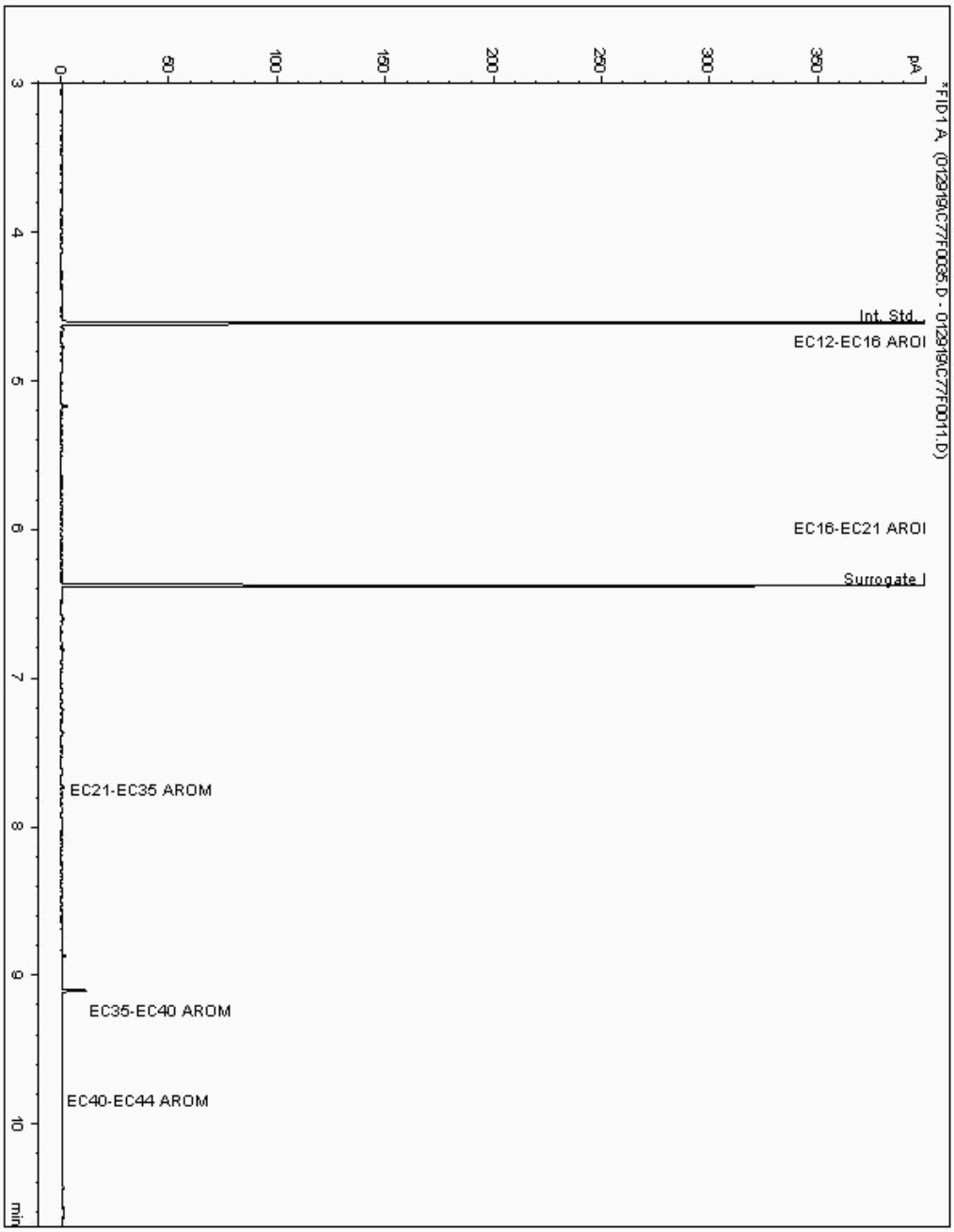
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19193683 **Depth :** 1.00
Sample ID : WS12

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18023021-
Date Acquired : 1/30/2019 1:39:28 AM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

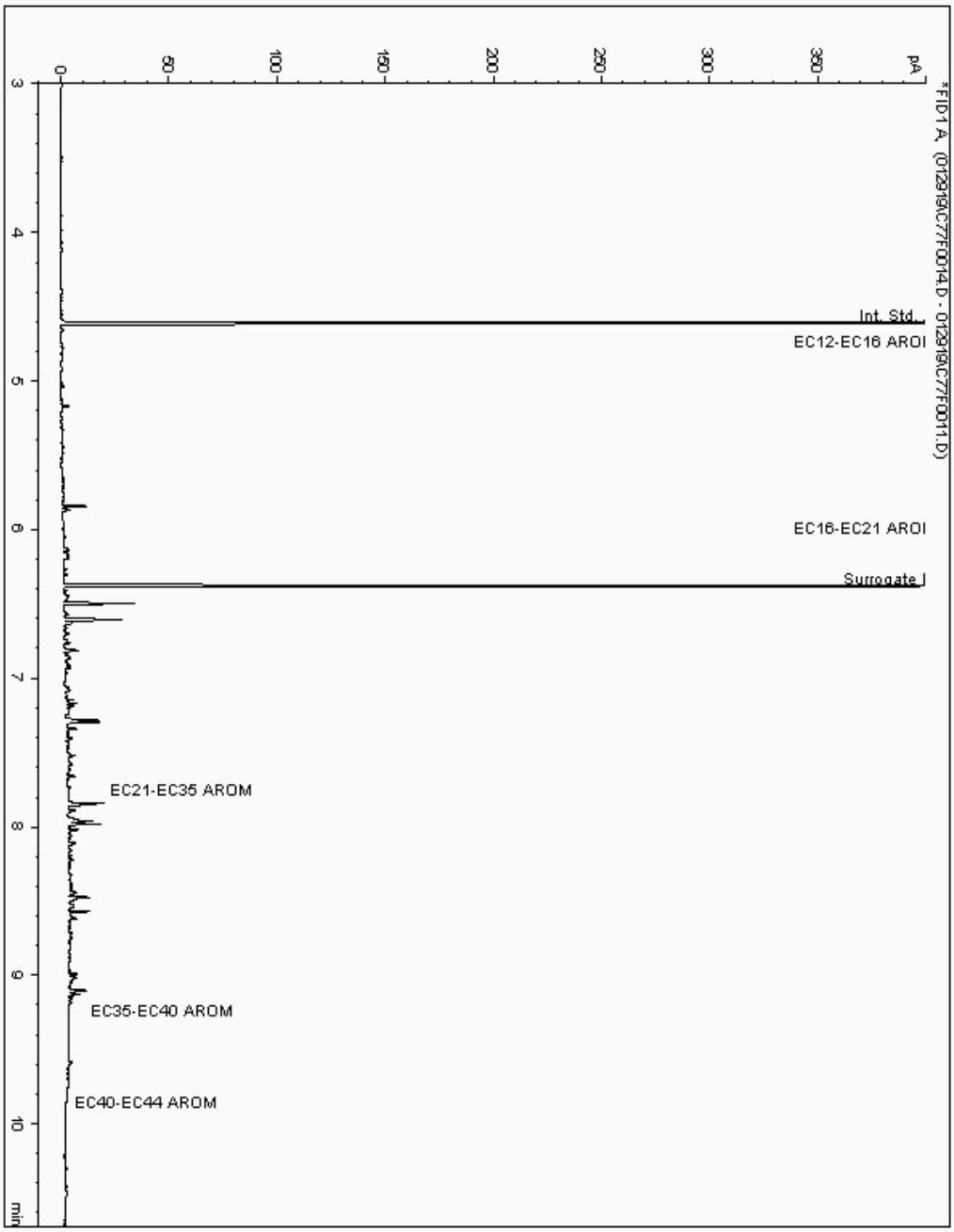
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19193807 **Depth :** 0.10 - 0.30
Sample ID : WS25

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18023654-
Date Acquired : 1/29/2019 7:51:50 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

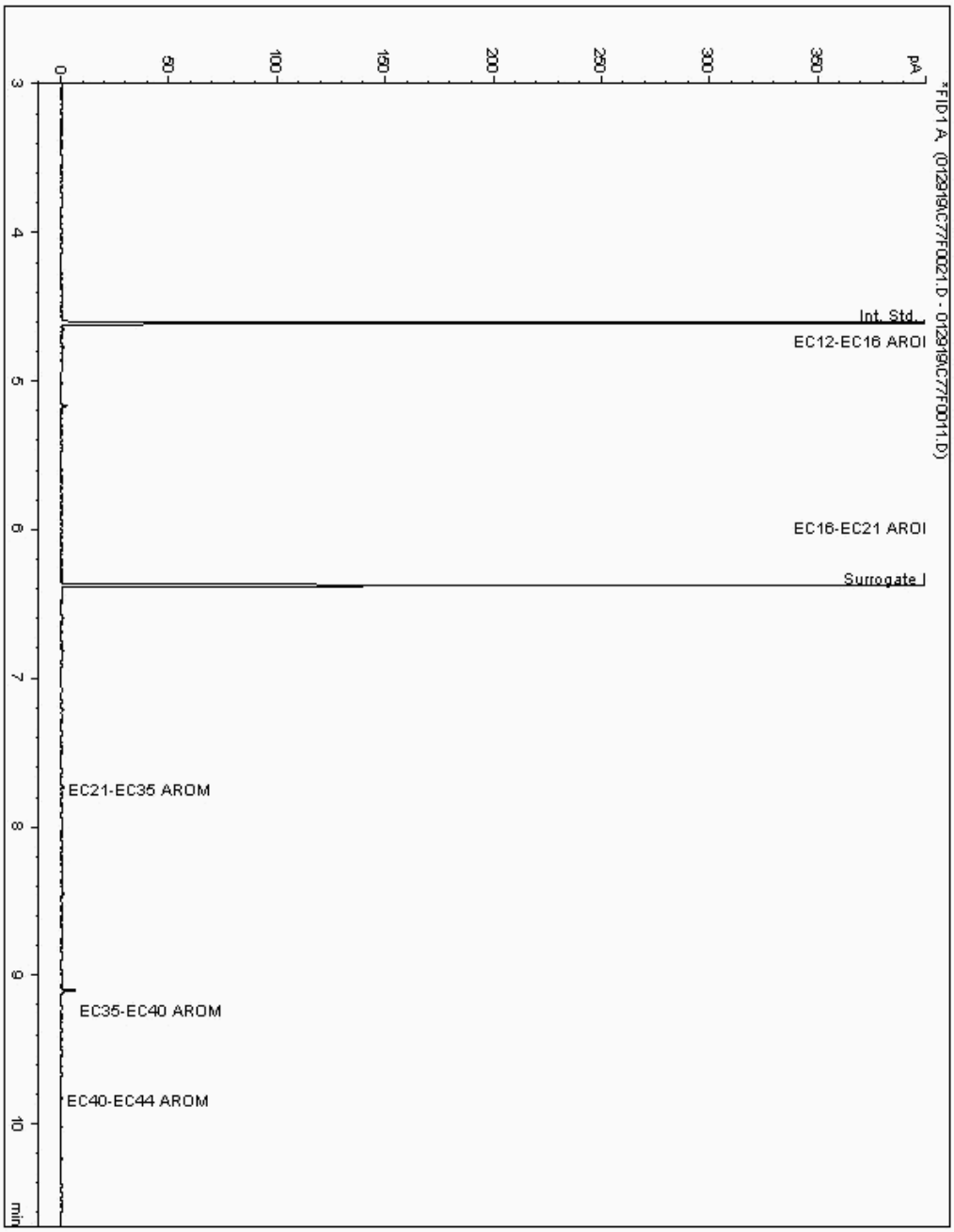
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19194059 **Depth :** 0.30
Sample ID : WS13

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18023346-
Date Acquired : 1/29/2019 9:47:45 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

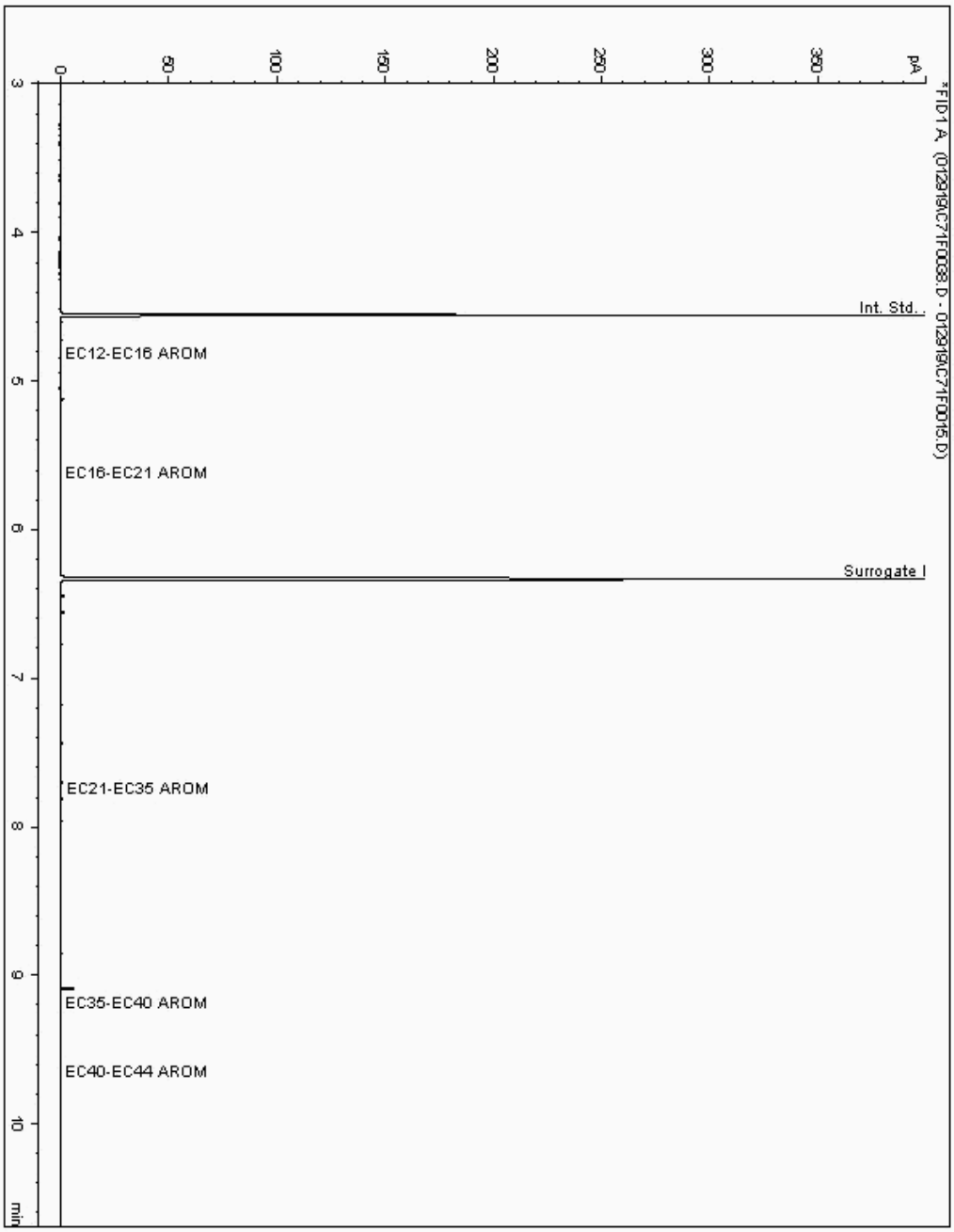
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19194453 **Depth :** 0.13 - 0.20
Sample ID : WS09

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18023315-
Date Acquired : 29/01/2019 18:34:55 PM
Units : ppb
Dilution: WS09[0.13 - 0.20] ->



CERTIFICATE OF ANALYSIS

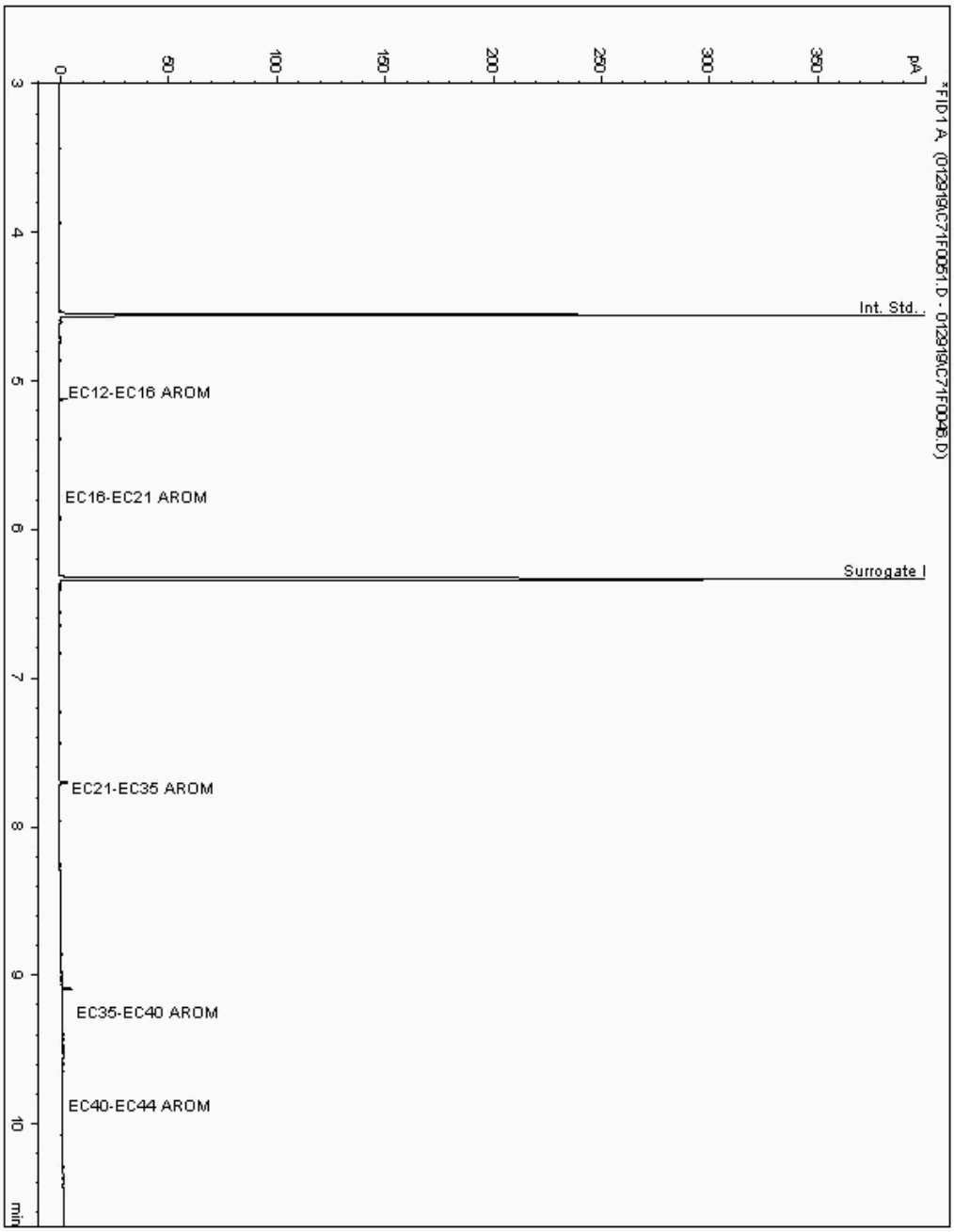
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19218123 **Depth :** 2.40
Sample ID : WS19

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18023141-
Date Acquired : 30/01/2019 08:29:04 PM
Units : ppb
Dilution: WS19[2.40] ->



CERTIFICATE OF ANALYSIS

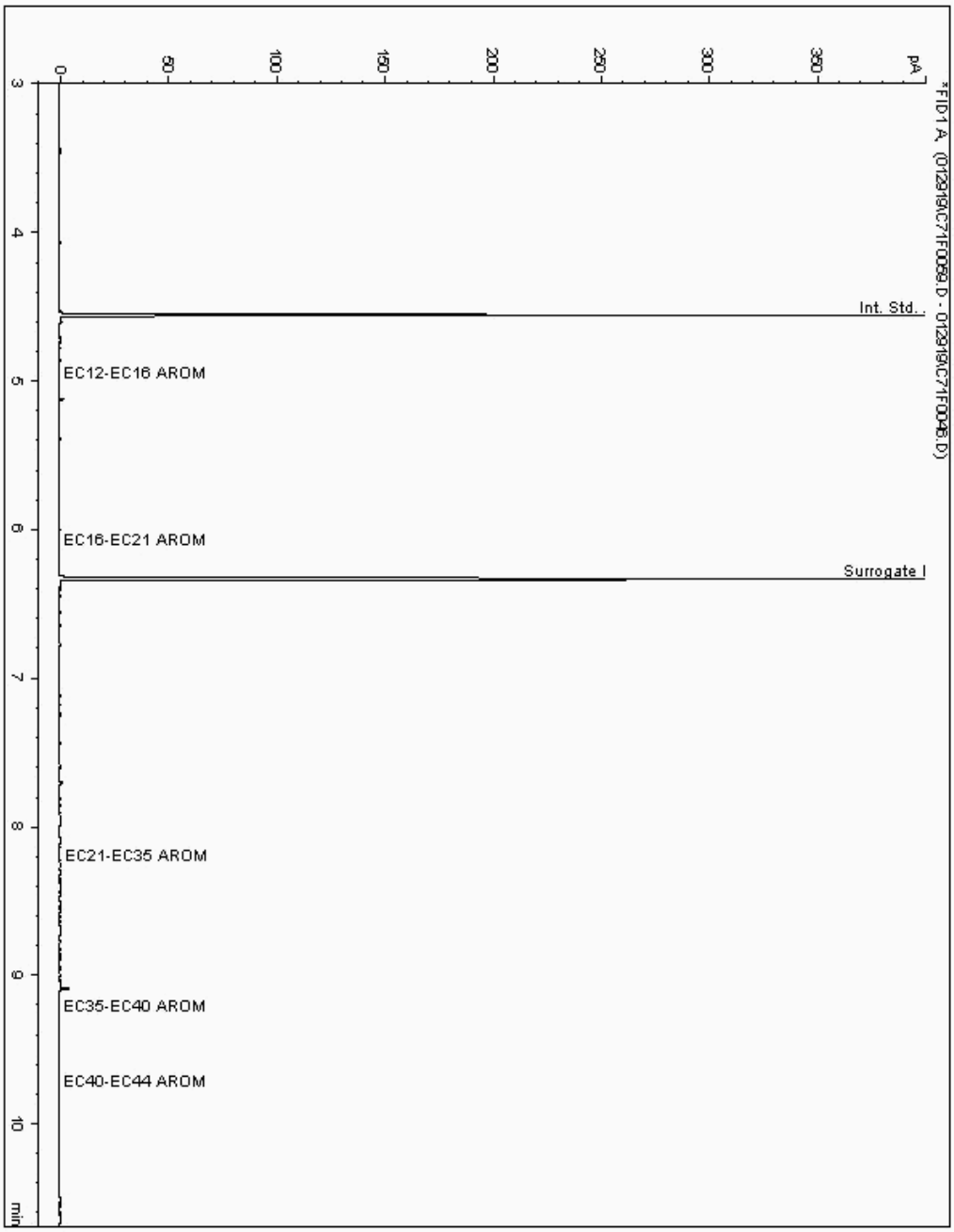
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19218146 **Depth :** 0.80
Sample ID : WS17

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18023087-
Date Acquired : 30/01/2019 10:39:02 PM
Units : ppb
Dilution: WS17[0.80] ->

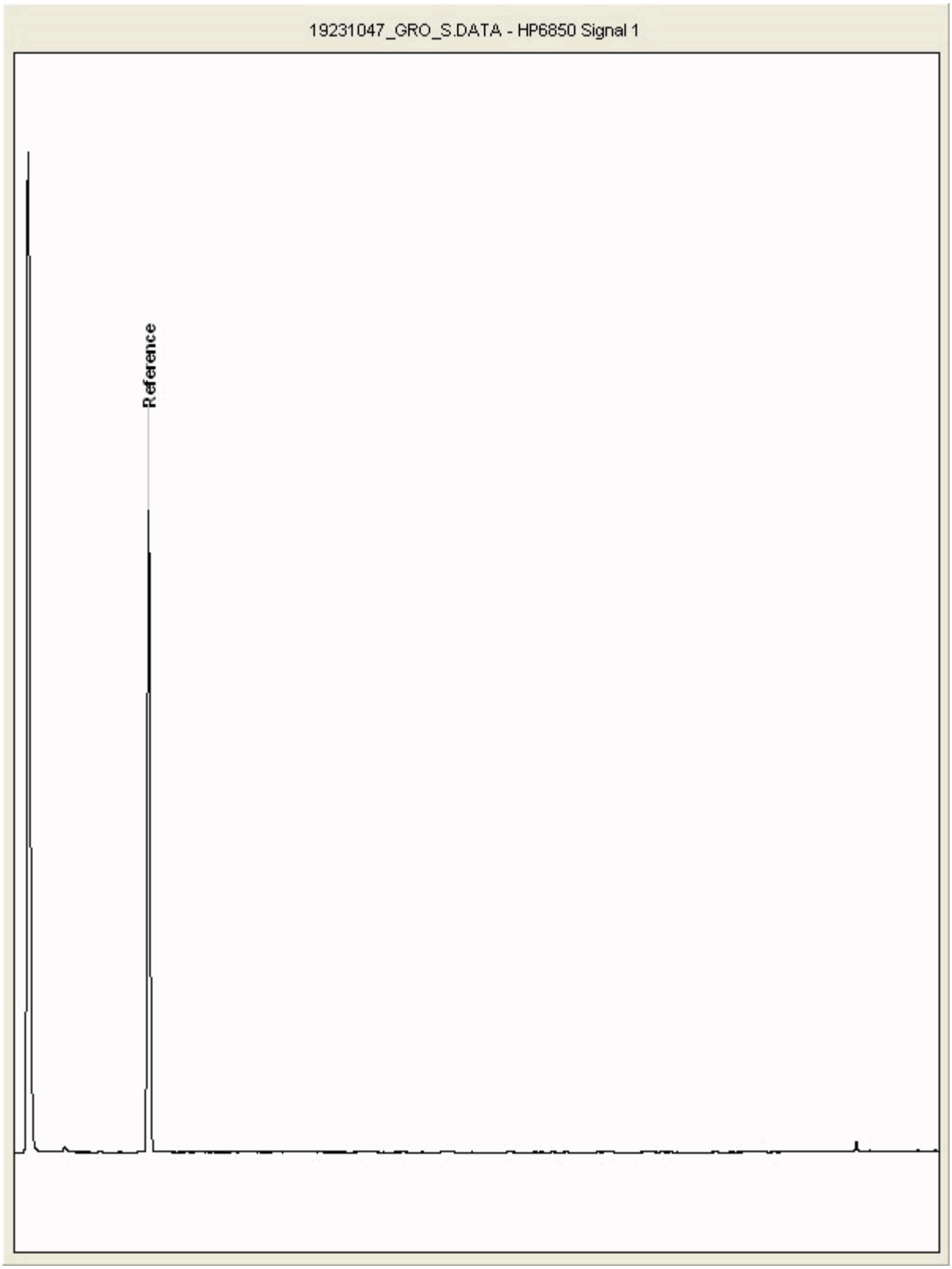


CERTIFICATE OF ANALYSIS

SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: GRO by GC-FID (S) **Sample No :** 19231047 **Sample ID :** WS25 **Depth :** 0.10 - 0.30



CERTIFICATE OF ANALYSIS

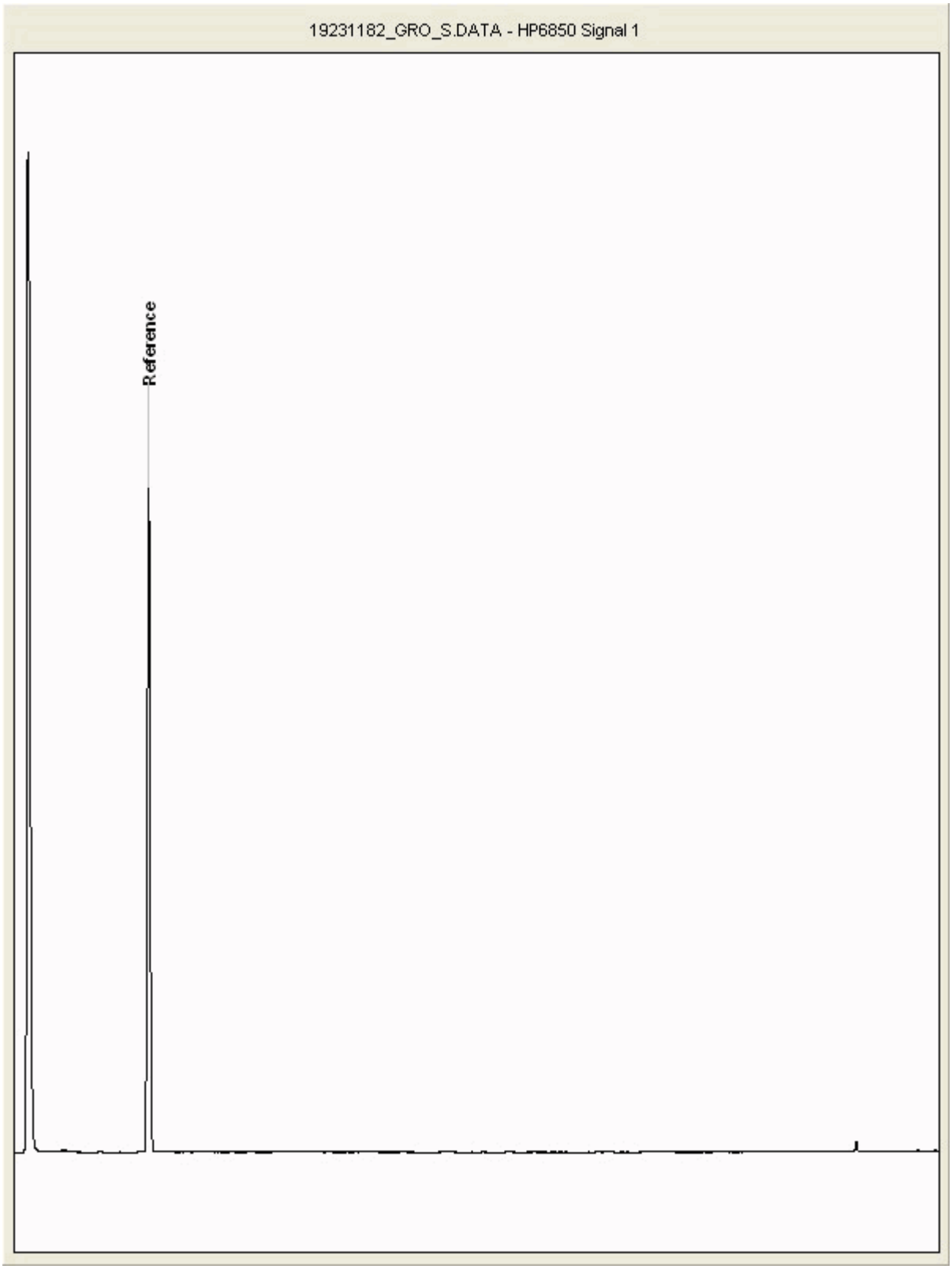
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19231182
Sample ID : WS21

Depth : 1.50



CERTIFICATE OF ANALYSIS

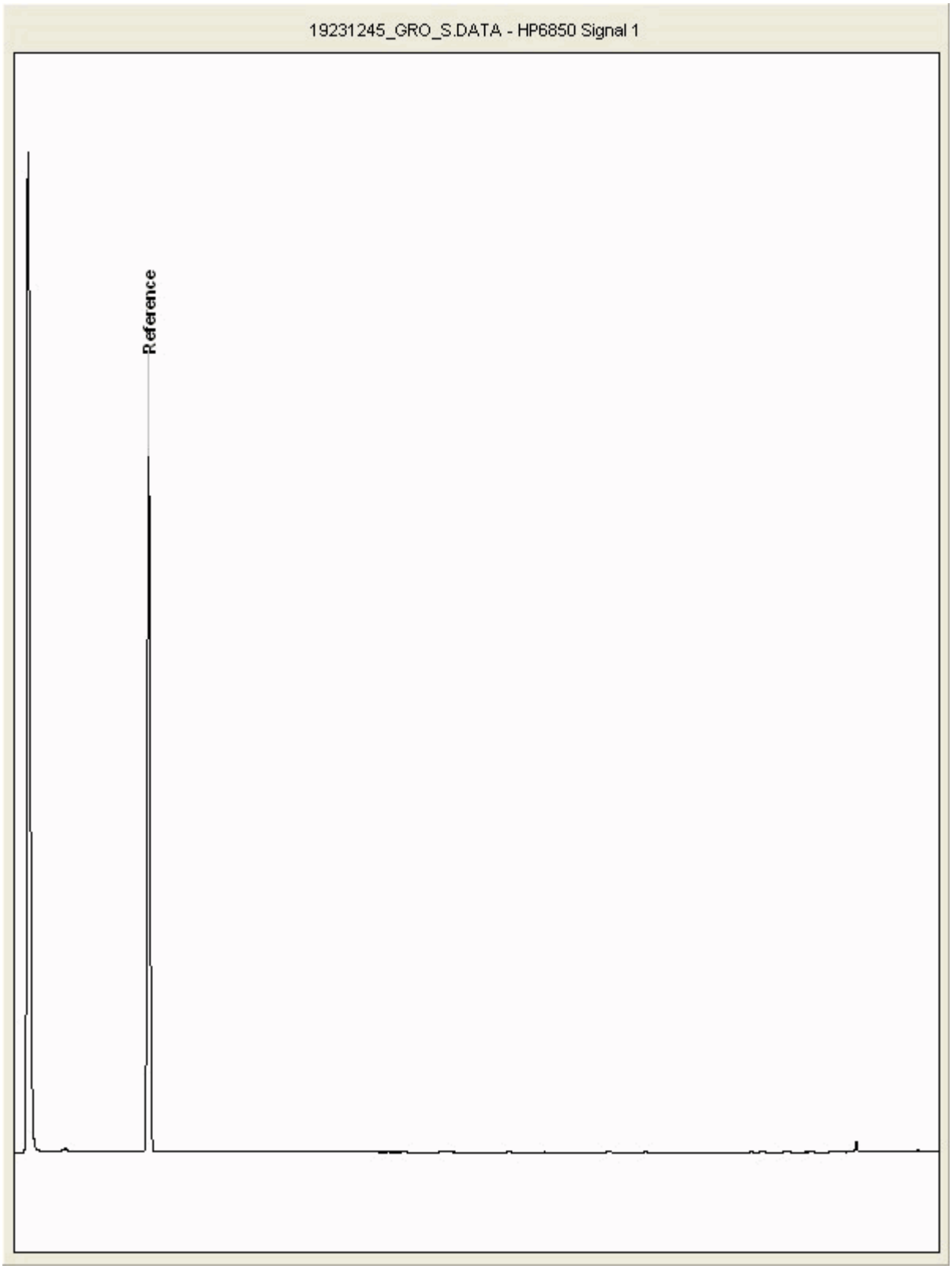
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19231245
Sample ID : WS21

Depth : 0.60 - 0.70



CERTIFICATE OF ANALYSIS

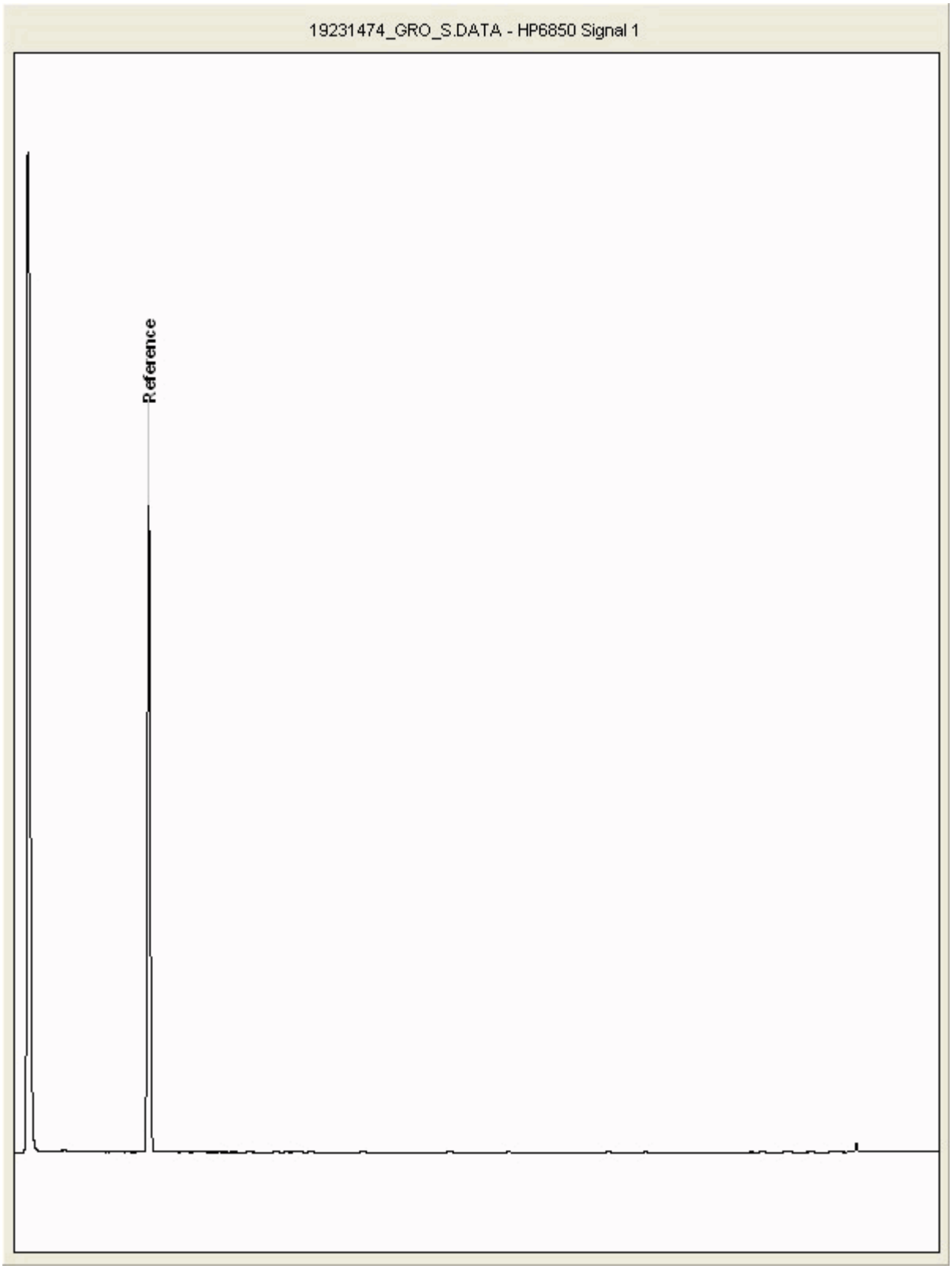
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19231474
Sample ID : WS17

Depth : 0.30



CERTIFICATE OF ANALYSIS

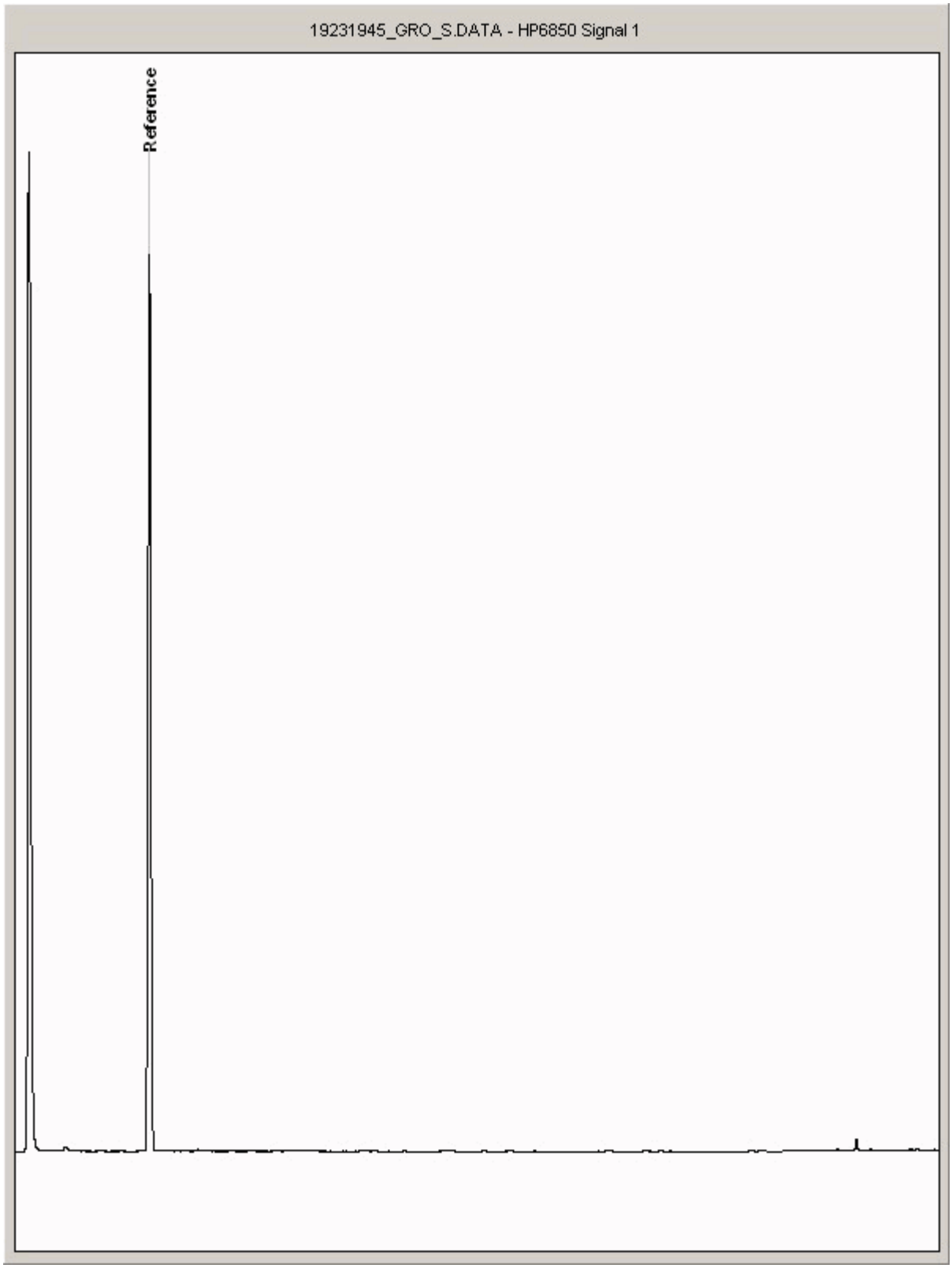
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19231945
Sample ID : WS24

Depth : 1.20



CERTIFICATE OF ANALYSIS

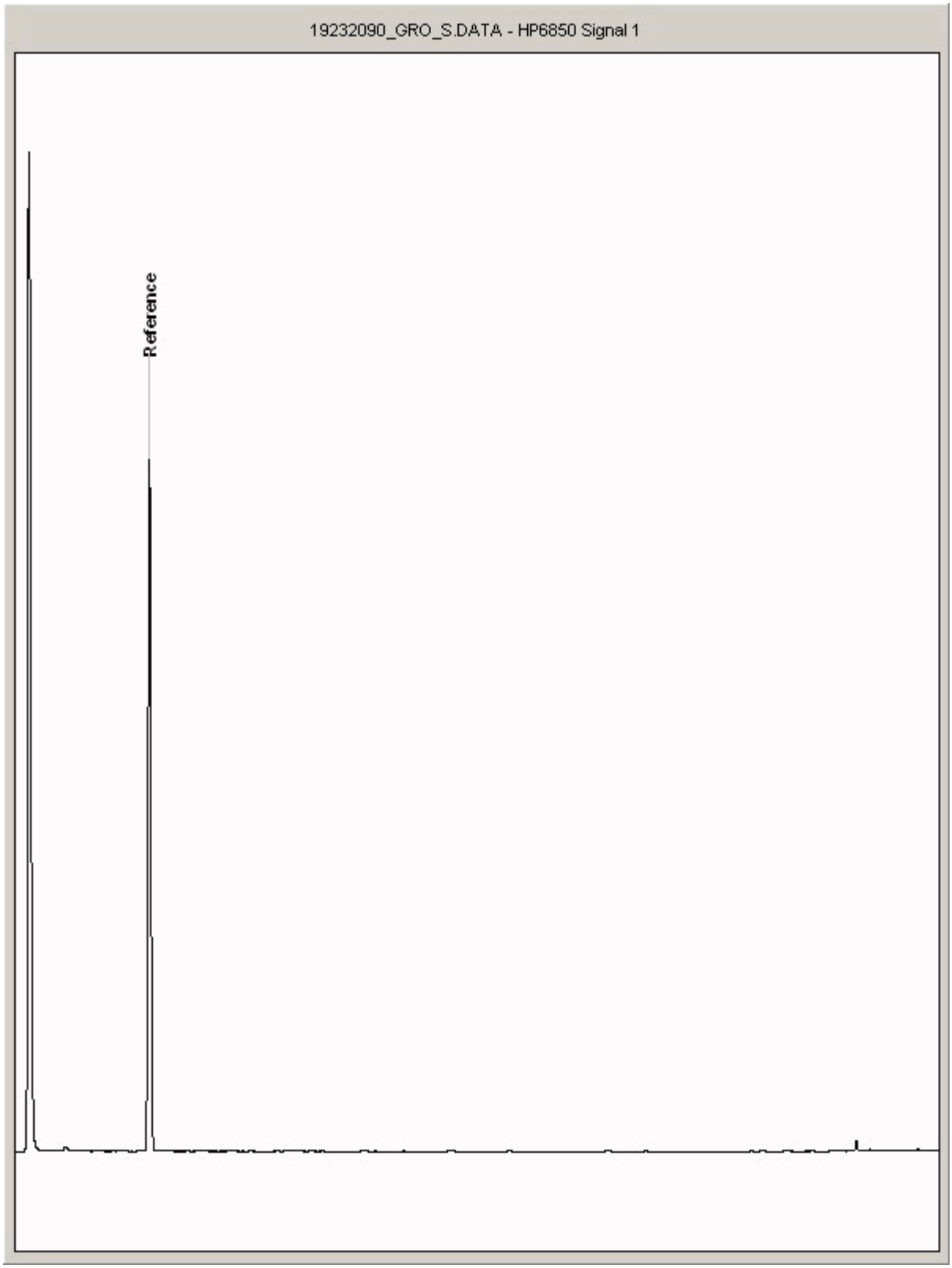
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19232090
Sample ID : WS21

Depth : 0.10 - 0.20



CERTIFICATE OF ANALYSIS

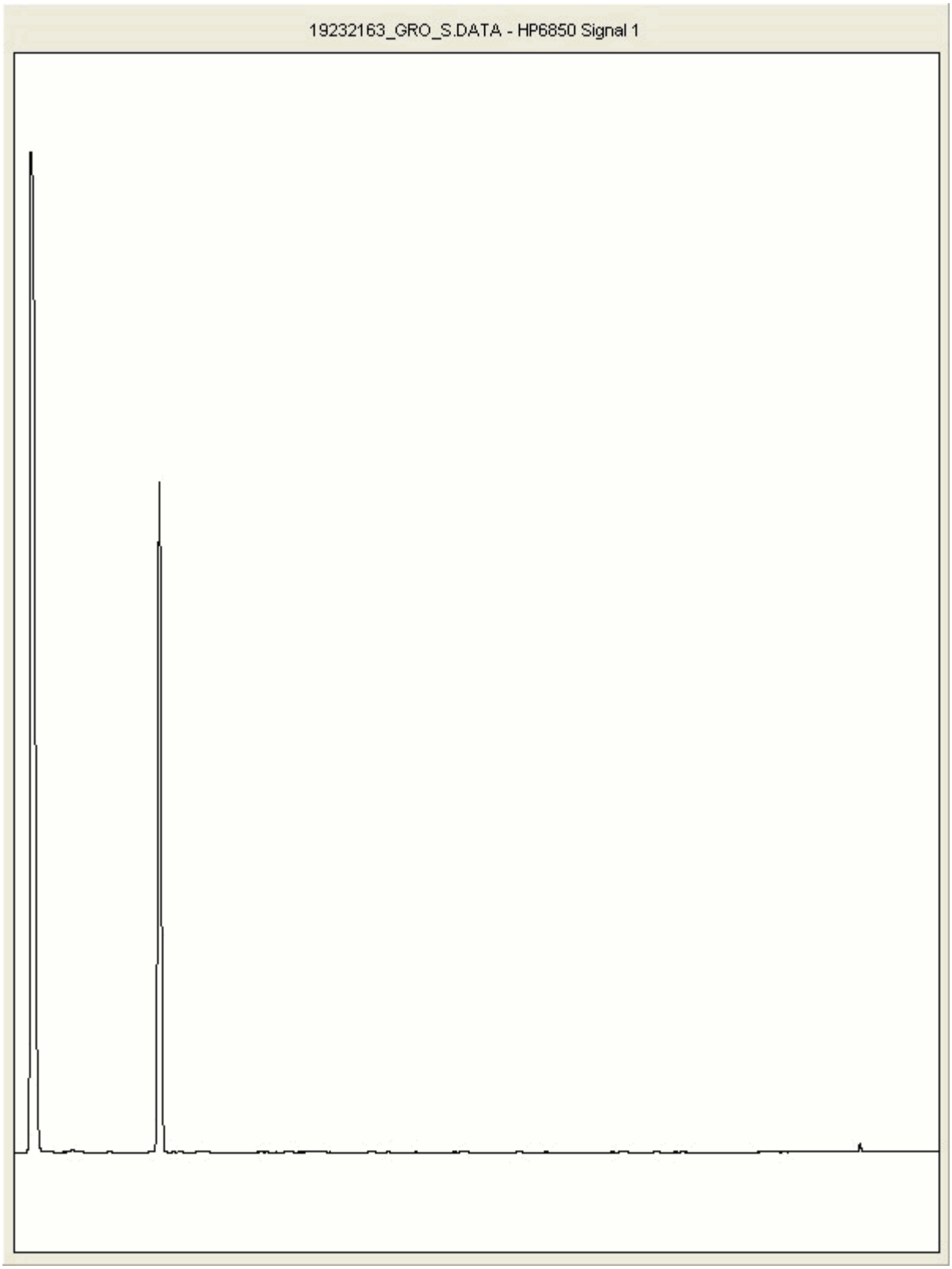
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19232163
Sample ID : WS09

Depth : 0.20 - 0.30



CERTIFICATE OF ANALYSIS

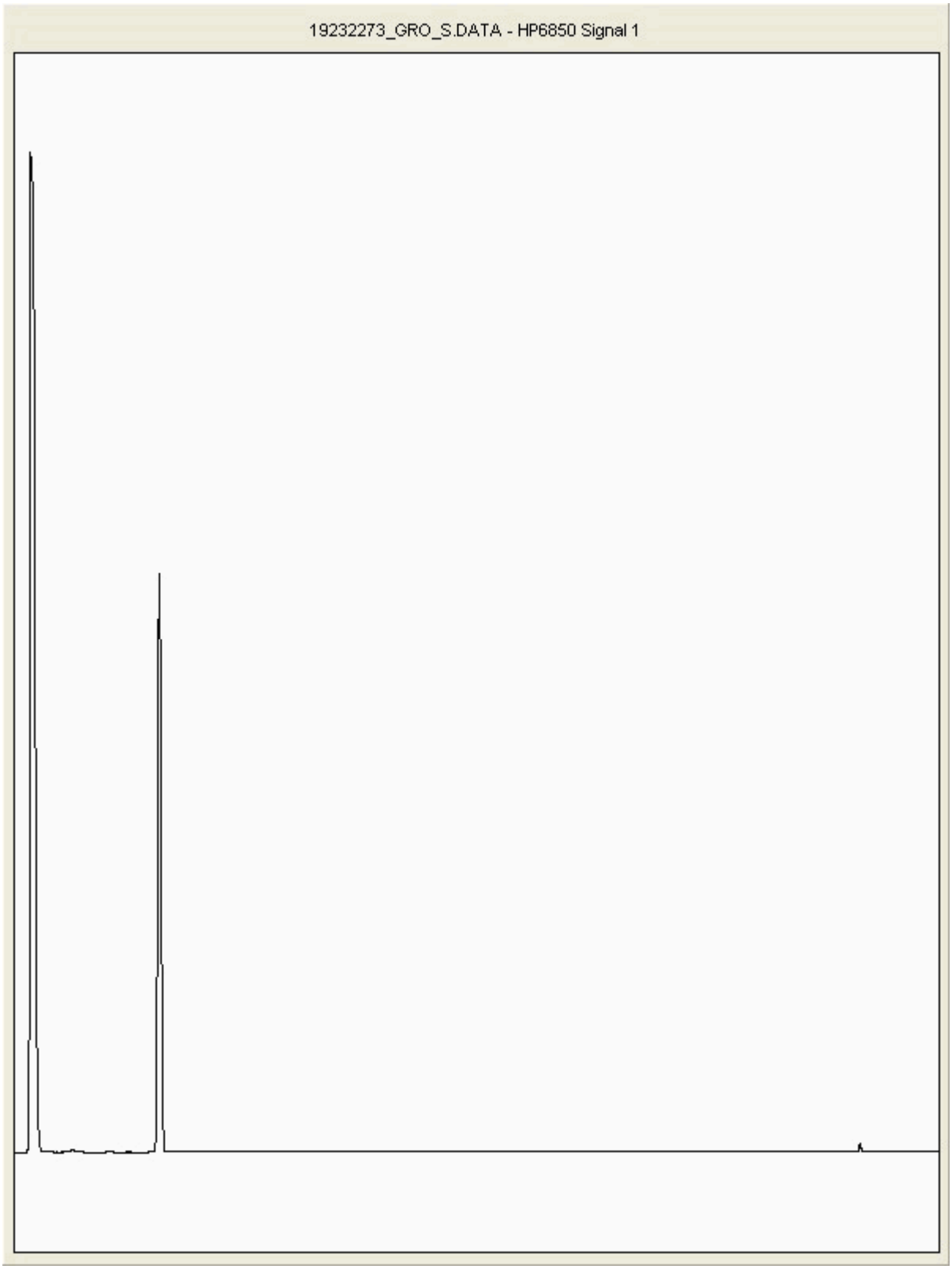
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19232273
Sample ID : WS09

Depth : 0.13 - 0.20



CERTIFICATE OF ANALYSIS

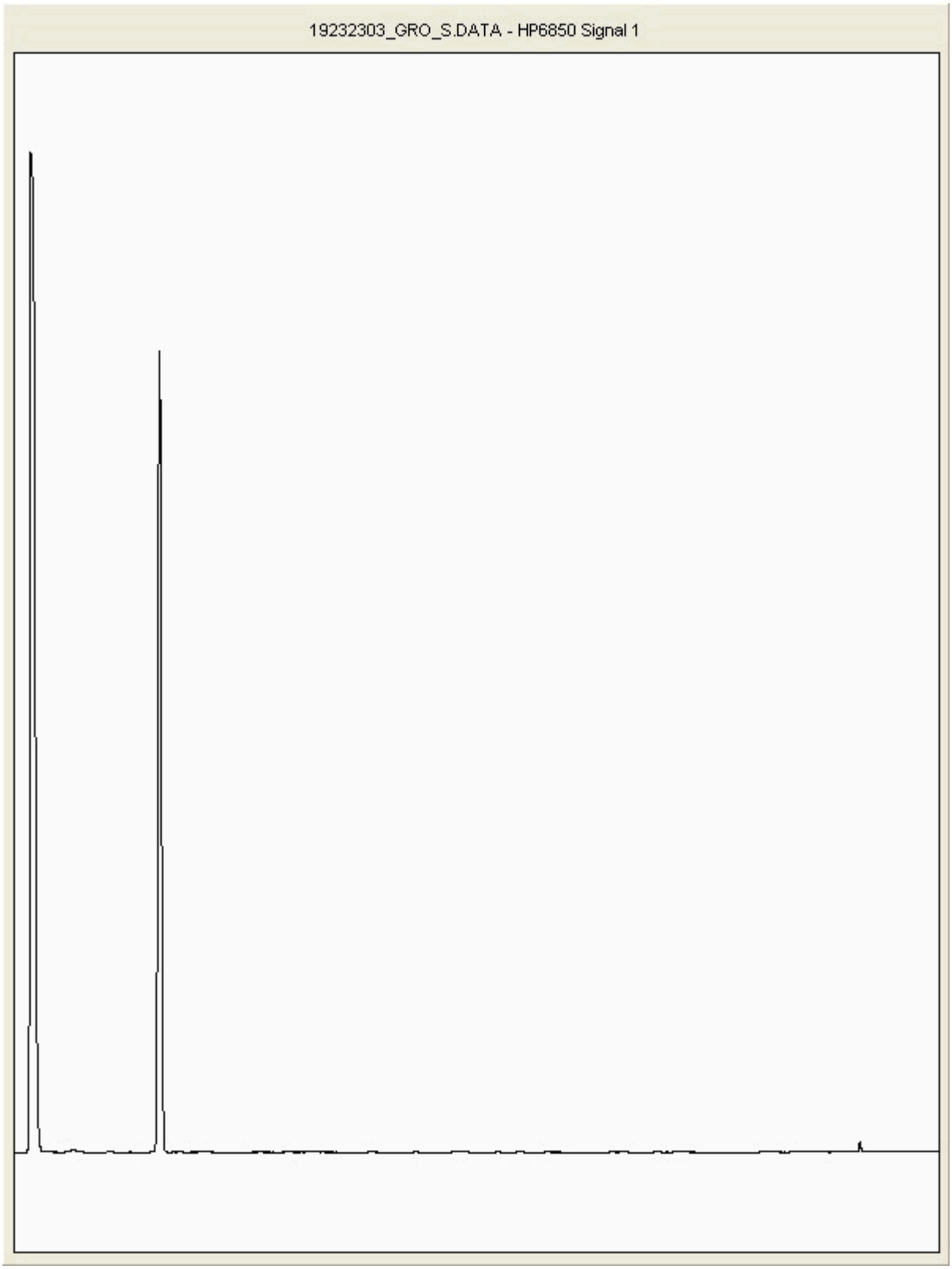
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19232303
Sample ID : WS13

Depth : 0.50



CERTIFICATE OF ANALYSIS

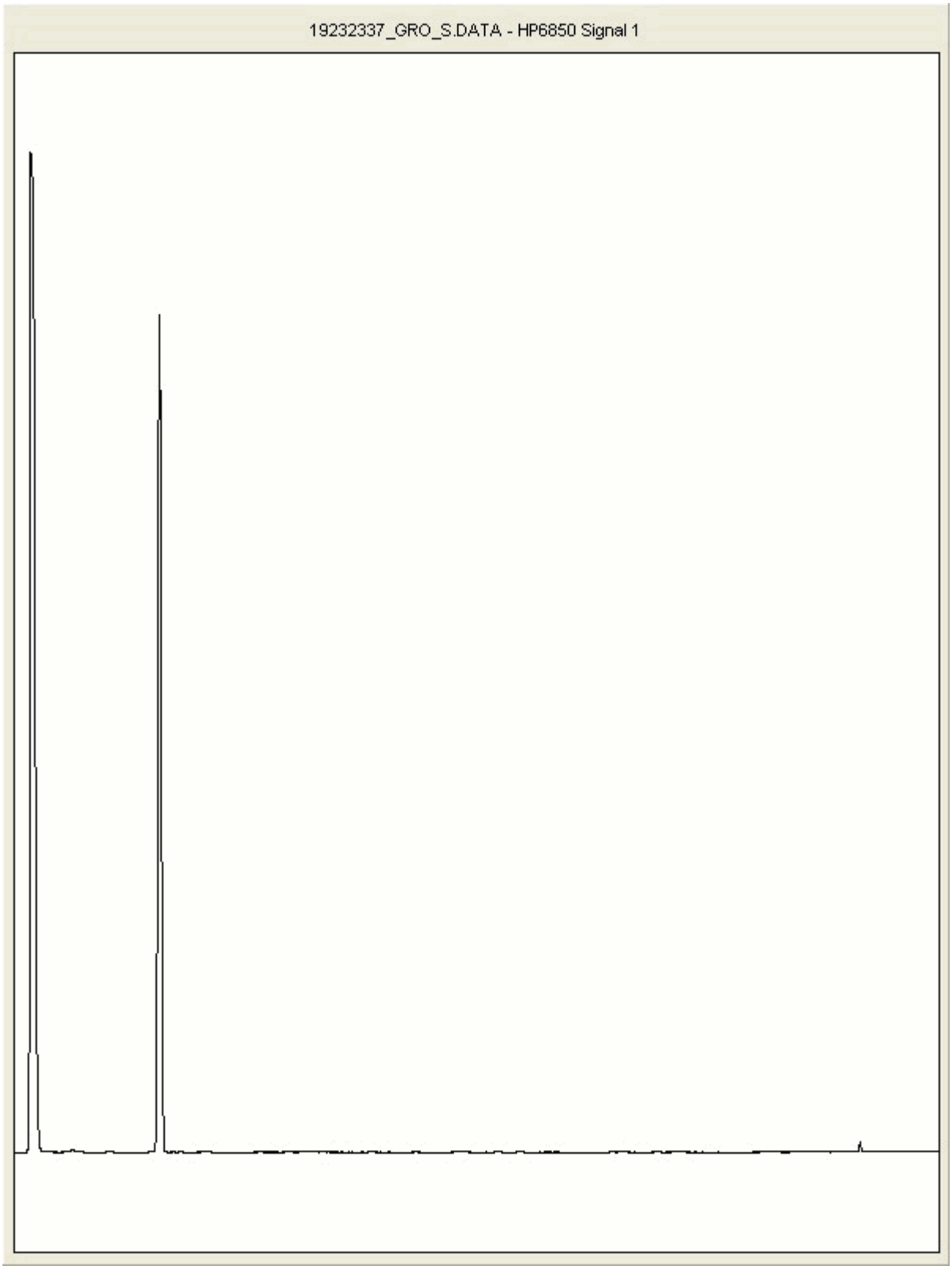
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19232337
Sample ID : WS19

Depth : 2.40



CERTIFICATE OF ANALYSIS

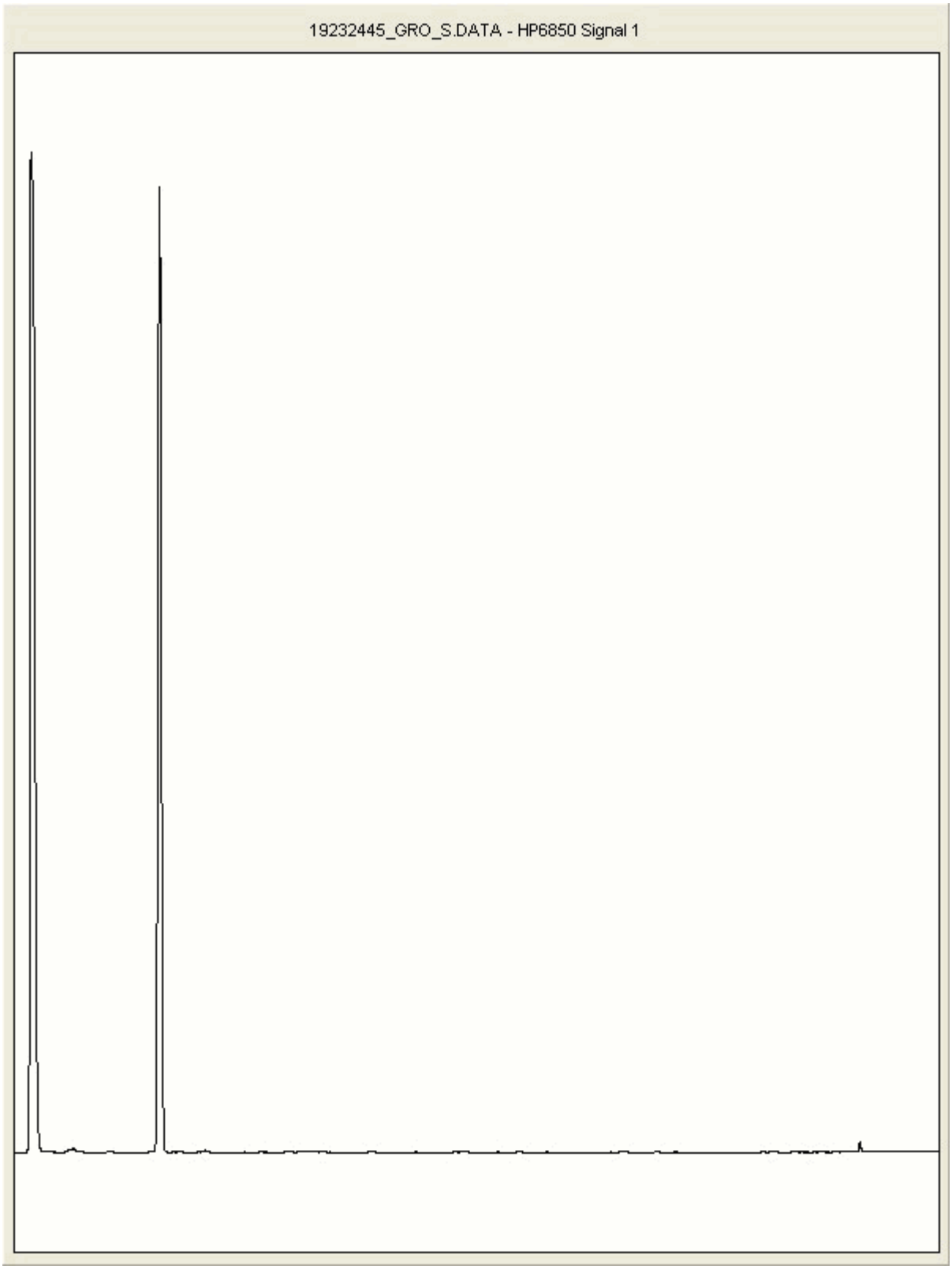
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19232445
Sample ID : WS17

Depth : 0.80



CERTIFICATE OF ANALYSIS

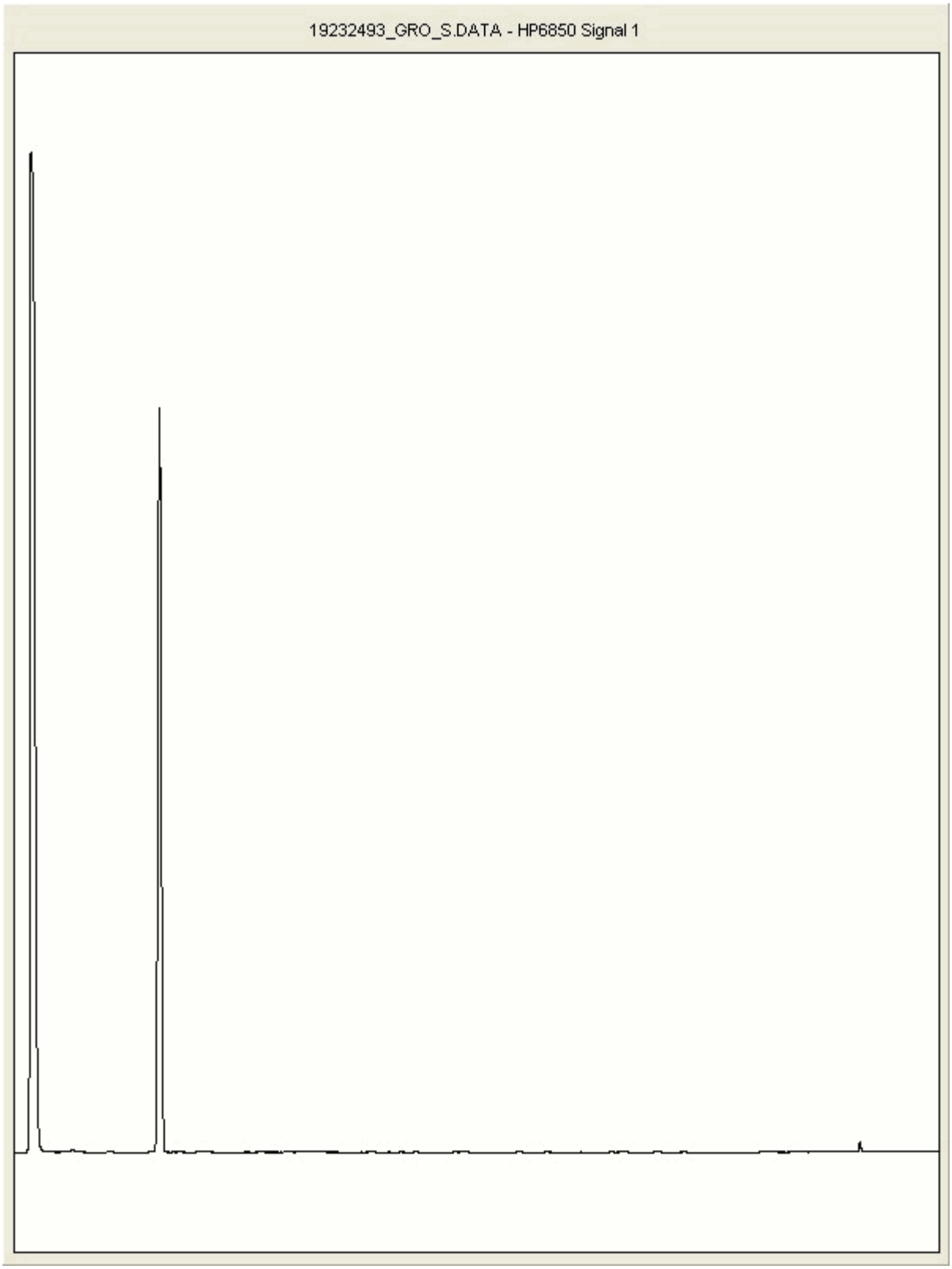
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19232493
Sample ID : WS19

Depth : 0.10



CERTIFICATE OF ANALYSIS

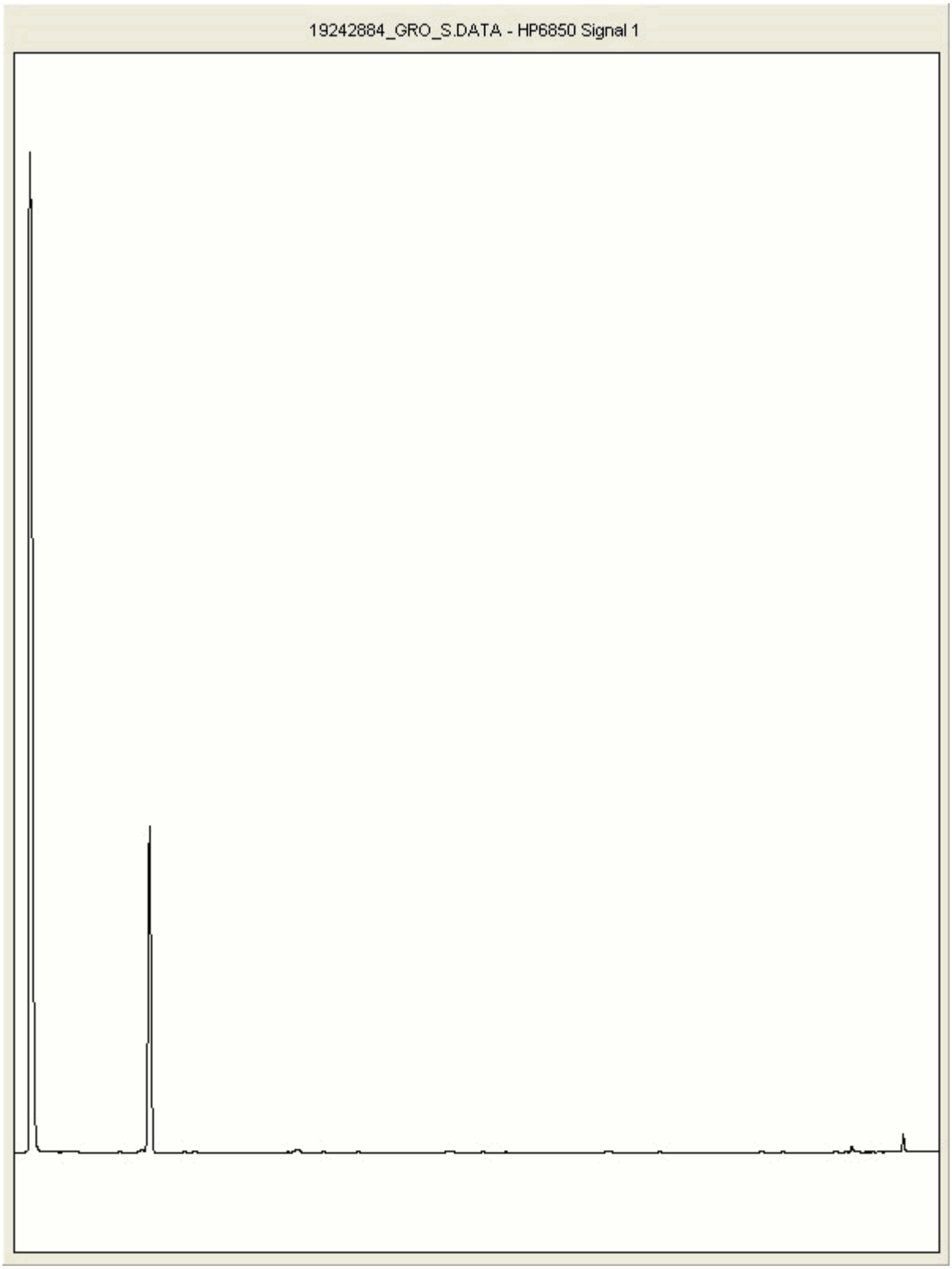
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19242884
Sample ID : WS12

Depth : 1.00



CERTIFICATE OF ANALYSIS

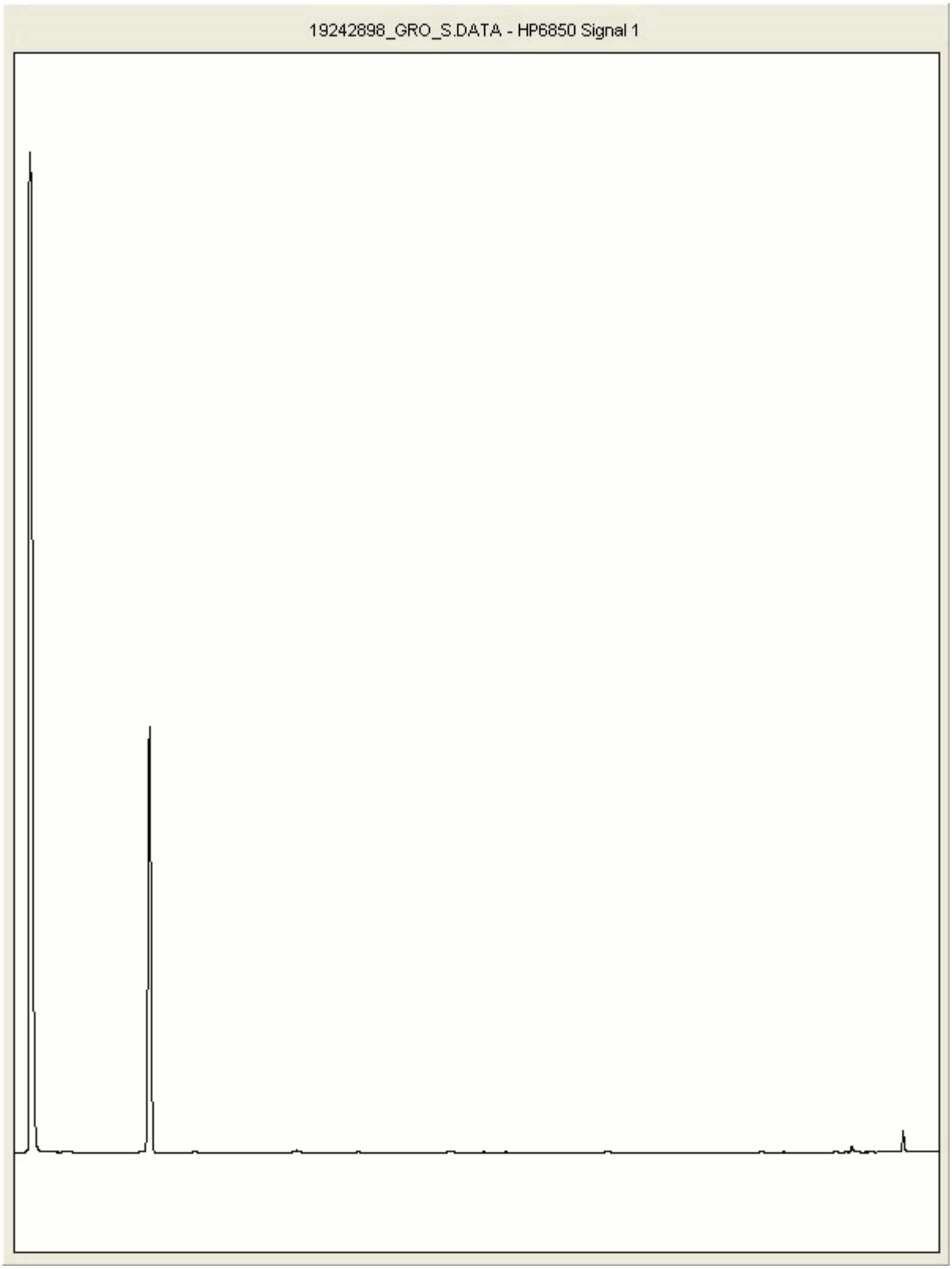
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19242898
Sample ID : WS13

Depth : 0.30



CERTIFICATE OF ANALYSIS

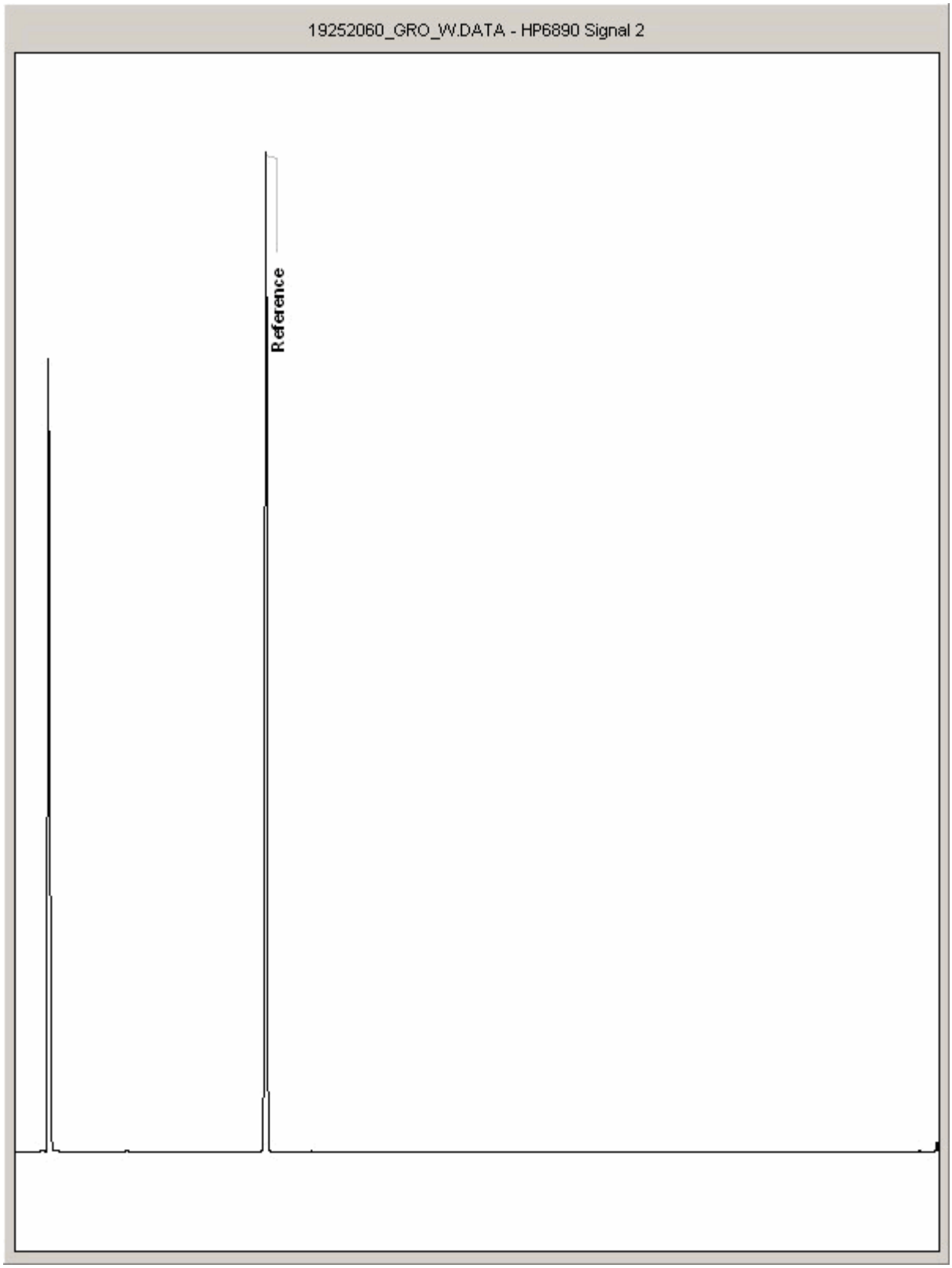
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19252060
Sample ID : WS21

Depth : 1.50



CERTIFICATE OF ANALYSIS

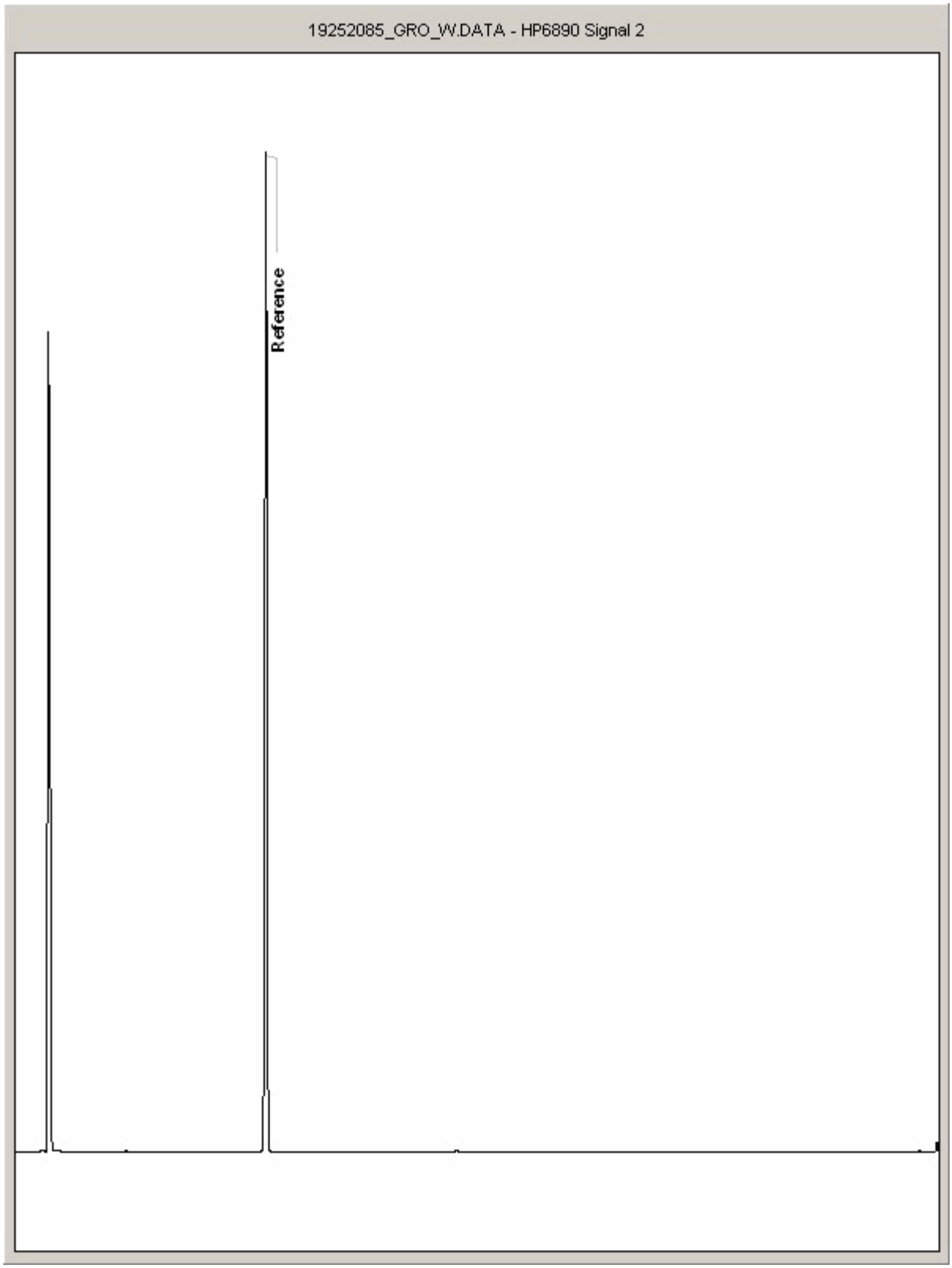
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19252085
Sample ID : WS13

Depth : 0.30



CERTIFICATE OF ANALYSIS

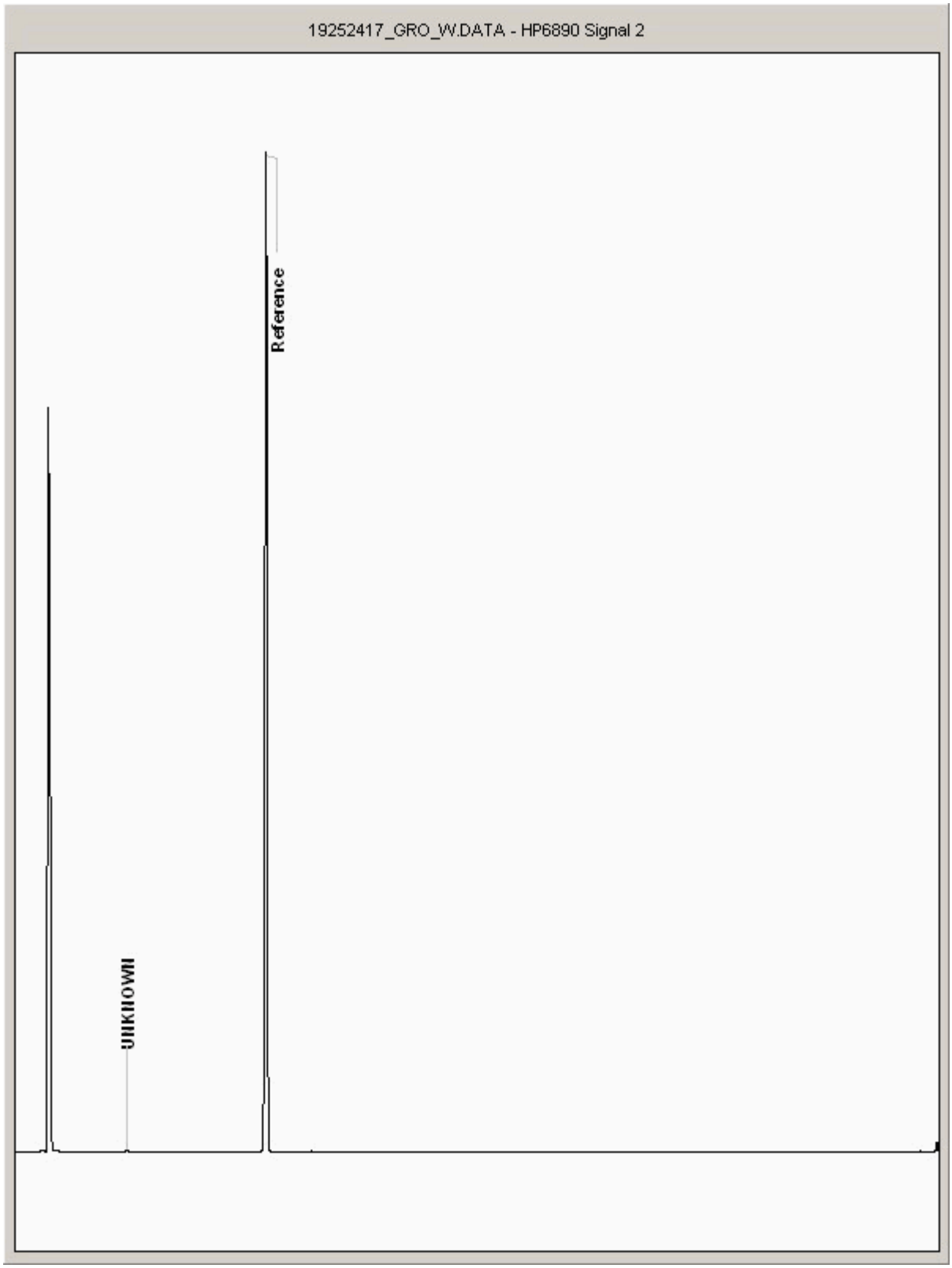
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19252417
Sample ID : WS09

Depth : 0.13 - 0.20



CERTIFICATE OF ANALYSIS

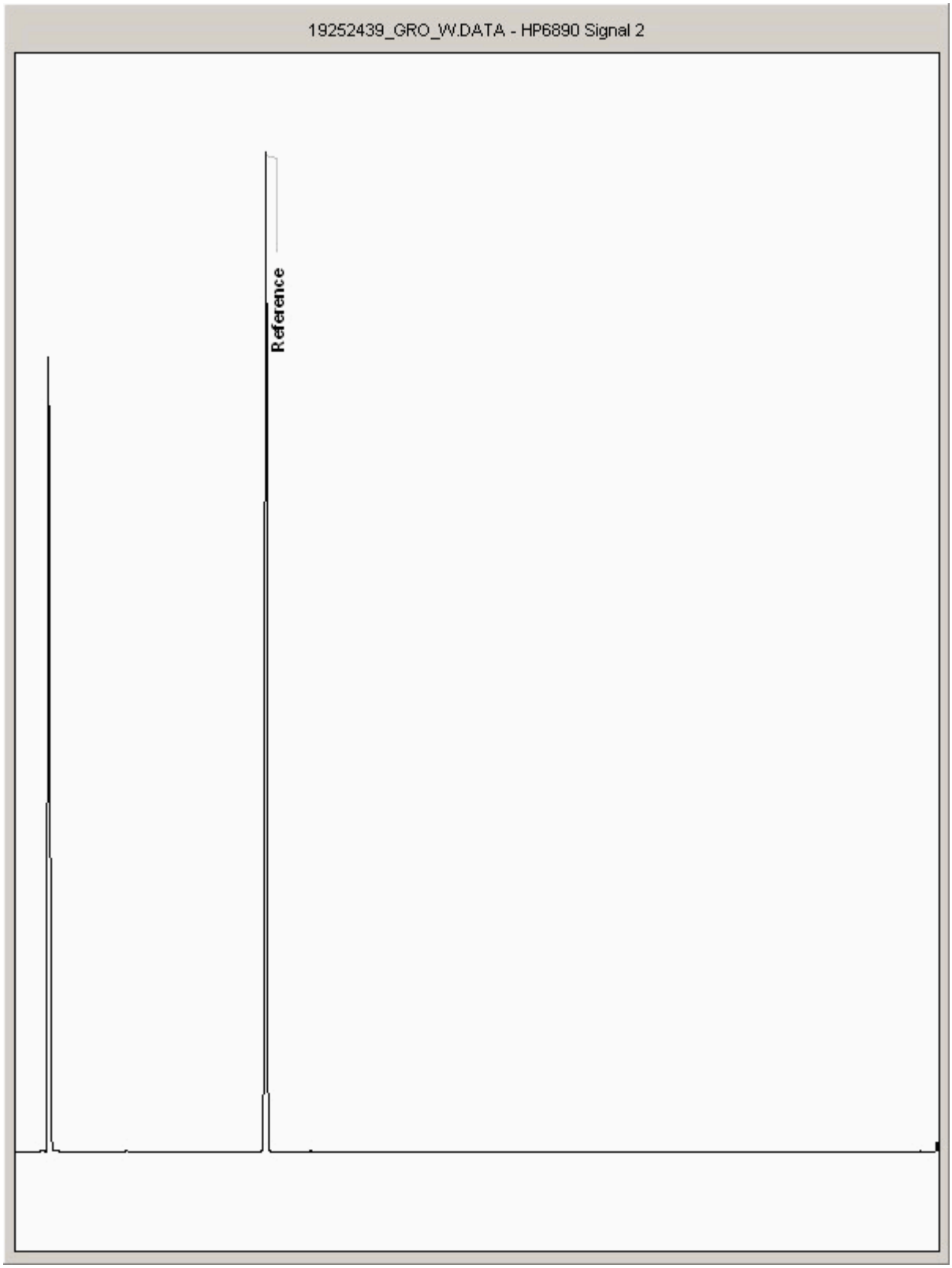
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19252439
Sample ID : WS25

Depth : 0.10 - 0.30



CERTIFICATE OF ANALYSIS

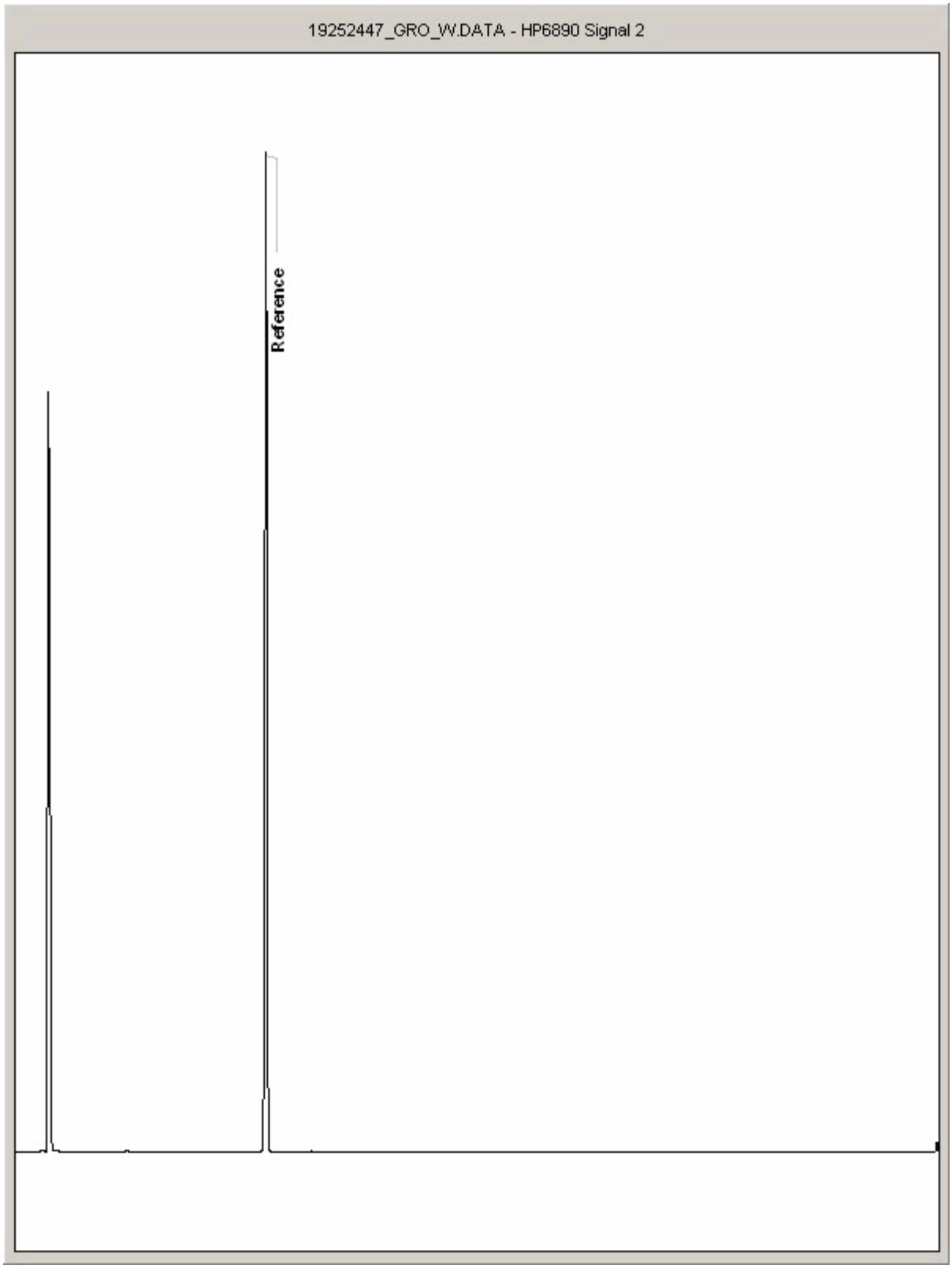
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19252447
Sample ID : WS21

Depth : 0.10 - 0.20



CERTIFICATE OF ANALYSIS

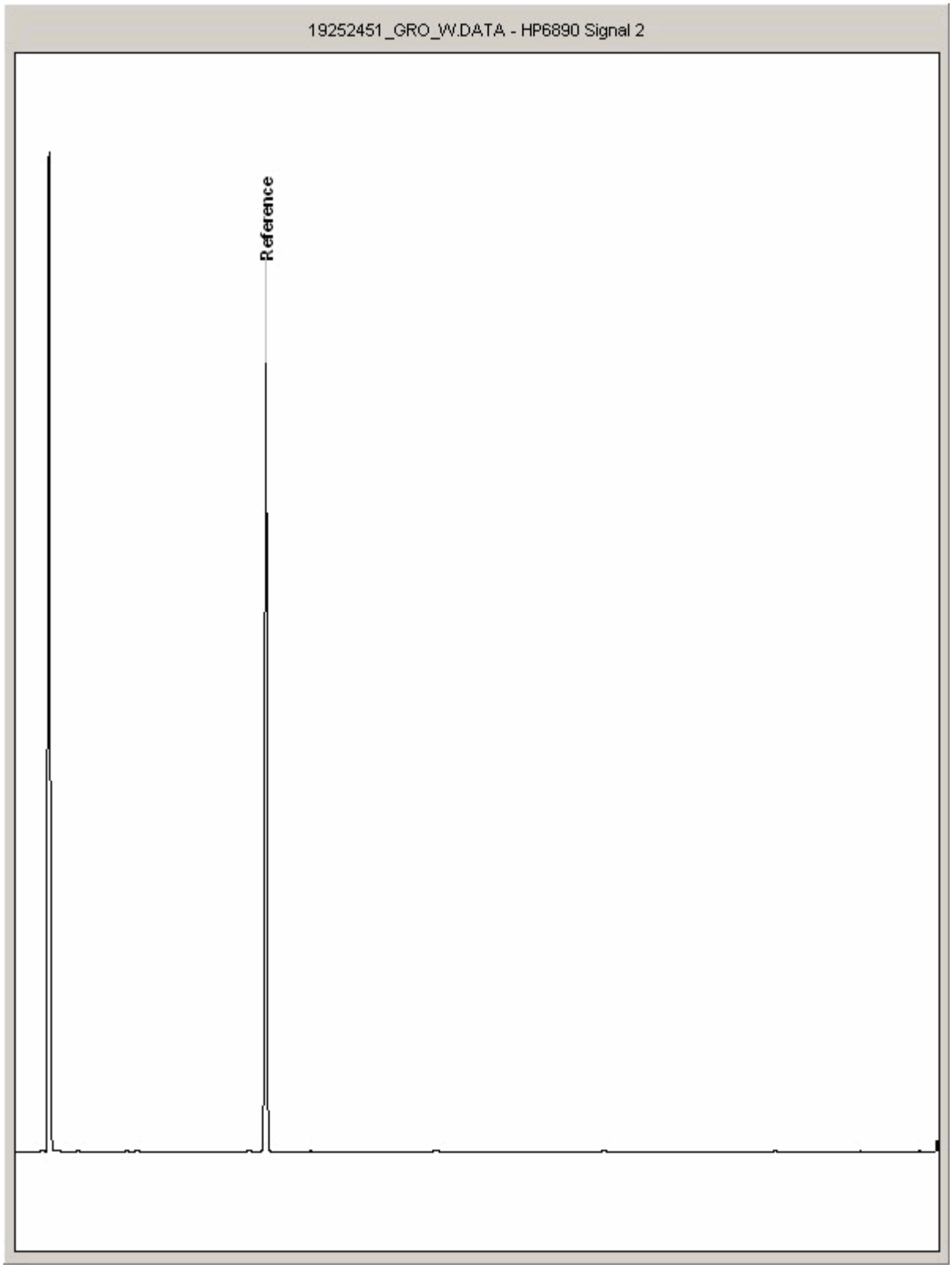
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19252451
Sample ID : WS17

Depth : 0.30



CERTIFICATE OF ANALYSIS

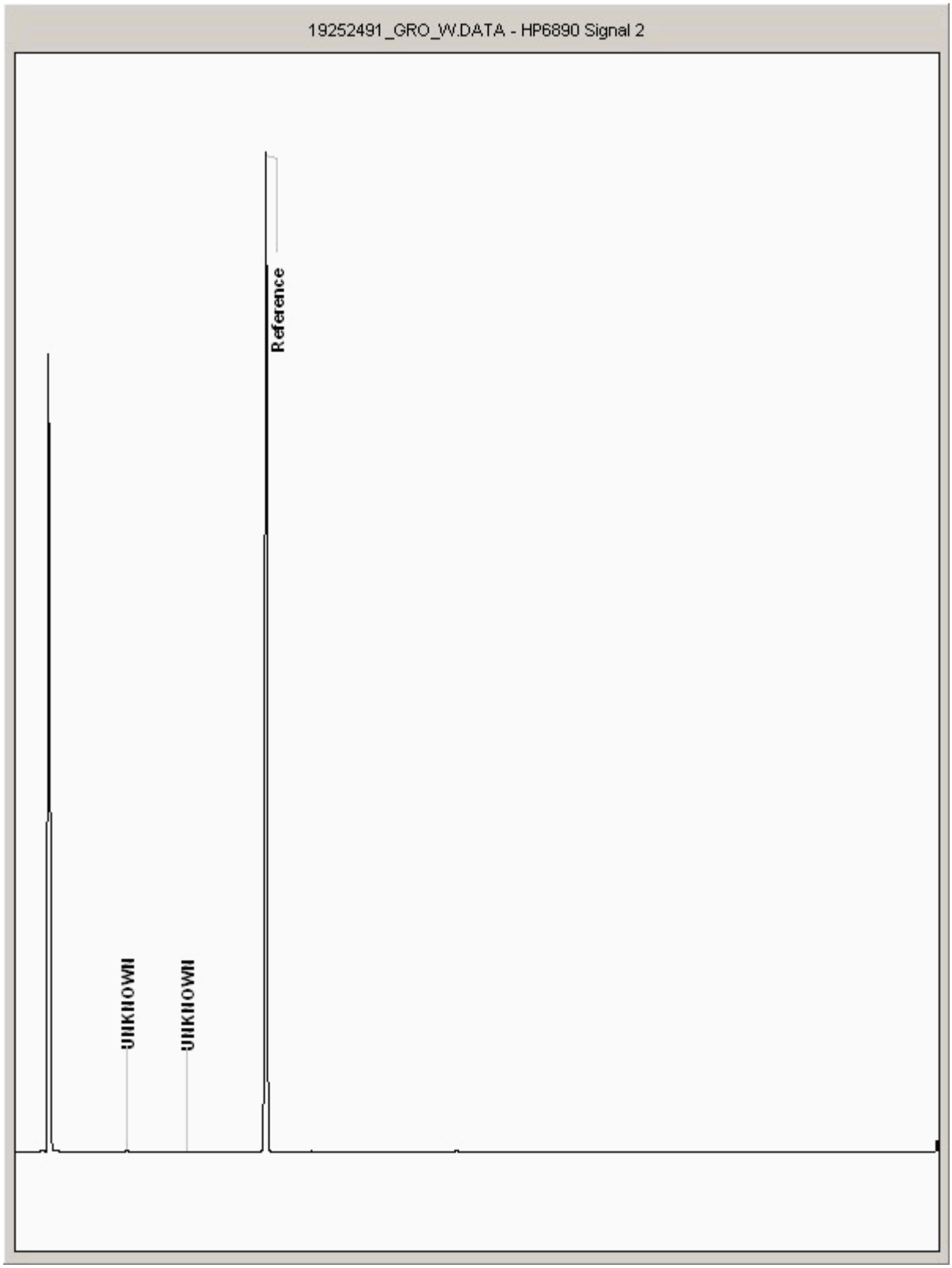
SDG:	190122-79	**Client Reference:**	A090070-474	**Report Number:**	495513
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	495510

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19252491
Sample ID : WS19

Depth : 0.10



Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. Samples will be run in duplicate upon request, but an additional charge may be incurred.

3. If sufficient sample is received a sub sample will be retained free of charge for 30 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of one month after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

4. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

5. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

6. When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2005), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

7. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised. This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

8. If appropriate preserved bottles are not received preservation will take place on receipt. However, the integrity of the data may be compromised.

9. NDP - No determination possible due to insufficient/unsuitable sample.

10. Metals in water are performed on a filtered sample, and therefore represent dissolved metals - total metals must be requested separately.

11. Results relate only to the items tested.

12. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

13. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

14. **Product analyses** - Organic analyses on products can only be semi-quantitative due to the matrix effects and high dilution factors employed.

15. Phenols monohydric by HPLC include phenol, cresols (2-Methylphenol, 3-Methylphenol and 4-Methylphenol) and Xylenols (2,3 Dimethylphenol, 2,4 Dimethylphenol, 2,5 Dimethylphenol, 2,6 Dimethylphenol, 3,4 Dimethyphenol, 3,5 Dimethylphenol).

16. Total of 5 speciated phenols by HPLC includes Phenol, 2,3,5-Trimethyl Phenol, 2-Isopropylphenol, Cresols and Xylenols (as detailed in 15).

17. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

18. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

19. Mercury results quoted on soils will not include volatile mercury as the analysis is performed on a dried and crushed sample.

20. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

21. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis. The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

22. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

23. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l. Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only. It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

24. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

Sample Deviations

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
§	**Sampled on date not provided**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**

Asbestos

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.

The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

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Tel: (01244) 528700
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email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

WYG Geo-Environment
Arndale Court
Headingley
Leeds
West Yorkshire
LS6 2UJ

Attention: Regulation

CERTIFICATE OF ANALYSIS

Date of report Generation:	20 March 2019
Customer:	H_WYG_LEE
Sample Delivery Group (SDG):	190201-81
Your Reference:	A090070-474
Location:	HE Compton
Report No:	497663

This report has been revised and directly supersedes 497661 in its entirety.

We received 83 samples on Wednesday January 30, 2019 and 47 of these samples were scheduled for analysis which was completed on Wednesday March 20, 2019. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Environmental Hawarden (Method codes TM) or ALS Environmental Aberdeen (Method codes S).

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:
Regulation 13

Regulation 13
Operations Manager

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
19253912	WS 07		0.30 - 0.30	18/01/2019
19253331	WS 10		0.20	24/01/2019
19253332	WS 10		0.50	24/01/2019
19253913	WS 16		0.15	18/01/2019
19253915	WS 16		0.40	18/01/2019
19253917	WS 16		0.60	18/01/2019
19253918	WS 16		1.20	18/01/2019
19253333	WS 20		0.10	23/01/2019
19253334	WS 20		0.50	23/01/2019
19253335	WS 20		1.50	23/01/2019
19253336	WS 20		2.00	23/01/2019
19257293	WS22		0.00 - 0.05	21/01/2019
19257296	WS22		0.10 - 0.20	21/01/2019
19257299	WS22		0.30	21/01/2019
19253919	WS 23		0.20	18/01/2019
19253920	WS 23		0.30 - 0.50	18/01/2019
19253583	WS 26		0.20	18/01/2019
19253585	WS 26		0.70	18/01/2019
19253589	WS 28		0.10	24/01/2019
19253590	WS 28		0.30	24/01/2019
19253591	WS 28		1.00	24/01/2019
19253592	WS 28		1.50	24/01/2019
19257272	WS29		0.10	21/01/2019
19257273	WS29		0.40	21/01/2019
19257274	WS29		0.70	21/01/2019
19257275	WS29		1.50 - 1.60	21/01/2019
19253322	WS 30		0.10	23/01/2019
19253323	WS 30		0.50	23/01/2019
19253581	WS 33		0.10	18/01/2019
19253582	WS 33		0.50	18/01/2019
19253340	WS 34		0.10	23/01/2019
19253341	WS 34		1.00	23/01/2019
19257269	WS35		0.10	21/01/2019
19257270	WS35		0.40	21/01/2019
19257271	WS35		1.00	21/01/2019
19253325	WS 36		0.30	24/01/2019
19253324	WS 36		0.10	24/01/2019
19253326	WS 36		0.50	24/01/2019
19253327	WS 36		1.00	24/01/2019
19253329	WS 37		0.20	22/01/2019
19253328	WS 37		0.40	22/01/2019
19253330	WS 37		0.70	22/01/2019
19257263	WS38		0.20	21/01/2019
19257264	WS38		0.50	21/01/2019
19257265	WS38		0.70	21/01/2019
19257266	WS39		0.05	21/01/2019
19257267	WS39		0.20	21/01/2019
19257268	WS39		0.70 - 0.90	21/01/2019
19253593	WS 40		0.10	24/01/2019
19253594	WS 40		0.30	24/01/2019

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
19253596	WS 40		1.00	24/01/2019
19253597	WS 40		1.50	24/01/2019
19253580	WS 41		0.10	18/01/2019
19253579	WS 41		0.50	18/01/2019
19253578	WS 41		1.00	18/01/2019
19253318	WS 42		0.10	22/01/2019
19253320	WS 42		0.30	22/01/2019
19253321	WS 42		1.30	22/01/2019
19253587	WS 43		0.20	22/01/2019
19253588	WS 43		0.50	22/01/2019
19253902	WS 45		0.10	22/01/2019
19253903	WS 45		0.30	22/01/2019
19253906	WS 45		1.00	22/01/2019
19253908	WS 45		1.30	22/01/2019
19253909	WS 46		0.30	22/01/2019
19253911	WS 46		0.70	22/01/2019
19257276	WS52		0.10	25/01/2019
19257277	WS52		0.30	25/01/2019
19257278	WS52		1.00	25/01/2019
19257282	WS53		0.10	24/01/2019
19257283	WS53		0.50	24/01/2019
19257284	WS53		1.00	24/01/2019
19257285	WS54		0.10	25/01/2019
19257286	WS54		0.30	25/01/2019
19257287	WS54		0.50	25/01/2019
19257279	WS57		0.10	25/01/2019
19257280	WS57		0.30	25/01/2019
19257281	WS57		1.00	25/01/2019
19257289	WS58		0.30	25/01/2019
19257291	WS58		1.00	25/01/2019
19253337	WS 25 A		0.10	23/01/2019
19253338	WS 25A		0.30	23/01/2019
19253339	WS 25A		1.00	23/01/2019

Maximum Sample/Coolbox Temperature (°C) : **5.0**

ISO5667-3 Water quality - Sampling - Part3 -
During Transportation samples shall be stored in a cooling device capable of maintaining a temperature of (5±3)°C.

ALS have data which show that a cool box with 4 frozen icepacks is capable of maintaining pre-chilled samples at a temperature of (5±3)°C for a period of up to 24hrs.

Only received samples which have had analysis scheduled will be shown on the following pages.

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	Sample Type
			19253912	WS 07		0.30 - 0.30	1kg TUB	S
							250g Amber Jar (ALE210)	S
							60g VOC (ALE215)	S
			19253331	WS 10		0.20	1kg TUB	S
							250g Amber Jar (ALE210)	S
							60g VOC (ALE215)	S
			19253332	WS 10		0.50	1kg TUB	S
							250g Amber Jar (ALE210)	S
							60g VOC (ALE215)	S
			19253917	WS 16		0.60	1kg TUB	S
							250g Amber Jar (ALE210)	S
							60g VOC (ALE215)	S
			19253918	WS 16		1.20	1kg TUB	S
							250g Amber Jar (ALE210)	S
							60g VOC (ALE215)	S
							Kone Cup	S
			19253335	WS 20		1.50	1kg TUB	S
							250g Amber Jar (ALE210)	S
							60g VOC (ALE215)	S
			19253336	WS 20		2.00	1kg TUB	S
Ammoniacal Nitrogen	All	NDPs: 0 Tests: 21	X															X	X			
Anions by Kone (soil)	All	NDPs: 0 Tests: 47		X			X			X			X			X				X		X
Anions by Kone (w)	All	NDPs: 0 Tests: 21	X															X	X			
Asbestos ID in Solid Samples	All	NDPs: 0 Tests: 47	X			X			X			X			X				X			X
Asbestos Quantification - Full	All	NDPs: 0 Tests: 1																				
Boron Water Soluble	All	NDPs: 0 Tests: 46		X			X			X			X			X				X		X
CEN Readings	All	NDPs: 0 Tests: 21	X															X	X			
Conductivity (at 20 deg.C)	All	NDPs: 0 Tests: 21	X															X	X			
Cyanide Comp/Free/Total/Thiocyanate	All	NDPs: 0 Tests: 65	X	X			X			X			X			X		X	X	X		X
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 21	X															X	X			
Dissolved Organic/Inorganic Carbon	All	NDPs: 0 Tests: 21	X															X	X			
EPH CWG (Aliphatic) Filtered GC (W)	All	NDPs: 0 Tests: 21	X															X	X			
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 47		X			X			X			X			X				X		X
EPH CWG (Aromatic) Filtered GC (W)	All	NDPs: 0 Tests: 21	X															X	X			
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 47		X			X			X			X			X				X		X

19257273	WS29		0.40	1kg TUB	S	X		X	X			X	X	X	X	X	X		X	
19253591	WS 28		1.00	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X				X			X				X		X
				1kg TUB	S				X											
19253590	WS 28		0.30	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X				X			X				X		X
				1kg TUB	S	X		X	X	X		X	X	X	X	X	X		X	
19253585	WS 26		0.70	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X				X			X				X		X
				1kg TUB	S				X											
19253920	WS 23		0.30 - 0.50	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X				X			X				X		X
				1kg TUB	S				X											
19253919	WS 23		0.20	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X				X			X				X		X
				1kg TUB	S	X		X	X			X	X	X	X	X	X		X	
19257296	WS22		0.10 - 0.20	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X				X			X				X		X
				1kg TUB	S	X		X	X			X	X	X	X	X	X		X	
19253336	WS 20		2.00	60g VOC (ALE215)	S															

Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

Lab Sample No(s)			19253912			19253331			19253332			19253917			19253918			19253335		19253336
Customer Sample Reference			WS 07			WS 10			WS 10			WS 16			WS 16			WS 20		WS 20
AGS Reference																					
Depth (m)			0.30 - 0.30			0.20			0.50			0.60			1.20			1.50		2.00
Container			1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	Kone Cup	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB
Sample Type			S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Fluoride	All	NDPs: 0 Tests: 21	X															X	X			
GRO by GC-FID (S)	All	NDPs: 0 Tests: 47			X			X			X			X			X				X	
GRO by GC-FID (W)	All	NDPs: 0 Tests: 21	X															X	X			
Mercury Dissolved	All	NDPs: 0 Tests: 21	X															X	X			
Metals in solid samples by OES	All	NDPs: 0 Tests: 46		X			X			X			X			X				X		X
PAH by GCMS	All	NDPs: 0 Tests: 47		X			X			X			X			X				X		X
PAH in waters by GC-MS (diss.filt)	All	NDPs: 0 Tests: 21	X															X	X			
PCB Congeners - Aqueous (W)	All	NDPs: 0 Tests: 21	X															X	X			
PCBs by GCMS	All	NDPs: 0 Tests: 47		X			X			X			X			X				X		X
pH	All	NDPs: 0 Tests: 46		X			X			X			X			X				X		X
pH Value of Filtered Water	All	NDPs: 0 Tests: 21	X															X	X			
Phenols by ms (w)	All	NDPs: 0 Tests: 21	X															X	X			
Phenols Spec MS (S)	All	NDPs: 0 Tests: 47		X			X			X			X			X				X		X
Phosphate by Kone (w)	All	NDPs: 0 Tests: 21	X															X	X			
Sample description	All	NDPs: 0 Tests: 45		X			X			X						X				X		X

19257273	WS29		0.40	1kg TUB	S	X		X	X			X	X			X	X		X	
19253591	WS 28		1.00	60g VOC (ALE215)	S		X													
				250g Amber Jar (ALE210)	S					X	X			X	X			X		X
				1kg TUB	S															
19253590	WS 28		0.30	60g VOC (ALE215)	S		X													
				250g Amber Jar (ALE210)	S					X	X			X	X			X		X
				1kg TUB	S	X		X	X			X	X			X	X		X	
19253585	WS 26		0.70	60g VOC (ALE215)	S		X													
				250g Amber Jar (ALE210)	S					X	X			X	X			X		X
				1kg TUB	S															
19253920	WS 23		0.30 - 0.50	60g VOC (ALE215)	S		X													
				250g Amber Jar (ALE210)	S					X	X			X	X			X		X
				1kg TUB	S															
19253919	WS 23		0.20	60g VOC (ALE215)	S		X													
				250g Amber Jar (ALE210)	S					X	X			X	X			X		X
				1kg TUB	S	X		X	X			X	X			X	X		X	
19257296	WS22		0.10 - 0.20	60g VOC (ALE215)	S		X													
				250g Amber Jar (ALE210)	S					X	X			X	X			X		X
				1kg TUB	S	X		X	X			X	X			X	X		X	
19253336	WS 20		2.00	60g VOC (ALE215)	S		X													

CERTIFICATE OF ANALYSIS

Validated

SDG:	190201-81	Client Reference:	A090070-474	Report Number:	497663
Location:	HE Compton	Order Number:	18/COMP043	Superseded Report:	497661

Results Legend

- X — Test
- N — No Determination Possible

Sample Types -

S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

Lab Sample No(s)			19253912			19253331			19253332			19253917			19253918				19253335			19253336
Customer Sample Reference			WS 07			WS 10			WS 10			WS 16			WS 16				WS 20			WS 20
AGS Reference																						
Depth (m)			0.30 - 0.30			0.20			0.50			0.60			1.20				1.50			2.00
Container			1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	Kone Cup	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB
Sample Type			S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 21		X												X				X		
Sulphide	All	NDPs: 0 Tests: 21	X															X	X			
SVOC MS (W) - Aqueous	All	NDPs: 0 Tests: 21	X															X	X			
Total Organic Carbon	All	NDPs: 0 Tests: 46		X			X			X			X			X				X		X
TPH CWG Filtered (W)	All	NDPs: 0 Tests: 21	X															X	X			
TPH CWG GC (S)	All	NDPs: 0 Tests: 47		X			X			X			X			X				X		X
VOC MS (S)	All	NDPs: 0 Tests: 47			X			X			X			X			X				X	
VOC MS (W)	All	NDPs: 0 Tests: 21	X															X	X			

19257273	WS29		0.40	1kg TUB	S		X	X		X			X
19253591	WS 28		1.00	60g VOC (ALE215)	S							X	
				250g Amber Jar (ALE210)	S				X		X		
				1kg TUB	S								
19253590	WS 28		0.30	60g VOC (ALE215)	S							X	
				250g Amber Jar (ALE210)	S	X			X		X		
				1kg TUB	S		X	X		X			X
19253585	WS 26		0.70	60g VOC (ALE215)	S							X	
				250g Amber Jar (ALE210)	S				X		X		
				1kg TUB	S								
19253920	WS 23		0.30 - 0.50	60g VOC (ALE215)	S							X	
				250g Amber Jar (ALE210)	S				X		X		
				1kg TUB	S								
19253919	WS 23		0.20	60g VOC (ALE215)	S							X	
				250g Amber Jar (ALE210)	S	X			X		X		
				1kg TUB	S		X	X		X			X
19257296	WS22		0.10 - 0.20	60g VOC (ALE215)	S							X	
				250g Amber Jar (ALE210)	S	X			X		X		
				1kg TUB	S		X	X		X			X
19253336	WS 20		2.00	60g VOC (ALE215)	S							X	

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
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PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	19257273	19253323	19253581	19253582	19253340	19253341	19257270
			Customer Sample Reference	WS29	WS 30	WS 33	WS 33	WS 34	WS 34	WS35
			AGS Reference							
			Depth (m)	0.40	0.50	0.10	0.50	0.10	1.00	0.40
			Container	250g Amber Jar (ALE210) / 60g VOC (ALE215)	1kg TUB / 250g Amber Jar (ALE210) / 60g VOC (ALE215)	1kg TUB / 250g Amber Jar (ALE210) / 60g VOC (ALE215)	1kg TUB / 250g Amber Jar (ALE210) / 60g VOC (ALE215)	1kg TUB / 250g Amber Jar (ALE210) / 60g VOC (ALE215)	1kg TUB / 250g Amber Jar (ALE210) / 60g VOC (ALE215)	1kg TUB / 250g Amber Jar (ALE210) / 60g VOC (ALE215)
			Sample Type	S	S	S	S	S	S	S
Ammoniacal Nitrogen	All	NDPs: 0 Tests: 21							X	
Anions by Kone (soil)	All	NDPs: 0 Tests: 47	X	X	X	X	X	X	X	X
Anions by Kone (w)	All	NDPs: 0 Tests: 21							X	
Asbestos ID in Solid Samples	All	NDPs: 0 Tests: 47		X	X	X	X	X	X	
Boron Water Soluble	All	NDPs: 0 Tests: 46	X	X	X	X	X	X		X
CEN Readings	All	NDPs: 0 Tests: 21							X	
Conductivity (at 20 deg.C)	All	NDPs: 0 Tests: 21							X	
Cyanide Comp/Free/Total/Thiocyanate	All	NDPs: 0 Tests: 65	X	X	X	X	X	X	X	
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 21							X	
Dissolved Organic/Inorganic Carbon	All	NDPs: 0 Tests: 21							X	
EPH CWG (Aliphatic) Filtered GC (W)	All	NDPs: 0 Tests: 21							X	
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 47	X	X	X	X	X	X		X
EPH CWG (Aromatic) Filtered GC (W)	All	NDPs: 0 Tests: 21							X	
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 47	X	X	X	X	X	X		X
Fluoride	All	NDPs: 0 Tests: 21							X	

19253596	WS 40		1.00	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X			X			X				X		X	
				1kg TUB	S	X		X	X		X	X	X	X	X	X		X		X
19257268	WS39		0.70 - 0.90	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X			X			X				X		X	
				1kg TUB	S				X											
19257267	WS39		0.20	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X			X			X				X		X	
				1kg TUB	S	X		X	X		X	X	X	X	X	X		X		X
19257265	WS38		0.70	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X			X			X				X		X	
				1kg TUB	S	X		X	X		X	X	X	X	X	X		X		X
19257263	WS38		0.20	60g VOC (ALE215)	S															
				1kg TUB	S	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
19253329	WS 37		0.20	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X			X			X				X		X	
				1kg TUB	S				X											
19253326	WS 36		0.50	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X			X			X				X		X	
				1kg TUB	S				X											

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
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SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	19257273		19253323		19253581		19253582		19253340		19253341		19257270		
			Customer Sample Reference	WS29		WS 30		WS 33		WS 33		WS 34		WS 34		WS35		
			AGS Reference															
			Depth (m)	0.40		0.50		0.10		0.50		0.10		1.00		0.40		
			Container	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)
			Sample Type	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
GRO by GC-FID (S)	All	NDPs: 0 Tests: 47			X			X			X			X			X			X
GRO by GC-FID (W)	All	NDPs: 0 Tests: 21																X		
Mercury Dissolved	All	NDPs: 0 Tests: 21																X		
Metals in solid samples by OES	All	NDPs: 0 Tests: 46	X			X			X					X			X			X	
PAH by GCMS	All	NDPs: 0 Tests: 47	X			X			X			X		X			X			X	
PAH in waters by GC-MS (diss.filt)	All	NDPs: 0 Tests: 21																X		
PCB Congeners - Aqueous (W)	All	NDPs: 0 Tests: 21																X		
PCBs by GCMS	All	NDPs: 0 Tests: 47	X			X			X			X		X			X			X	
pH	All	NDPs: 0 Tests: 46	X			X			X					X			X			X	
pH Value of Filtered Water	All	NDPs: 0 Tests: 21																X		
Phenols by ms (w)	All	NDPs: 0 Tests: 21																X		
Phenols Spec MS (S)	All	NDPs: 0 Tests: 47	X			X			X			X		X			X			X	
Phosphate by Kone (w)	All	NDPs: 0 Tests: 21																X		
Sample description	All	NDPs: 0 Tests: 45	X			X			X			X		X			X			X	
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 21	X																	

19253596	WS 40		1.00	60g VOC (ALE215)	S	X																	
				250g Amber Jar (ALE210)	S				X	X			X	X			X		X		X	
				1kg TUB	S		X	X			X	X			X	X			X				
19257268	WS39		0.70 - 0.90	60g VOC (ALE215)	S	X																	
				250g Amber Jar (ALE210)	S				X	X			X	X			X		X			
				1kg TUB	S																		
19257267	WS39		0.20	60g VOC (ALE215)	S	X																	
				250g Amber Jar (ALE210)	S				X	X			X	X			X		X		X	
				1kg TUB	S		X	X			X	X			X	X			X				
19257265	WS38		0.70	60g VOC (ALE215)	S	X																	
				250g Amber Jar (ALE210)	S				X	X			X	X			X		X		X	
				1kg TUB	S		X	X			X	X			X	X			X				
19257263	WS38		0.20	60g VOC (ALE215)	S	X																	
				1kg TUB	S		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
19253329	WS 37		0.20	60g VOC (ALE215)	S	X																	
				250g Amber Jar (ALE210)	S				X	X			X	X			X		X			
				1kg TUB	S																		
19253326	WS 36		0.50	60g VOC (ALE215)	S	X																	
				250g Amber Jar (ALE210)	S				X	X			X	X			X		X			
				1kg TUB	S																		

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Results Legend

X **Test**

N **No Determination Possible**

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

Lab Sample No(s)			19257273		19253323			19253581			19253582			19253340			19253341			19257270	
Customer Sample Reference			WS29		WS 30			WS 33			WS 33			WS 34			WS 34			WS35	
AGS Reference																					
Depth (m)			0.40		0.50			0.10			0.50			0.10			1.00			0.40	
Container			250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)
Sample Type			S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Sulphide	All	NDPs: 0 Tests: 21																		X		
SVOC MS (W) - Aqueous	All	NDPs: 0 Tests: 21																		X		
Total Organic Carbon	All	NDPs: 0 Tests: 46	X			X			X						X			X			X	
TPH CWG Filtered (W)	All	NDPs: 0 Tests: 21																		X		
TPH CWG GC (S)	All	NDPs: 0 Tests: 47	X			X			X			X			X			X			X	
VOC MS (S)	All	NDPs: 0 Tests: 47		X			X			X			X			X			X			X
VOC MS (W)	All	NDPs: 0 Tests: 21																		X		

19253596	WS 40		1.00	60g VOC (ALE215)	S												X		
				250g Amber Jar (ALE210)	S						X				X				
				1kg TUB	S		X		X				X						X
19257268	WS39		0.70 - 0.90	60g VOC (ALE215)	S												X		
				250g Amber Jar (ALE210)	S						X				X				
				1kg TUB	S														
19257267	WS39		0.20	60g VOC (ALE215)	S												X		
				250g Amber Jar (ALE210)	S						X				X				
				1kg TUB	S		X		X				X						X
19257265	WS38		0.70	60g VOC (ALE215)	S												X		
				250g Amber Jar (ALE210)	S						X				X				
				1kg TUB	S		X		X				X						X
19257263	WS38		0.20	60g VOC (ALE215)	S												X		
				1kg TUB	S		X		X		X		X		X				X
19253329	WS 37		0.20	60g VOC (ALE215)	S												X		
				250g Amber Jar (ALE210)	S						X				X				
				1kg TUB	S														
19253326	WS 36		0.50	60g VOC (ALE215)	S												X		
				250g Amber Jar (ALE210)	S						X				X				
				1kg TUB	S														

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)																							
			19253597			19253579			19253578			19253318			19253587			19253588			19253903		
			Customer Sample Reference			WS 40			WS 41			WS 41			WS 42			WS 43			WS 43			WS 45		
			AGS Reference																							
			Depth (m)			1.50			0.50			1.00			0.10			0.20			0.50			0.30		
			Container	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	
			Sample Type	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Ammoniacal Nitrogen	All	NDPs: 0 Tests: 21							X						X			X			X				
Anions by Kone (soil)	All	NDPs: 0 Tests: 47		X			X			X			X			X			X			X			X
Anions by Kone (w)	All	NDPs: 0 Tests: 21							X						X			X			X				
Asbestos ID in Solid Samples	All	NDPs: 0 Tests: 47	X			X			X			X			X			X			X			X		
Boron Water Soluble	All	NDPs: 0 Tests: 46		X			X			X			X			X			X			X			X	
CEN Readings	All	NDPs: 0 Tests: 21							X						X			X			X				
Conductivity (at 20 deg.C)	All	NDPs: 0 Tests: 21							X						X			X			X				
Cyanide Comp/Free/Total/Thiocyanate	All	NDPs: 0 Tests: 65		X			X		X	X			X		X	X		X	X		X	X			X	
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 21							X						X			X			X				
Dissolved Organic/Inorganic Carbon	All	NDPs: 0 Tests: 21							X						X			X			X				
EPH CWG (Aliphatic) Filtered GC (W)	All	NDPs: 0 Tests: 21							X						X			X			X				
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 47		X			X			X			X			X			X			X			X	
EPH CWG (Aromatic) Filtered GC (W)	All	NDPs: 0 Tests: 21							X						X			X			X				
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 47		X			X			X			X			X			X			X			X	
Fluoride	All	NDPs: 0 Tests: 21							X						X			X			X				

19257285	WS54		0.10	1kg TUB	S				X											
19257283	WS53		0.50	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X			X			X				X		X	
				1kg TUB	S	X		X	X		X	X	X	X	X	X		X		X
19257278	WS52		1.00	250g Amber Jar (ALE210)	S		X			X			X				X		X	
				1kg TUB	S				X											
19257276	WS52		0.10	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X			X			X				X		X	
				1kg TUB	S				X											
19253911	WS 46		0.70	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X			X			X				X		X	
				1kg TUB	S				X											
19253909	WS 46		0.30	Kone Cup	S	X		X			X	X	X	X	X	X		X		X
				60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X			X			X				X		X	
				1kg TUB	S				X											
19253906	WS 45		1.00	60g VOC (ALE215)	S															
				250g Amber Jar (ALE210)	S		X			X			X				X		X	
				1kg TUB	S				X											
19253903	WS 45		0.30	60g VOC (ALE215)	S															

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	19253597			19253579			19253578			19253318			19253587			19253588			19253903
			Customer Sample Reference	WS 40			WS 41			WS 41			WS 42			WS 43			WS 43			WS 45
			AGS Reference																			
			Depth (m)	1.50			0.50			1.00			0.10			0.20			0.50			0.30
			Container	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)
			Sample Type	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
GRO by GC-FID (S)	All	NDPs: 0 Tests: 47				X			X			X			X			X			X		
GRO by GC-FID (W)	All	NDPs: 0 Tests: 21								X						X			X			X	
Mercury Dissolved	All	NDPs: 0 Tests: 21								X						X			X			X	
Metals in solid samples by OES	All	NDPs: 0 Tests: 46		X			X			X			X			X			X			X	
PAH by GCMS	All	NDPs: 0 Tests: 47		X			X			X			X			X			X			X	
PAH in waters by GC-MS (diss.filt)	All	NDPs: 0 Tests: 21								X						X			X			X	
PCB Congeners - Aqueous (W)	All	NDPs: 0 Tests: 21								X						X			X			X	
PCBs by GCMS	All	NDPs: 0 Tests: 47		X			X			X			X			X			X			X	
pH	All	NDPs: 0 Tests: 46		X			X			X			X			X			X			X	
pH Value of Filtered Water	All	NDPs: 0 Tests: 21								X						X			X			X	
Phenols by ms (w)	All	NDPs: 0 Tests: 21								X						X			X			X	
Phenols Spec MS (S)	All	NDPs: 0 Tests: 47		X			X			X			X			X			X			X	
Phosphate by Kone (w)	All	NDPs: 0 Tests: 21								X						X			X			X	
Sample description	All	NDPs: 0 Tests: 45		X			X			X			X			X			X			X	
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 21								X						X			X			X	

19257285	WS54		0.10	1kg TUB	S																		
19257283	WS53		0.50	60g VOC (ALE215)	S	X																	
				250g Amber Jar (ALE210)	S				X	X			X	X				X		X		X	
				1kg TUB	S		X	X			X	X			X	X			X		X		
19257278	WS52		1.00	250g Amber Jar (ALE210)	S	X			X	X			X	X				X		X			
				1kg TUB	S																		
19257276	WS52		0.10	60g VOC (ALE215)	S	X																	
				250g Amber Jar (ALE210)	S				X	X			X	X				X		X			
				1kg TUB	S																		
19253911	WS 46		0.70	60g VOC (ALE215)	S	X																	
				250g Amber Jar (ALE210)	S				X	X			X	X				X		X		X	
				1kg TUB	S																		
19253909	WS 46		0.30	Kone Cup	S		X	X			X	X			X	X			X				
				60g VOC (ALE215)	S	X																	
				250g Amber Jar (ALE210)	S				X	X			X	X				X		X		X	
				1kg TUB	S																		
19253906	WS 45		1.00	60g VOC (ALE215)	S	X																	
				250g Amber Jar (ALE210)	S				X	X			X	X				X		X			
				1kg TUB	S																		
19253903	WS 45		0.30	60g VOC (ALE215)	S	X																	

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Results Legend

X **Test**

N **No Determination Possible**

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	19253597			19253579			19253578			19253318			19253587			19253588			19253903	
			Customer Sample Reference	WS 40			WS 41			WS 41			WS 42			WS 43			WS 43			WS 45	
			AGS Reference																				
			Depth (m)	1.50			0.50			1.00			0.10			0.20			0.50			0.30	
			Container	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)
			Sample Type	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Sulphide	All	NDPs: 0 Tests: 21								X						X			X			X	
SVOC MS (W) - Aqueous	All	NDPs: 0 Tests: 21								X						X			X			X	
Total Organic Carbon	All	NDPs: 0 Tests: 46		X			X			X			X			X			X			X	
TPH CWG Filtered (W)	All	NDPs: 0 Tests: 21								X						X			X			X	
TPH CWG GC (S)	All	NDPs: 0 Tests: 47		X			X			X			X			X			X			X	
VOC MS (S)	All	NDPs: 0 Tests: 47			X			X			X			X			X			X			
VOC MS (W)	All	NDPs: 0 Tests: 21								X						X			X			X	

19257285	WS54		0.10	1kg TUB	S									
19257283	WS53		0.50	60g VOC (ALE215)	S								X	
				250g Amber Jar (ALE210)	S				X			X		
				1kg TUB	S	X	X			X				X
19257278	WS52		1.00	250g Amber Jar (ALE210)	S				X			X	X	
				1kg TUB	S									
19257276	WS52		0.10	60g VOC (ALE215)	S								X	
				250g Amber Jar (ALE210)	S				X			X		
				1kg TUB	S									
19253911	WS 46		0.70	60g VOC (ALE215)	S								X	
				250g Amber Jar (ALE210)	S				X			X		
				1kg TUB	S									
19253909	WS 46		0.30	Kone Cup	S	X	X			X				X
				60g VOC (ALE215)	S								X	
				250g Amber Jar (ALE210)	S				X			X		
				1kg TUB	S									
19253906	WS 45		1.00	60g VOC (ALE215)	S								X	
				250g Amber Jar (ALE210)	S				X			X		
				1kg TUB	S									
19253903	WS 45		0.30	60g VOC (ALE215)	S								X	

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
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TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	19257285	19257287	19257280	19257289	19257291	19253338	19253339
			Customer Sample Reference	WS54	WS54	WS57	WS58	WS58	WS 25A	WS 25A
			AGS Reference							
			Depth (m)	0.10	0.50	0.30	0.30	1.00	0.30	1.00
			Container	250g Amber Jar (ALE210) / 60g VOC (ALE215)	1kg TUB / 250g Amber Jar (ALE210) / 60g VOC (ALE215)	1kg TUB / 250g Amber Jar (ALE210) / 60g VOC (ALE215)	1kg TUB / 250g Amber Jar (ALE210) / 60g VOC (ALE215)	1kg TUB / 250g Amber Jar (ALE210) / 60g VOC (ALE215)	1kg TUB / 250g Amber Jar (ALE210) / 60g VOC (ALE215)	1kg TUB / 250g Amber Jar (ALE210) / 60g VOC (ALE215)
			Sample Type	S	S	S	S	S	S	S
Ammoniacal Nitrogen	All	NDPs: 0 Tests: 21			X		X	X		
Anions by Kone (soil)	All	NDPs: 0 Tests: 47		X	X	X	X	X	X	X
Anions by Kone (w)	All	NDPs: 0 Tests: 21			X		X	X		
Asbestos ID in Solid Samples	All	NDPs: 0 Tests: 47			X	X	X	X	X	X
Boron Water Soluble	All	NDPs: 0 Tests: 46		X	X	X	X	X	X	X
CEN Readings	All	NDPs: 0 Tests: 21			X		X	X		
Conductivity (at 20 deg.C)	All	NDPs: 0 Tests: 21			X		X	X		
Cyanide Comp/Free/Total/Thiocyanate	All	NDPs: 0 Tests: 65		X	X	X	X	X	X	X
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 21			X		X	X		
Dissolved Organic/Inorganic Carbon	All	NDPs: 0 Tests: 21			X		X	X		
EPH CWG (Aliphatic) Filtered GC (W)	All	NDPs: 0 Tests: 21			X		X	X		
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 47		X	X	X	X	X	X	X
EPH CWG (Aromatic) Filtered GC (W)	All	NDPs: 0 Tests: 21			X		X	X		
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 47		X	X	X	X	X	X	X
Fluoride	All	NDPs: 0 Tests: 21			X		X	X		

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
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SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	19257285			19257287			19257280			19257289			19257291			19253338			19253339		
			Customer Sample Reference	WS54			WS54			WS57			WS58			WS58			WS 25A			WS 25A		
			AGS Reference																					
			Depth (m)	0.10			0.50			0.30			0.30			1.00			0.30			1.00		
			Container	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	
			Sample Type	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
GRO by GC-FID (S)	All	NDPs: 0 Tests: 47			X			X			X			X			X			X			X
GRO by GC-FID (W)	All	NDPs: 0 Tests: 21							X						X			X						
Mercury Dissolved	All	NDPs: 0 Tests: 21							X						X			X						
Metals in solid samples by OES	All	NDPs: 0 Tests: 46	X			X			X			X			X			X			X			
PAH by GCMS	All	NDPs: 0 Tests: 47	X			X			X			X			X			X			X			
PAH in waters by GC-MS (diss.filt)	All	NDPs: 0 Tests: 21							X						X			X						
PCB Congeners - Aqueous (W)	All	NDPs: 0 Tests: 21							X						X			X						
PCBs by GCMS	All	NDPs: 0 Tests: 47	X			X			X			X			X			X			X			
pH	All	NDPs: 0 Tests: 46	X			X			X			X			X			X			X			
pH Value of Filtered Water	All	NDPs: 0 Tests: 21							X						X			X						
Phenols by ms (w)	All	NDPs: 0 Tests: 21							X						X			X						
Phenols Spec MS (S)	All	NDPs: 0 Tests: 47	X			X			X			X			X			X			X			
Phosphate by Kone (w)	All	NDPs: 0 Tests: 21							X						X			X						
Sample description	All	NDPs: 0 Tests: 45	X			X			X			X			X			X						
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 21								X					X			X						

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

Lab Sample No(s)			19257285		19257287			19257280			19257289			19257291			19253338			19253339		
Customer Sample Reference			WS54		WS54			WS57			WS58			WS58			WS 25A			WS 25A		
AGS Reference																						
Depth (m)			0.10		0.50			0.30			0.30			1.00			0.30			1.00		
Container			250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)
Sample Type			S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Sulphide	All	NDPs: 0 Tests: 21						X						X			X					
SVOC MS (W) - Aqueous	All	NDPs: 0 Tests: 21						X						X			X					
Total Organic Carbon	All	NDPs: 0 Tests: 46	X			X			X			X			X			X			X		
TPH CWG Filtered (W)	All	NDPs: 0 Tests: 21						X						X			X					
TPH CWG GC (S)	All	NDPs: 0 Tests: 47	X			X			X			X			X			X			X		
VOC MS (S)	All	NDPs: 0 Tests: 47		X			X			X			X			X			X				X
VOC MS (W)	All	NDPs: 0 Tests: 21						X						X			X					

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Sample Descriptions

Grain Sizes

very fine	<0.063mm	fine	0.063mm - 0.1mm	medium	0.1mm - 2mm	coarse	2mm - 10mm	very coarse	>10mm

Lab Sample No(s)	Customer Sample Ref.	Depth (m)	Colour	Description	Inclusions	Inclusions 2
19257296	WS22	0.10 - 0.20	Cream	Loamy Sand	Stones	None
19257273	WS29	0.40	Dark Brown	Sandy Clay Loam	Stones	Brick
19257270	WS35	0.40	Dark Brown	Sandy Clay	Vegetation	Stones
19257263	WS38	0.20	Light Brown	Sand	Stones	Brick
19257265	WS38	0.70	Light Brown	Silt Loam	Vegetation	Stones
19257267	WS39	0.20	Dark Brown	Sandy Clay	Crushed Brick	N/A
19257268	WS39	0.70 - 0.90	Dark Brown	Sandy Clay	Vegetation	Stones
19257276	WS52	0.10	Dark Brown	Sandy Loam	Vegetation	None
19257278	WS52	1.00	Light Brown	Silt Loam	Stones	None
19257283	WS53	0.50	Dark Brown	Sandy Clay	Vegetation	Stones
19257285	WS54	0.10	Dark Brown	Sandy Clay	Vegetation	Stones
19257287	WS54	0.50	Cream	Sandy Loam	Stones	Vegetation
19257280	WS57	0.30	Light Brown	Loamy Sand	Stones	Cement board
19257289	WS58	0.30	Light Brown	Sandy Loam	Stones	Vegetation
19257291	WS58	1.00	Cream	Sandy Loam	Stones	Vegetation
19253912	WS 07	0.30 - 0.30	Dark Brown	Loamy Sand	Stones	None
19253331	WS 10	0.20	Light Brown	Loamy Sand	Stones	N/A
19253332	WS 10	0.50	White	Chalk	None	None
19253917	WS 16	0.60	Light Brown	Chalk	Stones	Vegetation
19253918	WS 16	1.20	Dark Brown	Sandy Loam	Stones	None
19253335	WS 20	1.50	Dark Brown	Clay	Stones	None
19253336	WS 20	2.00	Cream	Chalk	Stones	None
19253919	WS 23	0.20	Dark Brown	Sandy Loam	Stones	None
19253920	WS 23	0.30 - 0.50	White	Sandy Loam	None	None
19253585	WS 26	0.70	Cream	Loamy Sand	Stones	Vegetation
19253590	WS 28	0.30	Dark Brown	Sandy Loam	Stones	None
19253591	WS 28	1.00	Dark Brown	Sandy Loam	Stones	Vegetation
19253323	WS 30	0.50	Cream	Chalk	Stones	None
19253581	WS 33	0.10	Dark Brown	Silt Loam	Vegetation	Stones
19253582	WS 33	0.50	Cream	Loamy Sand	Stones	None
19253340	WS 34	0.10	White	Chalk	None	None
19253341	WS 34	1.00	Dark Brown	Clay Loam	Stones	Vegetation
19253326	WS 36	0.50	Dark Brown	Clay Loam	Stones	Vegetation
19253329	WS 37	0.20	Dark Brown	Sandy Clay	Stones	N/A
19253596	WS 40	1.00	Dark Brown	Sandy Loam	Stones	Vegetation
19253597	WS 40	1.50	Light Brown	Sandy Loam	Stones	None
19253578	WS 41	1.00	Grey	Loamy Sand	Vegetation	Stones
19253579	WS 41	0.50	Light Brown	Loamy Sand	Stones	Vegetation

			Colour	Description	Inclusions	Inclusions 2
19253318	WS 42	0.10	Dark Brown	Clay Loam	Stones	Vegetation
19253587	WS 43	0.20	Dark Brown	Silt Loam	Stones	Vegetation
19253588	WS 43	0.50	Light Brown	Loamy Sand	Stones	Vegetation
19253903	WS 45	0.30	Dark Brown	Sandy Loam	Stones	Brick
19253906	WS 45	1.00	Dark Brown	Sandy Loam	Stones	Vegetation
19253909	WS 46	0.30	Dark Brown	Loamy Sand	Crushed Brick	Stones
19253911	WS 46	0.70	Dark Brown	Sandy Loam	Stones	None
19253338	WS 25A	0.30	Dark Brown	Clay Loam	Stones	Concrete/Aggregate
19253339	WS 25A	1.00	Light Brown	Clay Loam	N/A	None

These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally ocurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.

Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 07	WS 10	WS 10	WS 16	WS 16	WS 20
			Depth (m)	0.30 - 0.30	0.20	0.50	0.60	1.20	1.50
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	18/01/2019	24/01/2019	24/01/2019	18/01/2019	18/01/2019	23/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253912	19253331	19253332	19253917	19253918	19253335
			AGS Reference						
Moisture Content Ratio (% of as received sample)	%	PM024		4.7	5.5	20	17	1.9	13
Organic Carbon, Total	<0.2 %	TM132		<0.2 @	<0.2	<0.2	0.505	0.63	1.07
pH	1 pH Units	TM133		9.32 @	8.93	9.02	8.48	8.62	8.3
Cyanide, Total	<1 mg/kg	TM153		<1 @	<1 @	<1 @	<1 @	<1 @	<1 @
PCB congener 28	<3 µg/kg	TM168			<3	<3	<3	<3	<3
PCB congener 52	<3 µg/kg	TM168			<3	<3	<3	<3	<3
PCB congener 101	<3 µg/kg	TM168			<3	<3	<3	<3	<3
PCB congener 118	<3 µg/kg	TM168			<3	<3	<3	<3	<3
PCB congener 138	<3 µg/kg	TM168			<3	<3	<3	<3	<3
PCB congener 153	<3 µg/kg	TM168			<3	<3	<3	<3	<3
PCB congener 180	<3 µg/kg	TM168			<3	<3	<3	<3	<3
Sum of detected PCB 7 Congeners	<21 µg/kg	TM168			<21	<21	<21	<21	<21
PCB congener 28	<3 µg/kg	TM168		<3 @					
PCB congener 52	<3 µg/kg	TM168		40.1 @					
PCB congener 101	<3 µg/kg	TM168		<3 @					
PCB congener 118	<3 µg/kg	TM168		<3 @					
PCB congener 138	<3 µg/kg	TM168		<3 @					
PCB congener 153	<3 µg/kg	TM168		<3 @					
PCB congener 180	<3 µg/kg	TM168		<3 @					
Sum of detected PCB 7 Congeners	<21 µg/kg	TM168		40.1					
Arsenic	<0.6 mg/kg	TM181		13.2	5.33	<0.6	4.94	6.79	10.9
Cadmium	<0.02 mg/kg	TM181		2.18	0.561	0.104	0.295	0.192	0.241
Chromium	<0.9 mg/kg	TM181		6.59	3.92	1.57	11.8	18.5	19.4
Copper	<1.4 mg/kg	TM181		5.57	3.82	11.6	6.82	10	12.6
Lead	<0.7 mg/kg	TM181		110	32.3	34.4	7.44	9.4	18
Mercury	<0.14 mg/kg	TM181		<0.14 @	<0.14	<0.14	<0.14	<0.14	<0.14
Nickel	<0.2 mg/kg	TM181		7.12	4.6	2.07	13.4	18.7	17.6
Selenium	<1 mg/kg	TM181		<1	<1	<1	<1	<1	<1
Vanadium	<0.2 mg/kg	TM181		11.6	6.32	2.51	22.5	28.5	29.7
Zinc	<1.9 mg/kg	TM181		464	80.3	19.2	40.3	52.6	62.9
Boron, water soluble	<1 mg/kg	TM222		<1 @	<1	<1	<1	<1	<1
Chloride (soluble)	<5 mg/kg	TM243		9.61 @	11.4	5.31	6.69	11.3	10

Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 20	WS22	WS 23	WS 23	WS 26	WS 28
			Depth (m)	2.00	0.10 - 0.20	0.20	0.30 - 0.50	0.70	0.30
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	23/01/2019	21/01/2019	18/01/2019	18/01/2019	18/01/2019	24/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253336	19257296	19253919	19253920	19253585	19253590
			AGS Reference						
Moisture Content Ratio (% of as received sample)	%	PM024		12	14	2.4	2.4	18	2.4
Organic Carbon, Total	<0.2 %	TM132		0.293	0.465	7.36	<0.2	<0.2	1.51
pH	1 pH Units	TM133		8.65	8.37	8.65	8.9	8.98	8.43
Cyanide, Total	<1 mg/kg	TM153		<1 @	<1 @	<1 @	<1 @	<1 @	<1 @
PCB congener 28	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<15
PCB congener 52	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<15
PCB congener 101	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<15
PCB congener 118	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<15
PCB congener 138	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<15
PCB congener 153	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<15
PCB congener 180	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<15
Sum of detected PCB 7 Congeners	<21 µg/kg	TM168		<21	<21	<21	<21	<21	<105
Arsenic	<0.6 mg/kg	TM181		3.4	2.29	4.1	0.614	0.664	4.22
Cadmium	<0.02 mg/kg	TM181		0.183	0.179	0.109	0.0948	0.111	0.678
Chromium	<0.9 mg/kg	TM181		6.46	5.84	6.71	1.16	2.47	8.34
Copper	<1.4 mg/kg	TM181		5.99	13.2	31.5	2.31	2.53	3.88
Lead	<0.7 mg/kg	TM181		3.16	5.49	2.14	<0.7	1.29	17.1
Mercury	<0.14 mg/kg	TM181		<0.14	<0.14	<0.14	<0.14	<0.14	<0.14
Nickel	<0.2 mg/kg	TM181		8.56	5.65	12.3	3.18	3.06	5.16
Selenium	<1 mg/kg	TM181		<1	<1	<1	<1	<1	<1
Vanadium	<0.2 mg/kg	TM181		13	10.4	10.7	2.58	4.05	13.9
Zinc	<1.9 mg/kg	TM181		24.7	24.6	10.3	13.5	14.4	47
Boron, water soluble	<1 mg/kg	TM222		<1	<1	<1	<1	<1	<1
Chloride (soluble)	<5 mg/kg	TM243		9.36	9.6	7.72	7.58	7.23	10.4
Asbestos Quantification - Gravimetric - %	<0.001 %	TM304							<0.001
Asbestos Quantification - PCOM Evaluation - %	<0.001 %	TM304							0.0039
Additional Asbestos Components (Using TM048)		TM304							None
Analysts Comments		TM304							N/C
Asbestos Quantification - Total - %	<0.001 %	TM304							0.0043

Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 28	WS29	WS 30	WS 33	WS 33	WS 34
			Depth (m)	1.00	0.40	0.50	0.10	0.50	0.10
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	24/01/2019	21/01/2019	23/01/2019	18/01/2019	18/01/2019	23/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253591	19257273	19253323	19253581	19253582	19253340
			AGS Reference						
Moisture Content Ratio (% of as received sample)	%	PM024		4.3	14	17	18	18	19
Organic Carbon, Total	<0.2 %	TM132		0.786	1.13	<0.2	1.24		<0.2
pH	1 pH Units	TM133		8.36	8.49	8.91	8.51		8.63
Cyanide, Total	<1 mg/kg	TM153		<1 @	<1 @	<1 @	<1 @		<1 @
PCB congener 28	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 52	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 101	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 118	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 138	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 153	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 180	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
Sum of detected PCB 7 Congeners	<21 µg/kg	TM168		<21	<21	<21	<21	<21	<21
Arsenic	<0.6 mg/kg	TM181		5.6	7.18	1.86	8.04		<0.6
Cadmium	<0.02 mg/kg	TM181		0.166	0.385	0.0797	0.508		0.099
Chromium	<0.9 mg/kg	TM181		13.6	10.7	3.8	19.7		1.51
Copper	<1.4 mg/kg	TM181		6.38	11.6	2.6	11		1.47
Lead	<0.7 mg/kg	TM181		7.6	31	1.05	16.5		0.912
Mercury	<0.14 mg/kg	TM181		<0.14	<0.14	<0.14	<0.14		<0.14
Nickel	<0.2 mg/kg	TM181		11.7	15.4	3.82	19.4		1.73
Selenium	<1 mg/kg	TM181		<1	<1	<1	<1		<1
Vanadium	<0.2 mg/kg	TM181		21.3	18.9	5.89	36.3		2.26
Zinc	<1.9 mg/kg	TM181		40.6	68.9	15.1	68.6		10.7
Boron, water soluble	<1 mg/kg	TM222		<1	<1	<1	<1		<1
Chloride (soluble)	<5 mg/kg	TM243		32.1	21.6	12.4	24.2	9.58	8.71

Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 34	WS35	WS 36	WS 37	WS38	WS38
			Depth (m)	1.00	0.40	0.50	0.20	0.20	0.70
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	23/01/2019	21/01/2019	24/01/2019	22/01/2019	21/01/2019	21/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253341	19257270	19253326	19253329	19257263	19257265
			AGS Reference						
Moisture Content Ratio (% of as received sample)	%	PM024		20	13	20	15	13	6.9
Organic Carbon, Total	<0.2 %	TM132		2.31	1.19	2.86	1.05	6.54	<0.2
pH	1 pH Units	TM133		7.63	8.29	8.06	8.06	9.01	8.72
Cyanide, Total	<1 mg/kg	TM153		<1 @	<1 @	<1 @	<1 @	<1 @	<1 @
PCB congener 28	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 52	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 101	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 118	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 138	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 153	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 180	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
Sum of detected PCB 7 Congeners	<21 µg/kg	TM168		<21	<21	<21	<21	<21	<21
Arsenic	<0.6 mg/kg	TM181		7.93	6.88	10.3	4.89	3.49	2.61
Cadmium	<0.02 mg/kg	TM181		0.446	0.441	0.31	0.153	0.11	0.0537
Chromium	<0.9 mg/kg	TM181		15.1	15.3	26	10.9	5.01	1.24
Copper	<1.4 mg/kg	TM181		11.8	12.1	17.9	6.78	14.4	2.31
Lead	<0.7 mg/kg	TM181		24.5	20.9	27.7	11.1	7.49	0.973
Mercury	<0.14 mg/kg	TM181		<0.14	<0.14	<0.14	<0.14	<0.14	<0.14
Nickel	<0.2 mg/kg	TM181		16.3	18.8	28.6	10	8.81	3.3
Selenium	<1 mg/kg	TM181		<1	<1	<1	<1	<1	<1
Vanadium	<0.2 mg/kg	TM181		29.7	28.5	38.7	17	12.2	4.9
Zinc	<1.9 mg/kg	TM181		72.7	59.6	92.4	35.2	13.9	5.32
Boron, water soluble	<1 mg/kg	TM222		<1	<1	<1	<1	<1	<1
Chloride (soluble)	<5 mg/kg	TM243		14.3	7.84	12.5	7.9	32.4	24.7

Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS39	WS39	WS 40	WS 40	WS 41	WS 41
			Depth (m)	0.20	0.70 - 0.90	1.00	1.50	0.50	1.00
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	21/01/2019	21/01/2019	24/01/2019	24/01/2019	18/01/2019	18/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19257267	19257268	19253596	19253597	19253579	19253578
			AGS Reference						
Moisture Content Ratio (% of as received sample)	%	PM024		16	12	2.4	0.99	16	4.8
Organic Carbon, Total	<0.2 %	TM132		1.86	0.573	0.906	<0.2	0.542	<0.2
pH	1 pH Units	TM133		8.22	8.53	8.14	8.8	8.69	8.76
Cyanide, Total	<1 mg/kg	TM153		<1 @	<1 @	<1 @	<1 @	<1 @	<1 @
PCB congener 28	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 52	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 101	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 118	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 138	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 153	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 180	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
Sum of detected PCB 7 Congeners	<21 µg/kg	TM168		<21	<21	<21	<21	<21	<21
Arsenic	<0.6 mg/kg	TM181		8.59	6.1	6.67	2.77	2.47	<0.6
Cadmium	<0.02 mg/kg	TM181		0.442	0.328	0.397	0.162	0.173	0.0787
Chromium	<0.9 mg/kg	TM181		15.5	13.3	11.8	4.63	6.24	1.86
Copper	<1.4 mg/kg	TM181		14.6	9.07	17.8	3.96	3.68	<1.4
Lead	<0.7 mg/kg	TM181		35	10.4	19.9	2.84	4.24	0.744
Mercury	<0.14 mg/kg	TM181		0.243	<0.14	0.192	<0.14	<0.14	<0.14
Nickel	<0.2 mg/kg	TM181		18	16.2	13.3	7.23	6.31	2.03
Selenium	<1 mg/kg	TM181		<1	<1	<1	<1	<1	<1
Vanadium	<0.2 mg/kg	TM181		29.6	24.3	21.8	10.9	10.8	2.84
Zinc	<1.9 mg/kg	TM181		75.8	42.6	116	16.4	22.7	9.83
Boron, water soluble	<1 mg/kg	TM222		<1	<1	<1	<1	<1	<1
Chloride (soluble)	<5 mg/kg	TM243		18.4	7.87	11.4	5.99	49.4	7.69

Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 42	WS 43	WS 43	WS 45	WS 45	WS 46
			Depth (m)	0.10	0.20	0.50	0.30	1.00	0.30
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253318	19253587	19253588	19253903	19253906	19253909
			AGS Reference						
Moisture Content Ratio (% of as received sample)	%	PM024		17	7	8.3	1.4	1.1	14
Organic Carbon, Total	<0.2 %	TM132		1.08	0.294	<0.2	1.41	0.646	1.28
pH	1 pH Units	TM133		8.13	8.89	8.79	8.13	8.27	8.12
Cyanide, Total	<1 mg/kg	TM153		<1 @	<1 @	<1 @	<1 @	<1 @	<1 @
PCB congener 28	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 52	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 101	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 118	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 138	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 153	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 180	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
Sum of detected PCB 7 Congeners	<21 µg/kg	TM168		<21	<21	<21	<21	<21	<21
Arsenic	<0.6 mg/kg	TM181		7.52	86.2	0.691	6.55	5.5	5.43
Cadmium	<0.02 mg/kg	TM181		0.395	0.627	0.0601	0.387	0.143	0.332
Chromium	<0.9 mg/kg	TM181		15.3	5.38	1.74	13.2	15.5	9.55
Copper	<1.4 mg/kg	TM181		12.5	7.52	<1.4	12.3	8.74	13.8
Lead	<0.7 mg/kg	TM181		19.5	64.9	0.935	21.2	8.33	23.5
Mercury	<0.14 mg/kg	TM181		<0.14	<0.14	<0.14	<0.14	<0.14	<0.14
Nickel	<0.2 mg/kg	TM181		18.7	8.04	2.73	15.9	12.7	12.5
Selenium	<1 mg/kg	TM181		<1	<1	<1	<1	<1	<1
Vanadium	<0.2 mg/kg	TM181		29.7	8.85	2.69	23.8	22.2	17.8
Zinc	<1.9 mg/kg	TM181		58.4	185	5.87	53	45.2	53.1
Boron, water soluble	<1 mg/kg	TM222		<1	<1	<1	<1	<1	<1
Chloride (soluble)	<5 mg/kg	TM243		8.99	18.1	39.8	8.12	10.9	9.95

Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 46	WS52	WS52	WS53	WS54	WS54
			Depth (m)	0.70	0.10	1.00	0.50	0.10	0.50
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	22/01/2019	25/01/2019	25/01/2019	24/01/2019	25/01/2019	25/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253911	19257276	19257278	19257283	19257285	19257287
			AGS Reference						
Moisture Content Ratio (% of as received sample)	%	PM024		1.1	28	12	16	20	17
Organic Carbon, Total	<0.2 %	TM132		<0.2	3.87	<0.2	0.526	2.19	0.229
pH	1 pH Units	TM133		8.77	7.92	8.65	8.29	7.96	8.66
Cyanide, Total	<1 mg/kg	TM153		<1 @	<1 @	<1 @	<1 @	<1 @	<1 @
PCB congener 28	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 52	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 101	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 118	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 138	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 153	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
PCB congener 180	<3 µg/kg	TM168		<3	<3	<3	<3	<3	<3
Sum of detected PCB 7 Congeners	<21 µg/kg	TM168		<21	<21	<21	<21	<21	<21
Arsenic	<0.6 mg/kg	TM181		3.91	7.02	4.1	5.94	9.03	1.15
Cadmium	<0.02 mg/kg	TM181		0.113	0.273	0.171	0.27	0.238	0.103
Chromium	<0.9 mg/kg	TM181		8.88	16.7	7.16	10.2	16.2	2.78
Copper	<1.4 mg/kg	TM181		5.18	13.1	4.95	7.33	13.2	5.37
Lead	<0.7 mg/kg	TM181		6.65	21.5	3.77	9.53	22.8	9.5
Mercury	<0.14 mg/kg	TM181		<0.14	<0.14	<0.14	<0.14	<0.14	<0.14
Nickel	<0.2 mg/kg	TM181		10.2	14.2	8.85	11.4	15.5	3.14
Selenium	<1 mg/kg	TM181		<1	<1	<1	<1	<1	<1
Vanadium	<0.2 mg/kg	TM181		12.2	28.6	12.5	20.4	27.2	4.62
Zinc	<1.9 mg/kg	TM181		23.9	65.3	24.8	41.4	65.3	17.4
Boron, water soluble	<1 mg/kg	TM222		<1	<1	<1	<1	<1	<1
Chloride (soluble)	<5 mg/kg	TM243		7.82	65.9	6.92	10.8	8.97	7.23

Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS57	WS58	WS58	WS 25A	WS 25A
			Depth (m)	0.30	0.30	1.00	0.30	1.00
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	25/01/2019	25/01/2019	25/01/2019	23/01/2019	23/01/2019
			Sampled Time	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19257280	19257289	19257291	19253338	19253339
			AGS Reference					
Moisture Content Ratio (% of as received sample)	%	PM024		13	17	16	17	15
Organic Carbon, Total	<0.2 %	TM132		<0.2	0.415	0.251	1.98	0.367
pH	1 pH Units	TM133		8.59	8.42	8.65	8.2	8.55
Cyanide, Total	<1 mg/kg	TM153		<1 @	<1 @	<1 @	<1 @	<1 @
PCB congener 28	<3 µg/kg	TM168		<3	<3	<3	<3	<3
PCB congener 52	<3 µg/kg	TM168		<3	<3	<3	<3	<3
PCB congener 101	<3 µg/kg	TM168		<3	<3	<3	<3	<3
PCB congener 118	<3 µg/kg	TM168		<3	<3	<3	<3	<3
PCB congener 138	<3 µg/kg	TM168		<3	<3	<3	<3	<3
PCB congener 153	<3 µg/kg	TM168		<3	<3	<3	<3	<3
PCB congener 180	<3 µg/kg	TM168		<3	<3	<3	<3	<3
Sum of detected PCB 7 Congeners	<21 µg/kg	TM168		<21	<21	<21	<21	<21
Arsenic	<0.6 mg/kg	TM181		1.67	5.83	3.88	9	4.56
Cadmium	<0.02 mg/kg	TM181		0.131	0.178	0.0902	0.376	0.238
Chromium	<0.9 mg/kg	TM181		3.83	13.6	7.61	12	8.98
Copper	<1.4 mg/kg	TM181		2.88	9.48	5.82	13.3	5.87
Lead	<0.7 mg/kg	TM181		1.6	10.2	2.7	30.1	5.62
Mercury	<0.14 mg/kg	TM181		<0.14	<0.14	<0.14	<0.14	<0.14
Nickel	<0.2 mg/kg	TM181		5.43	13.2	7.75	14.6	10.8
Selenium	<1 mg/kg	TM181		<1	<1	<1	<1	<1
Vanadium	<0.2 mg/kg	TM181		7.46	21.8	12.4	25.9	16.8
Zinc	<1.9 mg/kg	TM181		17.5	43.5	23.1	82	40.1
Boron, water soluble	<1 mg/kg	TM222		<1	<1	<1	<1	<1
Chloride (soluble)	<5 mg/kg	TM243		5.86	<5	8.87	14.2	7.54

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 07	WS 10	WS 10	WS 16	WS 16	WS 20
			Depth (m)	0.30 - 0.30	0.20	0.50	0.60	1.20	1.50
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	18/01/2019	24/01/2019	24/01/2019	18/01/2019	18/01/2019	23/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253912	19253331	19253332	19253917	19253918	19253335
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		95.4	108	94.3	103	96.2	97.6
Acenaphthene-d10 % recovery**	%	TM218		92	114	94.1	98.6	94.8	96.8
Phenanthrene-d10 % recovery**	%	TM218		90.8	123	94.9	105	93.7	109
Chrysene-d12 % recovery**	%	TM218		94.5	114	82	95.8	78.6	105
Perylene-d12 % recovery**	%	TM218		91.4	123	83.6	92.1	78.5	97.7
Naphthalene	<9 µg/kg	TM218		<9 @	<9 @	<9 @	<9 @	<9 @	<9 @
Acenaphthylene	<12 µg/kg	TM218		<12 @	<12 @	<12 @	<12 @	<12 @	<12 @
Acenaphthene	<8 µg/kg	TM218		<8 @	<8 @	<8 @	<8 @	<8 @	<8 @
Fluorene	<10 µg/kg	TM218		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
Phenanthrene	<15 µg/kg	TM218		<15 @	<15 @	<15 @	<15 @	<15 @	<15 @
Anthracene	<16 µg/kg	TM218		<16 @	<16 @	<16 @	<16 @	<16 @	<16 @
Fluoranthene	<17 µg/kg	TM218		<17 @	<17 @	<17 @	60.2 @	<17 @	65.1 @
Pyrene	<15 µg/kg	TM218		<15 @	<15 @	<15 @	51.6 @	<15 @	53.7 @
Benz(a)anthracene	<14 µg/kg	TM218		<14 @	<14 @	<14 @	23 @	<14 @	31 @
Chrysene	<10 µg/kg	TM218		<10 @	<10 @	<10 @	17.6 @	<10 @	33.3 @
Benzo(b)fluoranthene	<15 µg/kg	TM218		<15 @	<15 @	<15 @	<15 @	<15 @	59 @
Benzo(k)fluoranthene	<14 µg/kg	TM218		<14 @	<14 @	<14 @	<14 @	<14 @	22.5 @
Benzo(a)pyrene	<15 µg/kg	TM218		<15 @	<15 @	<15 @	<15 @	<15 @	35 @
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		<18 @	<18 @	<18 @	<18 @	<18 @	<18 @
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		<23 @	<23 @	<23 @	<23 @	<23 @	<23 @
Benzo(g,h,i)perylene	<24 µg/kg	TM218		<24 @	<24 @	<24 @	<24 @	<24 @	<24 @
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		<118	<118	<118	152	<118	300

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 20	WS22	WS 23	WS 23	WS 26	WS 28
			Depth (m)	2.00	0.10 - 0.20	0.20	0.30 - 0.50	0.70	0.30
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	23/01/2019	21/01/2019	18/01/2019	18/01/2019	18/01/2019	24/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253336	19257296	19253919	19253920	19253585	19253590
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		94.5	92.2	88.2	97.5	93.4	92.1
Acenaphthene-d10 % recovery**	%	TM218		94	97.8	83.1	90.4	94	104
Phenanthrene-d10 % recovery**	%	TM218		93.3	105	71.5	89	94.9	115
Chrysene-d12 % recovery**	%	TM218		78.9	102	53.1	87.5	88.8	100
Perylene-d12 % recovery**	%	TM218		78.7	96.7	38.2	81.9	92.6	97.5
Naphthalene	<9 µg/kg	TM218		<9 @	<9 @	<9 @	<9 @	<9 @	321 @
Acenaphthylene	<12 µg/kg	TM218		<12 @	<12 @	<12 @	<12 @	<12 @	307 @
Acenaphthene	<8 µg/kg	TM218		<8 @	<8 @	<8 @	<8 @	<8 @	5320 @
Fluorene	<10 µg/kg	TM218		<10 @	<10 @	<10 @	<10 @	<10 @	5760 @
Phenanthrene	<15 µg/kg	TM218		<15 @	<15 @	40.1 @	<15 @	<15 @	41400 @
Anthracene	<16 µg/kg	TM218		<16 @	<16 @	<16 @	<16 @	<16 @	15700 @
Fluoranthene	<17 µg/kg	TM218		<17 @	66.5 @	203 @	<17 @	<17 @	51000 @
Pyrene	<15 µg/kg	TM218		<15 @	58.5 @	180 @	<15 @	<15 @	43000 @
Benz(a)anthracene	<14 µg/kg	TM218		<14 @	34.2 @	90 @	<14 @	<14 @	24700 @
Chrysene	<10 µg/kg	TM218		<10 @	29.5 @	92.5 @	<10 @	<10 @	27400 @
Benzo(b)fluoranthene	<15 µg/kg	TM218		<15 @	45.4 @	134 @	<15 @	<15 @	<15 @
Benzo(k)fluoranthene	<14 µg/kg	TM218		<14 @	16.3 @	58.2 @	<14 @	<14 @	41300 @
Benzo(a)pyrene	<15 µg/kg	TM218		<15 @	26.6 @	86.7 @	<15 @	<15 @	15800 @
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		<18 @	<18 @	49.9 @	<18 @	<18 @	12600 @
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		<23 @	<23 @	<23 @	<23 @	<23 @	4370 @
Benzo(g,h,i)perylene	<24 µg/kg	TM218		<24 @	<24 @	54.2 @	<24 @	<24 @	14800 @
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		<118	277	989	<118	<118	304000

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 28	WS29	WS 30	WS 33	WS 33	WS 34
			Depth (m)	1.00	0.40	0.50	0.10	0.50	0.10
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	24/01/2019	21/01/2019	23/01/2019	18/01/2019	18/01/2019	23/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253591	19257273	19253323	19253581	19253582	19253340
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		92.5	95	91.9	95.3	88.4	94.5
Acenaphthene-d10 % recovery**	%	TM218		92.1	98.2	93.2	95.8	98.9	94.5
Phenanthrene-d10 % recovery**	%	TM218		95.5	106	98	96.8	107	95.1
Chrysene-d12 % recovery**	%	TM218		94.2	105	94.8	80.1	95.5	86.5
Perylene-d12 % recovery**	%	TM218		98.1	97.8	98.7	80	92.4	88.7
Naphthalene	<9 µg/kg	TM218		<9 @	<9 @	<9 @	<9 @	<9 @	<9 @
Acenaphthylene	<12 µg/kg	TM218		<12 @	<12 @	<12 @	<12 @	<12 @	<12 @
Acenaphthene	<8 µg/kg	TM218		17.5 @	<8 @	<8 @	<8 @	<8 @	<8 @
Fluorene	<10 µg/kg	TM218		16.8 @	<10 @	<10 @	<10 @	<10 @	<10 @
Phenanthrene	<15 µg/kg	TM218		257 @	<15 @	<15 @	44.1 @	<15 @	<15 @
Anthracene	<16 µg/kg	TM218		67.9 @	<16 @	<16 @	<16 @	<16 @	<16 @
Fluoranthene	<17 µg/kg	TM218		610 @	48.8 @	<17 @	150 @	<17 @	<17 @
Pyrene	<15 µg/kg	TM218		452 @	42.6 @	<15 @	135 @	<15 @	<15 @
Benz(a)anthracene	<14 µg/kg	TM218		263 @	28.7 @	<14 @	64.4 @	<14 @	<14 @
Chrysene	<10 µg/kg	TM218		250 @	26.8 @	<10 @	66 @	<10 @	<10 @
Benzo(b)fluoranthene	<15 µg/kg	TM218		253 @	43.5 @	<15 @	68.9 @	<15 @	<15 @
Benzo(k)fluoranthene	<14 µg/kg	TM218		99 @	<14 @	<14 @	36.2 @	<14 @	<14 @
Benzo(a)pyrene	<15 µg/kg	TM218		283 @	27.7 @	<15 @	75.8 @	<15 @	<15 @
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		166 @	<18 @	<18 @	39.1 @	<18 @	<18 @
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		50.2 @	<23 @	<23 @	<23 @	<23 @	<23 @
Benzo(g,h,i)perylene	<24 µg/kg	TM218		212 @	<24 @	<24 @	52.5 @	<24 @	<24 @
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		3000	218	<118	732	<118	<118

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 34	WS35	WS 36	WS 37	WS38	WS38
			Depth (m)	1.00	0.40	0.50	0.20	0.20	0.70
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	23/01/2019	21/01/2019	24/01/2019	22/01/2019	21/01/2019	21/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253341	19257270	19253326	19253329	19257263	19257265
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		95.2	93.1	87.4	91.8	79.3	96.3
Acenaphthene-d10 % recovery**	%	TM218		96.2	96.7	97.5	93.8	93.1	94.1
Phenanthrene-d10 % recovery**	%	TM218		104	98.4	104	97.1	97.9	94.9
Chrysene-d12 % recovery**	%	TM218		106	95.1	95.3	93.9	89.1	81.3
Perylene-d12 % recovery**	%	TM218		96.8	101	91	98.9	84.2	80.6
Naphthalene	<9 µg/kg	TM218		<9 @	<9 @	<9 @	<9 @	<90 @	<9 @
Acenaphthylene	<12 µg/kg	TM218		<12 @	<12 @	<12 @	<12 @	<120 @	<12 @
Acenaphthene	<8 µg/kg	TM218		<8 @	<8 @	<8 @	<8 @	<80 @	<8 @
Fluorene	<10 µg/kg	TM218		<10 @	<10 @	<10 @	<10 @	<100 @	<10 @
Phenanthrene	<15 µg/kg	TM218		<15 @	<15 @	55.3 @	<15 @	865 @	24.9 @
Anthracene	<16 µg/kg	TM218		<16 @	<16 @	<16 @	<16 @	361 @	<16 @
Fluoranthene	<17 µg/kg	TM218		127 @	24.8 @	168 @	54.6 @	2580 @	81.2 @
Pyrene	<15 µg/kg	TM218		110 @	23 @	150 @	50.7 @	2440 @	82.4 @
Benz(a)anthracene	<14 µg/kg	TM218		62.5 @	<14 @	68.8 @	24.7 @	1200 @	39.6 @
Chrysene	<10 µg/kg	TM218		61.4 @	<10 @	67.8 @	24.2 @	999 @	36.2 @
Benzo(b)fluoranthene	<15 µg/kg	TM218		111 @	<15 @	72.6 @	27.5 @	901 @	36 @
Benzo(k)fluoranthene	<14 µg/kg	TM218		35.7 @	<14 @	35.5 @	<14 @	456 @	15.5 @
Benzo(a)pyrene	<15 µg/kg	TM218		67.9 @	<15 @	76.3 @	29.6 @	1140 @	43.8 @
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		40.2 @	<18 @	36.1 @	<18 @	505 @	20.3 @
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		<23 @	<23 @	<23 @	<23 @	<230 @	<23 @
Benzo(g,h,i)perylene	<24 µg/kg	TM218		52.9 @	<24 @	56.3 @	<24 @	705 @	30.4 @
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		668	<118	787	211	12100	410

Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS39	WS39	WS 40	WS 40	WS 41	WS 41
			Depth (m)	0.20	0.70 - 0.90	1.00	1.50	0.50	1.00
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	21/01/2019	21/01/2019	24/01/2019	24/01/2019	18/01/2019	18/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19257267	19257268	19253596	19253597	19253579	19253578
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		92.3	89	94.4	86.5	93.4	93.6
Acenaphthene-d10 % recovery**	%	TM218		93.4	94.5	94	95.1	95.9	93
Phenanthrene-d10 % recovery**	%	TM218		98.5	99.8	96.7	103	96.4	94.1
Chrysene-d12 % recovery**	%	TM218		97.4	99.6	83.6	89.4	90.5	87.4
Perylene-d12 % recovery**	%	TM218		101	87.2	83.5	86.3	93.7	92.2
Naphthalene	<9 µg/kg	TM218		<9 @	<9 @	<9 @	<9 @	<9 @	<9 @
Acenaphthylene	<12 µg/kg	TM218		19.7 @	<12 @	48.5 @	<12 @	<12 @	<12 @
Acenaphthene	<8 µg/kg	TM218		15.6 @	<8 @	37.1 @	<8 @	<8 @	<8 @
Fluorene	<10 µg/kg	TM218		<10 @	<10 @	27.9 @	<10 @	<10 @	<10 @
Phenanthrene	<15 µg/kg	TM218		225 @	<15 @	521 @	55.8 @	<15 @	<15 @
Anthracene	<16 µg/kg	TM218		64.7 @	<16 @	133 @	<16 @	<16 @	<16 @
Fluoranthene	<17 µg/kg	TM218		1260 @	40.9 @	1460 @	83.4 @	29.6 @	<17 @
Pyrene	<15 µg/kg	TM218		1210 @	36 @	1310 @	57.8 @	27 @	<15 @
Benz(a)anthracene	<14 µg/kg	TM218		725 @	21.8 @	731 @	27.7 @	<14 @	<14 @
Chrysene	<10 µg/kg	TM218		667 @	20.4 @	619 @	21 @	<10 @	<10 @
Benzo(b)fluoranthene	<15 µg/kg	TM218		846 @	34.7 @	685 @	21.3 @	<15 @	<15 @
Benzo(k)fluoranthene	<14 µg/kg	TM218		406 @	<14 @	291 @	<14 @	<14 @	<14 @
Benzo(a)pyrene	<15 µg/kg	TM218		914 @	20.8 @	846 @	17.5 @	<15 @	<15 @
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		500 @	<18 @	421 @	<18 @	<18 @	<18 @
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		133 @	<23 @	111 @	<23 @	<23 @	<23 @
Benzo(g,h,i)perylene	<24 µg/kg	TM218		656 @	<24 @	571 @	<24 @	<24 @	<24 @
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		7640	175	7820	285	<118	<118

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 42	WS 43	WS 43	WS 45	WS 45	WS 46
			Depth (m)	0.10	0.20	0.50	0.30	1.00	0.30
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253318	19253587	19253588	19253903	19253906	19253909
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		109	80.4	88.4	86.4	93.7	88.8
Acenaphthene-d10 % recovery**	%	TM218		113	82.6	96.6	95.5	107	96.4
Phenanthrene-d10 % recovery**	%	TM218		122	95.1	105	102	106	104
Chrysene-d12 % recovery**	%	TM218		109	87.7	95.3	93.9	107	93.5
Perylene-d12 % recovery**	%	TM218		113	85.3	91.7	90.4	101	91
Naphthalene	<9 µg/kg	TM218		<9 @	<90 @	<9 @	<9 @	<9 @	<9 @
Acenaphthylene	<12 µg/kg	TM218		<12 @	<120 @	<12 @	<12 @	<12 @	<12 @
Acenaphthene	<8 µg/kg	TM218		<8 @	<80 @	<8 @	<8 @	<8 @	<8 @
Fluorene	<10 µg/kg	TM218		<10 @	<100 @	<10 @	<10 @	<10 @	<10 @
Phenanthrene	<15 µg/kg	TM218		<15 @	<150 @	<15 @	127 @	<15 @	44.7 @
Anthracene	<16 µg/kg	TM218		<16 @	<160 @	<16 @	31.9 @	<16 @	<16 @
Fluoranthene	<17 µg/kg	TM218		<17 @	448 @	<17 @	468 @	333 @	189 @
Pyrene	<15 µg/kg	TM218		<15 @	505 @	<15 @	433 @	308 @	181 @
Benz(a)anthracene	<14 µg/kg	TM218		<14 @	298 @	<14 @	217 @	155 @	74 @
Chrysene	<10 µg/kg	TM218		<10 @	258 @	<10 @	201 @	143 @	72.9 @
Benzo(b)fluoranthene	<15 µg/kg	TM218		<15 @	262 @	<15 @	247 @	263 @	86.9 @
Benzo(k)fluoranthene	<14 µg/kg	TM218		<14 @	<140 @	<14 @	104 @	80.3 @	47.5 @
Benzo(a)pyrene	<15 µg/kg	TM218		<15 @	394 @	<15 @	268 @	166 @	84.6 @
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		<18 @	<180 @	<18 @	123 @	85.1 @	39.3 @
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		<23 @	<230 @	<23 @	35.3 @	<23 @	<23 @
Benzo(g,h,i)perylene	<24 µg/kg	TM218		<24 @	<240 @	<24 @	182 @	109 @	66.5 @
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		<118	2160	<118	2440	1640	887

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 46	WS52	WS52	WS53	WS54	WS54
			Depth (m)	0.70	0.10	1.00	0.50	0.10	0.50
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	22/01/2019	25/01/2019	25/01/2019	24/01/2019	25/01/2019	25/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253911	19257276	19257278	19257283	19257285	19257287
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		92.4	93.5	88	92.5	90.8	88.4
Acenaphthene-d10 % recovery**	%	TM218		93.3	94	95.1	93.4	92.1	97.9
Phenanthrene-d10 % recovery**	%	TM218		96.3	95.4	103	105	97	107
Chrysene-d12 % recovery**	%	TM218		96	92.1	91.4	104	93.4	98
Perylene-d12 % recovery**	%	TM218		98.8	91.7	86.8	95.6	99.3	94.5
Naphthalene	<9 µg/kg	TM218		<9 @	<9 @	<9 @	<9 @	<9 @	<9 @
Acenaphthylene	<12 µg/kg	TM218		<12 @	<12 @	<12 @	<12 @	<12 @	<12 @
Acenaphthene	<8 µg/kg	TM218		<8 @	<8 @	<8 @	<8 @	<8 @	<8 @
Fluorene	<10 µg/kg	TM218		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
Phenanthrene	<15 µg/kg	TM218		<15 @	57.9 @	<15 @	101 @	43.6 @	<15 @
Anthracene	<16 µg/kg	TM218		<16 @	<16 @	<16 @	<16 @	<16 @	<16 @
Fluoranthene	<17 µg/kg	TM218		<17 @	241 @	<17 @	367 @	211 @	<17 @
Pyrene	<15 µg/kg	TM218		15.7 @	220 @	<15 @	306 @	194 @	<15 @
Benz(a)anthracene	<14 µg/kg	TM218		<14 @	117 @	<14 @	202 @	104 @	<14 @
Chrysene	<10 µg/kg	TM218		<10 @	112 @	<10 @	179 @	104 @	<10 @
Benzo(b)fluoranthene	<15 µg/kg	TM218		<15 @	142 @	<15 @	401 @	121 @	<15 @
Benzo(k)fluoranthene	<14 µg/kg	TM218		<14 @	52.1 @	<14 @	117 @	41.9 @	<14 @
Benzo(a)pyrene	<15 µg/kg	TM218		<15 @	144 @	<15 @	243 @	132 @	<15 @
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		<18 @	73.5 @	<18 @	170 @	66 @	<18 @
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		<23 @	<23 @	<23 @	41.8 @	<23 @	<23 @
Benzo(g,h,i)perylene	<24 µg/kg	TM218		<24 @	109 @	<24 @	219 @	103 @	<24 @
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		<118	1270	<118	2350	1120	<118

Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS57	WS58	WS58	WS 25A	WS 25A
			Depth (m)	0.30	0.30	1.00	0.30	1.00
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	25/01/2019	25/01/2019	25/01/2019	23/01/2019	23/01/2019
			Sampled Time	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19257280	19257289	19257291	19253338	19253339
			AGS Reference					
Naphthalene-d8 % recovery**	%	TM218		94.3	94.8	94.8	94.1	109
Acenaphthene-d10 % recovery**	%	TM218		95.1	94.9	94.4	94.9	114
Phenanthrene-d10 % recovery**	%	TM218		101	95	96.6	94.4	120
Chrysene-d12 % recovery**	%	TM218		101	77.2	92.5	78.5	114
Perylene-d12 % recovery**	%	TM218		95.5	77.6	96.5	77.7	127
Naphthalene	µg/kg	TM218		<9 @	<9 @	<9 @	<9 @	<9 @
Acenaphthylene	µg/kg	TM218		<12 @	<12 @	<12 @	50.6 @	<12 @
Acenaphthene	µg/kg	TM218		<8 @	<8 @	<8 @	25.8 @	<8 @
Fluorene	µg/kg	TM218		<10 @	<10 @	<10 @	20 @	<10 @
Phenanthrene	µg/kg	TM218		<15 @	22.5 @	<15 @	406 @	<15 @
Anthracene	µg/kg	TM218		<16 @	<16 @	<16 @	136 @	<16 @
Fluoranthene	µg/kg	TM218		<17 @	90.4 @	<17 @	1360 @	<17 @
Pyrene	µg/kg	TM218		<15 @	80.8 @	<15 @	1240 @	<15 @
Benz(a)anthracene	µg/kg	TM218		<14 @	46.6 @	<14 @	786 @	<14 @
Chrysene	µg/kg	TM218		<10 @	42.4 @	<10 @	662 @	<10 @
Benzo(b)fluoranthene	µg/kg	TM218		<15 @	51.2 @	<15 @	969 @	<15 @
Benzo(k)fluoranthene	µg/kg	TM218		<14 @	<14 @	<14 @	356 @	<14 @
Benzo(a)pyrene	µg/kg	TM218		<15 @	52 @	<15 @	974 @	<15 @
Indeno(1,2,3-cd)pyrene	µg/kg	TM218		<18 @	30.2 @	<18 @	503 @	<18 @
Dibenzo(a,h)anthracene	µg/kg	TM218		<23 @	<23 @	<23 @	146 @	<23 @
Benzo(g,h,i)perylene	µg/kg	TM218		<24 @	41.5 @	<24 @	699 @	<24 @
PAH, Total Detected USEPA 16	µg/kg	TM218		<118	458	<118	8340	<118

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Phenols Spec MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 07	WS 10	WS 10	WS 16	WS 16	WS 20
			Depth (m)	0.30 - 0.30	0.20	0.50	0.60	1.20	1.50
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	18/01/2019	24/01/2019	24/01/2019	18/01/2019	18/01/2019	23/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253912	19253331	19253332	19253917	19253918	19253335
			AGS Reference						
4-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4,6-Trichlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4-Dichlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Pentachlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Phenol	<1 µg/kg	TM072		<2	<1	<1	<1	<1	<1
4-Chloro-3-methylphenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4-Dimethylphenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2-Chlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Sum of Detected Phenols	<9 µg/kg	TM072		<10	<9	<9	<9	<9	<9

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Phenols Spec MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 20	WS22	WS 23	WS 23	WS 26	WS 28
			Depth (m)	2.00	0.10 - 0.20	0.20	0.30 - 0.50	0.70	0.30
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	23/01/2019	21/01/2019	18/01/2019	18/01/2019	18/01/2019	24/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253336	19257296	19253919	19253920	19253585	19253590
			AGS Reference						
4-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<10
2,4,6-Trichlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<10
2-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<10
2,4-Dichlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<10
Pentachlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<10
Phenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	11.2
4-Chloro-3-methylphenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<10
2,4-Dimethylphenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	18.4
2-Chlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<10
Sum of Detected Phenols	<9 µg/kg	TM072		<9	<9	<9	<9	<9	<90

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Phenols Spec MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 28	WS29	WS 30	WS 33	WS 33	WS 34
			Depth (m)	1.00	0.40	0.50	0.10	0.50	0.10
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	24/01/2019	21/01/2019	23/01/2019	18/01/2019	18/01/2019	23/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253591	19257273	19253323	19253581	19253582	19253340
			AGS Reference						
4-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4,6-Trichlorophenol	<1 µg/kg	TM072		<1	<1	<1	1.23	<1	<1
2-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4-Dichlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Pentachlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Phenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
4-Chloro-3-methylphenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4-Dimethylphenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2-Chlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Sum of Detected Phenols	<9 µg/kg	TM072		<9	<9	<9	<9	<9	<9

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Phenols Spec MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 34	WS35	WS 36	WS 37	WS38	WS38
			Depth (m)	1.00	0.40	0.50	0.20	0.20	0.70
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	23/01/2019	21/01/2019	24/01/2019	22/01/2019	21/01/2019	21/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253341	19257270	19253326	19253329	19257263	19257265
			AGS Reference						
4-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4,6-Trichlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4-Dichlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Pentachlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Phenol	<1 µg/kg	TM072		<1	<1	<1	<1	6.28	<1
4-Chloro-3-methylphenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4-Dimethylphenol	<1 µg/kg	TM072		<1	<1	<1	<1	6.07	<1
2-Chlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Sum of Detected Phenols	<9 µg/kg	TM072		<9	<9	<9	<9	12.4	<9

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Phenols Spec MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS39	WS39	WS 40	WS 40	WS 41	WS 41
			Depth (m)	0.20	0.70 - 0.90	1.00	1.50	0.50	1.00
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	21/01/2019	21/01/2019	24/01/2019	24/01/2019	18/01/2019	18/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19257267	19257268	19253596	19253597	19253579	19253578
			AGS Reference						
4-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4,6-Trichlorophenol	<1 µg/kg	TM072		1.57	<1	<1	<1	<1	<1
2-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4-Dichlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Pentachlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Phenol	<1 µg/kg	TM072		1.32	<1	<1	<1	<1	<1
4-Chloro-3-methylphenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4-Dimethylphenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2-Chlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Sum of Detected Phenols	<9 µg/kg	TM072		<9	<9	<9	<9	<9	<9

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Phenols Spec MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 42	WS 43	WS 43	WS 45	WS 45	WS 46
			Depth (m)	0.10	0.20	0.50	0.30	1.00	0.30
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253318	19253587	19253588	19253903	19253906	19253909
			AGS Reference						
4-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<10	<1	<1
2,4,6-Trichlorophenol	<1 µg/kg	TM072		<1	<1	<1	<10	1.66	<1
2-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<10	<1	<1
2,4-Dichlorophenol	<1 µg/kg	TM072		<1	<1	<1	<10	<1	<1
Pentachlorophenol	<1 µg/kg	TM072		<1	<1	<1	<10	<1	<1
Phenol	<1 µg/kg	TM072		<1	2.64	<1	<10	<1	<1
4-Chloro-3-methylphenol	<1 µg/kg	TM072		<1	<1	<1	<10	<1	<1
2,4-Dimethylphenol	<1 µg/kg	TM072		<1	<1	<1	<10	<1	<1
2-Chlorophenol	<1 µg/kg	TM072		<1	<1	<1	<10	<1	<1
Sum of Detected Phenols	<9 µg/kg	TM072		<9	<9	<9	<90	<9	<9

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Phenols Spec MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 46	WS52	WS52	WS53	WS54	WS54
			Depth (m)	0.70	0.10	1.00	0.50	0.10	0.50
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	22/01/2019	25/01/2019	25/01/2019	24/01/2019	25/01/2019	25/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253911	19257276	19257278	19257283	19257285	19257287
			AGS Reference						
4-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4,6-Trichlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	1.84	<1
2-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4-Dichlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Pentachlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Phenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
4-Chloro-3-methylphenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4-Dimethylphenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2-Chlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Sum of Detected Phenols	<9 µg/kg	TM072		<9	<9	<9	<9	<9	<9

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Phenols Spec MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS57	WS58	WS58	WS 25A	WS 25A
			Depth (m)	0.30	0.30	1.00	0.30	1.00
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	25/01/2019	25/01/2019	25/01/2019	23/01/2019	23/01/2019
			Sampled Time	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19257280	19257289	19257291	19253338	19253339
			AGS Reference					
4-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<5	<1
2,4,6-Trichlorophenol	<1 µg/kg	TM072		<1	<1	<1	<5	<1
2-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<5	<1
2,4-Dichlorophenol	<1 µg/kg	TM072		<1	<1	<1	<5	<1
Pentachlorophenol	<1 µg/kg	TM072		<1	<1	<1	<5	<1
Phenol	<1 µg/kg	TM072		<1	<1	<1	<5	<1
4-Chloro-3-methylphenol	<1 µg/kg	TM072		<1	<1	<1	<5	<1
2,4-Dimethylphenol	<1 µg/kg	TM072		<1	<1	<1	<5	<1
2-Chlorophenol	<1 µg/kg	TM072		<1	<1	<1	<5	<1
Sum of Detected Phenols	<9 µg/kg	TM072		<9	<9	<9	<45	<9

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 07	WS 16	WS 20	WS22	WS 23	WS 28
			Depth (m)	0.30 - 0.30	1.20	1.50	0.10 - 0.20	0.20	0.30
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	18/01/2019	18/01/2019	23/01/2019	21/01/2019	18/01/2019	24/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253912	19253918	19253335	19257296	19253919	19253590
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
Pentachlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
Nitrobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
Isophorone	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
Hexachloroethane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
Diethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
Dibenzofuran	<100 µg/kg	TM157		<100	<100	<100	<100	<100	1510
Carbazole	<100 µg/kg	TM157		<100	<100	<100	<100	<100	4170
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
Azobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
4-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
4-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
4-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
4-Chloroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
3-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
2-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
2-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
2-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 07	WS 16	WS 20	WS22	WS 23	WS 28
			Depth (m)	0.30 - 0.30	1.20	1.50	0.10 - 0.20	0.20	0.30
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	18/01/2019	18/01/2019	23/01/2019	21/01/2019	18/01/2019	24/01/2019
			Sampled Time	-	-	-	-	-	-
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253912	19253918	19253335	19257296	19253919	19253590
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
2-Methylnaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
Acenaphthylene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
Acenaphthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	2950
Anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	8230
Benzo(a)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	174	17800
Benzo(b)fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100	174	18800
Benzo(k)fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100	113	11400
Benzo(a)pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	133	15200
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	9680
Chrysene	<100 µg/kg	TM157		<100	<100	<100	<100	236	18300
Fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100	328	45300
Fluorene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	2970
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	133	19400
Phenanthrene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	31000
Pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	328	32200
Naphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	1280
Bis(2-chloroisopropyl) ether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<200
TIC report		TM157		Not Detected					
Total SVOC TIC	<100 µg/kg	TM157		<1000					

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS29	WS38	WS38	WS39	WS 40	WS 41
			Depth (m)	0.40	0.20	0.70	0.20	1.00	1.00
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	21/01/2019	21/01/2019	21/01/2019	21/01/2019	24/01/2019	18/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19257273	19257263	19257265	19257267	19253596	19253578
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
Pentachlorophenol	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
Nitrobenzene	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
Isophorone	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
Hexachloroethane	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
Hexachlorobenzene	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
Dimethyl phthalate	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
Diethyl phthalate	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
Dibenzofuran	<100 µg/kg	TM157		<100	598	<100	<100	<100	<100
Carbazole	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
Azobenzene	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
4-Nitrophenol	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
4-Nitroaniline	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
4-Methylphenol	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
4-Chloroaniline	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
3-Nitroaniline	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
2-Nitrophenol	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
2-Nitroaniline	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
2-Methylphenol	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS29	WS38	WS38	WS39	WS 40	WS 41
			Depth (m)	0.40	0.20	0.70	0.20	1.00	1.00
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	21/01/2019	21/01/2019	21/01/2019	21/01/2019	24/01/2019	18/01/2019
			Sampled Time	-	-	-	-	-	-
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19257273	19257263	19257265	19257267	19253596	19253578
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
2-Methylnaphthalene	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
Acenaphthylene	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
Acenaphthene	<100 µg/kg	TM157		<100	2130	<100	<100	<100	<100
Anthracene	<100 µg/kg	TM157		<100	5980	<100	<100	<100	<100
Benzo(a)anthracene	<100 µg/kg	TM157		<100	23500	<100	708	440	<100
Benzo(b)fluoranthene	<100 µg/kg	TM157		<100	16200	<100	648	369	<100
Benzo(k)fluoranthene	<100 µg/kg	TM157		<100	17600	<100	624	328	<100
Benzo(a)pyrene	<100 µg/kg	TM157		<100	22000	<100	720	420	<100
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	11300	<100	444	246	<100
Chrysene	<100 µg/kg	TM157		<100	20100	<100	888	512	<100
Fluoranthene	<100 µg/kg	TM157		<100	50100	<100	1220	707	<100
Fluorene	<100 µg/kg	TM157		<100	1320	<100	<100	<100	<100
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	18300	<100	672	430	<100
Phenanthrene	<100 µg/kg	TM157		<100	13500	<100	252	184	<100
Pyrene	<100 µg/kg	TM157		<100	44600	<100	1210	717	<100
Naphthalene	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	1140	<100	<100	<100	<100
Bis(2-chloroisopropyl) ether	<100 µg/kg	TM157		<100	<500	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 43	WS 43	WS 45	WS 46	WS 46	WS53
			Depth (m)	0.20	0.50	0.30	0.30	0.70	0.50
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019	24/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253587	19253588	19253903	19253909	19253911	19257283
			AGS Reference						
Phenol	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
Pentachlorophenol	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
Nitrobenzene	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
Isophorone	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
Hexachloroethane	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
Hexachlorobutadiene	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
Hexachlorobenzene	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
n-Dioctyl phthalate	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
Dimethyl phthalate	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
Diethyl phthalate	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
n-Dibutyl phthalate	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
Dibenzofuran	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
Carbazole	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
Butylbenzyl phthalate	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
Azobenzene	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
4-Nitrophenol	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
4-Nitroaniline	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
4-Methylphenol	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
4-Chlorophenylphenylether	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
4-Chloroaniline	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
4-Bromophenylphenylether	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
3-Nitroaniline	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
2-Nitrophenol	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
2-Nitroaniline	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
2-Methylphenol	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 43	WS 43	WS 45	WS 46	WS 46	WS53
			Depth (m)	0.20	0.50	0.30	0.30	0.70	0.50
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019	24/01/2019
			Sampled Time	-	-	-	-	-	-
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253587	19253588	19253903	19253909	19253911	19257283
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
2,6-Dinitrotoluene	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
2,4-Dinitrotoluene	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
2,4-Dimethylphenol	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
2,4-Dichlorophenol	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
1,4-Dichlorobenzene	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
1,3-Dichlorobenzene	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
1,2-Dichlorobenzene	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
2-Chloronaphthalene	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
2-Methylnaphthalene	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
Acenaphthylene	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
Acenaphthene	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
Anthracene	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
Benzo(a)anthracene	<100 µg/kg	TM157		2300	<100	233	<100	<100	180
Benzo(b)fluoranthene	<100 µg/kg	TM157		2330	<100	264	<100	<100	168
Benzo(k)fluoranthene	<100 µg/kg	TM157		2090	<100	223	<100	<100	120
Benzo(a)pyrene	<100 µg/kg	TM157		3030	<100	213	<100	<100	180
Benzo(g,h,i)perylene	<100 µg/kg	TM157		1960	<100	162	<100	<100	132
Chrysene	<100 µg/kg	TM157		2390	<100	284	<100	<100	264
Fluoranthene	<100 µg/kg	TM157		2740	<100	436	139	<100	276
Fluorene	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		3130	<100	355	<100	<100	240
Phenanthrene	<100 µg/kg	TM157		430	<100	112	<100	<100	132
Pyrene	<100 µg/kg	TM157		3110	<100	436	162	<100	264
Naphthalene	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100
Bis(2-chloroisopropyl) ether	<100 µg/kg	TM157		<200	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS57	WS58	WS 25A			
			Depth (m)	0.30	1.00	0.30			
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)			
			Date Sampled	25/01/2019	25/01/2019	23/01/2019			
			Sampled Time	.	.	.			
			Date Received	30/01/2019	30/01/2019	30/01/2019			
			SDG Ref	190201-81	190201-81	190201-81			
			Lab Sample No.(s)	19257280	19257291	19253338			
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100	<100			
Pentachlorophenol	<100 µg/kg	TM157		<100	<100	<100			
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100	<100			
Nitrobenzene	<100 µg/kg	TM157		<100	<100	<100			
Isophorone	<100 µg/kg	TM157		<100	<100	<100			
Hexachloroethane	<100 µg/kg	TM157		<100	<100	<100			
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100	<100			
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100	<100			
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100	<100			
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100	<100			
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100	<100			
Diethyl phthalate	<100 µg/kg	TM157		<100	<100	<100			
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100	<100			
Dibenzofuran	<100 µg/kg	TM157		<100	<100	<100			
Carbazole	<100 µg/kg	TM157		<100	<100	<100			
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100	<100			
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100	<100			
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100	<100			
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100	<100			
Azobenzene	<100 µg/kg	TM157		<100	<100	<100			
4-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100			
4-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100			
4-Methylphenol	<100 µg/kg	TM157		<100	<100	<100			
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100	<100			
4-Chloroaniline	<100 µg/kg	TM157		<100	<100	<100			
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100	<100			
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100	<100			
3-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100			
2-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100			
2-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100			
2-Methylphenol	<100 µg/kg	TM157		<100	<100	<100			
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100	<100			

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS57	WS58	WS 25A			
			Depth (m)	0.30	1.00	0.30			
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)			
			Date Sampled	25/01/2019	25/01/2019	23/01/2019			
			Sampled Time	-	-	-			
			Date Received	30/01/2019	30/01/2019	30/01/2019			
			SDG Ref	190201-81	190201-81	190201-81			
			Lab Sample No.(s)	19257280	19257291	19253338			
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100	<100			
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100			
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100			
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100	<100			
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100	<100			
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100			
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100			
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100			
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100			
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100			
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100	<100			
2-Methylnaphthalene	<100 µg/kg	TM157		<100	<100	<100			
Acenaphthylene	<100 µg/kg	TM157		<100	<100	<100			
Acenaphthene	<100 µg/kg	TM157		<100	<100	<100			
Anthracene	<100 µg/kg	TM157		<100	<100	<100			
Benzo(a)anthracene	<100 µg/kg	TM157		<100	<100	576			
Benzo(b)fluoranthene	<100 µg/kg	TM157		<100	<100	504			
Benzo(k)fluoranthene	<100 µg/kg	TM157		<100	<100	576			
Benzo(a)pyrene	<100 µg/kg	TM157		<100	<100	564			
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	<100	468			
Chrysene	<100 µg/kg	TM157		<100	<100	672			
Fluoranthene	<100 µg/kg	TM157		<100	<100	1080			
Fluorene	<100 µg/kg	TM157		<100	<100	<100			
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	<100	864			
Phenanthrene	<100 µg/kg	TM157		<100	<100	336			
Pyrene	<100 µg/kg	TM157		<100	<100	1040			
Naphthalene	<100 µg/kg	TM157		<100	<100	<100			
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100	<100			
Bis(2-chloroisopropyl) ether	<100 µg/kg	TM157		<100	<100	<100			

Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 07	WS 10	WS 10	WS 16	WS 16	WS 20
			Depth (m)	0.30 - 0.30	0.20	0.50	0.60	1.20	1.50
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	18/01/2019	24/01/2019	24/01/2019	18/01/2019	18/01/2019	23/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253912	19253331	19253332	19253917	19253918	19253335
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		110 @	111 @	100 @	144 @	108	100 @
GRO TOT (Moisture Corrected)	<100 µg/kg	TM089		<100 @	<100 @	<100 @	<100 @	<100	<100 @
Aliphatics >C5-C6	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10	<10 @
Aliphatics >C6-C8	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10	<10 @
Aliphatics >C8-C10	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10	<10 @
Aliphatics >C10-C12	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10	<10 @
Aliphatics >C12-C16	<100 µg/kg	TM173		<100	107	164	126	<100	<100
Aliphatics >C16-C21	<100 µg/kg	TM173		<100	<100	<100	<100	<100	<100
Aliphatics >C21-C35	<100 µg/kg	TM173		<100	478	384	761	2430	<100
Aliphatics >C35-C44	<100 µg/kg	TM173		<100	<100	334	365	204	<100
Total Aliphatics >C12-C44	<100 µg/kg	TM173		<100	585	881	1250	2630	<100
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10	<10 @
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10	<10 @
Aromatics >EC8-EC10	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10	<10 @
Aromatics >EC10-EC12	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10	<10 @
Aromatics >EC12-EC16	<100 µg/kg	TM173		<100	<100	<100	129	284	<100
Aromatics >EC16-EC21	<100 µg/kg	TM173		<100	<100	<100	100	644	<100
Aromatics >EC21-EC35	<100 µg/kg	TM173		<100	<100	408	1140	2170	1910
Aromatics >EC35-EC44	<100 µg/kg	TM173		<100	149	148	802	574	<100
Aromatics >EC40-EC44	<100 µg/kg	TM173		<100	271	398	<100	160	<100
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		<100	149	555	2170	3670	1910
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173		<100	734	1440	3420	6300	1910

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 20	WS22	WS 23	WS 23	WS 26	WS 28
			Depth (m)	2.00	0.10 - 0.20	0.20	0.30 - 0.50	0.70	0.30
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	23/01/2019	21/01/2019	18/01/2019	18/01/2019	18/01/2019	24/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253336	19257296	19253919	19253920	19253585	19253590
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		105 @	95.4 @	80	107 @	102 @	100 @
GRO TOT (Moisture Corrected)	<100 µg/kg	TM089		<100 @	<100 @	<100	<100 @	<100 @	<100 @
Aliphatics >C5-C6	<10 µg/kg	TM089		<10 @	<10 @	<10	<10 @	<10 @	<10 @
Aliphatics >C6-C8	<10 µg/kg	TM089		<10 @	<10 @	<10	<10 @	<10 @	13.3 @
Aliphatics >C8-C10	<10 µg/kg	TM089		<10 @	<10 @	<10	<10 @	<10 @	16.4 @
Aliphatics >C10-C12	<10 µg/kg	TM089		<10 @	<10 @	<10	<10 @	<10 @	32.8 @
Aliphatics >C12-C16	<100 µg/kg	TM173		<100	248	149	<100	<100	3820
Aliphatics >C16-C21	<100 µg/kg	TM173		<100	473	323	<100	<100	14700
Aliphatics >C21-C35	<100 µg/kg	TM173		4050	898	3290	<100	<100	25900
Aliphatics >C35-C44	<100 µg/kg	TM173		226	<100	540	<100	<100	8470
Total Aliphatics >C12-C44	<100 µg/kg	TM173		4270	1620	4300	<100	<100	52900
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10 @	<10 @	<10	<10 @	<10 @	<10 @
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10 @	<10 @	<10	<10 @	<10 @	<10 @
Aromatics >EC8-EC10	<10 µg/kg	TM089		<10 @	<10 @	<10	<10 @	<10 @	11.3 @
Aromatics >EC10-EC12	<10 µg/kg	TM089		<10 @	<10 @	<10	<10 @	<10 @	21.5 @
Aromatics >EC12-EC16	<100 µg/kg	TM173		<100	<100	275	<100	233	22200
Aromatics >EC16-EC21	<100 µg/kg	TM173		<100	133	1910	<100	395	260000
Aromatics >EC21-EC35	<100 µg/kg	TM173		1300	<100	5260	<100	577	504000
Aromatics >EC35-EC44	<100 µg/kg	TM173		328	408	253	<100	<100	152000
Aromatics >EC40-EC44	<100 µg/kg	TM173		302	643	<100	<100	<100	47800
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		1620	542	7700	<100	1210	938000
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173		5900	2160	12000	<100	1210	991000

Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 28	WS29	WS 30	WS 33	WS 33	WS 34
			Depth (m)	1.00	0.40	0.50	0.10	0.50	0.10
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	24/01/2019	21/01/2019	23/01/2019	18/01/2019	18/01/2019	23/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253591	19257273	19253323	19253581	19253582	19253340
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		118 @	112	130	121 @	110 @	108 @
GRO TOT (Moisture Corrected)	<100 µg/kg	TM089		<100 @	<100	<100	<100 @	<100 @	<100 @
Aliphatics >C5-C6	<10 µg/kg	TM089		<10 @	<10	<10	<10 @	<10 @	<10 @
Aliphatics >C6-C8	<10 µg/kg	TM089		<10 @	<10	<10	<10 @	<10 @	<10 @
Aliphatics >C8-C10	<10 µg/kg	TM089		<10 @	<10	<10	<10 @	<10 @	<10 @
Aliphatics >C10-C12	<10 µg/kg	TM089		<10 @	<10	<10	<10 @	<10 @	<10 @
Aliphatics >C12-C16	<100 µg/kg	TM173		193	1310	<100	<100	<100	<100
Aliphatics >C16-C21	<100 µg/kg	TM173		482	510	<100	<100	<100	<100
Aliphatics >C21-C35	<100 µg/kg	TM173		1660	8220	<100	597	<100	<100
Aliphatics >C35-C44	<100 µg/kg	TM173		154	834	<100	<100	<100	<100
Total Aliphatics >C12-C44	<100 µg/kg	TM173		2490	10900	<100	597	<100	<100
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10 @	<10	<10	<10 @	<10 @	<10 @
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10 @	<10	<10	<10 @	<10 @	<10 @
Aromatics >EC8-EC10	<10 µg/kg	TM089		<10 @	<10	<10	<10 @	<10 @	<10 @
Aromatics >EC10-EC12	<10 µg/kg	TM089		<10 @	<10	<10	<10 @	<10 @	<10 @
Aromatics >EC12-EC16	<100 µg/kg	TM173		322	107	<100	<100	<100	<100
Aromatics >EC16-EC21	<100 µg/kg	TM173		2060	<100	<100	<100	<100	<100
Aromatics >EC21-EC35	<100 µg/kg	TM173		6440	<100	<100	<100	<100	<100
Aromatics >EC35-EC44	<100 µg/kg	TM173		2030	<100	<100	<100	<100	<100
Aromatics >EC40-EC44	<100 µg/kg	TM173		527	325	<100	<100	266	<100
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		10800	107	<100	<100	<100	<100
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173		13300	11000	<100	597	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 34	WS35	WS 36	WS 37	WS38	WS38
			Depth (m)	1.00	0.40	0.50	0.20	0.20	0.70
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	23/01/2019	21/01/2019	24/01/2019	22/01/2019	21/01/2019	21/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253341	19257270	19253326	19253329	19257263	19257265
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		94 @	92.2 @	85.8 @	123 @	88.3 @	108 @
GRO TOT (Moisture Corrected)	<100 µg/kg	TM089		<100 @	<100 @	<100 @	<100 @	<100 @	<100 @
Aliphatics >C5-C6	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
Aliphatics >C6-C8	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
Aliphatics >C8-C10	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
Aliphatics >C10-C12	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
Aliphatics >C12-C16	<100 µg/kg	TM173		289	<100	103	<100	5180	<100
Aliphatics >C16-C21	<100 µg/kg	TM173		245	<100	<100	<100	11900	<100
Aliphatics >C21-C35	<100 µg/kg	TM173		2010	<100	2320	<100	22700	<100
Aliphatics >C35-C44	<100 µg/kg	TM173		450	<100	<100	<100	1230	<100
Total Aliphatics >C12-C44	<100 µg/kg	TM173		2990	<100	2430	<100	41000	<100
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
Aromatics >EC8-EC10	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
Aromatics >EC10-EC12	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
Aromatics >EC12-EC16	<100 µg/kg	TM173		<100	<100	<100	<100	12200	<100
Aromatics >EC16-EC21	<100 µg/kg	TM173		203	<100	434	<100	146000	410
Aromatics >EC21-EC35	<100 µg/kg	TM173		5350	<100	6340	2740	469000	2240
Aromatics >EC35-EC44	<100 µg/kg	TM173		1410	<100	1330	<100	106000	793
Aromatics >EC40-EC44	<100 µg/kg	TM173		644	<100	603	<100	35200	314
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		6970	<100	8100	2740	733000	3440
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173		9960	<100	10500	2740	774000	3440

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS39	WS39	WS 40	WS 40	WS 41	WS 41
			Depth (m)	0.20	0.70 - 0.90	1.00	1.50	0.50	1.00
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	21/01/2019	21/01/2019	24/01/2019	24/01/2019	18/01/2019	18/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19257267	19257268	19253596	19253597	19253579	19253578
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		89.3 @	106 @	101 @	103 @	102 @	106 @
GRO TOT (Moisture Corrected)	<100 µg/kg	TM089		<100 @	<100 @	<100 @	<100 @	<100 @	<100 @
Aliphatics >C5-C6	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
Aliphatics >C6-C8	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
Aliphatics >C8-C10	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
Aliphatics >C10-C12	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
Aliphatics >C12-C16	<100 µg/kg	TM173		<100	<100	<100	<100	<100	<100
Aliphatics >C16-C21	<100 µg/kg	TM173		<100	<100	<100	<100	<100	<100
Aliphatics >C21-C35	<100 µg/kg	TM173		8050	<100	5430	<100	1020	<100
Aliphatics >C35-C44	<100 µg/kg	TM173		<100	<100	<100	<100	<100	<100
Total Aliphatics >C12-C44	<100 µg/kg	TM173		8050	<100	5430	<100	1020	<100
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
Aromatics >EC8-EC10	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
Aromatics >EC10-EC12	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
Aromatics >EC12-EC16	<100 µg/kg	TM173		<100	<100	<100	<100	120	180
Aromatics >EC16-EC21	<100 µg/kg	TM173		6140	<100	8320	<100	1020	199
Aromatics >EC21-EC35	<100 µg/kg	TM173		39600	2020	39100	<100	4310	1630
Aromatics >EC35-EC44	<100 µg/kg	TM173		14600	<100	10900	<100	808	273
Aromatics >EC40-EC44	<100 µg/kg	TM173		5950	<100	3900	<100	215	<100
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		60400	2020	58300	<100	6250	2280
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173		68400	2020	63700	<100	7270	2280

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 42	WS 43	WS 43	WS 45	WS 45	WS 46
			Depth (m)	0.10	0.20	0.50	0.30	1.00	0.30
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253318	19253587	19253588	19253903	19253906	19253909
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		119 @	96.7 @	113 @	114 @	100 @	125
GRO TOT (Moisture Corrected)	<100 µg/kg	TM089		<100 @	<100 @	<100 @	<100 @	<100 @	325
Aliphatics >C5-C6	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	18.6
Aliphatics >C6-C8	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	34.8
Aliphatics >C8-C10	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	49.9
Aliphatics >C10-C12	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	111
Aliphatics >C12-C16	<100 µg/kg	TM173		<100	664	229	<100	<100	546
Aliphatics >C16-C21	<100 µg/kg	TM173		<100	3690	<100	<100	<100	1140
Aliphatics >C21-C35	<100 µg/kg	TM173		<100	18600	429	4180	<100	17300
Aliphatics >C35-C44	<100 µg/kg	TM173		<100	6190	509	<100	<100	4030
Total Aliphatics >C12-C44	<100 µg/kg	TM173		<100	29200	1170	4180	<100	23000
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	<10
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	33.6
Aromatics >EC10-EC12	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	74.2
Aromatics >EC12-EC16	<100 µg/kg	TM173		<100	1720	216	<100	<100	629
Aromatics >EC16-EC21	<100 µg/kg	TM173		<100	24200	121	3260	335	5300
Aromatics >EC21-EC35	<100 µg/kg	TM173		2610	136000	<100	20500	5930	125000
Aromatics >EC35-EC44	<100 µg/kg	TM173		745	58400	849	6730	102	25100
Aromatics >EC40-EC44	<100 µg/kg	TM173		<100	21300	445	2980	<100	7080
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		3350	220000	1190	30500	6370	156000
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173		3350	249000	2350	34700	6370	180000

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 46	WS52	WS52	WS53	WS54	WS54
			Depth (m)	0.70	0.10	1.00	0.50	0.10	0.50
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	22/01/2019	25/01/2019	25/01/2019	24/01/2019	25/01/2019	25/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253911	19257276	19257278	19257283	19257285	19257287
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		82 @	79	92.4 2	110	102 @	105 @
GRO TOT (Moisture Corrected)	<100 µg/kg	TM089		<100 @	238	<100 2	<100	<100 @	<100 @
Aliphatics >C5-C6	<10 µg/kg	TM089		<10 @	15.3	<10 2	<10	<10 @	<10 @
Aliphatics >C6-C8	<10 µg/kg	TM089		<10 @	38.9	<10 2	<10	<10 @	<10 @
Aliphatics >C8-C10	<10 µg/kg	TM089		10.1 @	50	<10 2	<10	<10 @	<10 @
Aliphatics >C10-C12	<10 µg/kg	TM089		10.1 @	59.8	<10 2	<10	<10 @	<10 @
Aliphatics >C12-C16	<100 µg/kg	TM173		<100	438	<100	<100	<100	<100
Aliphatics >C16-C21	<100 µg/kg	TM173		<100	158	175	<100	<100	<100
Aliphatics >C21-C35	<100 µg/kg	TM173		255	2350	1300	8310	3920	<100
Aliphatics >C35-C44	<100 µg/kg	TM173		<100	510	371	<100	<100	<100
Total Aliphatics >C12-C44	<100 µg/kg	TM173		255	3460	1850	8310	3920	<100
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10 @	<10	<10 2	<10	<10 @	<10 @
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10 @	<10	<10 2	<10	<10 @	<10 @
Aromatics >EC8-EC10	<10 µg/kg	TM089		<10 @	33.4	<10 2	<10	<10 @	<10 @
Aromatics >EC10-EC12	<10 µg/kg	TM089		<10 @	38.9	<10 2	<10	<10 @	<10 @
Aromatics >EC12-EC16	<100 µg/kg	TM173		<100	327	171	<100	<100	323
Aromatics >EC16-EC21	<100 µg/kg	TM173		119	1650	246	1340	2700	391
Aromatics >EC21-EC35	<100 µg/kg	TM173		480	11700	531	13800	13400	1030
Aromatics >EC35-EC44	<100 µg/kg	TM173		183	2790	193	5180	17900	266
Aromatics >EC40-EC44	<100 µg/kg	TM173		<100	<100	<100	1980	14200	<100
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		783	16500	1140	20400	34000	2010
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173		1060	20200	2990	28700	37900	2010

Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS57	WS58	WS58	WS 25A	WS 25A
			Depth (m)	0.30	0.30	1.00	0.30	1.00
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	25/01/2019	25/01/2019	25/01/2019	23/01/2019	23/01/2019
			Sampled Time	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19257280	19257289	19257291	19253338	19253339
			AGS Reference					
GRO Surrogate % recovery**	%	TM089		109 @	91.3 @	96.6 @	110 @	120 @
GRO TOT (Moisture Corrected)	<100 µg/kg	TM089		<100 @	<100 @	<100 @	<100 @	<100 @
Aliphatics >C5-C6	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @
Aliphatics >C6-C8	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @
Aliphatics >C8-C10	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @
Aliphatics >C10-C12	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @
Aliphatics >C12-C16	<100 µg/kg	TM173		<100	<100	<100	<100	<100
Aliphatics >C16-C21	<100 µg/kg	TM173		<100	<100	<100	<100	<100
Aliphatics >C21-C35	<100 µg/kg	TM173		1150	1890	130	9690	<100
Aliphatics >C35-C44	<100 µg/kg	TM173		201	653	<100	2700	<100
Total Aliphatics >C12-C44	<100 µg/kg	TM173		1350	2540	130	12400	<100
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @
Aromatics >EC8-EC10	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @
Aromatics >EC10-EC12	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @
Aromatics >EC12-EC16	<100 µg/kg	TM173		208	<100	<100	974	<100
Aromatics >EC16-EC21	<100 µg/kg	TM173		147	<100	<100	11800	<100
Aromatics >EC21-EC35	<100 µg/kg	TM173		1790	<100	<100	55500	<100
Aromatics >EC35-EC44	<100 µg/kg	TM173		1100	<100	<100	26200	<100
Aromatics >EC40-EC44	<100 µg/kg	TM173		389	<100	303	10100	<100
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		3240	<100	<100	94500	<100
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173		4600	2540	130	107000	<100

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 07	WS 10	WS 10	WS 16	WS 16	WS 20
			Depth (m)	0.30 - 0.30	0.20	0.50	0.60	1.20	1.50
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	18/01/2019	24/01/2019	24/01/2019	18/01/2019	18/01/2019	23/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253912	19253331	19253332	19253917	19253918	19253335
			AGS Reference						
Dibromofluoromethane**	%	TM116		113 @	109 @	112 @	111 @	99.7 @	117 @
Toluene-d8**	%	TM116		105 @	99.2 @	99.7 @	101 @	98.9 @	99.1 @
4-Bromofluorobenzene**	%	TM116		103 @	96.5 @	96.4 @	94.6 @	103 @	83.5 @
Dichlorodifluoromethane	<6 µg/kg	TM116		<6 @				<6 @	<6 @
Chloromethane	<7 µg/kg	TM116		<7 @				<7 @	<7 @
Vinyl Chloride	<6 µg/kg	TM116		<6 @				<6 @	<6 @
Bromomethane	<10 µg/kg	TM116		<10 @				<10 @	<10 @
Chloroethane	<10 µg/kg	TM116		<10 @				<10 @	<10 @
Trichlorofluorormethane	<6 µg/kg	TM116		<6 @				<6 @	<6 @
1,1-Dichloroethene	<10 µg/kg	TM116		<10 @				<10 @	<10 @
Carbon Disulphide	<7 µg/kg	TM116		<7 @				<7 @	<7 @
Dichloromethane	<10 µg/kg	TM116		13.4 @				21.9 @	<10 @
Methyl Tertiary Butyl Ether	<10 µg/kg	TM116		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
trans-1,2-Dichloroethene	<10 µg/kg	TM116		<10 @				<10 @	<10 @
1,1-Dichloroethane	<8 µg/kg	TM116		<8 @				<8 @	<8 @
cis-1,2-Dichloroethene	<6 µg/kg	TM116		<6 @				<6 @	<6 @
2,2-Dichloropropane	<10 µg/kg	TM116		<10 @				<10 @	<10 @
Bromochloromethane	<10 µg/kg	TM116		<10 @				<10 @	<10 @
Chloroform	<8 µg/kg	TM116		<8 @				<8 @	<8 @
1,1,1-Trichloroethane	<7 µg/kg	TM116		<7 @				<7 @	<7 @
1,1-Dichloropropene	<10 µg/kg	TM116		<10 @				<10 @	<10 @
Carbontetrachloride	<10 µg/kg	TM116		<10 @				<10 @	<10 @
1,2-Dichloroethane	<5 µg/kg	TM116		<5 @				<5 @	<5 @
Benzene	<9 µg/kg	TM116		<9 @	<9 @	<9 @	<9 @	<9 @	<9 @
Trichloroethene	<9 µg/kg	TM116		<9 @				<9 @	<9 @
1,2-Dichloropropane	<10 µg/kg	TM116		<10 @				<10 @	<10 @
Dibromomethane	<9 µg/kg	TM116		<9 @				<9 @	<9 @
Bromodichloromethane	<7 µg/kg	TM116		<7 @				<7 @	<7 @
cis-1,3-Dichloropropene	<10 µg/kg	TM116		<10 @				<10 @	<10 @
Toluene	<7 µg/kg	TM116		<7 @	<7 @	<7 @	<7 @	<7 @	<7 @
trans-1,3-Dichloropropene	<10 µg/kg	TM116		<10 @				<10 @	<10 @
1,1,2-Trichloroethane	<10 µg/kg	TM116		<10 @				<10 @	<10 @

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 07	WS 10	WS 10	WS 16	WS 16	WS 20
			Depth (m)	0.30 - 0.30	0.20	0.50	0.60	1.20	1.50
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	18/01/2019	24/01/2019	24/01/2019	18/01/2019	18/01/2019	23/01/2019
			Sampled Time	-	-	-	-	-	-
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253912	19253331	19253332	19253917	19253918	19253335
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<7 @				<7 @	<7 @
Tetrachloroethene	<5 µg/kg	TM116		<5 @				<5 @	<5 @
Dibromochloromethane	<10 µg/kg	TM116		<10 @				<10 @	<10 @
1,2-Dibromoethane	<10 µg/kg	TM116		<10 @				<10 @	<10 @
Chlorobenzene	<5 µg/kg	TM116		<5 @				<5 @	<5 3 @
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<10 @				<10 @	<10 @
Ethylbenzene	<4 µg/kg	TM116		<4 @	<4 @	<4 @	<4 @	<4 @	<4 @
p/m-Xylene	<10 µg/kg	TM116		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
o-Xylene	<10 µg/kg	TM116		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
Styrene	<10 µg/kg	TM116		<10 @				<10 @	<10 @
Bromoform	<10 µg/kg	TM116		<10 @				<10 @	<10 @
Isopropylbenzene	<5 µg/kg	TM116		<5 @				<5 @	<5 @
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<10 @				<10 @	<10 @
1,2,3-Trichloropropane	<16 µg/kg	TM116		<16 @				<16 @	<16 @
Bromobenzene	<10 µg/kg	TM116		<10 @				<10 @	<10 @
Propylbenzene	<10 µg/kg	TM116		<10 @				<10 @	<10 @
2-Chlorotoluene	<9 µg/kg	TM116		<9 @				<9 @	<9 @
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<8 @				<8 @	<8 @
4-Chlorotoluene	<10 µg/kg	TM116		<10 @				<10 @	<10 @
tert-Butylbenzene	<14 µg/kg	TM116		<14 @				<14 @	<14 @
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<9 @				<9 @	<9 @
sec-Butylbenzene	<10 µg/kg	TM116		<10 @				<10 @	<10 @
4-Isopropyltoluene	<10 µg/kg	TM116		<10 @				<10 @	<10 @
1,3-Dichlorobenzene	<8 µg/kg	TM116		<8 @				<8 @	<8 @
1,4-Dichlorobenzene	<5 µg/kg	TM116		<5 @				<5 @	<5 @
n-Butylbenzene	<11 µg/kg	TM116		<11 @				<11 @	<11 @
1,2-Dichlorobenzene	<10 µg/kg	TM116		<10 @				<10 @	<10 @
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<14 @				<14 @	<14 @
Tert-amyl methyl ether	<10 µg/kg	TM116		<10 @				<10 @	<10 @
1,2,4-Trichlorobenzene	<20 µg/kg	TM116		<20 @				<20 @	<20 @
Hexachlorobutadiene	<20 µg/kg	TM116		<20 @				<20 @	<20 @
Naphthalene	<13 µg/kg	TM116		<13 @				<13 @	<13 @

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 07	WS 10	WS 10	WS 16	WS 16	WS 20
			Depth (m)	0.30 - 0.30	0.20	0.50	0.60	1.20	1.50
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	18/01/2019	24/01/2019	24/01/2019	18/01/2019	18/01/2019	23/01/2019
			Sampled Time	-	-	-	-	-	-
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253912	19253331	19253332	19253917	19253918	19253335
			AGS Reference						
1,2,3-Trichlorobenzene	<20 µg/kg	TM116		<20 @				<20 @	<20 @
Sum of Detected Xylenes	<0.02 mg/kg	TM116		<0.02 @	<0.02 @	<0.02 @	<0.02 @	<0.02 @	<0.02 @
Sum of BTEX	<40 µg/kg	TM116		<40 @	<40 @	<40 @	<40 @	<40 @	<40 @

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 20	WS22	WS 23	WS 23	WS 26	WS 28
			Depth (m)	2.00	0.10 - 0.20	0.20	0.30 - 0.50	0.70	0.30
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	23/01/2019	21/01/2019	18/01/2019	18/01/2019	18/01/2019	24/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253336	19257296	19253919	19253920	19253585	19253590
			AGS Reference						
Dibromofluoromethane**	%	TM116		112 @	113 @	107 @	105 @	112 @	124 @
Toluene-d8**	%	TM116		99.4 @	98.4 @	98.8 @	99.1 @	98.3 @	95.5 @
4-Bromofluorobenzene**	%	TM116		99.2 @	91.6 @	89.5 @	113 @	98 @	82.7 @
Dichlorodifluoromethane	<6 µg/kg	TM116			<6 @	<6 @			<6 @
Chloromethane	<7 µg/kg	TM116			<7 @	<7 @			<7 @
Vinyl Chloride	<6 µg/kg	TM116			<6 @	<6 @			<6 @
Bromomethane	<10 µg/kg	TM116			<10 @	<10 @			<10 @
Chloroethane	<10 µg/kg	TM116			<10 @	<10 @			<10 @
Trichlorofluoromethane	<6 µg/kg	TM116			<6 3 @	<6 @			<6 @
1,1-Dichloroethene	<10 µg/kg	TM116			<10 @	<10 @			<10 @
Carbon Disulphide	<7 µg/kg	TM116			<7 @	<7 @			<7 @
Dichloromethane	<10 µg/kg	TM116			<10 @	61.3 @			<10 @
Methyl Tertiary Butyl Ether	<10 µg/kg	TM116		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
trans-1,2-Dichloroethene	<10 µg/kg	TM116			<10 @	<10 @			<10 @
1,1-Dichloroethane	<8 µg/kg	TM116			<8 @	<8 @			<8 @
cis-1,2-Dichloroethene	<6 µg/kg	TM116			<6 @	<6 @			<6 @
2,2-Dichloropropane	<10 µg/kg	TM116			<10 @	<10 @			<10 @
Bromochloromethane	<10 µg/kg	TM116			<10 @	<10 @			<10 @
Chloroform	<8 µg/kg	TM116			<8 @	<8 @			<8 @
1,1,1-Trichloroethane	<7 µg/kg	TM116			<7 @	<7 @			<7 @
1,1-Dichloropropene	<10 µg/kg	TM116			<10 @	<10 @			<10 @
Carbontetrachloride	<10 µg/kg	TM116			<10 @	<10 @			<10 @
1,2-Dichloroethane	<5 µg/kg	TM116			<5 @	<5 @			<5 @
Benzene	<9 µg/kg	TM116		<9 @	<9 @	<9 @	<9 @	<9 @	<9 @
Trichloroethene	<9 µg/kg	TM116			<9 3 @	<9 @			<9 @
1,2-Dichloropropane	<10 µg/kg	TM116			<10 @	<10 @			<10 @
Dibromomethane	<9 µg/kg	TM116			<9 @	<9 @			<9 @
Bromodichloromethane	<7 µg/kg	TM116			<7 @	<7 @			<7 @
cis-1,3-Dichloropropene	<10 µg/kg	TM116			<10 @	<10 @			<10 @
Toluene	<7 µg/kg	TM116		<7 @	<7 @	<7 @	<7 @	<7 @	<7 @
trans-1,3-Dichloropropene	<10 µg/kg	TM116			<10 @	<10 @			<10 @
1,1,2-Trichloroethane	<10 µg/kg	TM116			<10 @	<10 @			<10 @

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 20	WS22	WS 23	WS 23	WS 26	WS 28
			Depth (m)	2.00	0.10 - 0.20	0.20	0.30 - 0.50	0.70	0.30
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	23/01/2019	21/01/2019	18/01/2019	18/01/2019	18/01/2019	24/01/2019
			Sampled Time	-	-	-	-	-	-
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253336	19257296	19253919	19253920	19253585	19253590
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116			<7 @	<7 @			<7 @
Tetrachloroethene	<5 µg/kg	TM116			<5 @	<5 @			<5 @
Dibromochloromethane	<10 µg/kg	TM116			<10 @	<10 @			<10 @
1,2-Dibromoethane	<10 µg/kg	TM116			<10 @	<10 @			<10 @
Chlorobenzene	<5 µg/kg	TM116			<5 3 @	<5 @			<5 3 @
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116			<10 @	<10 @			<10 @
Ethylbenzene	<4 µg/kg	TM116	<4 @	<4 @	<4 @	<4 @	<4 @	<4 @	<4 @
p/m-Xylene	<10 µg/kg	TM116	<10 @	<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
o-Xylene	<10 µg/kg	TM116	<10 @	<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
Styrene	<10 µg/kg	TM116			<10 @	<10 @			<10 @
Bromoform	<10 µg/kg	TM116			<10 @	<10 @			<10 @
Isopropylbenzene	<5 µg/kg	TM116			<5 @	<5 @			<5 @
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116			<10 @	<10 @			<10 @
1,2,3-Trichloropropane	<16 µg/kg	TM116			<16 @	<16 @			<16 @
Bromobenzene	<10 µg/kg	TM116			<10 @	<10 @			<10 @
Propylbenzene	<10 µg/kg	TM116			<10 @	<10 @			<10 @
2-Chlorotoluene	<9 µg/kg	TM116			<9 @	<9 @			<9 @
1,3,5-Trimethylbenzene	<8 µg/kg	TM116			<8 @	<8 @			<8 @
4-Chlorotoluene	<10 µg/kg	TM116			<10 @	<10 @			<10 @
tert-Butylbenzene	<14 µg/kg	TM116			<14 @	<14 @			<14 @
1,2,4-Trimethylbenzene	<9 µg/kg	TM116			<9 @	<9 @			<9 @
sec-Butylbenzene	<10 µg/kg	TM116			<10 @	<10 @			<10 @
4-Isopropyltoluene	<10 µg/kg	TM116			<10 @	<10 @			<10 @
1,3-Dichlorobenzene	<8 µg/kg	TM116			<8 @	<8 @			<8 @
1,4-Dichlorobenzene	<5 µg/kg	TM116			<5 @	<5 @			<5 @
n-Butylbenzene	<11 µg/kg	TM116			<11 @	<11 @			<11 @
1,2-Dichlorobenzene	<10 µg/kg	TM116			<10 @	<10 @			<10 @
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116			<14 @	<14 @			<14 @
Tert-amyl methyl ether	<10 µg/kg	TM116			<10 @	<10 @			<10 @
1,2,4-Trichlorobenzene	<20 µg/kg	TM116			<20 @	<20 @			<20 @
Hexachlorobutadiene	<20 µg/kg	TM116			<20 @	<20 @			<20 @
Naphthalene	<13 µg/kg	TM116			<13 @	<13 @			22.7 @

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 20	WS22	WS 23	WS 23	WS 26	WS 28
			Depth (m)	2.00	0.10 - 0.20	0.20	0.30 - 0.50	0.70	0.30
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	23/01/2019	21/01/2019	18/01/2019	18/01/2019	18/01/2019	24/01/2019
			Sampled Time	-	-	-	-	-	-
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253336	19257296	19253919	19253920	19253585	19253590
			AGS Reference						
1,2,3-Trichlorobenzene	<20 µg/kg	TM116			<20 @	<20 @			<20 @
Sum of Detected Xylenes	<0.02 mg/kg	TM116		<0.02 @	<0.02 @	<0.02 @	<0.02 @	<0.02 @	<0.02 @
Sum of BTEX	<40 µg/kg	TM116		<40 @	<40 @	<40 @	<40 @	<40 @	<40 @

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 28	WS29	WS 30	WS 33	WS 33	WS 34
			Depth (m)	1.00	0.40	0.50	0.10	0.50	0.10
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	24/01/2019	21/01/2019	23/01/2019	18/01/2019	18/01/2019	23/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253591	19257273	19253323	19253581	19253582	19253340
			AGS Reference						
Dibromofluoromethane**	%	TM116		110 @	97.5 @	99.2 @	102 @	103 @	121 @
Toluene-d8**	%	TM116		98.3 @	99.3 @	100 @	97.4 @	99.8 @	99 @
4-Bromofluorobenzene**	%	TM116		86.8 @	98.3 @	109 @	83 @	97.5 @	100 @
Dichlorodifluoromethane	<6 µg/kg	TM116			<6 @				
Chloromethane	<7 µg/kg	TM116			<7 @				
Vinyl Chloride	<6 µg/kg	TM116			<6 @				
Bromomethane	<10 µg/kg	TM116			<10 @				
Chloroethane	<10 µg/kg	TM116			<10 @				
Trichlorofluorormethane	<6 µg/kg	TM116			<6 @				
1,1-Dichloroethene	<10 µg/kg	TM116			<10 @				
Carbon Disulphide	<7 µg/kg	TM116			<7 @				
Dichloromethane	<10 µg/kg	TM116			<10 @				
Methyl Tertiary Butyl Ether	<10 µg/kg	TM116		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
trans-1,2-Dichloroethene	<10 µg/kg	TM116			<10 @				
1,1-Dichloroethane	<8 µg/kg	TM116			<8 @				
cis-1,2-Dichloroethene	<6 µg/kg	TM116			<6 @				
2,2-Dichloropropane	<10 µg/kg	TM116			<10 @				
Bromochloromethane	<10 µg/kg	TM116			<10 @				
Chloroform	<8 µg/kg	TM116			<8 @				
1,1,1-Trichloroethane	<7 µg/kg	TM116			<7 @				
1,1-Dichloropropene	<10 µg/kg	TM116			<10 @				
Carbontetrachloride	<10 µg/kg	TM116			<10 @				
1,2-Dichloroethane	<5 µg/kg	TM116			<5 @				
Benzene	<9 µg/kg	TM116		<9 @	<9 @	<9 @	<9 @	<9 @	<9 @
Trichloroethene	<9 µg/kg	TM116			<9 @				
1,2-Dichloropropane	<10 µg/kg	TM116			<10 @				
Dibromomethane	<9 µg/kg	TM116			<9 @				
Bromodichloromethane	<7 µg/kg	TM116			<7 @				
cis-1,3-Dichloropropene	<10 µg/kg	TM116			<10 @				
Toluene	<7 µg/kg	TM116		<7 @	<7 @	<7 @	<7 @	<7 @	<7 @
trans-1,3-Dichloropropene	<10 µg/kg	TM116			<10 @				
1,1,2-Trichloroethane	<10 µg/kg	TM116			<10 @				

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 28	WS29	WS 30	WS 33	WS 33	WS 34
			Depth (m)	1.00	0.40	0.50	0.10	0.50	0.10
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	24/01/2019	21/01/2019	23/01/2019	18/01/2019	18/01/2019	23/01/2019
			Sampled Time	-	-	-	-	-	-
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253591	19257273	19253323	19253581	19253582	19253340
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116			<7 @				
Tetrachloroethene	<5 µg/kg	TM116			<5 @				
Dibromochloromethane	<10 µg/kg	TM116			<10 @				
1,2-Dibromoethane	<10 µg/kg	TM116			<10 @				
Chlorobenzene	<5 µg/kg	TM116			<5 @				
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116			<10 @				
Ethylbenzene	<4 µg/kg	TM116	<4 @	<4 @	<4 @	<4 @	<4 @	<4 @	
p/m-Xylene	<10 µg/kg	TM116	<10 @	<10 @	<10 @	<10 @	<10 @	<10 @	
o-Xylene	<10 µg/kg	TM116	<10 @	<10 @	<10 @	<10 @	<10 @	<10 @	
Styrene	<10 µg/kg	TM116		<10 @					
Bromoform	<10 µg/kg	TM116		<10 @					
Isopropylbenzene	<5 µg/kg	TM116		<5 @					
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<10 @					
1,2,3-Trichloropropane	<16 µg/kg	TM116		<16 @					
Bromobenzene	<10 µg/kg	TM116		<10 @					
Propylbenzene	<10 µg/kg	TM116		<10 @					
2-Chlorotoluene	<9 µg/kg	TM116		<9 @					
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<8 @					
4-Chlorotoluene	<10 µg/kg	TM116		<10 @					
tert-Butylbenzene	<14 µg/kg	TM116		<14 @					
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<9 @					
sec-Butylbenzene	<10 µg/kg	TM116		<10 @					
4-Isopropyltoluene	<10 µg/kg	TM116		<10 @					
1,3-Dichlorobenzene	<8 µg/kg	TM116		<8 @					
1,4-Dichlorobenzene	<5 µg/kg	TM116		<5 @					
n-Butylbenzene	<11 µg/kg	TM116		<11 @					
1,2-Dichlorobenzene	<10 µg/kg	TM116		<10 @					
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<14 @					
Tert-amyl methyl ether	<10 µg/kg	TM116		<10 @					
1,2,4-Trichlorobenzene	<20 µg/kg	TM116		<20 @					
Hexachlorobutadiene	<20 µg/kg	TM116		<20 @					
Naphthalene	<13 µg/kg	TM116		<13 @					

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	Depth (m)	Sample Type	Date Sampled	Sampled Time	Date Received	SDG Ref	Lab Sample No.(s)	AGS Reference
			WS 28	1.00	Unspecified Solid (UNS)	24/01/2019	-	30/01/2019	190201-81	19253591	
			WS29	0.40	Unspecified Solid (UNS)	21/01/2019	-	30/01/2019	190201-81	19257273	
			WS 30	0.50	Unspecified Solid (UNS)	23/01/2019	-	30/01/2019	190201-81	19253323	
			WS 33	0.10	Unspecified Solid (UNS)	18/01/2019	-	30/01/2019	190201-81	19253581	
			WS 33	0.50	Unspecified Solid (UNS)	18/01/2019	-	30/01/2019	190201-81	19253582	
			WS 34	0.10	Unspecified Solid (UNS)	23/01/2019	-	30/01/2019	190201-81	19253340	
1,2,3-Trichlorobenzene	<20 µg/kg	TM116			<20 @						
Sum of Detected Xylenes	<0.02 mg/kg	TM116	<0.02 @		<0.02 @			<0.02 @		<0.02 @		<0.02 @
Sum of BTEX	<40 µg/kg	TM116	<40 @		<40 @			<40 @		<40 @		<40 @

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 34	WS35	WS 36	WS 37	WS38	WS38
			Depth (m)	1.00	0.40	0.50	0.20	0.20	0.70
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	23/01/2019	21/01/2019	24/01/2019	22/01/2019	21/01/2019	21/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253341	19257270	19253326	19253329	19257263	19257265
			AGS Reference						
Dibromofluoromethane**	%	TM116		112 @	106 @	110 @	108 @	108 @	116 @
Toluene-d8**	%	TM116		92.4 @	98.2 @	98.2 @	97.4 @	94.1 @	98.6 @
4-Bromofluorobenzene**	%	TM116		75.7 @	91.3 @	95.1 @	80.4 @	71.6 @	101 @
Dichlorodifluoromethane	<6 µg/kg	TM116						<6 @	<6 @
Chloromethane	<7 µg/kg	TM116						<7 3 @	<7 @
Vinyl Chloride	<6 µg/kg	TM116						<6 @	<6 @
Bromomethane	<10 µg/kg	TM116						<10 @	<10 @
Chloroethane	<10 µg/kg	TM116						<10 @	<10 @
Trichlorofluorormethane	<6 µg/kg	TM116						<6 @	<6 @
1,1-Dichloroethene	<10 µg/kg	TM116						<10 @	<10 @
Carbon Disulphide	<7 µg/kg	TM116						<7 @	<7 @
Dichloromethane	<10 µg/kg	TM116						<10 @	<10 @
Methyl Tertiary Butyl Ether	<10 µg/kg	TM116		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
trans-1,2-Dichloroethene	<10 µg/kg	TM116						<10 @	<10 @
1,1-Dichloroethane	<8 µg/kg	TM116						<8 @	<8 @
cis-1,2-Dichloroethene	<6 µg/kg	TM116						<6 @	<6 @
2,2-Dichloropropane	<10 µg/kg	TM116						<10 @	<10 @
Bromochloromethane	<10 µg/kg	TM116						<10 @	<10 @
Chloroform	<8 µg/kg	TM116						<8 @	<8 @
1,1,1-Trichloroethane	<7 µg/kg	TM116						<7 @	<7 @
1,1-Dichloropropene	<10 µg/kg	TM116						<10 @	<10 @
Carbontetrachloride	<10 µg/kg	TM116						<10 @	<10 @
1,2-Dichloroethane	<5 µg/kg	TM116						<5 @	<5 @
Benzene	<9 µg/kg	TM116		<9 @	<9 @	<9 @	<9 @	<9 @	<9 @
Trichloroethene	<9 µg/kg	TM116						<9 @	<9 @
1,2-Dichloropropane	<10 µg/kg	TM116						<10 @	<10 @
Dibromomethane	<9 µg/kg	TM116						<9 @	<9 @
Bromodichloromethane	<7 µg/kg	TM116						<7 @	<7 @
cis-1,3-Dichloropropene	<10 µg/kg	TM116						<10 @	<10 @
Toluene	<7 µg/kg	TM116		<7 @	<7 @	<7 @	<7 @	<7 @	<7 @
trans-1,3-Dichloropropene	<10 µg/kg	TM116						<10 @	<10 @
1,1,2-Trichloroethane	<10 µg/kg	TM116						<10 @	<10 @

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 34	WS35	WS 36	WS 37	WS38	WS38
			Depth (m)	1.00	0.40	0.50	0.20	0.20	0.70
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	23/01/2019	21/01/2019	24/01/2019	22/01/2019	21/01/2019	21/01/2019
			Sampled Time	-	-	-	-	-	-
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253341	19257270	19253326	19253329	19257263	19257265
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116						<7 @	<7 @
Tetrachloroethene	<5 µg/kg	TM116						<5 @	<5 @
Dibromochloromethane	<10 µg/kg	TM116						<10 @	<10 @
1,2-Dibromoethane	<10 µg/kg	TM116						<10 @	<10 @
Chlorobenzene	<5 µg/kg	TM116						<5 @	<5 @
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116						<10 @	<10 @
Ethylbenzene	<4 µg/kg	TM116	<4 @	<4 @	<4 @	<4 @	<4 @	<4 @
p/m-Xylene	<10 µg/kg	TM116	<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
o-Xylene	<10 µg/kg	TM116	<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
Styrene	<10 µg/kg	TM116						<10 @	<10 @
Bromoform	<10 µg/kg	TM116						<10 @	<10 @
Isopropylbenzene	<5 µg/kg	TM116						<5 @	<5 @
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116						<10 @	<10 @
1,2,3-Trichloropropane	<16 µg/kg	TM116						<16 @	<16 @
Bromobenzene	<10 µg/kg	TM116						<10 @	<10 @
Propylbenzene	<10 µg/kg	TM116						<10 @	<10 @
2-Chlorotoluene	<9 µg/kg	TM116						<9 @	<9 @
1,3,5-Trimethylbenzene	<8 µg/kg	TM116						<8 @	<8 @
4-Chlorotoluene	<10 µg/kg	TM116						<10 @	<10 @
tert-Butylbenzene	<14 µg/kg	TM116						<14 @	<14 @
1,2,4-Trimethylbenzene	<9 µg/kg	TM116						<9 @	<9 @
sec-Butylbenzene	<10 µg/kg	TM116						<10 @	<10 @
4-Isopropyltoluene	<10 µg/kg	TM116						<10 @	<10 @
1,3-Dichlorobenzene	<8 µg/kg	TM116						<8 @	<8 @
1,4-Dichlorobenzene	<5 µg/kg	TM116						<5 @	<5 @
n-Butylbenzene	<11 µg/kg	TM116						<11 @	<11 @
1,2-Dichlorobenzene	<10 µg/kg	TM116						<10 @	<10 @
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116						<14 @	<14 @
Tert-amyl methyl ether	<10 µg/kg	TM116						<10 @	<10 @
1,2,4-Trichlorobenzene	<20 µg/kg	TM116						<20 @	<20 @
Hexachlorobutadiene	<20 µg/kg	TM116						<20 @	<20 @
Naphthalene	<13 µg/kg	TM116						<13 @	<13 @

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 34	WS35	WS 36	WS 37	WS38	WS38
			Depth (m)	1.00	0.40	0.50	0.20	0.20	0.70
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	23/01/2019	21/01/2019	24/01/2019	22/01/2019	21/01/2019	21/01/2019
			Sampled Time	-	-	-	-	-	-
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253341	19257270	19253326	19253329	19257263	19257265
			AGS Reference						
1,2,3-Trichlorobenzene	<20 µg/kg	TM116						<20 @	<20 @
Sum of Detected Xylenes	<0.02 mg/kg	TM116		<0.02 @	<0.02 @	<0.02 @	<0.02 @	<0.02 @	<0.02 @
Sum of BTEX	<40 µg/kg	TM116		<40 @	<40 @	<40 @	<40 @	<40 @	<40 @

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS39	WS39	WS 40	WS 40	WS 41	WS 41
			Depth (m)	0.20	0.70 - 0.90	1.00	1.50	0.50	1.00
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	21/01/2019	21/01/2019	24/01/2019	24/01/2019	18/01/2019	18/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19257267	19257268	19253596	19253597	19253579	19253578
			AGS Reference						
Dibromofluoromethane**	%	TM116		102 @	109 @	112 @	115 @	108 @	112 @
Toluene-d8**	%	TM116		93.5 @	98.6 @	90.8 @	99.6 @	98.3 @	99.7 @
4-Bromofluorobenzene**	%	TM116		73.5 @	102 @	70.2 @	98.3 @	90.1 @	96.2 @
Dichlorodifluoromethane	<6 µg/kg	TM116		<6 @		<6 @			<6 @
Chloromethane	<7 µg/kg	TM116		<7 3 @		<7 @			<7 @
Vinyl Chloride	<6 µg/kg	TM116		<6 @		<6 @			<6 @
Bromomethane	<10 µg/kg	TM116		<10 @		<10 @			<10 @
Chloroethane	<10 µg/kg	TM116		<10 @		<10 @			<10 @
Trichlorofluorormethane	<6 µg/kg	TM116		<6 @		<6 @			<6 @
1,1-Dichloroethene	<10 µg/kg	TM116		<10 @		<10 @			<10 @
Carbon Disulphide	<7 µg/kg	TM116		<7 @		<7 @			<7 @
Dichloromethane	<10 µg/kg	TM116		<10 @		<10 @			<10 @
Methyl Tertiary Butyl Ether	<10 µg/kg	TM116		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
trans-1,2-Dichloroethene	<10 µg/kg	TM116		<10 @		<10 @			<10 @
1,1-Dichloroethane	<8 µg/kg	TM116		<8 @		<8 @			<8 @
cis-1,2-Dichloroethene	<6 µg/kg	TM116		<6 @		<6 @			<6 @
2,2-Dichloropropane	<10 µg/kg	TM116		<10 @		<10 @			<10 @
Bromochloromethane	<10 µg/kg	TM116		<10 @		<10 @			<10 @
Chloroform	<8 µg/kg	TM116		<8 @		<8 @			<8 @
1,1,1-Trichloroethane	<7 µg/kg	TM116		<7 @		<7 @			<7 @
1,1-Dichloropropene	<10 µg/kg	TM116		<10 @		<10 @			<10 @
Carbontetrachloride	<10 µg/kg	TM116		<10 @		<10 @			<10 @
1,2-Dichloroethane	<5 µg/kg	TM116		<5 @		<5 @			<5 @
Benzene	<9 µg/kg	TM116		<9 @	<9 @	<9 @	<9 @	<9 @	<9 @
Trichloroethene	<9 µg/kg	TM116		<9 @		<9 @			<9 @
1,2-Dichloropropane	<10 µg/kg	TM116		<10 @		<10 @			<10 @
Dibromomethane	<9 µg/kg	TM116		<9 @		<9 @			<9 @
Bromodichloromethane	<7 µg/kg	TM116		<7 @		<7 @			<7 @
cis-1,3-Dichloropropene	<10 µg/kg	TM116		<10 @		<10 @			<10 @
Toluene	<7 µg/kg	TM116		<7 @	<7 @	<7 @	<7 @	<7 @	<7 @
trans-1,3-Dichloropropene	<10 µg/kg	TM116		<10 @		<10 @			<10 @
1,1,2-Trichloroethane	<10 µg/kg	TM116		<10 @		<10 @			<10 @

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS39	WS39	WS 40	WS 40	WS 41	WS 41
			Depth (m)	0.20	0.70 - 0.90	1.00	1.50	0.50	1.00
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	21/01/2019	21/01/2019	24/01/2019	24/01/2019	18/01/2019	18/01/2019
			Sampled Time	-	-	-	-	-	-
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19257267	19257268	19253596	19253597	19253579	19253578
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<7 @		<7 @			<7 @
Tetrachloroethene	<5 µg/kg	TM116		<5 @		<5 @			<5 @
Dibromochloromethane	<10 µg/kg	TM116		<10 @		<10 @			<10 @
1,2-Dibromoethane	<10 µg/kg	TM116		<10 @		<10 @			<10 @
Chlorobenzene	<5 µg/kg	TM116		<5 @		<5 3 @			<5 3 @
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<10 @		<10 @			<10 @
Ethylbenzene	<4 µg/kg	TM116		<4 @	<4 @	<4 @	<4 @	<4 @	<4 @
p/m-Xylene	<10 µg/kg	TM116		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
o-Xylene	<10 µg/kg	TM116		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
Styrene	<10 µg/kg	TM116		<10 @		<10 @			<10 @
Bromoform	<10 µg/kg	TM116		<10 @		<10 @			<10 @
Isopropylbenzene	<5 µg/kg	TM116		<5 @		<5 @			<5 @
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<10 @		<10 @			<10 @
1,2,3-Trichloropropane	<16 µg/kg	TM116		<16 @		<16 @			<16 @
Bromobenzene	<10 µg/kg	TM116		<10 @		<10 @			<10 @
Propylbenzene	<10 µg/kg	TM116		<10 @		<10 @			<10 @
2-Chlorotoluene	<9 µg/kg	TM116		<9 @		<9 @			<9 @
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<8 @		<8 @			<8 @
4-Chlorotoluene	<10 µg/kg	TM116		<10 @		<10 @			<10 @
tert-Butylbenzene	<14 µg/kg	TM116		<14 @		<14 @			<14 @
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<9 @		<9 @			<9 @
sec-Butylbenzene	<10 µg/kg	TM116		<10 @		<10 @			<10 @
4-Isopropyltoluene	<10 µg/kg	TM116		<10 @		<10 @			<10 @
1,3-Dichlorobenzene	<8 µg/kg	TM116		<8 @		<8 @			<8 @
1,4-Dichlorobenzene	<5 µg/kg	TM116		<5 @		<5 @			<5 @
n-Butylbenzene	<11 µg/kg	TM116		<11 @		<11 @			<11 @
1,2-Dichlorobenzene	<10 µg/kg	TM116		<10 @		<10 @			<10 @
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<14 @		<14 @			<14 @
Tert-amyl methyl ether	<10 µg/kg	TM116		<10 @		<10 @			<10 @
1,2,4-Trichlorobenzene	<20 µg/kg	TM116		<20 @		<20 @			<20 @
Hexachlorobutadiene	<20 µg/kg	TM116		<20 @		<20 @			<20 @
Naphthalene	<13 µg/kg	TM116		<13 @		<13 @			<13 @

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS39	WS39	WS 40	WS 40	WS 41	WS 41
			Depth (m)	0.20	0.70 - 0.90	1.00	1.50	0.50	1.00
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	21/01/2019	21/01/2019	24/01/2019	24/01/2019	18/01/2019	18/01/2019
			Sampled Time	-	-	-	-	-	-
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19257267	19257268	19253596	19253597	19253579	19253578
			AGS Reference						
1,2,3-Trichlorobenzene	<20 µg/kg	TM116		<20 @		<20 @			<20 @
Sum of Detected Xylenes	<0.02 mg/kg	TM116		<0.02 @	<0.02 @	<0.02 @	<0.02 @	<0.02 @	<0.02 @
Sum of BTEX	<40 µg/kg	TM116		<40 @	<40 @	<40 @	<40 @	<40 @	<40 @

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 42	WS 43	WS 43	WS 45	WS 45	WS 46
			Depth (m)	0.10	0.20	0.50	0.30	1.00	0.30
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253318	19253587	19253588	19253903	19253906	19253909
			AGS Reference						
Dibromofluoromethane**	%	TM116		111 @	104 @	113 @	98.8 @	114 @	103 @
Toluene-d8**	%	TM116		95.8 @	92.6 @	99 @	96.8 @	99.9 @	98 @
4-Bromofluorobenzene**	%	TM116		79.1 @	91.7 @	92.2 @	89.4 @	82.2 @	92.7 @
Dichlorodifluoromethane	<6 µg/kg	TM116			<6 @	<6 @	<6 @		<6 @
Chloromethane	<7 µg/kg	TM116			<7 @	<7 @	<7 @		<7 @
Vinyl Chloride	<6 µg/kg	TM116			<6 @	<6 @	<6 @		<6 @
Bromomethane	<10 µg/kg	TM116			<10 @	<10 @	<10 @		<10 @
Chloroethane	<10 µg/kg	TM116			<10 @	<10 @	<10 @		<10 @
Trichlorofluoromethane	<6 µg/kg	TM116			<6 @	<6 @	<6 @		<6 @
1,1-Dichloroethene	<10 µg/kg	TM116			<10 @	<10 @	<10 @		<10 @
Carbon Disulphide	<7 µg/kg	TM116				<7 @	<7 @		<7 @
Dichloromethane	<10 µg/kg	TM116			<10 @	<10 @	<10 @		48 @
Methyl Tertiary Butyl Ether	<10 µg/kg	TM116		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
trans-1,2-Dichloroethene	<10 µg/kg	TM116			<10 @	<10 @	<10 @		<10 @
1,1-Dichloroethane	<8 µg/kg	TM116			<8 @	<8 @	<8 @		<8 @
cis-1,2-Dichloroethene	<6 µg/kg	TM116			<6 @	<6 @	<6 @		<6 @
2,2-Dichloropropane	<10 µg/kg	TM116			<10 @	<10 @	<10 @		<10 @
Bromochloromethane	<10 µg/kg	TM116			<10 @	<10 @	<10 @		<10 @
Chloroform	<8 µg/kg	TM116			<8 @	<8 @	<8 @		<8 @
1,1,1-Trichloroethane	<7 µg/kg	TM116			<7 @	<7 @	<7 @		<7 @
1,1-Dichloropropene	<10 µg/kg	TM116			<10 @	<10 @	<10 @		<10 @
Carbontetrachloride	<10 µg/kg	TM116			<10 @	<10 @	<10 @		<10 @
1,2-Dichloroethane	<5 µg/kg	TM116			<5 @	<5 @	<5 @		<5 @
Benzene	<9 µg/kg	TM116		<9 @	<9 @	<9 @	<9 @	<9 @	<9 @
Trichloroethene	<9 µg/kg	TM116			<9 @	<9 @	<9 @		<9 @
1,2-Dichloropropane	<10 µg/kg	TM116			<10 @	<10 @	<10 @		<10 @
Dibromomethane	<9 µg/kg	TM116			<9 @	<9 @	<9 @		<9 @
Bromodichloromethane	<7 µg/kg	TM116			<7 @	<7 @	<7 @		<7 @
cis-1,3-Dichloropropene	<10 µg/kg	TM116			<10 @	<10 @	<10 @		<10 @
Toluene	<7 µg/kg	TM116		<7 @	<7 @	<7 @	<7 @	<7 @	<7 @
trans-1,3-Dichloropropene	<10 µg/kg	TM116			<10 @	<10 @	<10 @		<10 @
1,1,2-Trichloroethane	<10 µg/kg	TM116			<10 @	<10 @	<10 @		<10 @

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 42	WS 43	WS 43	WS 45	WS 45	WS 46
			Depth (m)	0.10	0.20	0.50	0.30	1.00	0.30
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019
			Sampled Time	-	-	-	-	-	-
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253318	19253587	19253588	19253903	19253906	19253909
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116			<7 @	<7 @	<7 @		<7 @
Tetrachloroethene	<5 µg/kg	TM116			<5 @	<5 @	<5 @		<5 @
Dibromochloromethane	<10 µg/kg	TM116			<10 @	<10 @	<10 @		<10 @
1,2-Dibromoethane	<10 µg/kg	TM116			<10 @	<10 @	<10 @		<10 @
Chlorobenzene	<5 µg/kg	TM116			<5 @	<5 3 @	<5 @		<5 @
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116			<10 @	<10 @	<10 @		<10 @
Ethylbenzene	<4 µg/kg	TM116	<4 @		<4 @	<4 @	<4 @	<4 @	<4 @
p/m-Xylene	<10 µg/kg	TM116	<10 @		<10 @	<10 @	<10 @	<10 @	<10 @
o-Xylene	<10 µg/kg	TM116	<10 @		<10 @	<10 @	<10 @	<10 @	<10 @
Styrene	<10 µg/kg	TM116			<10 @	<10 @	<10 @		<10 @
Bromoform	<10 µg/kg	TM116			<10 @	<10 @	<10 @		<10 @
Isopropylbenzene	<5 µg/kg	TM116			<5 @	<5 @	<5 @		<5 @
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116			<10 @	<10 @	<10 @		<10 @
1,2,3-Trichloropropane	<16 µg/kg	TM116			<16 @	<16 @	<16 @		<16 @
Bromobenzene	<10 µg/kg	TM116			<10 @	<10 @	<10 @		<10 @
Propylbenzene	<10 µg/kg	TM116			<10 @	<10 @	<10 @		<10 @
2-Chlorotoluene	<9 µg/kg	TM116			<9 @	<9 @	<9 @		<9 @
1,3,5-Trimethylbenzene	<8 µg/kg	TM116			<8 @	<8 @	<8 @		<8 @
4-Chlorotoluene	<10 µg/kg	TM116			<10 @	<10 @	<10 @		<10 @
tert-Butylbenzene	<14 µg/kg	TM116			<14 @	<14 @	<14 @		<14 @
1,2,4-Trimethylbenzene	<9 µg/kg	TM116			<9 @	<9 @	<9 @		<9 @
sec-Butylbenzene	<10 µg/kg	TM116			<10 @	<10 @	<10 @		<10 @
4-Isopropyltoluene	<10 µg/kg	TM116			<10 @	<10 @	<10 @		<10 @
1,3-Dichlorobenzene	<8 µg/kg	TM116			<8 @	<8 @	<8 @		<8 @
1,4-Dichlorobenzene	<5 µg/kg	TM116			<5 @	<5 @	<5 @		<5 @
n-Butylbenzene	<11 µg/kg	TM116			<11 @	<11 @	<11 @		<11 @
1,2-Dichlorobenzene	<10 µg/kg	TM116			<10 @	<10 @	<10 @		<10 @
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116			<14 @	<14 @	<14 @		<14 @
Tert-amyl methyl ether	<10 µg/kg	TM116			<10 @	<10 @	<10 @		<10 @
1,2,4-Trichlorobenzene	<20 µg/kg	TM116			<20 @	<20 @	<20 @		<20 @
Hexachlorobutadiene	<20 µg/kg	TM116			<20 @	<20 @	<20 @		<20 @
Naphthalene	<13 µg/kg	TM116			<13 @	<13 @	<13 @		<13 @

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 42	WS 43	WS 43	WS 45	WS 45	WS 46
			Depth (m)	0.10	0.20	0.50	0.30	1.00	0.30
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019	22/01/2019
			Sampled Time	-	-	-	-	-	-
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253318	19253587	19253588	19253903	19253906	19253909
			AGS Reference						
1,2,3-Trichlorobenzene	<20 µg/kg	TM116			<20 @	<20 @	<20 @		<20 @
Sum of Detected Xylenes	<0.02 mg/kg	TM116		<0.02 @	<0.02 @	<0.02 @	<0.02 @	<0.02 @	<0.02 @
Sum of BTEX	<40 µg/kg	TM116		<40 @	<40 @	<40 @	<40 @	<40 @	<40 @

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 46	WS52	WS52	WS53	WS54	WS54
			Depth (m)	0.70	0.10	1.00	0.50	0.10	0.50
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	22/01/2019	25/01/2019	25/01/2019	24/01/2019	25/01/2019	25/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253911	19257276	19257278	19257283	19257285	19257287
			AGS Reference						
Dibromofluoromethane**	%	TM116		115 @	103 @	113 2	102 @	101 @	114 @
Toluene-d8**	%	TM116		99.3 @	86.1 @	98.5 2	97.5 @	92.6 @	100 @
4-Bromofluorobenzene**	%	TM116		95.4 @	77.8 @	98.6 2	97.2 @	83.7 @	97.7 @
Dichlorodifluoromethane	<6 µg/kg	TM116		<6 @			<6 @		
Chloromethane	<7 µg/kg	TM116		<7 @			<7 @		
Vinyl Chloride	<6 µg/kg	TM116		<6 @			<6 @		
Bromomethane	<10 µg/kg	TM116		<10 @			<10 @		
Chloroethane	<10 µg/kg	TM116		<10 @			<10 @		
Trichlorofluorormethane	<6 µg/kg	TM116		<6 @			<6 @		
1,1-Dichloroethene	<10 µg/kg	TM116		<10 @			<10 @		
Carbon Disulphide	<7 µg/kg	TM116		<7 @			<7 @		
Dichloromethane	<10 µg/kg	TM116		<10 @			<10 @		
Methyl Tertiary Butyl Ether	<10 µg/kg	TM116		<10 @	<10 @	<10 2	<10 @	<10 @	<10 @
trans-1,2-Dichloroethene	<10 µg/kg	TM116		<10 @			<10 @		
1,1-Dichloroethane	<8 µg/kg	TM116		<8 @			<8 @		
cis-1,2-Dichloroethene	<6 µg/kg	TM116		<6 @			<6 @		
2,2-Dichloropropane	<10 µg/kg	TM116		<10 @			<10 @		
Bromochloromethane	<10 µg/kg	TM116		<10 @			<10 @		
Chloroform	<8 µg/kg	TM116		<8 @			<8 @		
1,1,1-Trichloroethane	<7 µg/kg	TM116		<7 @			<7 @		
1,1-Dichloropropene	<10 µg/kg	TM116		<10 @			<10 @		
Carbontetrachloride	<10 µg/kg	TM116		<10 @			<10 @		
1,2-Dichloroethane	<5 µg/kg	TM116		<5 @			<5 @		
Benzene	<9 µg/kg	TM116		<9 @	<9 @	<9 2	<9 @	<9 @	<9 @
Trichloroethene	<9 µg/kg	TM116		<9 @			<9 @		
1,2-Dichloropropane	<10 µg/kg	TM116		<10 @			<10 @		
Dibromomethane	<9 µg/kg	TM116		<9 @			<9 @		
Bromodichloromethane	<7 µg/kg	TM116		<7 @			<7 @		
cis-1,3-Dichloropropene	<10 µg/kg	TM116		<10 @			<10 @		
Toluene	<7 µg/kg	TM116		<7 @	<7 @	<7 2	<7 @	<7 @	<7 @
trans-1,3-Dichloropropene	<10 µg/kg	TM116		<10 @			<10 @		
1,1,2-Trichloroethane	<10 µg/kg	TM116		<10 @			<10 @		

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 46	WS52	WS52	WS53	WS54	WS54
			Depth (m)	0.70	0.10	1.00	0.50	0.10	0.50
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	22/01/2019	25/01/2019	25/01/2019	24/01/2019	25/01/2019	25/01/2019
			Sampled Time	-	-	-	-	-	-
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253911	19257276	19257278	19257283	19257285	19257287
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<7 @			<7 @		
Tetrachloroethene	<5 µg/kg	TM116		<5 @			<5 @		
Dibromochloromethane	<10 µg/kg	TM116		<10 @			<10 @		
1,2-Dibromoethane	<10 µg/kg	TM116		<10 @			<10 @		
Chlorobenzene	<5 µg/kg	TM116		<5 @			<5 @		
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<10 @			<10 @		
Ethylbenzene	<4 µg/kg	TM116		<4 @	<4 @	<4 2	<4 @	<4 @	<4 @
p/m-Xylene	<10 µg/kg	TM116		<10 @	<10 @	<10 2	<10 @	<10 @	<10 @
o-Xylene	<10 µg/kg	TM116		<10 @	<10 @	<10 2	<10 @	<10 @	<10 @
Styrene	<10 µg/kg	TM116		<10 @			<10 @		
Bromoform	<10 µg/kg	TM116		<10 @			<10 @		
Isopropylbenzene	<5 µg/kg	TM116		<5 @			<5 @		
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<10 @			<10 @		
1,2,3-Trichloropropane	<16 µg/kg	TM116		<16 @			<16 @		
Bromobenzene	<10 µg/kg	TM116		<10 @			<10 @		
Propylbenzene	<10 µg/kg	TM116		<10 @			<10 @		
2-Chlorotoluene	<9 µg/kg	TM116		<9 @			<9 @		
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<8 @			<8 @		
4-Chlorotoluene	<10 µg/kg	TM116		<10 @			<10 @		
tert-Butylbenzene	<14 µg/kg	TM116		<14 @			<14 @		
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<9 @			<9 @		
sec-Butylbenzene	<10 µg/kg	TM116		<10 @			<10 @		
4-Isopropyltoluene	<10 µg/kg	TM116		<10 @			<10 @		
1,3-Dichlorobenzene	<8 µg/kg	TM116		<8 @			<8 @		
1,4-Dichlorobenzene	<5 µg/kg	TM116		<5 @			<5 @		
n-Butylbenzene	<11 µg/kg	TM116		<11 @			<11 @		
1,2-Dichlorobenzene	<10 µg/kg	TM116		<10 @			<10 @		
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<14 @			<14 @		
Tert-amyl methyl ether	<10 µg/kg	TM116		<10 @			<10 @		
1,2,4-Trichlorobenzene	<20 µg/kg	TM116		<20 @			<20 @		
Hexachlorobutadiene	<20 µg/kg	TM116		<20 @			<20 @		
Naphthalene	<13 µg/kg	TM116		<13 @			<13 @		

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS 46	WS52	WS52	WS53	WS54	WS54
			Depth (m)	0.70	0.10	1.00	0.50	0.10	0.50
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	22/01/2019	25/01/2019	25/01/2019	24/01/2019	25/01/2019	25/01/2019
			Sampled Time	-	-	-	-	-	-
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19253911	19257276	19257278	19257283	19257285	19257287
			AGS Reference						
1,2,3-Trichlorobenzene	<20 µg/kg	TM116		<20 @			<20 @		
Sum of Detected Xylenes	<0.02 mg/kg	TM116		<0.02 @	<0.02 @	<0.02 2	<0.02 @	<0.02 @	<0.02 @
Sum of BTEX	<40 µg/kg	TM116		<40 @	<40 @	<40 2	<40 @	<40 @	<40 @

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS57	WS58	WS58	WS 25A	WS 25A
			Depth (m)	0.30	0.30	1.00	0.30	1.00
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	25/01/2019	25/01/2019	25/01/2019	23/01/2019	23/01/2019
			Sampled Time	.	.	.	.	.
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19257280	19257289	19257291	19253338	19253339
			AGS Reference					
Dibromofluoromethane**	%	TM116		94 @	111 @	112 @	109 @	109 @
Toluene-d8**	%	TM116		99.1 @	97.8 @	100 @	92.7 @	99.9 @
4-Bromofluorobenzene**	%	TM116		106 @	86.2 @	93.2 @	73.1 @	91.6 @
Dichlorodifluoromethane	<6 µg/kg	TM116		<6 @		<6 @	<6 @	
Chloromethane	<7 µg/kg	TM116		<7 @		<7 @	<7 @	
Vinyl Chloride	<6 µg/kg	TM116		<6 @		<6 @	<6 @	
Bromomethane	<10 µg/kg	TM116		<10 @		<10 @	<10 @	
Chloroethane	<10 µg/kg	TM116		<10 @		<10 @	<10 @	
Trichlorofluoromethane	<6 µg/kg	TM116		<6 @		<6 3 @	<6 @	
1,1-Dichloroethene	<10 µg/kg	TM116		<10 @		<10 @	<10 @	
Carbon Disulphide	<7 µg/kg	TM116		<7 @		<7 @	<7 @	
Dichloromethane	<10 µg/kg	TM116		<10 @		<10 @	<10 @	
Methyl Tertiary Butyl Ether	<10 µg/kg	TM116		<10 @	<10 @	<10 @	<10 @	<10 @
trans-1,2-Dichloroethene	<10 µg/kg	TM116		<10 @		<10 @	<10 @	
1,1-Dichloroethane	<8 µg/kg	TM116		<8 @		<8 @	<8 @	
cis-1,2-Dichloroethene	<6 µg/kg	TM116		<6 @		<6 @	<6 @	
2,2-Dichloropropane	<10 µg/kg	TM116		<10 @		<10 @	<10 @	
Bromochloromethane	<10 µg/kg	TM116		<10 @		<10 @	<10 @	
Chloroform	<8 µg/kg	TM116		<8 @		<8 @	<8 @	
1,1,1-Trichloroethane	<7 µg/kg	TM116		<7 @		<7 @	<7 @	
1,1-Dichloropropene	<10 µg/kg	TM116		<10 @		<10 @	<10 @	
Carbontetrachloride	<10 µg/kg	TM116		<10 @		<10 @	<10 @	
1,2-Dichloroethane	<5 µg/kg	TM116		<5 @		<5 @	<5 @	
Benzene	<9 µg/kg	TM116		<9 @	<9 @	<9 @	<9 @	<9 @
Trichloroethene	<9 µg/kg	TM116		<9 @		<9 3 @	<9 @	
1,2-Dichloropropane	<10 µg/kg	TM116		<10 @		<10 @	<10 @	
Dibromomethane	<9 µg/kg	TM116		<9 @		<9 @	<9 @	
Bromodichloromethane	<7 µg/kg	TM116		<7 @		<7 @	<7 @	
cis-1,3-Dichloropropene	<10 µg/kg	TM116		<10 @		<10 @	<10 @	
Toluene	<7 µg/kg	TM116		<7 @	<7 @	<7 @	<7 @	<7 @
trans-1,3-Dichloropropene	<10 µg/kg	TM116		<10 @		<10 @	<10 @	
1,1,2-Trichloroethane	<10 µg/kg	TM116		<10 @		<10 @	<10 @	

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS57	WS58	WS58	WS 25A	WS 25A
			Depth (m)	0.30	0.30	1.00	0.30	1.00
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	25/01/2019	25/01/2019	25/01/2019	23/01/2019	23/01/2019
			Sampled Time	-	-	-	-	-
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19257280	19257289	19257291	19253338	19253339
			AGS Reference					
1,3-Dichloropropane	<7 µg/kg	TM116		<7 @		<7 @	<7 @	
Tetrachloroethene	<5 µg/kg	TM116		<5 @		<5 @	<5 @	
Dibromochloromethane	<10 µg/kg	TM116		<10 @		<10 @	<10 @	
1,2-Dibromoethane	<10 µg/kg	TM116		<10 @		<10 @	<10 @	
Chlorobenzene	<5 µg/kg	TM116		<5 @		<5 3 @	<5 3 @	
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<10 @		<10 @	<10 @	
Ethylbenzene	<4 µg/kg	TM116		<4 @	<4 @	<4 @	<4 @	<4 @
p/m-Xylene	<10 µg/kg	TM116		<10 @	<10 @	<10 @	<10 @	<10 @
o-Xylene	<10 µg/kg	TM116		<10 @	<10 @	<10 @	<10 @	<10 @
Styrene	<10 µg/kg	TM116		<10 @		<10 @	<10 @	
Bromoform	<10 µg/kg	TM116		<10 @		<10 @	<10 @	
Isopropylbenzene	<5 µg/kg	TM116		<5 @		<5 @	<5 @	
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<10 @		<10 @	<10 @	
1,2,3-Trichloropropane	<16 µg/kg	TM116		<16 @		<16 @	<16 @	
Bromobenzene	<10 µg/kg	TM116		<10 @		<10 @	<10 @	
Propylbenzene	<10 µg/kg	TM116		<10 @		<10 @	<10 @	
2-Chlorotoluene	<9 µg/kg	TM116		<9 @		<9 @	<9 @	
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<8 @		<8 @	<8 @	
4-Chlorotoluene	<10 µg/kg	TM116		<10 @		<10 @	<10 @	
tert-Butylbenzene	<14 µg/kg	TM116		<14 @		<14 @	<14 @	
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<9 @		<9 @	<9 @	
sec-Butylbenzene	<10 µg/kg	TM116		<10 @		<10 @	<10 @	
4-Isopropyltoluene	<10 µg/kg	TM116		<10 @		<10 @	<10 @	
1,3-Dichlorobenzene	<8 µg/kg	TM116		<8 @		<8 @	<8 @	
1,4-Dichlorobenzene	<5 µg/kg	TM116		<5 @		<5 @	<5 @	
n-Butylbenzene	<11 µg/kg	TM116		<11 @		<11 @	<11 @	
1,2-Dichlorobenzene	<10 µg/kg	TM116		<10 @		<10 @	<10 @	
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<14 @		<14 @	<14 @	
Tert-amyl methyl ether	<10 µg/kg	TM116		<10 @		<10 @	<10 @	
1,2,4-Trichlorobenzene	<20 µg/kg	TM116		<20 @		<20 @	<20 @	
Hexachlorobutadiene	<20 µg/kg	TM116		<20 @		<20 @	<20 @	
Naphthalene	<13 µg/kg	TM116		<13 @		<13 @	<13 @	

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS57	WS58	WS58	WS 25A	WS 25A
			Depth (m)	0.30	0.30	1.00	0.30	1.00
			Sample Type	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)	Unspecified Solid (UNS)
			Date Sampled	25/01/2019	25/01/2019	25/01/2019	23/01/2019	23/01/2019
			Sampled Time	-	-	-	-	-
			Date Received	30/01/2019	30/01/2019	30/01/2019	30/01/2019	30/01/2019
			SDG Ref	190201-81	190201-81	190201-81	190201-81	190201-81
			Lab Sample No.(s)	19257280	19257289	19257291	19253338	19253339
			AGS Reference					
1,2,3-Trichlorobenzene	<20 µg/kg	TM116		<20 @		<20 @	<20 @	
Sum of Detected Xylenes	<0.02 mg/kg	TM116		<0.02 @	<0.02 @	<0.02 @	<0.02 @	<0.02 @
Sum of BTEX	<40 µg/kg	TM116		<40 @	<40 @	<40 @	<40 @	<40 @

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Asbestos Identification - Solid Samples

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
*	Subcontracted test.
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 07 0.30 - 0.30 MISC_SOLID 18/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253912 TM048	15/03/2019	James Richards	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 10 0.20 MISC_SOLID 24/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253331 TM048	11/02/2019	Lucy Caroe	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 10 0.50 MISC_SOLID 24/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253332 TM048	11/02/19	Andrzej Ferfecki	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 16 0.60 MISC_SOLID 18/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253917 TM048	12/02/19	Andrzej Ferfecki	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 16 1.20 MISC_SOLID 18/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253918 TM048	11/02/2019	Lucy Caroe	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 20 1.50 MISC_SOLID 23/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253335 TM048	12/02/2019	Lucy Caroe	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 20 2.00 MISC_SOLID 23/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253336 TM048	12/02/2019	James Richards	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS22 0.10 - 0.20 MISC_SOLID 21/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19257296 TM048	12/02/2019	Lucy Caroe	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Detected

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 23 0.20 MISC_SOLID 18/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253919 TM048	12/02/19	Andrzej Ferfecki	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 23 0.30 - 0.50 MISC_SOLID 18/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253920 TM048	12/02/2019	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 26 0.70 MISC_SOLID 18/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253585 TM048	12/02/19	Andrzej Ferfecki	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 28 0.30 MISC_SOLID 24/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253590 TM048	12/02/2019	Lucy Caroe	Soil containing debris typical of AIB	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 28 1.00 MISC_SOLID 24/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253591 TM048	12/02/19	Andrzej Ferfecki	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS29 0.40 MISC_SOLID 21/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19257273 TM048	11/02/19	Andrzej Ferfecki	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 30 0.50 MISC_SOLID 23/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253323 TM048	11/02/2019	Renata Bozhkov	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 33 0.10 MISC_SOLID 18/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253581 TM048	12/02/2019	Barbara Urbanek-Walsh	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 33 0.50 MISC_SOLID 18/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253582 TM048	12/02/2019	James Richards	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 34 0.10 MISC_SOLID 23/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253340 TM048	11/02/2019	Lucy Caroe	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 34 1.00 MISC_SOLID 23/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253341 TM048	11/02/2019	Lucy Caroe	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS35 0.40 MISC_SOLID 21/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19257270 TM048	12/02/2019	Barbara Urbanek-Walsh	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 36 0.50 MISC_SOLID 24/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253326 TM048	12/02/2019	James Richards	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 37 0.20 MISC_SOLID 22/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253329 TM048	12/02/2019	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS38 0.20 MISC_SOLID 21/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19257263 TM048	12/02/2019	Lucy Caroe	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS38 0.70 MISC_SOLID 21/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19257265 TM048	12/02/2019	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS39 0.20 MISC_SOLID 21/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19257267 TM048	12/02/19	Andrzej Ferfecki	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS39 0.70 - 0.90 MISC_SOLID 21/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19257268 TM048	12/02/2019	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 40 1.00 MISC_SOLID 24/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253596 TM048	12/02/2019	James Richards	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 40 1.50 MISC_SOLID 24/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253597 TM048	12/02/2019	James Richards	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 41 0.50 MISC_SOLID 18/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253579 TM048	12/02/2019	Barbara Urbanek-Walsh	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 41 1.00 MISC_SOLID 18/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253578 TM048	12/02/2019	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 42 0.10 MISC_SOLID 22/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253318 TM048	11/02/2019	Lucy Caroe	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 43 0.20 MISC_SOLID 22/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253587 TM048	11/02/19	Andrzej Ferfecki	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 43 0.50 MISC_SOLID 22/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253588 TM048	11/02/2019	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 45 0.30 MISC_SOLID 22/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253903 TM048	11/02/19	Andrzej Ferfecki	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 45 1.00 MISC_SOLID 22/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253906 TM048	12/02/2019	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 46 0.30 MISC_SOLID 22/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253909 TM048	12/02/2019	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 46 0.70 MISC_SOLID 22/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253911 TM048	12/02/2019	James Richards	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS52 0.10 MISC_SOLID 25/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19257276 TM048	12/02/2019	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS52 1.00 MISC_SOLID 25/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19257278 TM048	12/02/2019	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS53 0.50 MISC_SOLID 24/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19257283 TM048	11/02/2019	Lucy Caroe	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS54 0.10 MISC_SOLID 25/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19257285 TM048	12/02/2019	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS54 0.50 MISC_SOLID 25/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19257287 TM048	12/02/2019	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS57 0.30 MISC_SOLID 25/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19257280 TM048	12/02/2019	Lucy Caroe	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS58 0.30 MISC_SOLID 25/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19257289 TM048	12/02/2019	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS58 1.00 MISC_SOLID 25/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19257291 TM048	12/02/2019	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 25A 0.30 MISC_SOLID 23/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253338 TM048	12/02/2019	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 25A 1.00 MISC_SOLID 23/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253339 TM048	12/02/19	Andrzej Ferfecki	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

Asbestos Quantification - Full

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
*	Subcontracted test.
(F)	Trigger breach confirmed
1-5&♦§@	Sample deviation (see appendix)

		Additional Asbestos Components	Analysts Comments	Asbestos Quantification - Gravimetric - %	Asbestos Quantification - PCOM Evaluation	Asbestos Quantification - Total - %
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS 28 0.30 MISC_SOLID 24/01/2019 00:00:00 30/01/2019 06:00:00 190201-81 19253590 TM304	None (#)	N/C	<0.001 (#)	0.0039 (#)	0.0043 (#)

Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.200	**Natural Moisture Content (%)**	14.4
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	87.4
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19253587			
Sampled Date	22-Jan-2019			
Customer Sample Ref.	WS 43			
Depth (m)	0.20			

Solid Waste Analysis

Total Organic Carbon (%)	0.294	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<5	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.89	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Conc^n in 2:1 eluate (mg/l)		2:1 conc^n leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
Arsenic	0.000917	<0.0005	0.00183	<0.001	0.5	2	25
Barium	-	-	-	-	20	100	300
Cadmium	<0.00008	<0.00008	<0.00016	<0.00016	0.04	1	5
Chromium	<0.001	<0.001	<0.002	<0.002	0.5	10	70
Copper	0.000875	<0.0003	0.00175	<0.0006	2	50	100
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.00002	<0.00002	0.01	0.2	2
Molybdenum	-	-	-	-	0.5	10	30
Nickel	<0.0004	<0.0004	<0.0008	<0.0008	0.4	10	40
Lead	<0.0002	<0.0002	<0.0004	<0.0004	0.5	10	50
Antimony	-	-	-	-	0.06	0.7	5
Selenium	<0.001	<0.001	<0.002	<0.002	0.1	0.5	7
Zinc	<0.001	<0.001	<0.002	<0.002	4	50	200
Chloride	21.9	<2	43.8	<4	800	15000	25000
Fluoride	<0.5	<0.5	<1	<1	10	150	500
Sulphate (soluble)	16.7	<2	33.4	<4	1000	20000	50000
Total Dissolved Solids	-	-	-	-	4000	60000	100000
Total Monohydric Phenols (W)	-	-	-	-	1	-	-
Dissolved Organic Carbon	<3	<3	<6	<6	500	800	1000

Leach Test Information

Date Prepared	12-Feb-2019
pH (pH Units)	6.56
Conductivity (µS/cm)	194.00
Temperature (ºC)	18.20
Volume Leachant (Litres)	0.325
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
20/03/2019 16:12:51

Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.200	**Natural Moisture Content (%)**	14.4
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	87.4
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19253587			
Sampled Date	22-Jan-2019			
Customer Sample Ref.	WS 43			
Depth (m)	0.20			

Solid Waste Analysis

Total Organic Carbon (%)	0.294	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<5	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.89	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**Concⁿ in 2:1 eluate (mg/l)**		**2:1 concⁿ leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Aliphatics >C12-C16	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.02	<0.02	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC16-EC35	<0.01	<0.01	<0.02	<0.02	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.02	<0.02	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.02	<0.02	-	-	-
Ammoniacal Nitrogen as N	<0.2	<0.2	<0.4	<0.4	-	-	-
Conductivity (at 20 deg.C)	0.186	<0.000014	0.372	<0.000028	-	-	-
pH Value of Filtered Water	7.9	<0.001	16	<0.002	-	-	-
Phosphate (Ortho as PO4)	0.056	<0.05	0.112	<0.1	-	-	-
Sulphide	<0.01	<0.01	<0.02	<0.02	-	-	-
Naphthalene (diss.filt)	0.000026	<0.00001	0.000052	<0.00002	-	-	-
PCB congener 28	<0.000015	<0.000015	<0.00003	<0.00003	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.1	<0.1	-	-	-
Acenaphthene (diss.filt)	0.0000173	<0.000005	0.0000346	<0.00001	-	-	-
PCB congener 52	<0.000015	<0.000015	<0.00003	<0.00003	-	-	-
Phenol	<0.001	<0.001	<0.002	<0.002	-	-	-
2-methylphenol	<0.001	<0.001	<0.002	<0.002	-	-	-

Leach Test Information

Date Prepared	12-Feb-2019
pH (pH Units)	6.56
Conductivity (µS/cm)	194.00
Temperature (ºC)	18.20
Volume Leachant (Litres)	0.325
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
20/03/2019 16:12:51

Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.200	**Natural Moisture Content (%)**	14.4
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	87.4
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19253587			
Sampled Date	22-Jan-2019			
Customer Sample Ref.	WS 43			
Depth (m)	0.20			

Solid Waste Analysis

Total Organic Carbon (%)	0.294	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<5	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.89	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
Acenaphthylene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
Nitrate as NO3	3.81	<0.3	7.62	<0.6	-	-	-
PCB congener 101	<0.000015	<0.000015	<0.00003	<0.00003	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Fluoranthene (diss.filt)	0.00006	<0.000005	0.00012	<0.00001	-	-	-
PCB congener 118	<0.000015	<0.000015	<0.00003	<0.00003	-	-	-
4-methylphenol	<0.001	<0.001	<0.002	<0.002	-	-	-
Anthracene (diss.filt)	0.0000208	<0.000005	0.0000416	<0.00001	-	-	-
PCB congener 138	<0.000015	<0.000015	<0.00003	<0.00003	-	-	-
2-chlorophenol	<0.001	<0.001	<0.002	<0.002	-	-	-
Boron	<0.01	<0.01	<0.02	<0.02	-	-	-
PCB congener 153	<0.000015	<0.000015	<0.00003	<0.00003	-	-	-
Phenanthrene (diss.filt)	0.0000863	<0.000005	0.000173	<0.00001	-	-	-
2,4-dimethylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Fluorene (diss.filt)	0.000016	<0.000005	0.000032	<0.00001	-	-	-
PCB congener 180	<0.000015	<0.000015	<0.00003	<0.00003	-	-	-
4-chloro-3-methylphenol	<0.001	<0.001	<0.002	<0.002	-	-	-
Chrysene (diss.filt)	0.0000101	<0.000005	0.0000202	<0.00001	-	-	-
Total of 7 Congener PCBs	<0.000105	<0.000105	<0.00021	<0.00021	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Pyrene (diss.filt)	0.0000435	<0.000005	0.000087	<0.00001	-	-	-
4-chlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-

Leach Test Information

Date Prepared	12-Feb-2019
pH (pH Units)	6.56
Conductivity (µS/cm)	194.00
Temperature (ºC)	18.20
Volume Leachant (Litres)	0.325
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
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Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.200	**Natural Moisture Content (%)**	14.4
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	87.4
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19253587			
Sampled Date	22-Jan-2019			
Customer Sample Ref.	WS 43			
Depth (m)	0.20			

Solid Waste Analysis

Total Organic Carbon (%)	0.294	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<5	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.89	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**Concⁿ in 2:1 eluate (mg/l)**		**2:1 concⁿ leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Benzo(a)anthracene (diss.filt)	0.0000118	<0.000005	0.0000236	<0.00001	-	-	-
2,4-dichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(b)fluoranthene (diss.filt)	0.00000968	<0.000005	0.0000194	<0.00001	-	-	-
2-nitrophenol	<0.001	<0.001	<0.002	<0.002	-	-	-
Benzo(k)fluoranthene (diss.filt)	0.000006	<0.000005	0.000012	<0.00001	-	-	-
2,4,6-trichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(a)pyrene (diss.filt)	0.0000076	<0.000002	0.0000152	<0.000004	-	-	-
2,4,5-trichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
4-nitrophenol	<0.001	<0.001	<0.002	<0.002	-	-	-
Benzo(g,h,i)perylene (diss.filt)	0.0000078	<0.000005	0.0000156	<0.00001	-	-	-
2,3,5,6-tetrachlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	0.00000597	<0.000005	0.0000119	<0.00001	-	-	-
2,3,4,6-tetrachlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.000329	<0.000082	0.000658	<0.000164	-	-	-
2,4-Dinitrophenol	<0.0025	<0.0025	<0.005	<0.005	-	-	-
DNOC	<0.003	<0.003	<0.006	<0.006	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.002	<0.002	-	-	-
Dinoseb	<0.004	<0.004	<0.008	<0.008	-	-	-
Vanadium	<0.001	<0.001	<0.002	<0.002	-	-	-
SVOC MS (W) - Aqueous							
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-

Leach Test Information

Date Prepared	12-Feb-2019
pH (pH Units)	6.56
Conductivity (µS/cm)	194.00
Temperature (°C)	18.20
Volume Leachant (Litres)	0.325
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
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Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.200	**Natural Moisture Content (%)**	14.4
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	87.4
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19253587			
Sampled Date	22-Jan-2019			
Customer Sample Ref.	WS 43			
Depth (m)	0.20			

Solid Waste Analysis

Total Organic Carbon (%)	0.294	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<5	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.89	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**Conc^n in 2:1 eluate (mg/l)**		**2:1 conc^n leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
1,3-Dichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.002	<0.002	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.002	<0.002	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.002	<0.002	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.002	<0.002	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.002	<0.002	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.002	<0.002	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.002	<0.002	-	-	-
2-Chlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.002	<0.002	-	-	-
2-Methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.002	<0.002	-	-	-
2-Nitrophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.002	<0.002	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.002	<0.002	-	-	-
4-Chloro-3-methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.002	<0.002	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.002	<0.002	-	-	-
4-Methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.002	<0.002	-	-	-
4-Nitrophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-

Leach Test Information

Date Prepared	12-Feb-2019
pH (pH Units)	6.56
Conductivity (µS/cm)	194.00
Temperature (ºC)	18.20
Volume Leachant (Litres)	0.325
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.200	**Natural Moisture Content (%)**	14.4
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	87.4
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19253587			
Sampled Date	22-Jan-2019			
Customer Sample Ref.	WS 43			
Depth (m)	0.20			

Solid Waste Analysis

Total Organic Carbon (%)	0.294	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<5	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.89	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**Concⁿ in 2:1 eluate (mg/l)**		**2:1 concⁿ leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
Azobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.002	<0.002	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.002	<0.002	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.004	<0.004	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.002	<0.002	-	-	-
Carbazole	<0.001	<0.001	<0.002	<0.002	-	-	-
Dibenzofuran	<0.001	<0.001	<0.002	<0.002	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.002	<0.002	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.002	<0.002	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.002	<0.002	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.01	<0.01	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.002	<0.002	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.002	<0.002	-	-	-
Phenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.002	<0.002	-	-	-
Hexachloroethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Nitrobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
Isophorone	<0.001	<0.001	<0.002	<0.002	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.002	<0.002	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	-	-	-	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.1	<0.1	-	-	-

Leach Test Information

Date Prepared	12-Feb-2019
pH (pH Units)	6.56
Conductivity (µS/cm)	194.00
Temperature (ºC)	18.20
Volume Leachant (Litres)	0.325
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.200	**Natural Moisture Content (%)**	14.4
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	87.4
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19253587			
Sampled Date	22-Jan-2019			
Customer Sample Ref.	WS 43			
Depth (m)	0.20			

Solid Waste Analysis

Total Organic Carbon (%)	0.294	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<5	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.89	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**Concⁿ in 2:1 eluate (mg/l)**		**2:1 concⁿ leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
TPH CWG (W)							
Aliphatics C5-C6	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.02	<0.02	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.006	<0.006	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.02	<0.02	-	-	-
Benzene by GC	<0.007	<0.007	<0.014	<0.014	-	-	-
Toluene by GC	<0.004	<0.004	<0.008	<0.008	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.01	<0.01	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.016	<0.016	-	-	-
o Xylene by GC	<0.003	<0.003	<0.006	<0.006	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.022	<0.022	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.056	<0.056	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	-	-	-	-	-	-
Toluene-d8	-	-	-	-	-	-	-
4-Bromofluorobenzene	-	-	-	-	-	-	-
Dichlorodifluoromethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Chloromethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.002	<0.002	-	-	-

Leach Test Information

Date Prepared	12-Feb-2019
pH (pH Units)	6.56
Conductivity (µS/cm)	194.00
Temperature (ºC)	18.20
Volume Leachant (Litres)	0.325
Volume of Eluate VE1 (Litres)	

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.200	**Natural Moisture Content (%)**	14.4
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	87.4
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19253587			
Sampled Date	22-Jan-2019			
Customer Sample Ref.	WS 43			
Depth (m)	0.20			

Solid Waste Analysis

Total Organic Carbon (%)	0.294	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<5	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.89	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
VOC MS (W)							
Bromomethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Chloroethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.002	<0.002	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.002	<0.002	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.002	<0.002	-	-	-
Dichloromethane	<0.003	<0.003	<0.006	<0.006	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.002	<0.002	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.002	<0.002	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.002	<0.002	-	-	-
Bromochloromethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Chloroform	<0.001	<0.001	<0.002	<0.002	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.002	<0.002	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.002	<0.002	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Benzene	<0.001	<0.001	<0.002	<0.002	-	-	-
Trichloroethene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.002	<0.002	-	-	-
Dibromomethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.002	<0.002	-	-	-

Leach Test Information

Date Prepared	12-Feb-2019
pH (pH Units)	6.56
Conductivity (µS/cm)	194.00
Temperature (ºC)	18.20
Volume Leachant (Litres)	0.325
Volume of Eluate VE1 (Litres)	

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20/03/2019 16:12:51

Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.200	**Natural Moisture Content (%)**	14.4
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	87.4
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19253587			
Sampled Date	22-Jan-2019			
Customer Sample Ref.	WS 43			
Depth (m)	0.20			

Solid Waste Analysis

Total Organic Carbon (%)	0.294	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<5	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.89	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
VOC MS (W)							
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.002	<0.002	-	-	-
Toluene	<0.001	<0.001	<0.002	<0.002	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.002	<0.002	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.002	<0.002	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.002	<0.002	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Chlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Ethylbenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
p/m-Xylene	<0.001	<0.001	<0.002	<0.002	-	-	-
o-Xylene	<0.001	<0.001	<0.002	<0.002	-	-	-
Styrene	<0.001	<0.001	<0.002	<0.002	-	-	-
Bromoform	<0.001	<0.001	<0.002	<0.002	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.002	<0.002	-	-	-
Bromobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
Propylbenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,3,5-Trimethylbenzene	<0.001	<0.001	<0.002	<0.002	-	-	-

Leach Test Information

Date Prepared	12-Feb-2019
pH (pH Units)	6.56
Conductivity (µS/cm)	194.00
Temperature (ºC)	18.20
Volume Leachant (Litres)	0.325
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.200	**Natural Moisture Content (%)**	14.4
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	87.4
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19253587			
Sampled Date	22-Jan-2019			
Customer Sample Ref.	WS 43			
Depth (m)	0.20			

Solid Waste Analysis

Total Organic Carbon (%)	0.294	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<5	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.89	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
VOC MS (W)							
4-Chlorotoluene	<0.001	<0.001	<0.002	<0.002	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2,4-Trimethylbenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.002	<0.002	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.002	<0.002	-	-	-
Naphthalene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-

Leach Test Information

Date Prepared	12-Feb-2019
pH (pH Units)	6.56
Conductivity (µS/cm)	194.00
Temperature (ºC)	18.20
Volume Leachant (Litres)	0.325
Volume of Eluate VE1 (Litres)	

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.177	**Natural Moisture Content (%)**	1.42
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	98.6
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19253903			
Sampled Date	22-Jan-2019			
Customer Sample Ref.	WS 45			
Depth (m)	0.30			

Solid Waste Analysis

Total Organic Carbon (%)	1.41	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.13	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
Arsenic	0.000691	<0.0005	0.00138	<0.001	0.5	2	25
Barium	-	-	-	-	20	100	300
Cadmium	<0.00008	<0.00008	<0.00016	<0.00016	0.04	1	5
Chromium	<0.001	<0.001	<0.002	<0.002	0.5	10	70
Copper	0.00374	<0.0003	0.00748	<0.0006	2	50	100
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.00002	<0.00002	0.01	0.2	2
Molybdenum	-	-	-	-	0.5	10	30
Nickel	0.000831	<0.0004	0.00166	<0.0008	0.4	10	40
Lead	<0.0002	<0.0002	<0.0004	<0.0004	0.5	10	50
Antimony	-	-	-	-	0.06	0.7	5
Selenium	<0.001	<0.001	<0.002	<0.002	0.1	0.5	7
Zinc	0.00546	<0.001	0.0109	<0.002	4	50	200
Chloride	<2	<2	<4	<4	800	15000	25000
Fluoride	0.551	<0.5	1.1	<1	10	150	500
Sulphate (soluble)	<2	<2	<4	<4	1000	20000	50000
Total Dissolved Solids	-	-	-	-	4000	60000	100000
Total Monohydric Phenols (W)	-	-	-	-	1	-	-
Dissolved Organic Carbon	6.52	<3	13	<6	500	800	1000

Leach Test Information

Date Prepared	10-Feb-2019
pH (pH Units)	8.19
Conductivity (µS/cm)	212.00
Temperature (°C)	19.30
Volume Leachant (Litres)	0.348
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.177	**Natural Moisture Content (%)**	1.42
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	98.6
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19253903			
Sampled Date	22-Jan-2019			
Customer Sample Ref.	WS 45			
Depth (m)	0.30			

Solid Waste Analysis

Total Organic Carbon (%)	1.41	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.13	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
Aliphatics >C12-C16	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.02	<0.02	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC16-EC35	<0.01	<0.01	<0.02	<0.02	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.02	<0.02	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.02	<0.02	-	-	-
Ammoniacal Nitrogen as N	<0.2	<0.2	<0.4	<0.4	-	-	-
Conductivity (at 20 deg.C)	0.195	<0.000014	0.39	<0.000028	-	-	-
pH Value of Filtered Water	8.4	<0.001	17	<0.002	-	-	-
Phosphate (Ortho as PO4)	0.147	<0.05	0.294	<0.1	-	-	-
Sulphide	<0.01	<0.01	<0.02	<0.02	-	-	-
Naphthalene (diss.filt)	0.000033	<0.00001	0.000066	<0.00002	-	-	-
PCB congener 28	<0.000015	<0.000015	<0.00003	<0.00003	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.1	<0.1	-	-	-
Acenaphthene (diss.filt)	0.0000338	<0.000005	0.0000676	<0.00001	-	-	-
PCB congener 52	<0.000015	<0.000015	<0.00003	<0.00003	-	-	-
Phenol	<0.001	<0.001	<0.002	<0.002	-	-	-
2-methylphenol	<0.001	<0.001	<0.002	<0.002	-	-	-

Leach Test Information

Date Prepared	10-Feb-2019
pH (pH Units)	8.19
Conductivity (µS/cm)	212.00
Temperature (ºC)	19.30
Volume Leachant (Litres)	0.348
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.177	**Natural Moisture Content (%)**	1.42
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	98.6
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19253903			
Sampled Date	22-Jan-2019			
Customer Sample Ref.	WS 45			
Depth (m)	0.30			

Solid Waste Analysis

Total Organic Carbon (%)	1.41	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.13	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
Acenaphthylene (diss.filt)	0.00000563	<0.000005	0.0000113	<0.00001	-	-	-
Nitrate as NO3	14.7	<0.3	29.4	<0.6	-	-	-
PCB congener 101	<0.000015	<0.000015	<0.00003	<0.00003	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Fluoranthene (diss.filt)	0.0000905	<0.000005	0.000181	<0.00001	-	-	-
PCB congener 118	<0.000015	<0.000015	<0.00003	<0.00003	-	-	-
4-methylphenol	<0.001	<0.001	<0.002	<0.002	-	-	-
Anthracene (diss.filt)	0.0000482	<0.000005	0.0000964	<0.00001	-	-	-
PCB congener 138	<0.000015	<0.000015	<0.00003	<0.00003	-	-	-
2-chlorophenol	<0.001	<0.001	<0.002	<0.002	-	-	-
Boron	<0.01	<0.01	<0.02	<0.02	-	-	-
PCB congener 153	<0.000015	<0.000015	<0.00003	<0.00003	-	-	-
Phenanthrene (diss.filt)	0.000226	<0.000005	0.000452	<0.00001	-	-	-
2,4-dimethylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Fluorene (diss.filt)	0.0000455	<0.000005	0.000091	<0.00001	-	-	-
PCB congener 180	<0.000015	<0.000015	<0.00003	<0.00003	-	-	-
4-chloro-3-methylphenol	<0.001	<0.001	<0.002	<0.002	-	-	-
Chrysene (diss.filt)	0.0000109	<0.000005	0.0000218	<0.00001	-	-	-
Total of 7 Congener PCBs	<0.000105	<0.000105	<0.00021	<0.00021	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Pyrene (diss.filt)	0.0000603	<0.000005	0.000121	<0.00001	-	-	-
4-chlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-

Leach Test Information

Date Prepared	10-Feb-2019
pH (pH Units)	8.19
Conductivity (µS/cm)	212.00
Temperature (ºC)	19.30
Volume Leachant (Litres)	0.348
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.177	**Natural Moisture Content (%)**	1.42
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	98.6
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19253903			
Sampled Date	22-Jan-2019			
Customer Sample Ref.	WS 45			
Depth (m)	0.30			

Solid Waste Analysis

Total Organic Carbon (%)	1.41	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.13	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
Benzo(a)anthracene (diss.filt)	0.0000103	<0.000005	0.0000206	<0.00001	-	-	-
2,4-dichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(b)fluoranthene (diss.filt)	0.00000885	<0.000005	0.0000177	<0.00001	-	-	-
2-nitrophenol	<0.001	<0.001	<0.002	<0.002	-	-	-
Benzo(k)fluoranthene (diss.filt)	0.00000572	<0.000005	0.0000114	<0.00001	-	-	-
2,4,6-trichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(a)pyrene (diss.filt)	0.00000664	<0.000002	0.0000133	<0.000004	-	-	-
2,4,5-trichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	0.0000156	<0.000005	0.0000312	<0.00001	-	-	-
4-nitrophenol	<0.001	<0.001	<0.002	<0.002	-	-	-
Benzo(g,h,i)perylene (diss.filt)	0.0000218	<0.000005	0.0000436	<0.00001	-	-	-
2,3,5,6-tetrachlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	0.0000175	<0.000005	0.000035	<0.00001	-	-	-
2,3,4,6-tetrachlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.000641	<0.000082	0.00128	<0.000164	-	-	-
2,4-Dinitrophenol	<0.0025	<0.0025	<0.005	<0.005	-	-	-
DNOC	<0.003	<0.003	<0.006	<0.006	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.002	<0.002	-	-	-
Dinoseb	<0.004	<0.004	<0.008	<0.008	-	-	-
Vanadium	<0.001	<0.001	<0.002	<0.002	-	-	-
SVOC MS (W) - Aqueous							
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-

Leach Test Information

Date Prepared	10-Feb-2019
pH (pH Units)	8.19
Conductivity (µS/cm)	212.00
Temperature (ºC)	19.30
Volume Leachant (Litres)	0.348
Volume of Eluate VE1 (Litres)	

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Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.177	**Natural Moisture Content (%)**	1.42
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	98.6
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19253903			
Sampled Date	22-Jan-2019			
Customer Sample Ref.	WS 45			
Depth (m)	0.30			

Solid Waste Analysis

Total Organic Carbon (%)	1.41	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.13	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**Concⁿ in 2:1 eluate (mg/l)**		**2:1 concⁿ leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
1,3-Dichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.002	<0.002	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.002	<0.002	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.002	<0.002	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.002	<0.002	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.002	<0.002	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.002	<0.002	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.002	<0.002	-	-	-
2-Chlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.002	<0.002	-	-	-
2-Methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.002	<0.002	-	-	-
2-Nitrophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.002	<0.002	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.002	<0.002	-	-	-
4-Chloro-3-methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.002	<0.002	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.002	<0.002	-	-	-
4-Methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.002	<0.002	-	-	-
4-Nitrophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-

Leach Test Information

Date Prepared	10-Feb-2019
pH (pH Units)	8.19
Conductivity (µS/cm)	212.00
Temperature (ºC)	19.30
Volume Leachant (Litres)	0.348
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
20/03/2019 16:12:51

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.177	**Natural Moisture Content (%)**	1.42
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	98.6
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19253903			
Sampled Date	22-Jan-2019			
Customer Sample Ref.	WS 45			
Depth (m)	0.30			

Solid Waste Analysis

Total Organic Carbon (%)	1.41	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.13	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**Conc^n in 2:1 eluate (mg/l)**		**2:1 conc^n leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
Azobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.002	<0.002	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.002	<0.002	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.004	<0.004	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.002	<0.002	-	-	-
Carbazole	<0.001	<0.001	<0.002	<0.002	-	-	-
Dibenzofuran	<0.001	<0.001	<0.002	<0.002	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.002	<0.002	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.002	<0.002	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.002	<0.002	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.01	<0.01	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.002	<0.002	-	-	-
Pentachlorophenol	<0.002	<0.002	<0.004	<0.004	-	-	-
Phenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.002	<0.002	-	-	-
Hexachloroethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Nitrobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
Isophorone	<0.001	<0.001	<0.002	<0.002	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.002	<0.002	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	-	-	-	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.1	<0.1	-	-	-

Leach Test Information

Date Prepared	10-Feb-2019
pH (pH Units)	8.19
Conductivity (µS/cm)	212.00
Temperature (ºC)	19.30
Volume Leachant (Litres)	0.348
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.177	**Natural Moisture Content (%)**	1.42
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	98.6
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19253903			
Sampled Date	22-Jan-2019			
Customer Sample Ref.	WS 45			
Depth (m)	0.30			

Solid Waste Analysis

Total Organic Carbon (%)	1.41	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.13	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**Conc^n in 2:1 eluate (mg/l)**		**2:1 conc^n leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
TPH CWG (W)							
Aliphatics C5-C6	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.02	<0.02	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.006	<0.006	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.02	<0.02	-	-	-
Benzene by GC	<0.007	<0.007	<0.014	<0.014	-	-	-
Toluene by GC	<0.004	<0.004	<0.008	<0.008	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.01	<0.01	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.016	<0.016	-	-	-
o Xylene by GC	<0.003	<0.003	<0.006	<0.006	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.022	<0.022	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.056	<0.056	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	-	-	-	-	-	-
Toluene-d8	-	-	-	-	-	-	-
4-Bromofluorobenzene	-	-	-	-	-	-	-
Dichlorodifluoromethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Chloromethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.002	<0.002	-	-	-

Leach Test Information

Date Prepared	10-Feb-2019
pH (pH Units)	8.19
Conductivity (µS/cm)	212.00
Temperature (ºC)	19.30
Volume Leachant (Litres)	0.348
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.177	**Natural Moisture Content (%)**	1.42
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	98.6
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19253903			
Sampled Date	22-Jan-2019			
Customer Sample Ref.	WS 45			
Depth (m)	0.30			

Solid Waste Analysis

Total Organic Carbon (%)	1.41	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.13	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Conc^n in 2:1 eluate (mg/l)		2:1 conc^n leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
VOC MS (W)							
Bromomethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Chloroethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.002	<0.002	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.002	<0.002	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.002	<0.002	-	-	-
Dichloromethane	<0.003	<0.003	<0.006	<0.006	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.002	<0.002	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.002	<0.002	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.002	<0.002	-	-	-
Bromochloromethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Chloroform	<0.001	<0.001	<0.002	<0.002	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.002	<0.002	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.002	<0.002	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Benzene	<0.001	<0.001	<0.002	<0.002	-	-	-
Trichloroethene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.002	<0.002	-	-	-
Dibromomethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.002	<0.002	-	-	-

Leach Test Information

Date Prepared	10-Feb-2019
pH (pH Units)	8.19
Conductivity (µS/cm)	212.00
Temperature (ºC)	19.30
Volume Leachant (Litres)	0.348
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
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Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.177	**Natural Moisture Content (%)**	1.42
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	98.6
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19253903			
Sampled Date	22-Jan-2019			
Customer Sample Ref.	WS 45			
Depth (m)	0.30			

Solid Waste Analysis

Total Organic Carbon (%)	1.41	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.13	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Conc^n in 2:1 eluate (mg/l)		2:1 conc^n leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
VOC MS (W)							
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.002	<0.002	-	-	-
Toluene	<0.001	<0.001	<0.002	<0.002	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.002	<0.002	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.002	<0.002	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.002	<0.002	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Chlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Ethylbenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
p/m-Xylene	<0.001	<0.001	<0.002	<0.002	-	-	-
o-Xylene	<0.001	<0.001	<0.002	<0.002	-	-	-
Styrene	<0.001	<0.001	<0.002	<0.002	-	-	-
Bromoform	<0.001	<0.001	<0.002	<0.002	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.002	<0.002	-	-	-
Bromobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
Propylbenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,3,5-Trimethylbenzene	<0.001	<0.001	<0.002	<0.002	-	-	-

Leach Test Information

Date Prepared	10-Feb-2019
pH (pH Units)	8.19
Conductivity (µS/cm)	212.00
Temperature (ºC)	19.30
Volume Leachant (Litres)	0.348
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.177	**Natural Moisture Content (%)**	1.42
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	98.6
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19253903			
Sampled Date	22-Jan-2019			
Customer Sample Ref.	WS 45			
Depth (m)	0.30			

Solid Waste Analysis

Total Organic Carbon (%)	1.41	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.13	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
VOC MS (W)							
4-Chlorotoluene	<0.001	<0.001	<0.002	<0.002	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2,4-Trimethylbenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.002	<0.002	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.002	<0.002	-	-	-
Naphthalene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-

Leach Test Information

Date Prepared	10-Feb-2019
pH (pH Units)	8.19
Conductivity (µS/cm)	212.00
Temperature (ºC)	19.30
Volume Leachant (Litres)	0.348
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
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Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.092	**Natural Moisture Content (%)**	1.94
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	98.1
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19253918			
Sampled Date	18-Jan-2019			
Customer Sample Ref.	WS 16			
Depth (m)	1.20			

Solid Waste Analysis

Total Organic Carbon (%)	0.63	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<5	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.62	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
Arsenic	-	-	-	-	0.5	2	25
Barium	-	-	-	-	20	100	300
Cadmium	-	-	-	-	0.04	1	5
Chromium	-	-	-	-	0.5	10	70
Copper	-	-	-	-	2	50	100
Mercury Dissolved (CVAF)	-	-	-	-	0.01	0.2	2
Molybdenum	-	-	-	-	0.5	10	30
Nickel	-	-	-	-	0.4	10	40
Lead	-	-	-	-	0.5	10	50
Antimony	-	-	-	-	0.06	0.7	5
Selenium	-	-	-	-	0.1	0.5	7
Zinc	-	-	-	-	4	50	200
Chloride	-	-	-	-	800	15000	25000
Fluoride	-	-	-	-	10	150	500
Sulphate (soluble)	-	-	-	-	1000	20000	50000
Total Dissolved Solids	-	-	-	-	4000	60000	100000
Total Monohydric Phenols (W)	-	-	-	-	1	-	-
Dissolved Organic Carbon	-	-	-	-	500	800	1000

Leach Test Information

Date Prepared	10-Feb-2019
pH (pH Units)	
Conductivity (µS/cm)	
Temperature (ºC)	
Volume Leachant (Litres)	
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
20/03/2019 16:12:51

Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.201	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19257270			
Sampled Date	21-Jan-2019			
Customer Sample Ref.	WS35			
Depth (m)	0.40			

Solid Waste Analysis

Total Organic Carbon (%)	1.19	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<50	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.29	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
Arsenic	0.000676	<0.0005	0.00135	<0.001	0.5	2	25
Barium	-	-	-	-	20	100	300
Cadmium	<0.00008	<0.00008	<0.00016	<0.00016	0.04	1	5
Chromium	<0.001	<0.001	<0.002	<0.002	0.5	10	70
Copper	0.00663	<0.0003	0.0133	<0.0006	2	50	100
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.00002	<0.00002	0.01	0.2	2
Molybdenum	-	-	-	-	0.5	10	30
Nickel	0.000904	<0.0004	0.00181	<0.0008	0.4	10	40
Lead	<0.0002	<0.0002	<0.0004	<0.0004	0.5	10	50
Antimony	-	-	-	-	0.06	0.7	5
Selenium	<0.001	<0.001	<0.002	<0.002	0.1	0.5	7
Zinc	0.00504	<0.001	0.0101	<0.002	4	50	200
Chloride	<2	<2	<4	<4	800	15000	25000
Fluoride	<0.5	<0.5	<1	<1	10	150	500
Sulphate (soluble)	<2	<2	<4	<4	1000	20000	50000
Total Dissolved Solids	-	-	-	-	4000	60000	100000
Total Monohydric Phenols (W)	-	-	-	-	1	-	-
Dissolved Organic Carbon	5.96	<3	11.9	<6	500	800	1000

Leach Test Information

Date Prepared	12-Feb-2019
pH (pH Units)	7.77
Conductivity (µS/cm)	195.00
Temperature (°C)	18.10
Volume Leachant (Litres)	0.324
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.201	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19257270			
Sampled Date	21-Jan-2019			
Customer Sample Ref.	WS35			
Depth (m)	0.40			

Solid Waste Analysis

Total Organic Carbon (%)	1.19	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<50	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.29	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**Conc^n in 2:1 eluate (mg/l)**		**2:1 conc^n leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Aliphatics >C12-C16	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.02	<0.02	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC16-EC35	<0.01	<0.01	<0.02	<0.02	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.02	<0.02	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.02	<0.02	-	-	-
Ammoniacal Nitrogen as N	<0.2	<0.2	<0.4	<0.4	-	-	-
Conductivity (at 20 deg.C)	0.183	<0.000014	0.366	<0.000028	-	-	-
pH Value of Filtered Water	8.2	<0.001	16	<0.002	-	-	-
Phosphate (Ortho as PO4)	0.452	<0.05	0.904	<0.1	-	-	-
Sulphide	<0.01	<0.01	<0.02	<0.02	-	-	-
Naphthalene (diss.filt)	<0.00001	<0.00001	<0.00002	<0.00002	-	-	-
PCB congener 28	<0.000015	<0.000015	<0.00003	<0.00003	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.1	<0.1	-	-	-
Acenaphthene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
PCB congener 52	<0.000015	<0.000015	<0.00003	<0.00003	-	-	-
Phenol	<0.001	<0.001	<0.002	<0.002	-	-	-
2-methylphenol	<0.001	<0.001	<0.002	<0.002	-	-	-

Leach Test Information

Date Prepared	12-Feb-2019
pH (pH Units)	7.77
Conductivity (µS/cm)	195.00
Temperature (ºC)	18.10
Volume Leachant (Litres)	0.324
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
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Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.201	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19257270			
Sampled Date	21-Jan-2019			
Customer Sample Ref.	WS35			
Depth (m)	0.40			

Solid Waste Analysis

Total Organic Carbon (%)	1.19	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<50	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.29	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
Acenaphthylene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
Nitrate as NO3	10.8	<0.3	21.6	<0.6	-	-	-
PCB congener 101	<0.000015	<0.000015	<0.00003	<0.00003	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Fluoranthene (diss.filt)	0.0000261	<0.000005	0.0000522	<0.00001	-	-	-
PCB congener 118	<0.000015	<0.000015	<0.00003	<0.00003	-	-	-
4-methylphenol	<0.001	<0.001	<0.002	<0.002	-	-	-
Anthracene (diss.filt)	0.0000059	<0.000005	0.0000118	<0.00001	-	-	-
PCB congener 138	<0.000015	<0.000015	<0.00003	<0.00003	-	-	-
2-chlorophenol	<0.001	<0.001	<0.002	<0.002	-	-	-
Boron	<0.01	<0.01	<0.02	<0.02	-	-	-
PCB congener 153	<0.000015	<0.000015	<0.00003	<0.00003	-	-	-
Phenanthrene (diss.filt)	0.0000346	<0.000005	0.0000692	<0.00001	-	-	-
2,4-dimethylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Fluorene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
PCB congener 180	<0.000015	<0.000015	<0.00003	<0.00003	-	-	-
4-chloro-3-methylphenol	<0.001	<0.001	<0.002	<0.002	-	-	-
Chrysene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
Total of 7 Congener PCBs	<0.000105	<0.000105	<0.00021	<0.00021	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Pyrene (diss.filt)	0.0000163	<0.000005	0.0000326	<0.00001	-	-	-
4-chlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-

Leach Test Information

Date Prepared	12-Feb-2019
pH (pH Units)	7.77
Conductivity (µS/cm)	195.00
Temperature (ºC)	18.10
Volume Leachant (Litres)	0.324
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
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Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.201	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19257270			
Sampled Date	21-Jan-2019			
Customer Sample Ref.	WS35			
Depth (m)	0.40			

Solid Waste Analysis

Total Organic Carbon (%)	1.19	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<50	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.29	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**Concⁿ in 2:1 eluate (mg/l)**		**2:1 concⁿ leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Benzo(a)anthracene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2,4-dichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(b)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2-nitrophenol	<0.001	<0.001	<0.002	<0.002	-	-	-
Benzo(k)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2,4,6-trichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(a)pyrene (diss.filt)	<0.000002	<0.000002	<0.000004	<0.000004	-	-	-
2,4,5-trichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
4-nitrophenol	<0.001	<0.001	<0.002	<0.002	-	-	-
Benzo(g,h,i)perylene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2,3,5,6-tetrachlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2,3,4,6-tetrachlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.0000829	<0.000082	0.000166	<0.000164	-	-	-
2,4-Dinitrophenol	<0.0025	<0.0025	<0.005	<0.005	-	-	-
DNOC	<0.003	<0.003	<0.006	<0.006	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.002	<0.002	-	-	-
Dinoseb	<0.004	<0.004	<0.008	<0.008	-	-	-
Vanadium	0.00102	<0.001	0.00204	<0.002	-	-	-
SVOC MS (W) - Aqueous							
1,2,4-Trichlorobenzene	<0.01	<0.01	<0.02	<0.02	-	-	-
1,2-Dichlorobenzene	<0.01	<0.01	<0.02	<0.02	-	-	-

Leach Test Information

Date Prepared	12-Feb-2019
pH (pH Units)	7.77
Conductivity (µS/cm)	195.00
Temperature (ºC)	18.10
Volume Leachant (Litres)	0.324
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
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20/03/2019 16:12:51

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.201	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19257270			
Sampled Date	21-Jan-2019			
Customer Sample Ref.	WS35			
Depth (m)	0.40			

Solid Waste Analysis

Total Organic Carbon (%)	1.19	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<50	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.29	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
SVOC MS (W) - Aqueous							
1,3-Dichlorobenzene	<0.01	<0.01	<0.02	<0.02	-	-	-
1,4-Dichlorobenzene	<0.01	<0.01	<0.02	<0.02	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.002	<0.002	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.002	<0.002	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.002	<0.002	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.002	<0.002	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.002	<0.002	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.002	<0.002	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.002	<0.002	-	-	-
2-Chlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.002	<0.002	-	-	-
2-Methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.002	<0.002	-	-	-
2-Nitrophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.002	<0.002	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.002	<0.002	-	-	-
4-Chloro-3-methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.002	<0.002	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.002	<0.002	-	-	-
4-Methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.002	<0.002	-	-	-
4-Nitrophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-

Leach Test Information

Date Prepared	12-Feb-2019
pH (pH Units)	7.77
Conductivity (µS/cm)	195.00
Temperature (ºC)	18.10
Volume Leachant (Litres)	0.324
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.201	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19257270			
Sampled Date	21-Jan-2019			
Customer Sample Ref.	WS35			
Depth (m)	0.40			

Solid Waste Analysis

Total Organic Carbon (%)	1.19	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<50	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.29	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**Concⁿ in 2:1 eluate (mg/l)**		**2:1 concⁿ leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
Azobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.002	<0.002	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.002	<0.002	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.004	<0.004	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.002	<0.002	-	-	-
Carbazole	<0.001	<0.001	<0.002	<0.002	-	-	-
Dibenzofuran	<0.001	<0.001	<0.002	<0.002	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.002	<0.002	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.002	<0.002	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.002	<0.002	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.01	<0.01	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.002	<0.002	-	-	-
Pentachlorophenol	<0.002	<0.002	<0.004	<0.004	-	-	-
Phenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.002	<0.002	-	-	-
Hexachloroethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Nitrobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
Isophorone	<0.001	<0.001	<0.002	<0.002	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.002	<0.002	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	-	-	-	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.1	<0.1	-	-	-

Leach Test Information

Date Prepared	12-Feb-2019
pH (pH Units)	7.77
Conductivity (µS/cm)	195.00
Temperature (ºC)	18.10
Volume Leachant (Litres)	0.324
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
20/03/2019 16:12:51

Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.201	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19257270			
Sampled Date	21-Jan-2019			
Customer Sample Ref.	WS35			
Depth (m)	0.40			

Solid Waste Analysis

Total Organic Carbon (%)	1.19	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<50	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.29	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**Concⁿ in 2:1 eluate (mg/l)**		**2:1 concⁿ leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
TPH CWG (W)							
Aliphatics C5-C6	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.02	<0.02	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.006	<0.006	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.02	<0.02	-	-	-
Benzene by GC	<0.007	<0.007	<0.014	<0.014	-	-	-
Toluene by GC	<0.004	<0.004	<0.008	<0.008	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.01	<0.01	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.016	<0.016	-	-	-
o Xylene by GC	<0.003	<0.003	<0.006	<0.006	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.022	<0.022	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.056	<0.056	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	-	-	-	-	-	-
Toluene-d8	-	-	-	-	-	-	-
4-Bromofluorobenzene	-	-	-	-	-	-	-
Dichlorodifluoromethane	<0.01	<0.01	<0.02	<0.02	-	-	-
Chloromethane	<0.01	<0.01	<0.02	<0.02	-	-	-
Vinyl Chloride	<0.01	<0.01	<0.02	<0.02	-	-	-

Leach Test Information

Date Prepared	12-Feb-2019
pH (pH Units)	7.77
Conductivity (µS/cm)	195.00
Temperature (ºC)	18.10
Volume Leachant (Litres)	0.324
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.201	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19257270			
Sampled Date	21-Jan-2019			
Customer Sample Ref.	WS35			
Depth (m)	0.40			

Solid Waste Analysis

Total Organic Carbon (%)	1.19	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<50	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.29	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**Concⁿ in 2:1 eluate (mg/l)**		**2:1 concⁿ leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
Bromomethane	<0.01	<0.01	<0.02	<0.02	-	-	-
Chloroethane	<0.01	<0.01	<0.02	<0.02	-	-	-
Trichlorofluoromethane	<0.01	<0.01	<0.02	<0.02	-	-	-
1,1-Dichloroethene	<0.01	<0.01	<0.02	<0.02	-	-	-
Carbon Disulphide	<0.01	<0.01	<0.02	<0.02	-	-	-
Dichloromethane	<0.03	<0.03	<0.06	<0.06	-	-	-
Tert-butyl methyl ether	<0.01	<0.01	<0.02	<0.02	-	-	-
Trans-1,2-Dichloroethene	<0.01	<0.01	<0.02	<0.02	-	-	-
1,1-Dichloroethane	<0.01	<0.01	<0.02	<0.02	-	-	-
Cis-1,2-Dichloroethene	<0.01	<0.01	<0.02	<0.02	-	-	-
2,2-Dichloropropane	<0.01	<0.01	<0.02	<0.02	-	-	-
Bromochloromethane	<0.01	<0.01	<0.02	<0.02	-	-	-
Chloroform	<0.01	<0.01	<0.02	<0.02	-	-	-
1,1,1-Trichloroethane	<0.01	<0.01	<0.02	<0.02	-	-	-
1,1-Dichloropropene	<0.01	<0.01	<0.02	<0.02	-	-	-
Carbontetrachloride	<0.01	<0.01	<0.02	<0.02	-	-	-
1,2-Dichloroethane	<0.01	<0.01	<0.02	<0.02	-	-	-
Benzene	<0.01	<0.01	<0.02	<0.02	-	-	-
Trichloroethene	<0.01	<0.01	<0.02	<0.02	-	-	-
1,2-Dichloropropane	<0.01	<0.01	<0.02	<0.02	-	-	-
Dibromomethane	<0.01	<0.01	<0.02	<0.02	-	-	-
Bromodichloromethane	<0.01	<0.01	<0.02	<0.02	-	-	-

Leach Test Information

Date Prepared	12-Feb-2019
pH (pH Units)	7.77
Conductivity (µS/cm)	195.00
Temperature (ºC)	18.10
Volume Leachant (Litres)	0.324
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.201	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19257270			
Sampled Date	21-Jan-2019			
Customer Sample Ref.	WS35			
Depth (m)	0.40			

Solid Waste Analysis

Total Organic Carbon (%)	1.19	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<50	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.29	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**Concⁿ in 2:1 eluate (mg/l)**		**2:1 concⁿ leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
Cis-1,3-Dichloropropene	<0.01	<0.01	<0.02	<0.02	-	-	-
Toluene	<0.01	<0.01	<0.02	<0.02	-	-	-
Trans-1,3-Dichloropropene	<0.01	<0.01	<0.02	<0.02	-	-	-
1,1,2-Trichloroethane	<0.01	<0.01	<0.02	<0.02	-	-	-
1,3-Dichloropropane	<0.01	<0.01	<0.02	<0.02	-	-	-
Tetrachloroethene	<0.01	<0.01	<0.02	<0.02	-	-	-
Dibromochloromethane	<0.01	<0.01	<0.02	<0.02	-	-	-
1,2-Dibromoethane	<0.01	<0.01	<0.02	<0.02	-	-	-
Chlorobenzene	<0.01	<0.01	<0.02	<0.02	-	-	-
1,1,1,2-Tetrachloroethane	<0.01	<0.01	<0.02	<0.02	-	-	-
Ethylbenzene	<0.01	<0.01	<0.02	<0.02	-	-	-
p/m-Xylene	<0.01	<0.01	<0.02	<0.02	-	-	-
o-Xylene	<0.01	<0.01	<0.02	<0.02	-	-	-
Styrene	<0.01	<0.01	<0.02	<0.02	-	-	-
Bromoform	<0.01	<0.01	<0.02	<0.02	-	-	-
Isopropylbenzene	<0.01	<0.01	<0.02	<0.02	-	-	-
1,1,2,2-Tetrachloroethane	<0.01	<0.01	<0.02	<0.02	-	-	-
1,2,3-Trichloropropane	<0.01	<0.01	<0.02	<0.02	-	-	-
Bromobenzene	<0.01	<0.01	<0.02	<0.02	-	-	-
Propylbenzene	<0.01	<0.01	<0.02	<0.02	-	-	-
2-Chlorotoluene	<0.01	<0.01	<0.02	<0.02	-	-	-
1,3,5-Trimethylbenzene	<0.01	<0.01	<0.02	<0.02	-	-	-

Leach Test Information

Date Prepared	12-Feb-2019
pH (pH Units)	7.77
Conductivity (µS/cm)	195.00
Temperature (ºC)	18.10
Volume Leachant (Litres)	0.324
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.201	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19257270			
Sampled Date	21-Jan-2019			
Customer Sample Ref.	WS35			
Depth (m)	0.40			

Solid Waste Analysis

Total Organic Carbon (%)	1.19	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<50	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.29	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**Conc^n in 2:1 eluate (mg/l)**		**2:1 conc^n leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
4-Chlorotoluene	<0.01	<0.01	<0.02	<0.02	-	-	-
Tert-Butylbenzene	<0.01	<0.01	<0.02	<0.02	-	-	-
1,2,4-Trimethylbenzene	<0.01	<0.01	<0.02	<0.02	-	-	-
Sec-Butylbenzene	<0.01	<0.01	<0.02	<0.02	-	-	-
4-Isopropyltoluene	<0.01	<0.01	<0.02	<0.02	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
n-Butylbenzene	<0.01	<0.01	<0.02	<0.02	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2-Dibromo-3-Chloropropane	<0.01	<0.01	<0.02	<0.02	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
Hexachlorobutadiene	<0.01	<0.01	<0.02	<0.02	-	-	-
Tert-amyl methyl ether	<0.01	<0.01	<0.02	<0.02	-	-	-
Naphthalene	<0.01	<0.01	<0.02	<0.02	-	-	-
1,2,3-Trichlorobenzene	<0.01	<0.01	<0.02	<0.02	-	-	-
1,3,5-Trichlorobenzene	<0.01	<0.01	<0.02	<0.02	-	-	-

Leach Test Information

Date Prepared	12-Feb-2019
pH (pH Units)	7.77
Conductivity (µS/cm)	195.00
Temperature (ºC)	18.10
Volume Leachant (Litres)	0.324
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
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Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.203	**Natural Moisture Content (%)**	16.3
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	86
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19257296			
Sampled Date	21-Jan-2019			
Customer Sample Ref.	WS22			
Depth (m)	0.10 - 0.20			

Solid Waste Analysis

Total Organic Carbon (%)	0.465	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<5	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.37	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
Arsenic	0.000588	<0.0005	0.00118	<0.001	0.5	2	25
Barium	-	-	-	-	20	100	300
Cadmium	<0.00008	<0.00008	<0.00016	<0.00016	0.04	1	5
Chromium	<0.001	<0.001	<0.002	<0.002	0.5	10	70
Copper	0.00386	<0.0003	0.00772	<0.0006	2	50	100
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.00002	<0.00002	0.01	0.2	2
Molybdenum	-	-	-	-	0.5	10	30
Nickel	0.000767	<0.0004	0.00153	<0.0008	0.4	10	40
Lead	0.00056	<0.0002	0.00112	<0.0004	0.5	10	50
Antimony	-	-	-	-	0.06	0.7	5
Selenium	<0.001	<0.001	<0.002	<0.002	0.1	0.5	7
Zinc	0.00158	<0.001	0.00316	<0.002	4	50	200
Chloride	<2	<2	<4	<4	800	15000	25000
Fluoride	<0.5	<0.5	<1	<1	10	150	500
Sulphate (soluble)	<2	<2	<4	<4	1000	20000	50000
Total Dissolved Solids	-	-	-	-	4000	60000	100000
Total Monohydric Phenols (W)	-	-	-	-	1	-	-
Dissolved Organic Carbon	4.73	<3	9.46	<6	500	800	1000

Leach Test Information

Date Prepared	10-Feb-2019
pH (pH Units)	8.34
Conductivity (µS/cm)	273.00
Temperature (ºC)	19.10
Volume Leachant (Litres)	0.321
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
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Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.203	**Natural Moisture Content (%)**	16.3
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	86
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19257296			
Sampled Date	21-Jan-2019			
Customer Sample Ref.	WS22			
Depth (m)	0.10 - 0.20			

Solid Waste Analysis

Total Organic Carbon (%)	0.465	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<5	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.37	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
Aliphatics >C12-C16	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.02	<0.02	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC16-EC35	<0.01	<0.01	<0.02	<0.02	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.02	<0.02	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.02	<0.02	-	-	-
Ammoniacal Nitrogen as N	<0.2	<0.2	<0.4	<0.4	-	-	-
Conductivity (at 20 deg.C)	0.259	<0.000014	0.518	<0.000028	-	-	-
pH Value of Filtered Water	8.4	<0.001	17	<0.002	-	-	-
Phosphate (Ortho as PO4)	<0.05	<0.05	<0.1	<0.1	-	-	-
Sulphide	<0.01	<0.01	<0.02	<0.02	-	-	-
Naphthalene (diss.filt)	<0.00001	<0.00001	<0.00002	<0.00002	-	-	-
PCB congener 28	<0.000015	<0.000015	<0.00003	<0.00003	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.1	<0.1	-	-	-
Acenaphthene (diss.filt)	0.0000237	<0.000005	0.0000474	<0.00001	-	-	-
PCB congener 52	<0.000015	<0.000015	<0.00003	<0.00003	-	-	-
Phenol	<0.001	<0.001	<0.002	<0.002	-	-	-
2-methylphenol	<0.001	<0.001	<0.002	<0.002	-	-	-

Leach Test Information

Date Prepared	10-Feb-2019
pH (pH Units)	8.34
Conductivity (µS/cm)	273.00
Temperature (ºC)	19.10
Volume Leachant (Litres)	0.321
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
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Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.203	**Natural Moisture Content (%)**	16.3
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	86
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19257296			
Sampled Date	21-Jan-2019			
Customer Sample Ref.	WS22			
Depth (m)	0.10 - 0.20			

Solid Waste Analysis

Total Organic Carbon (%)	0.465	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<5	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.37	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
Acenaphthylene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
Nitrate as NO3	3.83	<0.3	7.66	<0.6	-	-	-
PCB congener 101	<0.000015	<0.000015	<0.00003	<0.00003	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Fluoranthene (diss.filt)	0.0000684	<0.000005	0.000137	<0.00001	-	-	-
PCB congener 118	<0.000015	<0.000015	<0.00003	<0.00003	-	-	-
4-methylphenol	<0.001	<0.001	<0.002	<0.002	-	-	-
Anthracene (diss.filt)	0.0000278	<0.000005	0.0000556	<0.00001	-	-	-
PCB congener 138	<0.000015	<0.000015	<0.00003	<0.00003	-	-	-
2-chlorophenol	<0.001	<0.001	<0.002	<0.002	-	-	-
Boron	0.0116	<0.01	0.0232	<0.02	-	-	-
PCB congener 153	<0.000015	<0.000015	<0.00003	<0.00003	-	-	-
Phenanthrene (diss.filt)	0.000182	<0.000005	0.000364	<0.00001	-	-	-
2,4-dimethylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Fluorene (diss.filt)	0.000033	<0.000005	0.000066	<0.00001	-	-	-
PCB congener 180	<0.000015	<0.000015	<0.00003	<0.00003	-	-	-
4-chloro-3-methylphenol	<0.001	<0.001	<0.002	<0.002	-	-	-
Chrysene (diss.filt)	0.00000649	<0.000005	0.000013	<0.00001	-	-	-
Total of 7 Congener PCBs	<0.000105	<0.000105	<0.00021	<0.00021	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Pyrene (diss.filt)	0.0000447	<0.000005	0.0000894	<0.00001	-	-	-
4-chlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-

Leach Test Information

Date Prepared	10-Feb-2019
pH (pH Units)	8.34
Conductivity (µS/cm)	273.00
Temperature (ºC)	19.10
Volume Leachant (Litres)	0.321
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.203	**Natural Moisture Content (%)**	16.3
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	86
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19257296			
Sampled Date	21-Jan-2019			
Customer Sample Ref.	WS22			
Depth (m)	0.10 - 0.20			

Solid Waste Analysis

Total Organic Carbon (%)	0.465	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<5	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.37	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**Concⁿ in 2:1 eluate (mg/l)**		**2:1 concⁿ leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Benzo(a)anthracene (diss.filt)	0.00000684	<0.000005	0.0000137	<0.00001	-	-	-
2,4-dichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(b)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2-nitrophenol	<0.001	<0.001	<0.002	<0.002	-	-	-
Benzo(k)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2,4,6-trichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(a)pyrene (diss.filt)	<0.000002	<0.000002	<0.000004	<0.000004	-	-	-
2,4,5-trichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
4-nitrophenol	<0.001	<0.001	<0.002	<0.002	-	-	-
Benzo(g,h,i)perylene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2,3,5,6-tetrachlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2,3,4,6-tetrachlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.000393	<0.000082	0.000786	<0.000164	-	-	-
2,4-Dinitrophenol	<0.0025	<0.0025	<0.005	<0.005	-	-	-
DNOC	<0.003	<0.003	<0.006	<0.006	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.002	<0.002	-	-	-
Dinoseb	<0.004	<0.004	<0.008	<0.008	-	-	-
Vanadium	<0.001	<0.001	<0.002	<0.002	-	-	-
SVOC MS (W) - Aqueous							
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-

Leach Test Information

Date Prepared	10-Feb-2019
pH (pH Units)	8.34
Conductivity (µS/cm)	273.00
Temperature (ºC)	19.10
Volume Leachant (Litres)	0.321
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.203	**Natural Moisture Content (%)**	16.3
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	86
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19257296			
Sampled Date	21-Jan-2019			
Customer Sample Ref.	WS22			
Depth (m)	0.10 - 0.20			

Solid Waste Analysis

Total Organic Carbon (%)	0.465	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<5	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.37	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**Concⁿ in 2:1 eluate (mg/l)**		**2:1 concⁿ leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
1,3-Dichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.002	<0.002	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.002	<0.002	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.002	<0.002	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.002	<0.002	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.002	<0.002	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.002	<0.002	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.002	<0.002	-	-	-
2-Chlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.002	<0.002	-	-	-
2-Methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.002	<0.002	-	-	-
2-Nitrophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.002	<0.002	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.002	<0.002	-	-	-
4-Chloro-3-methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.002	<0.002	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.002	<0.002	-	-	-
4-Methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.002	<0.002	-	-	-
4-Nitrophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-

Leach Test Information

Date Prepared	10-Feb-2019
pH (pH Units)	8.34
Conductivity (µS/cm)	273.00
Temperature (ºC)	19.10
Volume Leachant (Litres)	0.321
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
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Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.203	**Natural Moisture Content (%)**	16.3
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	86
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19257296			
Sampled Date	21-Jan-2019			
Customer Sample Ref.	WS22			
Depth (m)	0.10 - 0.20			

Solid Waste Analysis

Total Organic Carbon (%)	0.465	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<5	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.37	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**Conc^n in 2:1 eluate (mg/l)**		**2:1 conc^n leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
Azobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.002	<0.002	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.002	<0.002	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.004	<0.004	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.002	<0.002	-	-	-
Carbazole	<0.001	<0.001	<0.002	<0.002	-	-	-
Dibenzofuran	<0.001	<0.001	<0.002	<0.002	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.002	<0.002	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.002	<0.002	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.002	<0.002	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.01	<0.01	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.002	<0.002	-	-	-
Pentachlorophenol	<0.002	<0.002	<0.004	<0.004	-	-	-
Phenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.002	<0.002	-	-	-
Hexachloroethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Nitrobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
Isophorone	<0.001	<0.001	<0.002	<0.002	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.002	<0.002	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	-	-	-	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.1	<0.1	-	-	-

Leach Test Information

Date Prepared	10-Feb-2019
pH (pH Units)	8.34
Conductivity (µS/cm)	273.00
Temperature (ºC)	19.10
Volume Leachant (Litres)	0.321
Volume of Eluate VE1 (Litres)	

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20/03/2019 16:12:51

Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.203	**Natural Moisture Content (%)**	16.3
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	86
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19257296			
Sampled Date	21-Jan-2019			
Customer Sample Ref.	WS22			
Depth (m)	0.10 - 0.20			

Solid Waste Analysis

Total Organic Carbon (%)	0.465	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<5	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.37	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
TPH CWG (W)							
Aliphatics C5-C6	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.02	<0.02	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.006	<0.006	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.02	<0.02	-	-	-
Benzene by GC	<0.007	<0.007	<0.014	<0.014	-	-	-
Toluene by GC	<0.004	<0.004	<0.008	<0.008	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.01	<0.01	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.016	<0.016	-	-	-
o Xylene by GC	<0.003	<0.003	<0.006	<0.006	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.022	<0.022	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.056	<0.056	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	-	-	-	-	-	-
Toluene-d8	-	-	-	-	-	-	-
4-Bromofluorobenzene	-	-	-	-	-	-	-
Dichlorodifluoromethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Chloromethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.002	<0.002	-	-	-

Leach Test Information

Date Prepared	10-Feb-2019
pH (pH Units)	8.34
Conductivity (µS/cm)	273.00
Temperature (ºC)	19.10
Volume Leachant (Litres)	0.321
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.203	**Natural Moisture Content (%)**	16.3
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	86
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19257296			
Sampled Date	21-Jan-2019			
Customer Sample Ref.	WS22			
Depth (m)	0.10 - 0.20			

Solid Waste Analysis

Total Organic Carbon (%)	0.465	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<5	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.37	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Conc^n in 2:1 eluate (mg/l)		2:1 conc^n leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
VOC MS (W)							
Bromomethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Chloroethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.002	<0.002	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.002	<0.002	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.002	<0.002	-	-	-
Dichloromethane	<0.003	<0.003	<0.006	<0.006	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.002	<0.002	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.002	<0.002	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.002	<0.002	-	-	-
Bromochloromethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Chloroform	<0.001	<0.001	<0.002	<0.002	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.002	<0.002	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.002	<0.002	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Benzene	<0.001	<0.001	<0.002	<0.002	-	-	-
Trichloroethene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.002	<0.002	-	-	-
Dibromomethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.002	<0.002	-	-	-

Leach Test Information

Date Prepared	10-Feb-2019
pH (pH Units)	8.34
Conductivity (µS/cm)	273.00
Temperature (ºC)	19.10
Volume Leachant (Litres)	0.321
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.203	**Natural Moisture Content (%)**	16.3
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	86
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19257296			
Sampled Date	21-Jan-2019			
Customer Sample Ref.	WS22			
Depth (m)	0.10 - 0.20			

Solid Waste Analysis

Total Organic Carbon (%)	0.465	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<5	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.37	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**Conc^n in 2:1 eluate (mg/l)**		**2:1 conc^n leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.002	<0.002	-	-	-
Toluene	<0.001	<0.001	<0.002	<0.002	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.002	<0.002	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.002	<0.002	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.002	<0.002	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Chlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.002	<0.002	-	-	-
Ethylbenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
p/m-Xylene	<0.001	<0.001	<0.002	<0.002	-	-	-
o-Xylene	<0.001	<0.001	<0.002	<0.002	-	-	-
Styrene	<0.001	<0.001	<0.002	<0.002	-	-	-
Bromoform	<0.001	<0.001	<0.002	<0.002	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.002	<0.002	-	-	-
Bromobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
Propylbenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,3,5-Trimethylbenzene	<0.001	<0.001	<0.002	<0.002	-	-	-

Leach Test Information

Date Prepared	10-Feb-2019
pH (pH Units)	8.34
Conductivity (µS/cm)	273.00
Temperature (ºC)	19.10
Volume Leachant (Litres)	0.321
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.203	**Natural Moisture Content (%)**	16.3
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	86
Particle Size <4mm	>95%		

Case				
SDG	190201-81			
Lab Sample Number(s)	19257296			
Sampled Date	21-Jan-2019			
Customer Sample Ref.	WS22			
Depth (m)	0.10 - 0.20			

Solid Waste Analysis

Total Organic Carbon (%)	0.465	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<5	-	-	-
Sum of 7 PCBs (mg/kg)	<0.105	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.37	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Conc^n in 2:1 eluate (mg/l)		2:1 conc^n leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
VOC MS (W)							
4-Chlorotoluene	<0.001	<0.001	<0.002	<0.002	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2,4-Trimethylbenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.002	<0.002	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.002	<0.002	-	-	-
Naphthalene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.002	<0.002	-	-	-

Leach Test Information

Date Prepared	10-Feb-2019
pH (pH Units)	8.34
Conductivity (µS/cm)	273.00
Temperature (ºC)	19.10
Volume Leachant (Litres)	0.321
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.103	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253335
Sampled Date	23-Jan-2019
Customer Sample Ref.	WS 20
Depth (m)	1.50

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Aliphatics >C12-C16	<0.02	<0.02	<0.2	<0.2	-	-	-
Aliphatics >C16-C21	<0.02	<0.02	<0.2	<0.2	-	-	-
Aliphatics >C21-C35	<0.02	<0.02	<0.2	<0.2	-	-	-
Total Aliphatics >C12-C35	<0.02	<0.02	<0.2	<0.2	-	-	-
Aromatics >EC12-EC16	<0.02	<0.02	<0.2	<0.2	-	-	-
Aromatics >EC16-EC21	<0.02	<0.02	<0.2	<0.2	-	-	-
Aromatics >EC21-EC35	<0.02	<0.02	<0.2	<0.2	-	-	-
Aromatics >EC16-EC35	<0.02	<0.02	<0.2	<0.2	-	-	-
Total Aromatics >EC12-EC35	<0.02	<0.02	<0.2	<0.2	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
Conductivity (at 20 deg.C)	0.109	<0.000014	1.09	<0.00014	-	-	-
Fluoride	<0.5	<0.5	<5	<5	-	-	-
Sulphate (soluble)	<2	<2	<20	<20	-	-	-
Sulphide	<0.01	<0.01	<0.1	<0.1	-	-	-
Chloride	<2	<2	<20	<20	-	-	-
Dissolved Organic Carbon	5.18	<3	51.8	<30	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Phosphate (Ortho as P)	0.404	<0.02	4.04	<0.2	-	-	-
Naphthalene (diss.filt)	0.0000999	<0.00002	0.000999	<0.0002	-	-	-
PCB congener 28	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Acenaphthene (diss.filt)	0.0000253	<0.00001	0.000253	<0.0001	-	-	-
Arsenic	0.00275	<0.0005	0.0275	<0.005	-	-	-
PCB congener 52	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Acenaphthylene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Nitrate as NO3	4.97	<0.3	49.7	<3	-	-	-
PCB congener 101	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Fluoranthene (diss.filt)	0.0000284	<0.00001	0.000284	<0.0001	-	-	-
PCB congener 118	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Anthracene (diss.filt)	0.0000164	<0.00001	0.000164	<0.0001	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	7.88
Conductivity (µS/cm)	110.00
Temperature (ºC)	18.20
Volume Leachant (Litres)	0.887

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.103	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253335
Sampled Date	23-Jan-2019
Customer Sample Ref.	WS 20
Depth (m)	1.50

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
PCB congener 138	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
2-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Boron	0.0353	<0.01	0.353	<0.1	-	-	-
PCB congener 153	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenanthrene (diss.filt)	0.0000591	<0.00001	0.000591	<0.0001	-	-	-
2,4-dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Fluorene (diss.filt)	0.0000207	<0.00001	0.000207	<0.0001	-	-	-
PCB congener 180	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Total of 7 Congener PCBs	<0.000105	<0.000105	<0.00105	<0.00105	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Pyrene (diss.filt)	0.0000187	<0.00001	0.000187	<0.0001	-	-	-
4-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)anthracene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(b)fluoranthene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
2-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
2,4,6-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)pyrene (diss.filt)	<0.000004	<0.000004	<0.00004	<0.00004	-	-	-
Copper	0.00233	<0.0003	0.0233	<0.003	-	-	-
2,4,5-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Lead	<0.0002	<0.0002	<0.002	<0.002	-	-	-
4-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(g,h,i)perylene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
2,3,5,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
2,3,4,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.000268	<0.000164	0.00268	<0.00164	-	-	-
2,4-Dinitrophenol	<0.0025	<0.0025	<0.025	<0.025	-	-	-
Nickel	<0.0004	<0.0004	<0.004	<0.004	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	7.88
Conductivity (µS/cm)	110.00
Temperature (ºC)	18.20
Volume Leachant (Litres)	0.887

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.103	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253335
Sampled Date	23-Jan-2019
Customer Sample Ref.	WS 20
Depth (m)	1.50

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
DNOC	<0.003	<0.003	<0.03	<0.03	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Dinoseb	<0.004	<0.004	<0.04	<0.04	-	-	-
Vanadium	0.00197	<0.001	0.0197	<0.01	-	-	-
Zinc	0.0101	<0.001	0.101	<0.01	-	-	-
SVOC MS (W) - Aqueous							
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	7.88
Conductivity (µS/cm)	110.00
Temperature (ºC)	18.20
Volume Leachant (Litres)	0.887

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.103	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253335
Sampled Date	23-Jan-2019
Customer Sample Ref.	WS 20
Depth (m)	1.50

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.03	<0.03	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Benzene by GC	<0.007	<0.007	<0.07	<0.07	-	-	-
Toluene by GC	<0.004	<0.004	<0.04	<0.04	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.05	<0.05	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.08	<0.08	-	-	-
o Xylene by GC	<0.003	<0.003	<0.03	<0.03	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.11	<0.11	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.28	<0.28	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	<0	-	<0	-	-	-
Toluene-d8	-	<0	-	<0	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	7.88
Conductivity (µS/cm)	110.00
Temperature (ºC)	18.20
Volume Leachant (Litres)	0.887

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.103	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253335
Sampled Date	23-Jan-2019
Customer Sample Ref.	WS 20
Depth (m)	1.50

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
4-Bromofluorobenzene	-	<0	-	<0	-	-	-
Dichlorodifluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.01	<0.01	-	-	-
Dichloromethane	<0.003	<0.003	<0.03	<0.03	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroform	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chlorobenzene	0.00156	<0.001	0.0156	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	7.88
Conductivity (µS/cm)	110.00
Temperature (ºC)	18.20
Volume Leachant (Litres)	0.887

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.103	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253335
Sampled Date	23-Jan-2019
Customer Sample Ref.	WS 20
Depth (m)	1.50

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Styrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromoform	<0.001	<0.001	<0.01	<0.01	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Propylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	7.88
Conductivity (µS/cm)	110.00
Temperature (ºC)	18.20
Volume Leachant (Litres)	0.887

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.108	**Natural Moisture Content (%)**	20.5
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	83
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253338
Sampled Date	23-Jan-2019
Customer Sample Ref.	WS 25A
Depth (m)	0.30

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
Conductivity (at 20 deg.C)	0.125	<0.000014	1.25	<0.00014	-	-	-
Fluoride	<0.5	<0.5	<5	<5	-	-	-
Sulphate (soluble)	9.7	<2	97	<20	-	-	-
Sulphide	<0.01	<0.01	<0.1	<0.1	-	-	-
Chloride	2.4	<2	24	<20	-	-	-
Dissolved Organic Carbon	7.58	<3	75.8	<30	-	-	-
Mercury Dissolved (CVAF)	0.0000181	<0.00001	0.000181	<0.0001	-	-	-
Phosphate (Ortho as P)	0.217	<0.02	2.17	<0.2	-	-	-
Naphthalene (diss.filt)	0.0000232	<0.00001	0.000232	<0.0001	-	-	-
PCB congener 28	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Acenaphthene (diss.filt)	0.0000418	<0.000005	0.000418	<0.00005	-	-	-
Arsenic	0.00472	<0.0005	0.0472	<0.005	-	-	-
PCB congener 52	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Acenaphthylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Nitrate as NO3	5.92	<0.3	59.2	<3	-	-	-
PCB congener 101	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Fluoranthene (diss.filt)	0.00013	<0.000005	0.0013	<0.00005	-	-	-
PCB congener 118	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Anthracene (diss.filt)	0.0000461	<0.000005	0.000461	<0.00005	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.59
Conductivity (µS/cm)	122.00
Temperature (ºC)	18.60
Volume Leachant (Litres)	0.882

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.108	**Natural Moisture Content (%)**	20.5
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	83
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253338
Sampled Date	23-Jan-2019
Customer Sample Ref.	WS 25A
Depth (m)	0.30

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
PCB congener 138	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
2-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Boron	0.0256	<0.01	0.256	<0.1	-	-	-
PCB congener 153	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenanthrene (diss.filt)	0.000168	<0.000005	0.00168	<0.00005	-	-	-
2,4-dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Fluorene (diss.filt)	0.00003	<0.000005	0.0003	<0.00005	-	-	-
PCB congener 180	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene (diss.filt)	0.0000132	<0.000005	0.000132	<0.00005	-	-	-
Total of 7 Congener PCBs	<0.000105	<0.000105	<0.00105	<0.00105	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Pyrene (diss.filt)	0.000114	<0.000005	0.00114	<0.00005	-	-	-
4-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)anthracene (diss.filt)	0.00000977	<0.000005	0.0000977	<0.00005	-	-	-
Chromium	0.00211	<0.001	0.0211	<0.01	-	-	-
2,4-dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(b)fluoranthene (diss.filt)	0.0000159	<0.000005	0.000159	<0.00005	-	-	-
2-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene (diss.filt)	0.00000646	<0.000005	0.0000646	<0.00005	-	-	-
2,4,6-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)pyrene (diss.filt)	0.0000077	<0.000002	0.000077	<0.00002	-	-	-
Copper	0.00552	<0.0003	0.0552	<0.003	-	-	-
2,4,5-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Lead	0.000292	<0.0002	0.00292	<0.002	-	-	-
4-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(g,h,i)perylene (diss.filt)	0.00000777	<0.000005	0.0000777	<0.00005	-	-	-
2,3,5,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	0.00000993	<0.000005	0.0000993	<0.00005	-	-	-
2,3,4,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.000624	<0.000082	0.00624	<0.00082	-	-	-
2,4-Dinitrophenol	<0.0025	<0.0025	<0.025	<0.025	-	-	-
Nickel	0.0011	<0.0004	0.011	<0.004	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.59
Conductivity (µS/cm)	122.00
Temperature (°C)	18.60
Volume Leachant (Litres)	0.882

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.108	**Natural Moisture Content (%)**	20.5
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	83
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253338
Sampled Date	23-Jan-2019
Customer Sample Ref.	WS 25A
Depth (m)	0.30

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
DNOC	<0.003	<0.003	<0.03	<0.03	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Dinoseb	<0.004	<0.004	<0.04	<0.04	-	-	-
Vanadium	0.00912	<0.001	0.0912	<0.01	-	-	-
Zinc	0.00175	<0.001	0.0175	<0.01	-	-	-
SVOC MS (W) - Aqueous							
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.59
Conductivity (µS/cm)	122.00
Temperature (°C)	18.60
Volume Leachant (Litres)	0.882

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.108	**Natural Moisture Content (%)**	20.5
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	83
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253338
Sampled Date	23-Jan-2019
Customer Sample Ref.	WS 25A
Depth (m)	0.30

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.03	<0.03	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Benzene by GC	<0.007	<0.007	<0.07	<0.07	-	-	-
Toluene by GC	<0.004	<0.004	<0.04	<0.04	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.05	<0.05	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.08	<0.08	-	-	-
o Xylene by GC	<0.003	<0.003	<0.03	<0.03	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.11	<0.11	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.28	<0.28	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	<0	-	<0	-	-	-
Toluene-d8	-	<0	-	<0	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.59
Conductivity (µS/cm)	122.00
Temperature (ºC)	18.60
Volume Leachant (Litres)	0.882

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.108	**Natural Moisture Content (%)**	20.5
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	83
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253338
Sampled Date	23-Jan-2019
Customer Sample Ref.	WS 25A
Depth (m)	0.30

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
4-Bromofluorobenzene	-	<0	-	<0	-	-	-
Dichlorodifluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.01	<0.01	-	-	-
Dichloromethane	<0.003	<0.003	<0.03	<0.03	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroform	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chlorobenzene	0.00146	<0.001	0.0146	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.59
Conductivity (µS/cm)	122.00
Temperature (ºC)	18.60
Volume Leachant (Litres)	0.882

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.108	**Natural Moisture Content (%)**	20.5
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	83
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253338
Sampled Date	23-Jan-2019
Customer Sample Ref.	WS 25A
Depth (m)	0.30

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Styrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromoform	<0.001	<0.001	<0.01	<0.01	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Propylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.59
Conductivity (µS/cm)	122.00
Temperature (°C)	18.60
Volume Leachant (Litres)	0.882

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.095	**Natural Moisture Content (%)**	5.04
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	95.2
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253578
Sampled Date	18-Jan-2019
Customer Sample Ref.	WS 41
Depth (m)	1.00

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
Conductivity (at 20 deg.C)	0.1	<0.000014	1	<0.00014	-	-	-
Fluoride	<0.5	<0.5	<5	<5	-	-	-
Sulphate (soluble)	<2	<2	<20	<20	-	-	-
Sulphide	<0.01	<0.01	<0.1	<0.1	-	-	-
Chloride	<2	<2	<20	<20	-	-	-
Dissolved Organic Carbon	6.17	<3	61.7	<30	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Phosphate (Ortho as P)	<0.02	<0.02	<0.2	<0.2	-	-	-
Naphthalene (diss.filt)	0.0000179	<0.00001	0.000179	<0.0001	-	-	-
PCB congener 28	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Acenaphthene (diss.filt)	0.0000119	<0.000005	0.000119	<0.00005	-	-	-
Arsenic	<0.0005	<0.0005	<0.005	<0.005	-	-	-
PCB congener 52	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Acenaphthylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Nitrate as NO3	2.7	<0.3	27	<3	-	-	-
PCB congener 101	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Fluoranthene (diss.filt)	0.000033	<0.000005	0.00033	<0.00005	-	-	-
PCB congener 118	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Anthracene (diss.filt)	0.0000236	<0.000005	0.000236	<0.00005	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.44
Conductivity (µS/cm)	96.30
Temperature (ºC)	18.60
Volume Leachant (Litres)	0.895

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.095	**Natural Moisture Content (%)**	5.04
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	95.2
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253578
Sampled Date	18-Jan-2019
Customer Sample Ref.	WS 41
Depth (m)	1.00

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
PCB congener 138	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
2-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Boron	0.0311	<0.01	0.311	<0.1	-	-	-
PCB congener 153	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenanthrene (diss.filt)	0.0000818	<0.000005	0.000818	<0.00005	-	-	-
2,4-dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Fluorene (diss.filt)	0.0000149	<0.000005	0.000149	<0.00005	-	-	-
PCB congener 180	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Total of 7 Congener PCBs	<0.000105	<0.000105	<0.00105	<0.00105	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Pyrene (diss.filt)	0.0000238	<0.000005	0.000238	<0.00005	-	-	-
4-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(b)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,4,6-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)pyrene (diss.filt)	<0.000002	<0.000002	<0.00002	<0.00002	-	-	-
Copper	0.00253	<0.0003	0.0253	<0.003	-	-	-
2,4,5-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Lead	<0.0002	<0.0002	<0.002	<0.002	-	-	-
4-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(g,h,i)perylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,3,5,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,3,4,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.000207	<0.000082	0.00207	<0.00082	-	-	-
2,4-Dinitrophenol	<0.0025	<0.0025	<0.025	<0.025	-	-	-
Nickel	0.000593	<0.0004	0.00593	<0.004	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.44
Conductivity (µS/cm)	96.30
Temperature (°C)	18.60
Volume Leachant (Litres)	0.895

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.095	**Natural Moisture Content (%)**	5.04
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	95.2
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253578
Sampled Date	18-Jan-2019
Customer Sample Ref.	WS 41
Depth (m)	1.00

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
DNOC	<0.003	<0.003	<0.03	<0.03	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Dinoseb	<0.004	<0.004	<0.04	<0.04	-	-	-
Vanadium	<0.001	<0.001	<0.01	<0.01	-	-	-
Zinc	0.0147	<0.001	0.147	<0.01	-	-	-
SVOC MS (W) - Aqueous							
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.44
Conductivity (µS/cm)	96.30
Temperature (°C)	18.60
Volume Leachant (Litres)	0.895

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.095	**Natural Moisture Content (%)**	5.04
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	95.2
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253578
Sampled Date	18-Jan-2019
Customer Sample Ref.	WS 41
Depth (m)	1.00

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.03	<0.03	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Benzene by GC	<0.007	<0.007	<0.07	<0.07	-	-	-
Toluene by GC	<0.004	<0.004	<0.04	<0.04	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.05	<0.05	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.08	<0.08	-	-	-
o Xylene by GC	<0.003	<0.003	<0.03	<0.03	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.11	<0.11	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.28	<0.28	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	<0	-	<0	-	-	-
Toluene-d8	-	<0	-	<0	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.44
Conductivity (µS/cm)	96.30
Temperature (ºC)	18.60
Volume Leachant (Litres)	0.895

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.095	**Natural Moisture Content (%)**	5.04
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	95.2
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253578
Sampled Date	18-Jan-2019
Customer Sample Ref.	WS 41
Depth (m)	1.00

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
4-Bromofluorobenzene	-	<0	-	<0	-	-	-
Dichlorodifluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.01	<0.01	-	-	-
Dichloromethane	<0.003	<0.003	<0.03	<0.03	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroform	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chlorobenzene	0.00129	<0.001	0.0129	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.44
Conductivity (µS/cm)	96.30
Temperature (ºC)	18.60
Volume Leachant (Litres)	0.895

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.095	**Natural Moisture Content (%)**	5.04
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	95.2
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253578
Sampled Date	18-Jan-2019
Customer Sample Ref.	WS 41
Depth (m)	1.00

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Styrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromoform	<0.001	<0.001	<0.01	<0.01	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Propylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.44
Conductivity (µS/cm)	96.30
Temperature (ºC)	18.60
Volume Leachant (Litres)	0.895

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.098	**Natural Moisture Content (%)**	9.05
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	91.7
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253588
Sampled Date	22-Jan-2019
Customer Sample Ref.	WS 43
Depth (m)	0.50

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
Conductivity (at 20 deg.C)	0.097	<0.000014	0.97	<0.00014	-	-	-
Fluoride	<0.5	<0.5	<5	<5	-	-	-
Sulphate (soluble)	9.2	<2	92	<20	-	-	-
Sulphide	<0.01	<0.01	<0.1	<0.1	-	-	-
Chloride	<2	<2	<20	<20	-	-	-
Dissolved Organic Carbon	3.96	<3	39.6	<30	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Phosphate (Ortho as P)	0.0679	<0.02	0.679	<0.2	-	-	-
Naphthalene (diss.filt)	0.000011	<0.00001	0.00011	<0.0001	-	-	-
PCB congener 28	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Acenaphthene (diss.filt)	0.000103	<0.000005	0.00103	<0.00005	-	-	-
Arsenic	0.0127	<0.0005	0.127	<0.005	-	-	-
PCB congener 52	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Acenaphthylene (diss.filt)	0.00000947	<0.000005	0.0000947	<0.00005	-	-	-
Nitrate as NO3	0.51	<0.3	5.1	<3	-	-	-
PCB congener 101	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Fluoranthene (diss.filt)	0.000396	<0.000005	0.00396	<0.00005	-	-	-
PCB congener 118	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Anthracene (diss.filt)	0.0000282	<0.000005	0.000282	<0.00005	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.72
Conductivity (µS/cm)	92.40
Temperature (ºC)	18.80
Volume Leachant (Litres)	0.892

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.098	**Natural Moisture Content (%)**	9.05
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	91.7
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253588
Sampled Date	22-Jan-2019
Customer Sample Ref.	WS 43
Depth (m)	0.50

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
PCB congener 138	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
2-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Boron	<0.01	<0.01	<0.1	<0.1	-	-	-
PCB congener 153	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenanthrene (diss.filt)	0.0000937	<0.000005	0.000937	<0.00005	-	-	-
2,4-dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Fluorene (diss.filt)	0.0000237	<0.000005	0.000237	<0.00005	-	-	-
PCB congener 180	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene (diss.filt)	0.0000464	<0.000005	0.000464	<0.00005	-	-	-
Total of 7 Congener PCBs	<0.000105	<0.000105	<0.00105	<0.00105	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Pyrene (diss.filt)	0.000321	<0.000005	0.00321	<0.00005	-	-	-
4-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)anthracene (diss.filt)	0.000049	<0.000005	0.00049	<0.00005	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(b)fluoranthene (diss.filt)	0.0000602	<0.000005	0.000602	<0.00005	-	-	-
2-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene (diss.filt)	0.0000365	<0.000005	0.000365	<0.00005	-	-	-
2,4,6-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)pyrene (diss.filt)	0.000047	<0.000002	0.00047	<0.00002	-	-	-
Copper	0.00153	<0.0003	0.0153	<0.003	-	-	-
2,4,5-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	0.0000106	<0.000005	0.000106	<0.00005	-	-	-
Lead	<0.0002	<0.0002	<0.002	<0.002	-	-	-
4-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(g,h,i)perylene (diss.filt)	0.0000504	<0.000005	0.000504	<0.00005	-	-	-
2,3,5,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	0.0000295	<0.000005	0.000295	<0.00005	-	-	-
2,3,4,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.00132	<0.000082	0.0132	<0.00082	-	-	-
2,4-Dinitrophenol	<0.0025	<0.0025	<0.025	<0.025	-	-	-
Nickel	<0.0004	<0.0004	<0.004	<0.004	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.72
Conductivity (µS/cm)	92.40
Temperature (°C)	18.80
Volume Leachant (Litres)	0.892

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.098	**Natural Moisture Content (%)**	9.05
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	91.7
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253588
Sampled Date	22-Jan-2019
Customer Sample Ref.	WS 43
Depth (m)	0.50

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
DNOC	<0.003	<0.003	<0.03	<0.03	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Dinoseb	<0.004	<0.004	<0.04	<0.04	-	-	-
Vanadium	<0.001	<0.001	<0.01	<0.01	-	-	-
Zinc	<0.001	<0.001	<0.01	<0.01	-	-	-
SVOC MS (W) - Aqueous							
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.72
Conductivity (µS/cm)	92.40
Temperature (°C)	18.80
Volume Leachant (Litres)	0.892

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.098	**Natural Moisture Content (%)**	9.05
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	91.7
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253588
Sampled Date	22-Jan-2019
Customer Sample Ref.	WS 43
Depth (m)	0.50

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.03	<0.03	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Benzene by GC	<0.007	<0.007	<0.07	<0.07	-	-	-
Toluene by GC	<0.004	<0.004	<0.04	<0.04	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.05	<0.05	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.08	<0.08	-	-	-
o Xylene by GC	<0.003	<0.003	<0.03	<0.03	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.11	<0.11	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.28	<0.28	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	<0	-	<0	-	-	-
Toluene-d8	-	<0	-	<0	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.72
Conductivity (µS/cm)	92.40
Temperature (ºC)	18.80
Volume Leachant (Litres)	0.892

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.098	**Natural Moisture Content (%)**	9.05
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	91.7
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253588
Sampled Date	22-Jan-2019
Customer Sample Ref.	WS 43
Depth (m)	0.50

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
4-Bromofluorobenzene	-	<0	-	<0	-	-	-
Dichlorodifluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.01	<0.01	-	-	-
Dichloromethane	<0.003	<0.003	<0.03	<0.03	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroform	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chlorobenzene	0.00117	<0.001	0.0117	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.72
Conductivity (µS/cm)	92.40
Temperature (ºC)	18.80
Volume Leachant (Litres)	0.892

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.098	**Natural Moisture Content (%)**	9.05
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	91.7
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253588
Sampled Date	22-Jan-2019
Customer Sample Ref.	WS 43
Depth (m)	0.50

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Styrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromoform	<0.001	<0.001	<0.01	<0.01	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Propylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.72
Conductivity (µS/cm)	92.40
Temperature (°C)	18.80
Volume Leachant (Litres)	0.892

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.092	**Natural Moisture Content (%)**	2.46
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	97.6
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253590
Sampled Date	24-Jan-2019
Customer Sample Ref.	WS 28
Depth (m)	0.30

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
Conductivity (at 20 deg.C)	0.0897	<0.000014	0.897	<0.00014	-	-	-
Fluoride	<0.5	<0.5	<5	<5	-	-	-
Sulphate (soluble)	<2	<2	<20	<20	-	-	-
Sulphide	<0.01	<0.01	<0.1	<0.1	-	-	-
Chloride	<2	<2	<20	<20	-	-	-
Dissolved Organic Carbon	6.13	<3	61.3	<30	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Phosphate (Ortho as P)	0.0728	<0.02	0.728	<0.2	-	-	-
Naphthalene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
PCB congener 28	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Total Cyanide (W)	0.069	<0.05	0.69	<0.5	-	-	-
Acenaphthene (diss.filt)	0.00256	<0.000005	0.0256	<0.00005	-	-	-
Arsenic	0.00195	<0.0005	0.0195	<0.005	-	-	-
PCB congener 52	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Acenaphthylene (diss.filt)	0.0000761	<0.000005	0.000761	<0.00005	-	-	-
Nitrate as NO3	1.28	<0.3	12.8	<3	-	-	-
PCB congener 101	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Fluoranthene (diss.filt)	0.00617	<0.000005	0.0617	<0.00005	-	-	-
PCB congener 118	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Anthracene (diss.filt)	0.000421	<0.000005	0.00421	<0.00005	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.34
Conductivity (µS/cm)	90.00
Temperature (ºC)	18.10
Volume Leachant (Litres)	0.898

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.092	**Natural Moisture Content (%)**	2.46
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	97.6
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253590
Sampled Date	24-Jan-2019
Customer Sample Ref.	WS 28
Depth (m)	0.30

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
PCB congener 138	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
2-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Boron	0.0522	<0.01	0.522	<0.1	-	-	-
PCB congener 153	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenanthrene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,4-dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Fluorene (diss.filt)	0.000345	<0.000005	0.00345	<0.00005	-	-	-
PCB congener 180	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene (diss.filt)	0.000232	<0.000005	0.00232	<0.00005	-	-	-
Total of 7 Congener PCBs	<0.000105	<0.000105	<0.00105	<0.00105	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Pyrene (diss.filt)	0.00363	<0.000005	0.0363	<0.00005	-	-	-
4-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)anthracene (diss.filt)	0.000297	<0.000005	0.00297	<0.00005	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(b)fluoranthene (diss.filt)	0.00016	<0.000005	0.0016	<0.00005	-	-	-
2-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene (diss.filt)	0.0000701	<0.000005	0.000701	<0.00005	-	-	-
2,4,6-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)pyrene (diss.filt)	0.0000831	<0.000002	0.000831	<0.00002	-	-	-
Copper	0.00501	<0.0003	0.0501	<0.003	-	-	-
2,4,5-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	0.0000183	<0.000005	0.000183	<0.00005	-	-	-
Lead	<0.0002	<0.0002	<0.002	<0.002	-	-	-
4-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(g,h,i)perylene (diss.filt)	0.0000628	<0.000005	0.000628	<0.00005	-	-	-
2,3,5,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	0.0000474	<0.000005	0.000474	<0.00005	-	-	-
2,3,4,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.0142	<0.000082	0.142	<0.00082	-	-	-
2,4-Dinitrophenol	<0.0025	<0.0025	<0.025	<0.025	-	-	-
Nickel	<0.0004	<0.0004	<0.004	<0.004	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.34
Conductivity (µS/cm)	90.00
Temperature (°C)	18.10
Volume Leachant (Litres)	0.898

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.092	**Natural Moisture Content (%)**	2.46
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	97.6
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253590
Sampled Date	24-Jan-2019
Customer Sample Ref.	WS 28
Depth (m)	0.30

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
DNOC	<0.003	<0.003	<0.03	<0.03	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Dinoseb	<0.004	<0.004	<0.04	<0.04	-	-	-
Vanadium	0.00508	<0.001	0.0508	<0.01	-	-	-
Zinc	0.00436	<0.001	0.0436	<0.01	-	-	-
SVOC MS (W) - Aqueous							
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.34
Conductivity (µS/cm)	90.00
Temperature (°C)	18.10
Volume Leachant (Litres)	0.898

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.092	**Natural Moisture Content (%)**	2.46
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	97.6
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253590
Sampled Date	24-Jan-2019
Customer Sample Ref.	WS 28
Depth (m)	0.30

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.03	<0.03	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Benzene by GC	<0.007	<0.007	<0.07	<0.07	-	-	-
Toluene by GC	<0.004	<0.004	<0.04	<0.04	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.05	<0.05	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.08	<0.08	-	-	-
o Xylene by GC	<0.003	<0.003	<0.03	<0.03	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.11	<0.11	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.28	<0.28	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	<0	-	<0	-	-	-
Toluene-d8	-	<0	-	<0	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.34
Conductivity (µS/cm)	90.00
Temperature (ºC)	18.10
Volume Leachant (Litres)	0.898

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.092	**Natural Moisture Content (%)**	2.46
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	97.6
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253590
Sampled Date	24-Jan-2019
Customer Sample Ref.	WS 28
Depth (m)	0.30

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
4-Bromofluorobenzene	-	<0	-	<0	-	-	-
Dichlorodifluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.01	<0.01	-	-	-
Dichloromethane	<0.003	<0.003	<0.03	<0.03	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroform	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.34
Conductivity (µS/cm)	90.00
Temperature (ºC)	18.10
Volume Leachant (Litres)	0.898

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.092	**Natural Moisture Content (%)**	2.46
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	97.6
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253590
Sampled Date	24-Jan-2019
Customer Sample Ref.	WS 28
Depth (m)	0.30

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Styrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromoform	<0.001	<0.001	<0.01	<0.01	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Propylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.34
Conductivity (µS/cm)	90.00
Temperature (°C)	18.10
Volume Leachant (Litres)	0.898

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.092	**Natural Moisture Content (%)**	2.46
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	97.6
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253596
Sampled Date	24-Jan-2019
Customer Sample Ref.	WS 40
Depth (m)	1.00

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Aliphatics >C12-C16	<0.02	<0.02	<0.2	<0.2	-	-	-
Aliphatics >C16-C21	<0.02	<0.02	<0.2	<0.2	-	-	-
Aliphatics >C21-C35	<0.02	<0.02	<0.2	<0.2	-	-	-
Total Aliphatics >C12-C35	<0.02	<0.02	<0.2	<0.2	-	-	-
Aromatics >EC12-EC16	<0.02	<0.02	<0.2	<0.2	-	-	-
Aromatics >EC16-EC21	<0.02	<0.02	<0.2	<0.2	-	-	-
Aromatics >EC21-EC35	<0.02	<0.02	<0.2	<0.2	-	-	-
Aromatics >EC16-EC35	<0.02	<0.02	<0.2	<0.2	-	-	-
Total Aromatics >EC12-EC35	<0.02	<0.02	<0.2	<0.2	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
Conductivity (at 20 deg.C)	0.0872	<0.000014	0.872	<0.00014	-	-	-
Fluoride	<0.5	<0.5	<5	<5	-	-	-
Sulphate (soluble)	<2	<2	<20	<20	-	-	-
Sulphide	<0.01	<0.01	<0.1	<0.1	-	-	-
Chloride	<2	<2	<20	<20	-	-	-
Dissolved Organic Carbon	5.02	<3	50.2	<30	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Phosphate (Ortho as P)	0.97	<0.02	9.7	<0.2	-	-	-
Naphthalene (diss.filt)	0.0000321	<0.00002	0.000321	<0.0002	-	-	-
PCB congener 28	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Acenaphthene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Arsenic	0.00313	<0.0005	0.0313	<0.005	-	-	-
PCB congener 52	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Acenaphthylene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Nitrate as NO3	1.24	<0.3	12.4	<3	-	-	-
PCB congener 101	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Fluoranthene (diss.filt)	0.0000241	<0.00001	0.000241	<0.0001	-	-	-
PCB congener 118	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Anthracene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.00
Conductivity (µS/cm)	86.90
Temperature (ºC)	18.20
Volume Leachant (Litres)	0.898

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.092	**Natural Moisture Content (%)**	2.46
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	97.6
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253596
Sampled Date	24-Jan-2019
Customer Sample Ref.	WS 40
Depth (m)	1.00

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
PCB congener 138	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
2-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Boron	0.0122	<0.01	0.122	<0.1	-	-	-
PCB congener 153	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenanthrene (diss.filt)	0.000049	<0.00001	0.00049	<0.0001	-	-	-
2,4-dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Fluorene (diss.filt)	0.0000101	<0.00001	0.000101	<0.0001	-	-	-
PCB congener 180	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Total of 7 Congener PCBs	<0.000105	<0.000105	<0.00105	<0.00105	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Pyrene (diss.filt)	0.0000155	<0.00001	0.000155	<0.0001	-	-	-
4-chlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(a)anthracene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(b)fluoranthene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
2-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
2,4,6-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)pyrene (diss.filt)	<0.000004	<0.000004	<0.00004	<0.00004	-	-	-
Copper	0.00344	<0.0003	0.0344	<0.003	-	-	-
2,4,5-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Lead	0.00397	<0.0002	0.0397	<0.002	-	-	-
4-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(g,h,i)perylene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
2,3,5,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
2,3,4,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	<0.000164	<0.000164	<0.00164	<0.00164	-	-	-
2,4-Dinitrophenol	<0.0025	<0.0025	<0.025	<0.025	-	-	-
Nickel	0.000773	<0.0004	0.00773	<0.004	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.00
Conductivity (µS/cm)	86.90
Temperature (°C)	18.20
Volume Leachant (Litres)	0.898

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.092	**Natural Moisture Content (%)**	2.46
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	97.6
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253596
Sampled Date	24-Jan-2019
Customer Sample Ref.	WS 40
Depth (m)	1.00

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
DNOC	<0.003	<0.003	<0.03	<0.03	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Dinoseb	<0.004	<0.004	<0.04	<0.04	-	-	-
Vanadium	0.00254	<0.001	0.0254	<0.01	-	-	-
Zinc	0.00135	<0.001	0.0135	<0.01	-	-	-
SVOC MS (W) - Aqueous							
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.00
Conductivity (µS/cm)	86.90
Temperature (ºC)	18.20
Volume Leachant (Litres)	0.898

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.092	**Natural Moisture Content (%)**	2.46
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	97.6
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253596
Sampled Date	24-Jan-2019
Customer Sample Ref.	WS 40
Depth (m)	1.00

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.03	<0.03	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Benzene by GC	<0.007	<0.007	<0.07	<0.07	-	-	-
Toluene by GC	<0.004	<0.004	<0.04	<0.04	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.05	<0.05	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.08	<0.08	-	-	-
o Xylene by GC	<0.003	<0.003	<0.03	<0.03	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.11	<0.11	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.28	<0.28	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	<0	-	<0	-	-	-
Toluene-d8	-	<0	-	<0	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.00
Conductivity (µS/cm)	86.90
Temperature (ºC)	18.20
Volume Leachant (Litres)	0.898

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.092	**Natural Moisture Content (%)**	2.46
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	97.6
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253596
Sampled Date	24-Jan-2019
Customer Sample Ref.	WS 40
Depth (m)	1.00

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
4-Bromofluorobenzene	-	<0	-	<0	-	-	-
Dichlorodifluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.01	<0.01	-	-	-
Dichloromethane	<0.003	<0.003	<0.03	<0.03	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroform	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.00
Conductivity (µS/cm)	86.90
Temperature (°C)	18.20
Volume Leachant (Litres)	0.898

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.092	**Natural Moisture Content (%)**	2.46
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	97.6
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253596
Sampled Date	24-Jan-2019
Customer Sample Ref.	WS 40
Depth (m)	1.00

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Styrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromoform	<0.001	<0.001	<0.01	<0.01	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Propylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.00
Conductivity (µS/cm)	86.90
Temperature (°C)	18.20
Volume Leachant (Litres)	0.898

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.095	**Natural Moisture Content (%)**	4.93
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	95.3
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253912
Sampled Date	18-Jan-2019
Customer Sample Ref.	WS 07
Depth (m)	0.30 - 0.30

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
Conductivity (at 20 deg.C)	0.0517	<0.000014	0.517	<0.00014	-	-	-
Fluoride	<0.5	<0.5	<5	<5	-	-	-
Sulphate (soluble)	3.3	<2	33	<20	-	-	-
Sulphide	<0.01	<0.01	<0.1	<0.1	-	-	-
Chloride	<2	<2	<20	<20	-	-	-
Dissolved Organic Carbon	<3	<3	<30	<30	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Phosphate (Ortho as P)	<0.02	<0.02	<0.2	<0.2	-	-	-
Naphthalene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
PCB congener 28	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Acenaphthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Arsenic	0.00298	<0.0005	0.0298	<0.005	-	-	-
PCB congener 52	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Acenaphthylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Nitrate as NO3	<0.3	<0.3	<3	<3	-	-	-
PCB congener 101	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Fluoranthene (diss.filt)	0.0000278	<0.000005	0.000278	<0.00005	-	-	-
PCB congener 118	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Anthracene (diss.filt)	0.00000503	<0.000005	0.0000503	<0.00005	-	-	-

Leach Test Information

Date Prepared	14-Mar-2019
pH (pH Units)	8.00
Conductivity (µS/cm)	55.60
Temperature (ºC)	18.80
Volume Leachant (Litres)	0.896

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.095	**Natural Moisture Content (%)**	4.93
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	95.3
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253912
Sampled Date	18-Jan-2019
Customer Sample Ref.	WS 07
Depth (m)	0.30 - 0.30

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
PCB congener 138	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
2-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Boron	<0.01	<0.01	<0.1	<0.1	-	-	-
PCB congener 153	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenanthrene (diss.filt)	0.0000351	<0.000005	0.000351	<0.00005	-	-	-
2,4-dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Fluorene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
PCB congener 180	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Total of 7 Congener PCBs	<0.000105	<0.000105	<0.00105	<0.00105	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Pyrene (diss.filt)	0.0000203	<0.000005	0.000203	<0.00005	-	-	-
4-chlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(a)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Chromium	0.00225	<0.001	0.0225	<0.01	-	-	-
2,4-dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(b)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,4,6-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)pyrene (diss.filt)	<0.000002	<0.000002	<0.00002	<0.00002	-	-	-
Copper	<0.0003	<0.0003	<0.003	<0.003	-	-	-
2,4,5-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Lead	<0.0002	<0.0002	<0.002	<0.002	-	-	-
4-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(g,h,i)perylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,3,5,6-tetrachlorophenol	<0.0015	<0.0015	<0.015	<0.015	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,3,4,6-tetrachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.0000882	<0.000082	0.000882	<0.00082	-	-	-
2,4-Dinitrophenol	<0.0025	<0.0025	<0.025	<0.025	-	-	-
Nickel	<0.0004	<0.0004	<0.004	<0.004	-	-	-

Leach Test Information

Date Prepared	14-Mar-2019
pH (pH Units)	8.00
Conductivity (µS/cm)	55.60
Temperature (°C)	18.80
Volume Leachant (Litres)	0.896

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.095	**Natural Moisture Content (%)**	4.93
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	95.3
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253912
Sampled Date	18-Jan-2019
Customer Sample Ref.	WS 07
Depth (m)	0.30 - 0.30

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
DNOC	<0.003	<0.003	<0.03	<0.03	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Dinoseb	<0.004	<0.004	<0.04	<0.04	-	-	-
Vanadium	0.00463	<0.001	0.0463	<0.01	-	-	-
Zinc	0.0017	<0.001	0.017	<0.01	-	-	-
SVOC MS (W) - Aqueous							
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	14-Mar-2019
pH (pH Units)	8.00
Conductivity (µS/cm)	55.60
Temperature (°C)	18.80
Volume Leachant (Litres)	0.896

Mcerts Certification does not apply to leachates

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Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.095	**Natural Moisture Content (%)**	4.93
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	95.3
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253912
Sampled Date	18-Jan-2019
Customer Sample Ref.	WS 07
Depth (m)	0.30 - 0.30

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.03	<0.03	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Benzene by GC	<0.007	<0.007	<0.07	<0.07	-	-	-
Toluene by GC	<0.004	<0.004	<0.04	<0.04	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.05	<0.05	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.08	<0.08	-	-	-
o Xylene by GC	<0.003	<0.003	<0.03	<0.03	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.11	<0.11	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.28	<0.28	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	<0	-	<0	-	-	-
Toluene-d8	-	<0	-	<0	-	-	-

Leach Test Information

Date Prepared	14-Mar-2019
pH (pH Units)	8.00
Conductivity (µS/cm)	55.60
Temperature (ºC)	18.80
Volume Leachant (Litres)	0.896

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.095	**Natural Moisture Content (%)**	4.93
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	95.3
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253912
Sampled Date	18-Jan-2019
Customer Sample Ref.	WS 07
Depth (m)	0.30 - 0.30

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
4-Bromofluorobenzene	-	<0	-	<0	-	-	-
Dichlorodifluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.01	<0.01	-	-	-
Dichloromethane	<0.003	<0.003	<0.03	<0.03	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroform	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	14-Mar-2019
pH (pH Units)	8.00
Conductivity (µS/cm)	55.60
Temperature (°C)	18.80
Volume Leachant (Litres)	0.896

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.095	**Natural Moisture Content (%)**	4.93
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	95.3
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253912
Sampled Date	18-Jan-2019
Customer Sample Ref.	WS 07
Depth (m)	0.30 - 0.30

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Styrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromoform	<0.001	<0.001	<0.01	<0.01	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Propylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	14-Mar-2019
pH (pH Units)	8.00
Conductivity (µS/cm)	55.60
Temperature (ºC)	18.80
Volume Leachant (Litres)	0.896

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.092	**Natural Moisture Content (%)**	2.46
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	97.6
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253919
Sampled Date	18-Jan-2019
Customer Sample Ref.	WS 23
Depth (m)	0.20

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
Conductivity (at 20 deg.C)	0.0682	<0.000014	0.682	<0.00014	-	-	-
Fluoride	<0.5	<0.5	<5	<5	-	-	-
Sulphate (soluble)	11.3	<2	113	<20	-	-	-
Sulphide	<0.01	<0.01	<0.1	<0.1	-	-	-
Chloride	<2	<2	<20	<20	-	-	-
Dissolved Organic Carbon	3.12	<3	31.2	<30	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Phosphate (Ortho as P)	<0.02	<0.02	<0.2	<0.2	-	-	-
Naphthalene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
PCB congener 28	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Acenaphthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Arsenic	0.00416	<0.0005	0.0416	<0.005	-	-	-
PCB congener 52	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Acenaphthylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Nitrate as NO3	0.78	<0.3	7.8	<3	-	-	-
PCB congener 101	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Fluoranthene (diss.filt)	0.0000152	<0.000005	0.000152	<0.00005	-	-	-
PCB congener 118	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Anthracene (diss.filt)	0.00000662	<0.000005	0.0000662	<0.00005	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.99
Conductivity (µS/cm)	70.80
Temperature (ºC)	18.10
Volume Leachant (Litres)	0.898

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.092	**Natural Moisture Content (%)**	2.46
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	97.6
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253919
Sampled Date	18-Jan-2019
Customer Sample Ref.	WS 23
Depth (m)	0.20

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
PCB congener 138	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
2-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Boron	0.0237	<0.01	0.237	<0.1	-	-	-
PCB congener 153	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenanthrene (diss.filt)	0.0000213	<0.000005	0.000213	<0.00005	-	-	-
2,4-dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Fluorene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
PCB congener 180	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Total of 7 Congener PCBs	<0.000105	<0.000105	<0.00105	<0.00105	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Pyrene (diss.filt)	0.0000114	<0.000005	0.000114	<0.00005	-	-	-
4-chlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(a)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(b)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,4,6-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)pyrene (diss.filt)	<0.000002	<0.000002	<0.00002	<0.00002	-	-	-
Copper	0.00111	<0.0003	0.0111	<0.003	-	-	-
2,4,5-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Lead	<0.0002	<0.0002	<0.002	<0.002	-	-	-
4-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(g,h,i)perylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,3,5,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,3,4,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	<0.000082	<0.000082	<0.00082	<0.00082	-	-	-
2,4-Dinitrophenol	<0.0025	<0.0025	<0.025	<0.025	-	-	-
Nickel	<0.0004	<0.0004	<0.004	<0.004	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.99
Conductivity (µS/cm)	70.80
Temperature (°C)	18.10
Volume Leachant (Litres)	0.898

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.092	**Natural Moisture Content (%)**	2.46
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	97.6
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253919
Sampled Date	18-Jan-2019
Customer Sample Ref.	WS 23
Depth (m)	0.20

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
DNOC	<0.003	<0.003	<0.03	<0.03	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Dinoseb	<0.004	<0.004	<0.04	<0.04	-	-	-
Vanadium	0.00463	<0.001	0.0463	<0.01	-	-	-
Zinc	<0.001	<0.001	<0.01	<0.01	-	-	-
SVOC MS (W) - Aqueous							
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.99
Conductivity (µS/cm)	70.80
Temperature (ºC)	18.10
Volume Leachant (Litres)	0.898

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.092	**Natural Moisture Content (%)**	2.46
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	97.6
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253919
Sampled Date	18-Jan-2019
Customer Sample Ref.	WS 23
Depth (m)	0.20

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.03	<0.03	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Benzene by GC	<0.007	<0.007	<0.07	<0.07	-	-	-
Toluene by GC	<0.004	<0.004	<0.04	<0.04	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.05	<0.05	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.08	<0.08	-	-	-
o Xylene by GC	<0.003	<0.003	<0.03	<0.03	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.11	<0.11	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.28	<0.28	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	<0	-	<0	-	-	-
Toluene-d8	-	<0	-	<0	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.99
Conductivity (µS/cm)	70.80
Temperature (ºC)	18.10
Volume Leachant (Litres)	0.898

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.092	**Natural Moisture Content (%)**	2.46
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	97.6
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253919
Sampled Date	18-Jan-2019
Customer Sample Ref.	WS 23
Depth (m)	0.20

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
4-Bromofluorobenzene	-	<0	-	<0	-	-	-
Dichlorodifluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.01	<0.01	-	-	-
Dichloromethane	<0.003	<0.003	<0.03	<0.03	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroform	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chlorobenzene	0.00127	<0.001	0.0127	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.99
Conductivity (µS/cm)	70.80
Temperature (ºC)	18.10
Volume Leachant (Litres)	0.898

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.092	**Natural Moisture Content (%)**	2.46
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	97.6
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19253919
Sampled Date	18-Jan-2019
Customer Sample Ref.	WS 23
Depth (m)	0.20

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Styrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromoform	<0.001	<0.001	<0.01	<0.01	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Propylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.99
Conductivity (µS/cm)	70.80
Temperature (ºC)	18.10
Volume Leachant (Litres)	0.898

Mcerts Certification does not apply to leachates

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Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.103	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257263
Sampled Date	21-Jan-2019
Customer Sample Ref.	WS38
Depth (m)	0.20

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
Conductivity (at 20 deg.C)	0.0945	<0.000014	0.945	<0.00014	-	-	-
Fluoride	<0.5	<0.5	<5	<5	-	-	-
Sulphate (soluble)	3.1	<2	31	<20	-	-	-
Sulphide	<0.01	<0.01	<0.1	<0.1	-	-	-
Chloride	2.4	<2	24	<20	-	-	-
Dissolved Organic Carbon	<3	<3	<30	<30	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Phosphate (Ortho as P)	0.329	<0.02	3.29	<0.2	-	-	-
Naphthalene (diss.filt)	0.0000273	<0.00001	0.000273	<0.0001	-	-	-
PCB congener 28	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Acenaphthene (diss.filt)	0.000583	<0.000005	0.00583	<0.00005	-	-	-
Arsenic	0.01	<0.0005	0.1	<0.005	-	-	-
PCB congener 52	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Acenaphthylene (diss.filt)	0.000081	<0.000005	0.00081	<0.00005	-	-	-
Nitrate as NO3	1.24	<0.3	12.4	<3	-	-	-
PCB congener 101	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Fluoranthene (diss.filt)	0.00123	<0.000005	0.0123	<0.00005	-	-	-
PCB congener 118	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Anthracene (diss.filt)	0.000202	<0.000005	0.00202	<0.00005	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	9.08
Conductivity (µS/cm)	91.60
Temperature (ºC)	18.60
Volume Leachant (Litres)	0.887

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.103	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257263
Sampled Date	21-Jan-2019
Customer Sample Ref.	WS38
Depth (m)	0.20

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
PCB congener 138	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
2-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Boron	0.0153	<0.01	0.153	<0.1	-	-	-
PCB congener 153	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenanthrene (diss.filt)	0.0000291	<0.000005	0.000291	<0.00005	-	-	-
2,4-dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Fluorene (diss.filt)	0.000175	<0.000005	0.00175	<0.00005	-	-	-
PCB congener 180	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene (diss.filt)	0.000132	<0.000005	0.00132	<0.00005	-	-	-
Total of 7 Congener PCBs	<0.000105	<0.000105	<0.00105	<0.00105	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Pyrene (diss.filt)	0.00105	<0.000005	0.0105	<0.00005	-	-	-
4-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)anthracene (diss.filt)	0.000136	<0.000005	0.00136	<0.00005	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(b)fluoranthene (diss.filt)	0.00023	<0.000005	0.0023	<0.00005	-	-	-
2-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene (diss.filt)	0.0000936	<0.000005	0.000936	<0.00005	-	-	-
2,4,6-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)pyrene (diss.filt)	0.000184	<0.000002	0.00184	<0.00002	-	-	-
Copper	0.00308	<0.0003	0.0308	<0.003	-	-	-
2,4,5-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	0.0000307	<0.000005	0.000307	<0.00005	-	-	-
Lead	<0.0002	<0.0002	<0.002	<0.002	-	-	-
4-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(g,h,i)perylene (diss.filt)	0.000194	<0.000005	0.00194	<0.00005	-	-	-
2,3,5,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	0.000113	<0.000005	0.00113	<0.00005	-	-	-
2,3,4,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.00449	<0.000082	0.0449	<0.00082	-	-	-
2,4-Dinitrophenol	<0.0025	<0.0025	<0.025	<0.025	-	-	-
Nickel	0.000765	<0.0004	0.00765	<0.004	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	9.08
Conductivity (µS/cm)	91.60
Temperature (°C)	18.60
Volume Leachant (Litres)	0.887

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.103	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257263
Sampled Date	21-Jan-2019
Customer Sample Ref.	WS38
Depth (m)	0.20

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
DNOC	<0.003	<0.003	<0.03	<0.03	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Dinoseb	<0.004	<0.004	<0.04	<0.04	-	-	-
Vanadium	0.0146	<0.001	0.146	<0.01	-	-	-
Zinc	<0.001	<0.001	<0.01	<0.01	-	-	-
SVOC MS (W) - Aqueous							
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	9.08
Conductivity (µS/cm)	91.60
Temperature (ºC)	18.60
Volume Leachant (Litres)	0.887

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.103	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257263
Sampled Date	21-Jan-2019
Customer Sample Ref.	WS38
Depth (m)	0.20

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	Limit of Detection	Result	Limit of Detection			
SVOC MS (W) - Aqueous							
Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.03	<0.03	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Benzene by GC	<0.007	<0.007	<0.07	<0.07	-	-	-
Toluene by GC	<0.004	<0.004	<0.04	<0.04	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.05	<0.05	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.08	<0.08	-	-	-
o Xylene by GC	<0.003	<0.003	<0.03	<0.03	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.11	<0.11	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.28	<0.28	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	<0	-	<0	-	-	-
Toluene-d8	-	<0	-	<0	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	9.08
Conductivity (µS/cm)	91.60
Temperature (ºC)	18.60
Volume Leachant (Litres)	0.887

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.103	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257263
Sampled Date	21-Jan-2019
Customer Sample Ref.	WS38
Depth (m)	0.20

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
4-Bromofluorobenzene	-	<0	-	<0	-	-	-
Dichlorodifluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.01	<0.01	-	-	-
Dichloromethane	<0.003	<0.003	<0.03	<0.03	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroform	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chlorobenzene	0.00144	<0.001	0.0144	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	9.08
Conductivity (µS/cm)	91.60
Temperature (ºC)	18.60
Volume Leachant (Litres)	0.887

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.103	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257263
Sampled Date	21-Jan-2019
Customer Sample Ref.	WS38
Depth (m)	0.20

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Styrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromoform	<0.001	<0.001	<0.01	<0.01	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Propylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	9.08
Conductivity (µS/cm)	91.60
Temperature (ºC)	18.60
Volume Leachant (Litres)	0.887

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.096	**Natural Moisture Content (%)**	7.41
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	93.1
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257265
Sampled Date	21-Jan-2019
Customer Sample Ref.	WS38
Depth (m)	0.70

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
Conductivity (at 20 deg.C)	0.0706	<0.000014	0.706	<0.00014	-	-	-
Fluoride	<0.5	<0.5	<5	<5	-	-	-
Sulphate (soluble)	2.3	<2	23	<20	-	-	-
Sulphide	<0.01	<0.01	<0.1	<0.1	-	-	-
Chloride	3.3	<2	33	<20	-	-	-
Dissolved Organic Carbon	3.06	<3	30.6	<30	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Phosphate (Ortho as P)	0.0333	<0.02	0.333	<0.2	-	-	-
Naphthalene (diss.filt)	0.0000125	<0.00001	0.000125	<0.0001	-	-	-
PCB congener 28	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Acenaphthene (diss.filt)	0.0000836	<0.000005	0.000836	<0.00005	-	-	-
Arsenic	0.000581	<0.0005	0.00581	<0.005	-	-	-
PCB congener 52	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Acenaphthylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Nitrate as NO3	0.946	<0.3	9.46	<3	-	-	-
PCB congener 101	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Fluoranthene (diss.filt)	0.000567	<0.000005	0.00567	<0.00005	-	-	-
PCB congener 118	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Anthracene (diss.filt)	0.000164	<0.000005	0.00164	<0.00005	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.75
Conductivity (µS/cm)	72.30
Temperature (ºC)	18.30
Volume Leachant (Litres)	0.893

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.096	**Natural Moisture Content (%)**	7.41
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	93.1
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257265
Sampled Date	21-Jan-2019
Customer Sample Ref.	WS38
Depth (m)	0.70

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
PCB congener 138	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
2-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Boron	0.0117	<0.01	0.117	<0.1	-	-	-
PCB congener 153	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenanthrene (diss.filt)	0.000605	<0.000005	0.00605	<0.00005	-	-	-
2,4-dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Fluorene (diss.filt)	0.0000774	<0.000005	0.000774	<0.00005	-	-	-
PCB congener 180	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene (diss.filt)	0.0000337	<0.000005	0.000337	<0.00005	-	-	-
Total of 7 Congener PCBs	<0.000105	<0.000105	<0.00105	<0.00105	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Pyrene (diss.filt)	0.000452	<0.000005	0.00452	<0.00005	-	-	-
4-chlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(a)anthracene (diss.filt)	0.0000232	<0.000005	0.000232	<0.00005	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(b)fluoranthene (diss.filt)	0.00000862	<0.000005	0.0000862	<0.00005	-	-	-
2-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,4,6-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)pyrene (diss.filt)	0.00000482	<0.000002	0.0000482	<0.00002	-	-	-
Copper	0.000423	<0.0003	0.00423	<0.003	-	-	-
2,4,5-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Lead	<0.0002	<0.0002	<0.002	<0.002	-	-	-
4-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(g,h,i)perylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,3,5,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,3,4,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.00203	<0.000082	0.0203	<0.00082	-	-	-
2,4-Dinitrophenol	<0.0025	<0.0025	<0.025	<0.025	-	-	-
Nickel	<0.0004	<0.0004	<0.004	<0.004	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.75
Conductivity (µS/cm)	72.30
Temperature (ºC)	18.30
Volume Leachant (Litres)	0.893

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.096	**Natural Moisture Content (%)**	7.41
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	93.1
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257265
Sampled Date	21-Jan-2019
Customer Sample Ref.	WS38
Depth (m)	0.70

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
DNOC	<0.003	<0.003	<0.03	<0.03	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Dinoseb	<0.004	<0.004	<0.04	<0.04	-	-	-
Vanadium	0.00106	<0.001	0.0106	<0.01	-	-	-
Zinc	<0.001	<0.001	<0.01	<0.01	-	-	-
SVOC MS (W) - Aqueous							
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.75
Conductivity (µS/cm)	72.30
Temperature (°C)	18.30
Volume Leachant (Litres)	0.893

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.096	**Natural Moisture Content (%)**	7.41
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	93.1
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257265
Sampled Date	21-Jan-2019
Customer Sample Ref.	WS38
Depth (m)	0.70

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.03	<0.03	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Benzene by GC	<0.007	<0.007	<0.07	<0.07	-	-	-
Toluene by GC	<0.004	<0.004	<0.04	<0.04	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.05	<0.05	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.08	<0.08	-	-	-
o Xylene by GC	<0.003	<0.003	<0.03	<0.03	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.11	<0.11	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.28	<0.28	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	<0	-	<0	-	-	-
Toluene-d8	-	<0	-	<0	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.75
Conductivity (µS/cm)	72.30
Temperature (ºC)	18.30
Volume Leachant (Litres)	0.893

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.096	**Natural Moisture Content (%)**	7.41
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	93.1
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257265
Sampled Date	21-Jan-2019
Customer Sample Ref.	WS38
Depth (m)	0.70

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
4-Bromofluorobenzene	-	<0	-	<0	-	-	-
Dichlorodifluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.01	<0.01	-	-	-
Dichloromethane	<0.003	<0.003	<0.03	<0.03	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroform	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.75
Conductivity (µS/cm)	72.30
Temperature (°C)	18.30
Volume Leachant (Litres)	0.893

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.096	**Natural Moisture Content (%)**	7.41
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	93.1
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257265
Sampled Date	21-Jan-2019
Customer Sample Ref.	WS38
Depth (m)	0.70

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Styrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromoform	<0.001	<0.001	<0.01	<0.01	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Propylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.75
Conductivity (µS/cm)	72.30
Temperature (°C)	18.30
Volume Leachant (Litres)	0.893

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.107	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257267
Sampled Date	21-Jan-2019
Customer Sample Ref.	WS39
Depth (m)	0.20

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
Conductivity (at 20 deg.C)	0.111	<0.000014	1.11	<0.00014	-	-	-
Fluoride	<0.5	<0.5	<5	<5	-	-	-
Sulphate (soluble)	<2	<2	<20	<20	-	-	-
Sulphide	<0.01	<0.01	<0.1	<0.1	-	-	-
Chloride	<2	<2	<20	<20	-	-	-
Dissolved Organic Carbon	6.74	<3	67.4	<30	-	-	-
Mercury Dissolved (CVAF)	0.0000181	<0.00001	0.000181	<0.0001	-	-	-
Phosphate (Ortho as P)	0.249	<0.02	2.49	<0.2	-	-	-
Naphthalene (diss.filt)	0.000012	<0.00001	0.00012	<0.0001	-	-	-
PCB congener 28	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Acenaphthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Arsenic	0.00201	<0.0005	0.0201	<0.005	-	-	-
PCB congener 52	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Acenaphthylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Nitrate as NO3	4.82	<0.3	48.2	<3	-	-	-
PCB congener 101	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Fluoranthene (diss.filt)	0.0000377	<0.000005	0.000377	<0.00005	-	-	-
PCB congener 118	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Anthracene (diss.filt)	0.00000918	<0.000005	0.0000918	<0.00005	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.38
Conductivity (µS/cm)	110.00
Temperature (ºC)	18.50
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.107	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257267
Sampled Date	21-Jan-2019
Customer Sample Ref.	WS39
Depth (m)	0.20

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
PCB congener 138	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
2-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Boron	0.0341	<0.01	0.341	<0.1	-	-	-
PCB congener 153	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenanthrene (diss.filt)	0.000034	<0.000005	0.00034	<0.00005	-	-	-
2,4-dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Fluorene (diss.filt)	0.00000612	<0.000005	0.0000612	<0.00005	-	-	-
PCB congener 180	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene (diss.filt)	0.00000726	<0.000005	0.0000726	<0.00005	-	-	-
Total of 7 Congener PCBs	<0.000105	<0.000105	<0.00105	<0.00105	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Pyrene (diss.filt)	0.0000272	<0.000005	0.000272	<0.00005	-	-	-
4-chlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(a)anthracene (diss.filt)	0.00000626	<0.000005	0.0000626	<0.00005	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(b)fluoranthene (diss.filt)	0.0000148	<0.000005	0.000148	<0.00005	-	-	-
2-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene (diss.filt)	0.00000737	<0.000005	0.0000737	<0.00005	-	-	-
2,4,6-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)pyrene (diss.filt)	0.00000895	<0.000002	0.0000895	<0.00002	-	-	-
Copper	0.00359	<0.0003	0.0359	<0.003	-	-	-
2,4,5-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Lead	0.000267	<0.0002	0.00267	<0.002	-	-	-
4-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(g,h,i)perylene (diss.filt)	0.00000703	<0.000005	0.0000703	<0.00005	-	-	-
2,3,5,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,3,4,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.000178	<0.000082	0.00178	<0.00082	-	-	-
2,4-Dinitrophenol	<0.0025	<0.0025	<0.025	<0.025	-	-	-
Nickel	0.000693	<0.0004	0.00693	<0.004	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.38
Conductivity (µS/cm)	110.00
Temperature (ºC)	18.50
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.107	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257267
Sampled Date	21-Jan-2019
Customer Sample Ref.	WS39
Depth (m)	0.20

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
DNOC	<0.003	<0.003	<0.03	<0.03	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Dinoseb	<0.004	<0.004	<0.04	<0.04	-	-	-
Vanadium	0.00295	<0.001	0.0295	<0.01	-	-	-
Zinc	0.00264	<0.001	0.0264	<0.01	-	-	-
SVOC MS (W) - Aqueous							
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.38
Conductivity (µS/cm)	110.00
Temperature (°C)	18.50
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.107	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257267
Sampled Date	21-Jan-2019
Customer Sample Ref.	WS39
Depth (m)	0.20

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.03	<0.03	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Benzene by GC	<0.007	<0.007	<0.07	<0.07	-	-	-
Toluene by GC	<0.004	<0.004	<0.04	<0.04	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.05	<0.05	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.08	<0.08	-	-	-
o Xylene by GC	<0.003	<0.003	<0.03	<0.03	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.11	<0.11	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.28	<0.28	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	<0	-	<0	-	-	-
Toluene-d8	-	<0	-	<0	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.38
Conductivity (µS/cm)	110.00
Temperature (ºC)	18.50
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.107	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257267
Sampled Date	21-Jan-2019
Customer Sample Ref.	WS39
Depth (m)	0.20

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
4-Bromofluorobenzene	-	<0	-	<0	-	-	-
Dichlorodifluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.01	<0.01	-	-	-
Dichloromethane	<0.003	<0.003	<0.03	<0.03	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroform	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.38
Conductivity (µS/cm)	110.00
Temperature (°C)	18.50
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

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Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.107	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257267
Sampled Date	21-Jan-2019
Customer Sample Ref.	WS39
Depth (m)	0.20

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Styrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromoform	<0.001	<0.001	<0.01	<0.01	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Propylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.38
Conductivity (µS/cm)	110.00
Temperature (°C)	18.50
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.105	**Natural Moisture Content (%)**	16.3
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	86
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257273
Sampled Date	21-Jan-2019
Customer Sample Ref.	WS29
Depth (m)	0.40

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
Conductivity (at 20 deg.C)	0.0983	<0.000014	0.983	<0.00014	-	-	-
Fluoride	<0.5	<0.5	<5	<5	-	-	-
Sulphate (soluble)	<2	<2	<20	<20	-	-	-
Sulphide	<0.01	<0.01	<0.1	<0.1	-	-	-
Chloride	<2	<2	<20	<20	-	-	-
Dissolved Organic Carbon	5.55	<3	55.5	<30	-	-	-
Mercury Dissolved (CVAF)	0.0000103	<0.00001	0.000103	<0.0001	-	-	-
Phosphate (Ortho as P)	0.158	<0.02	1.58	<0.2	-	-	-
Naphthalene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
PCB congener 28	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Acenaphthene (diss.filt)	0.00000703	<0.000005	0.0000703	<0.00005	-	-	-
Arsenic	0.00214	<0.0005	0.0214	<0.005	-	-	-
PCB congener 52	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Acenaphthylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Nitrate as NO3	2.84	<0.3	28.4	<3	-	-	-
PCB congener 101	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Fluoranthene (diss.filt)	0.0000728	<0.000005	0.000728	<0.00005	-	-	-
PCB congener 118	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Anthracene (diss.filt)	0.0000178	<0.000005	0.000178	<0.00005	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.56
Conductivity (µS/cm)	97.20
Temperature (ºC)	18.60
Volume Leachant (Litres)	0.885

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.105	**Natural Moisture Content (%)**	16.3
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	86
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257273
Sampled Date	21-Jan-2019
Customer Sample Ref.	WS29
Depth (m)	0.40

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
PCB congener 138	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
2-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Boron	<0.01	<0.01	<0.1	<0.1	-	-	-
PCB congener 153	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenanthrene (diss.filt)	0.0000713	<0.000005	0.000713	<0.00005	-	-	-
2,4-dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Fluorene (diss.filt)	0.00000784	<0.000005	0.0000784	<0.00005	-	-	-
PCB congener 180	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Total of 7 Congener PCBs	<0.000105	<0.000105	<0.00105	<0.00105	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Pyrene (diss.filt)	0.0000456	<0.000005	0.000456	<0.00005	-	-	-
4-chlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(a)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(b)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,4,6-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)pyrene (diss.filt)	<0.000002	<0.000002	<0.00002	<0.00002	-	-	-
Copper	0.00259	<0.0003	0.0259	<0.003	-	-	-
2,4,5-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Lead	0.000293	<0.0002	0.00293	<0.002	-	-	-
4-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(g,h,i)perylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,3,5,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,3,4,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.000222	<0.000082	0.00222	<0.00082	-	-	-
2,4-Dinitrophenol	<0.0025	<0.0025	<0.025	<0.025	-	-	-
Nickel	0.000659	<0.0004	0.00659	<0.004	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.56
Conductivity (µS/cm)	97.20
Temperature (ºC)	18.60
Volume Leachant (Litres)	0.885

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.105	**Natural Moisture Content (%)**	16.3
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	86
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257273
Sampled Date	21-Jan-2019
Customer Sample Ref.	WS29
Depth (m)	0.40

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
DNOC	<0.003	<0.003	<0.03	<0.03	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Dinoseb	<0.004	<0.004	<0.04	<0.04	-	-	-
Vanadium	0.00313	<0.001	0.0313	<0.01	-	-	-
Zinc	0.00112	<0.001	0.0112	<0.01	-	-	-
SVOC MS (W) - Aqueous							
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.56
Conductivity (µS/cm)	97.20
Temperature (°C)	18.60
Volume Leachant (Litres)	0.885

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.105	**Natural Moisture Content (%)**	16.3
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	86
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257273
Sampled Date	21-Jan-2019
Customer Sample Ref.	WS29
Depth (m)	0.40

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.03	<0.03	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Benzene by GC	<0.007	<0.007	<0.07	<0.07	-	-	-
Toluene by GC	<0.004	<0.004	<0.04	<0.04	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.05	<0.05	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.08	<0.08	-	-	-
o Xylene by GC	<0.003	<0.003	<0.03	<0.03	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.11	<0.11	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.28	<0.28	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	<0	-	<0	-	-	-
Toluene-d8	-	<0	-	<0	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.56
Conductivity (µS/cm)	97.20
Temperature (ºC)	18.60
Volume Leachant (Litres)	0.885

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.105	**Natural Moisture Content (%)**	16.3
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	86
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257273
Sampled Date	21-Jan-2019
Customer Sample Ref.	WS29
Depth (m)	0.40

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
4-Bromofluorobenzene	-	<0	-	<0	-	-	-
Dichlorodifluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.01	<0.01	-	-	-
Dichloromethane	<0.003	<0.003	<0.03	<0.03	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroform	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.56
Conductivity (µS/cm)	97.20
Temperature (ºC)	18.60
Volume Leachant (Litres)	0.885

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.105	**Natural Moisture Content (%)**	16.3
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	86
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257273
Sampled Date	21-Jan-2019
Customer Sample Ref.	WS29
Depth (m)	0.40

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Styrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromoform	<0.001	<0.001	<0.01	<0.01	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Propylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.56
Conductivity (µS/cm)	97.20
Temperature (ºC)	18.60
Volume Leachant (Litres)	0.885

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.103	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257280
Sampled Date	25-Jan-2019
Customer Sample Ref.	WS57
Depth (m)	0.30

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
Conductivity (at 20 deg.C)	0.0566	<0.000014	0.566	<0.00014	-	-	-
Fluoride	<0.5	<0.5	<5	<5	-	-	-
Sulphate (soluble)	<2	<2	<20	<20	-	-	-
Sulphide	<0.01	<0.01	<0.1	<0.1	-	-	-
Chloride	<2	<2	<20	<20	-	-	-
Dissolved Organic Carbon	<3	<3	<30	<30	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Phosphate (Ortho as P)	0.0346	<0.02	0.346	<0.2	-	-	-
Naphthalene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
PCB congener 28	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Total Cyanide (W)	0.083	<0.05	0.83	<0.5	-	-	-
Acenaphthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Arsenic	0.000996	<0.0005	0.00996	<0.005	-	-	-
PCB congener 52	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Acenaphthylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Nitrate as NO3	<0.3	<0.3	<3	<3	-	-	-
PCB congener 101	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Fluoranthene (diss.filt)	0.0000256	<0.000005	0.000256	<0.00005	-	-	-
PCB congener 118	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Anthracene (diss.filt)	0.00000792	<0.000005	0.0000792	<0.00005	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.70
Conductivity (µS/cm)	56.30
Temperature (ºC)	18.60
Volume Leachant (Litres)	0.887

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.103	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257280
Sampled Date	25-Jan-2019
Customer Sample Ref.	WS57
Depth (m)	0.30

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
PCB congener 138	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
2-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Boron	<0.01	<0.01	<0.1	<0.1	-	-	-
PCB congener 153	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenanthrene (diss.filt)	0.0000294	<0.000005	0.000294	<0.00005	-	-	-
2,4-dimethylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Fluorene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
PCB congener 180	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Total of 7 Congener PCBs	<0.000105	<0.000105	<0.00105	<0.00105	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Pyrene (diss.filt)	0.0000171	<0.000005	0.000171	<0.00005	-	-	-
4-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(b)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,4,6-trichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(a)pyrene (diss.filt)	<0.000002	<0.000002	<0.00002	<0.00002	-	-	-
Copper	<0.0003	<0.0003	<0.003	<0.003	-	-	-
2,4,5-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Lead	0.000248	<0.0002	0.00248	<0.002	-	-	-
4-nitrophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(g,h,i)perylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,3,5,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,3,4,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	<0.000082	<0.000082	<0.00082	<0.00082	-	-	-
2,4-Dinitrophenol	<0.0025	<0.0025	<0.025	<0.025	-	-	-
Nickel	<0.0004	<0.0004	<0.004	<0.004	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.70
Conductivity (µS/cm)	56.30
Temperature (ºC)	18.60
Volume Leachant (Litres)	0.887

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.103	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257280
Sampled Date	25-Jan-2019
Customer Sample Ref.	WS57
Depth (m)	0.30

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
DNOC	<0.003	<0.003	<0.03	<0.03	-	-	-
Pentachlorophenol	<0.002	<0.002	<0.02	<0.02	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Dinoseb	<0.004	<0.004	<0.04	<0.04	-	-	-
Vanadium	0.00128	<0.001	0.0128	<0.01	-	-	-
Zinc	<0.001	<0.001	<0.01	<0.01	-	-	-
SVOC MS (W) - Aqueous							
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,6-Trichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dimethylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.70
Conductivity (µS/cm)	56.30
Temperature (°C)	18.60
Volume Leachant (Litres)	0.887

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.103	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257280
Sampled Date	25-Jan-2019
Customer Sample Ref.	WS57
Depth (m)	0.30

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.006	<0.006	<0.06	<0.06	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.03	<0.03	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Benzene by GC	<0.007	<0.007	<0.07	<0.07	-	-	-
Toluene by GC	<0.004	<0.004	<0.04	<0.04	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.05	<0.05	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.08	<0.08	-	-	-
o Xylene by GC	<0.003	<0.003	<0.03	<0.03	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.11	<0.11	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.28	<0.28	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	<0	-	<0	-	-	-
Toluene-d8	-	<0	-	<0	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.70
Conductivity (µS/cm)	56.30
Temperature (ºC)	18.60
Volume Leachant (Litres)	0.887

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.103	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257280
Sampled Date	25-Jan-2019
Customer Sample Ref.	WS57
Depth (m)	0.30

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
4-Bromofluorobenzene	-	<0	-	<0	-	-	-
Dichlorodifluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.01	<0.01	-	-	-
Dichloromethane	<0.003	<0.003	<0.03	<0.03	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroform	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.70
Conductivity (µS/cm)	56.30
Temperature (°C)	18.60
Volume Leachant (Litres)	0.887

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.103	**Natural Moisture Content (%)**	14.9
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	87
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257280
Sampled Date	25-Jan-2019
Customer Sample Ref.	WS57
Depth (m)	0.30

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Styrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromoform	<0.001	<0.001	<0.01	<0.01	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Propylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.70
Conductivity (µS/cm)	56.30
Temperature (ºC)	18.60
Volume Leachant (Litres)	0.887

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.108	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257283
Sampled Date	24-Jan-2019
Customer Sample Ref.	WS53
Depth (m)	0.50

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Aliphatics >C12-C16	<0.02	<0.02	<0.2	<0.2	-	-	-
Aliphatics >C16-C21	<0.02	<0.02	<0.2	<0.2	-	-	-
Aliphatics >C21-C35	<0.02	<0.02	<0.2	<0.2	-	-	-
Total Aliphatics >C12-C35	<0.02	<0.02	<0.2	<0.2	-	-	-
Aromatics >EC12-EC16	<0.02	<0.02	<0.2	<0.2	-	-	-
Aromatics >EC16-EC21	<0.02	<0.02	<0.2	<0.2	-	-	-
Aromatics >EC21-EC35	<0.02	<0.02	<0.2	<0.2	-	-	-
Aromatics >EC16-EC35	<0.02	<0.02	<0.2	<0.2	-	-	-
Total Aromatics >EC12-EC35	<0.02	<0.02	<0.2	<0.2	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
Conductivity (at 20 deg.C)	0.085	<0.000014	0.85	<0.00014	-	-	-
Fluoride	<0.5	<0.5	<5	<5	-	-	-
Sulphate (soluble)	<2	<2	<20	<20	-	-	-
Sulphide	<0.01	<0.01	<0.1	<0.1	-	-	-
Chloride	<2	<2	<20	<20	-	-	-
Dissolved Organic Carbon	4.76	<3	47.6	<30	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Phosphate (Ortho as P)	0.0578	<0.02	0.578	<0.2	-	-	-
Naphthalene (diss.filt)	0.0000225	<0.00002	0.000225	<0.0002	-	-	-
PCB congener 28	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Acenaphthene (diss.filt)	0.0000348	<0.00001	0.000348	<0.0001	-	-	-
Arsenic	0.00152	<0.0005	0.0152	<0.005	-	-	-
PCB congener 52	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenol	<0.006	<0.006	<0.06	<0.06	-	-	-
2-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Acenaphthylene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Nitrate as NO3	1.89	<0.3	18.9	<3	-	-	-
PCB congener 101	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Fluoranthene (diss.filt)	0.0000827	<0.00001	0.000827	<0.0001	-	-	-
PCB congener 118	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Anthracene (diss.filt)	0.0000353	<0.00001	0.000353	<0.0001	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.10
Conductivity (µS/cm)	85.50
Temperature (ºC)	18.30
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.108	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257283
Sampled Date	24-Jan-2019
Customer Sample Ref.	WS53
Depth (m)	0.50

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
PCB congener 138	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
2-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Boron	<0.01	<0.01	<0.1	<0.1	-	-	-
PCB congener 153	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenanthrene (diss.filt)	0.000159	<0.00001	0.00159	<0.0001	-	-	-
2,4-dimethylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Fluorene (diss.filt)	0.0000317	<0.00001	0.000317	<0.0001	-	-	-
PCB congener 180	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Total of 7 Congener PCBs	<0.000105	<0.000105	<0.00105	<0.00105	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Pyrene (diss.filt)	0.0000557	<0.00001	0.000557	<0.0001	-	-	-
4-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)anthracene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(b)fluoranthene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
2-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
2,4,6-trichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(a)pyrene (diss.filt)	<0.000004	<0.000004	<0.00004	<0.00004	-	-	-
Copper	0.00248	<0.0003	0.0248	<0.003	-	-	-
2,4,5-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Lead	<0.0002	<0.0002	<0.002	<0.002	-	-	-
4-nitrophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(g,h,i)perylene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
2,3,5,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
2,3,4,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.000422	<0.000164	0.00422	<0.00164	-	-	-
2,4-Dinitrophenol	<0.0025	<0.0025	<0.025	<0.025	-	-	-
Nickel	0.000525	<0.0004	0.00525	<0.004	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.10
Conductivity (µS/cm)	85.50
Temperature (ºC)	18.30
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.108	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257283
Sampled Date	24-Jan-2019
Customer Sample Ref.	WS53
Depth (m)	0.50

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
DNOC	<0.003	<0.003	<0.03	<0.03	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Dinoseb	<0.004	<0.004	<0.04	<0.04	-	-	-
Vanadium	0.00372	<0.001	0.0372	<0.01	-	-	-
Zinc	<0.001	<0.001	<0.01	<0.01	-	-	-
SVOC MS (W) - Aqueous							
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,6-Trichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dimethylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.10
Conductivity (µS/cm)	85.50
Temperature (ºC)	18.30
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.108	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257283
Sampled Date	24-Jan-2019
Customer Sample Ref.	WS53
Depth (m)	0.50

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.03	<0.03	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Benzene by GC	<0.007	<0.007	<0.07	<0.07	-	-	-
Toluene by GC	<0.004	<0.004	<0.04	<0.04	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.05	<0.05	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.08	<0.08	-	-	-
o Xylene by GC	<0.003	<0.003	<0.03	<0.03	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.11	<0.11	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.28	<0.28	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	<0	-	<0	-	-	-
Toluene-d8	-	<0	-	<0	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.10
Conductivity (µS/cm)	85.50
Temperature (ºC)	18.30
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.108	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257283
Sampled Date	24-Jan-2019
Customer Sample Ref.	WS53
Depth (m)	0.50

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
4-Bromofluorobenzene	-	<0	-	<0	-	-	-
Dichlorodifluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.01	<0.01	-	-	-
Dichloromethane	<0.003	<0.003	<0.03	<0.03	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroform	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.10
Conductivity (µS/cm)	85.50
Temperature (ºC)	18.30
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.108	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257283
Sampled Date	24-Jan-2019
Customer Sample Ref.	WS53
Depth (m)	0.50

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Styrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromoform	<0.001	<0.001	<0.01	<0.01	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Propylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	13-Feb-2019
pH (pH Units)	8.10
Conductivity (µS/cm)	85.50
Temperature (ºC)	18.30
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.107	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257291
Sampled Date	25-Jan-2019
Customer Sample Ref.	WS58
Depth (m)	1.00

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
Conductivity (at 20 deg.C)	0.0607	<0.000014	0.607	<0.00014	-	-	-
Fluoride	<0.5	<0.5	<5	<5	-	-	-
Sulphate (soluble)	<2	<2	<20	<20	-	-	-
Sulphide	<0.01	<0.01	<0.1	<0.1	-	-	-
Chloride	<2	<2	<20	<20	-	-	-
Dissolved Organic Carbon	<3	<3	<30	<30	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Phosphate (Ortho as P)	<0.02	<0.02	<0.2	<0.2	-	-	-
Naphthalene (diss.filt)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
PCB congener 28	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Acenaphthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Arsenic	0.000798	<0.0005	0.00798	<0.005	-	-	-
PCB congener 52	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Acenaphthylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Nitrate as NO3	0.914	<0.3	9.14	<3	-	-	-
PCB congener 101	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Fluoranthene (diss.filt)	0.0000672	<0.000005	0.000672	<0.00005	-	-	-
PCB congener 118	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-methylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Anthracene (diss.filt)	0.0000188	<0.000005	0.000188	<0.00005	-	-	-

Leach Test Information

Date Prepared	14-Feb-2019
pH (pH Units)	9.19
Conductivity (µS/cm)	58.30
Temperature (ºC)	17.70
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.107	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257291
Sampled Date	25-Jan-2019
Customer Sample Ref.	WS58
Depth (m)	1.00

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
PCB congener 138	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
2-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Boron	0.0339	<0.01	0.339	<0.1	-	-	-
PCB congener 153	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenanthrene (diss.filt)	0.0000981	<0.000005	0.000981	<0.00005	-	-	-
2,4-dimethylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Fluorene (diss.filt)	0.00000973	<0.000005	0.0000973	<0.00005	-	-	-
PCB congener 180	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
4-chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Chrysene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Total of 7 Congener PCBs	<0.000105	<0.000105	<0.00105	<0.00105	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Pyrene (diss.filt)	0.0000461	<0.000005	0.000461	<0.00005	-	-	-
4-chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(a)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Chromium	0.0011	<0.001	0.011	<0.01	-	-	-
2,4-dichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(b)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2-nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(k)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,4,6-trichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(a)pyrene (diss.filt)	<0.000002	<0.000002	<0.00002	<0.00002	-	-	-
Copper	<0.0003	<0.0003	<0.003	<0.003	-	-	-
2,4,5-trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Lead	<0.0002	<0.0002	<0.002	<0.002	-	-	-
4-nitrophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Benzo(g,h,i)perylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,3,5,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
2,3,4,6-tetrachlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.00024	<0.000082	0.0024	<0.00082	-	-	-
2,4-Dinitrophenol	<0.0025	<0.0025	<0.025	<0.025	-	-	-
Nickel	<0.0004	<0.0004	<0.004	<0.004	-	-	-

Leach Test Information

Date Prepared	14-Feb-2019
pH (pH Units)	9.19
Conductivity (µS/cm)	58.30
Temperature (ºC)	17.70
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.107	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257291
Sampled Date	25-Jan-2019
Customer Sample Ref.	WS58
Depth (m)	1.00

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
DNOC	<0.003	<0.003	<0.03	<0.03	-	-	-
Pentachlorophenol	<0.002	<0.002	<0.02	<0.02	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Dinoseb	<0.004	<0.004	<0.04	<0.04	-	-	-
Vanadium	0.00138	<0.001	0.0138	<0.01	-	-	-
Zinc	<0.001	<0.001	<0.01	<0.01	-	-	-
SVOC MS (W) - Aqueous							
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,5-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,6-Trichlorophenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dimethylphenol	<0.0005	<0.0005	<0.005	<0.005	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	14-Feb-2019
pH (pH Units)	9.19
Conductivity (µS/cm)	58.30
Temperature (°C)	17.70
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.107	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257291
Sampled Date	25-Jan-2019
Customer Sample Ref.	WS58
Depth (m)	1.00

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.006	<0.006	<0.06	<0.06	-	-	-
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.03	<0.03	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Benzene by GC	<0.007	<0.007	<0.07	<0.07	-	-	-
Toluene by GC	<0.004	<0.004	<0.04	<0.04	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.05	<0.05	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.08	<0.08	-	-	-
o Xylene by GC	<0.003	<0.003	<0.03	<0.03	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.11	<0.11	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.28	<0.28	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	<0	-	<0	-	-	-
Toluene-d8	-	<0	-	<0	-	-	-

Leach Test Information

Date Prepared	14-Feb-2019
pH (pH Units)	9.19
Conductivity (µS/cm)	58.30
Temperature (ºC)	17.70
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.107	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257291
Sampled Date	25-Jan-2019
Customer Sample Ref.	WS58
Depth (m)	1.00

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
4-Bromofluorobenzene	-	<0	-	<0	-	-	-
Dichlorodifluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.01	<0.01	-	-	-
Dichloromethane	<0.003	<0.003	<0.03	<0.03	-	-	-
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroform	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	14-Feb-2019
pH (pH Units)	9.19
Conductivity (µS/cm)	58.30
Temperature (ºC)	17.70
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.107	**Natural Moisture Content (%)**	19
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	84
Particle Size <4mm	>95%		

Case	
SDG	190201-81
Lab Sample Number(s)	19257291
Sampled Date	25-Jan-2019
Customer Sample Ref.	WS58
Depth (m)	1.00

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Styrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromoform	<0.001	<0.001	<0.01	<0.01	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Propylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	14-Feb-2019
pH (pH Units)	9.19
Conductivity (µS/cm)	58.30
Temperature (ºC)	17.70
Volume Leachant (Litres)	0.883

Mcerts Certification does not apply to leachates

20/03/2019 16:13:08

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Table of Results - Appendix

Method No	Reference	Description
ASB_PREP		
PM001		Preparation of Samples for Metals Analysis
PM024	Modified BS 1377	Soil preparation including homogenisation, moisture screens of soils for Asbestos Containing Material
PM115		Leaching Procedure for CEN One Stage Leach Test 2:1 & 10:1 1 Step
TM048	HSG 248, Asbestos: The analysts' guide for sampling, analysis and clearance procedures	Identification of Asbestos in Bulk Material
TM061	Method for the Determination of EPH,Massachusetts Dept.of EP, 1998	Determination of Extractable Petroleum Hydrocarbons by GC-FID (C10-C40)
TM072	Modified: US EPA Method 8141A	Determination of Phenols by GC-MS
TM089	Modified: US EPA Methods 8020 & 602	Determination of Gasoline Range Hydrocarbons (GRO) by Headspace GC-FID (C4-C12)
TM090	Method 5310, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 415.1 & 9060	Determination of Total Organic Carbon/Total Inorganic Carbon in Water and Waste Water
TM099	BS 2690: Part 7:1968 / BS 6068: Part2.11:1984	Determination of Ammonium in Water Samples using the Kone Analyser
TM101	Method 4500B & C, AWWA/APHA, 20th Ed., 1999	Determination of Sulphide in soil and water samples using the Kone Analyser
TM104	Method 4500F, AWWA/APHA, 20th Ed., 1999	Determination of Fluoride using the Kone Analyser
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS
TM120	Method 2510B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part 9:1970	Determination of Electrical Conductivity using a Conductivity Meter
TM132	In - house Method	ELTRA CS800 Operators Guide
TM133	BS 1377: Part 3 1990;BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter
TM152	Method 3125B, AWWA/APHA, 20th Ed., 1999	Analysis of Aqueous Samples by ICP-MS
TM153	Method 4500A,B,C, I, M AWWA/APHA, 20th Ed., 1999	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate using the Skalar SANS+ System Segmented Flow Analyser
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone
TM168	EPA Method 8082, Polychlorinated Biphenyls by Gas Chromatography	Determination of WHO12 and EC7 Polychlorinated Biphenyl Congeners by GC-MS in Soils
TM173	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Determination of Speciated Extractable Petroleum Hydrocarbons in Soils by GC-FID
TM174	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Determination of Speciated Extractable Petroleum Hydrocarbons in Waters by GC-FID
TM176	EPA 8270D Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of SVOCs in Water by GCMS
TM178	Modified: US EPA Method 8100	Determination of Polynuclear Aromatic Hydrocarbons (PAH) by GC-MS in Waters
TM181	US EPA Method 6010B	Determination of Routine Metals in Soil by iCap 6500 Duo ICP-OES
TM183	BS EN 23506:2002, (BS 6068-2.74:2002) ISBN 0 580 38924 3	Determination of Trace Level Mercury in Waters and Leachates by PSA Cold Vapour Atomic Fluorescence Spectrometry
TM184	EPA Methods 325.1 & 325.2,	The Determination of Anions in Aqueous Matrices using the Kone Spectrophotometric Analysers
TM197	Modified: US EPA Method 8082.EA Method 174 and 5109631	Determination of WHO12 and EC7 Polychlorinated Biphenyl Congeners by GC-MS in Waters
TM205		Determination of Phenols in Waste Waters using Solid Phase Extraction, Acetylation, Gas Chromatography and Mass Selective Detection
TM208	Modified: US EPA Method 8260b & 624	Determination of Volatile Organic Compounds by Headspace / GC-MS in Waters
TM218	Shaker extraction - EPA method 3546.	The determination of PAH in soil samples by GC-MS
TM222	In-House Method	Determination of Hot Water Soluble Boron in Soils (10:1 Water:soil) by IRIS Emission Spectrometer
TM227	Standard methods for the examination of waters and wastewaters 20th Edition, AWWA/APHA Method 4500.	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate
TM243		Mixed Anions In Soils By Kone
TM245	By GC-FID	Determination of GRO by Headspace in waters
TM256	The measurement of Electrical Conductivity and the Laboratory determination of pH Value of Natural, Treated and Wastewaters. HMSO, 1978. ISBN 011 751428 4.	Determination of pH in Water and Leachate using the GLpH pH Meter
TM304	HSE Contract research Report no 83/1996	Asbestos Quantification in Soil: Fibres identified by morphology only

NA = not applicable.

Chemical testing (unless subcontracted) performed at ALS Environmental Hawarden (Method codes TM) or ALS Environmental Aberdeen (Method codes S).

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Test Completion Dates

Lab Sample No(s)	19257296	19253912	19253331	19253332	19253917	19253918	19253335	19253336	19253919	19253920
Customer Sample Ref.	WS22	WS 07	WS 10	WS 10	WS 16	WS 16	WS 20	WS 20	WS 23	WS 23
AGS Ref.										
Depth	0.10 - 0.20	0.30 - 0.30	0.20	0.50	0.60	1.20	1.50	2.00	0.20	0.30 - 0.50
Type	Unspecified So	Unspecified So	Unspecified So	Unspecified So	Unspecified So	Unspecified So	Unspecified So	Unspecified So	Unspecified So	Unspecified So
Ammoniacal Nitrogen	12-Feb-2019	19-Mar-2019				18-Feb-2019	18-Feb-2019		18-Feb-2019	
Anions by Kone (soil)	15-Feb-2019	14-Mar-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019
Anions by Kone (w)	18-Feb-2019	18-Mar-2019				21-Feb-2019	21-Feb-2019		21-Feb-2019	
Asbestos ID in Solid Samples	12-Feb-2019	15-Mar-2019	11-Feb-2019	11-Feb-2019	12-Feb-2019	11-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019
Boron Water Soluble	13-Feb-2019	15-Mar-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	12-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019
CEN 10:1 Leachate (1 Stage)		14-Mar-2019				13-Feb-2019	13-Feb-2019		13-Feb-2019	
CEN 2:1 Leachate (1 Stage)	10-Feb-2019									
CEN Readings	12-Feb-2019	15-Mar-2019				15-Feb-2019	15-Feb-2019		15-Feb-2019	
Conductivity (at 20 deg.C)	13-Feb-2019	15-Mar-2019				19-Feb-2019	19-Feb-2019		19-Feb-2019	
Cyanide Comp/Free/Total/Thiocyanate	18-Feb-2019	19-Mar-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	20-Feb-2019	20-Feb-2019	15-Feb-2019	22-Feb-2019	19-Feb-2019
Dissolved Metals by ICP-MS	12-Feb-2019	18-Mar-2019				18-Feb-2019	18-Feb-2019		18-Feb-2019	
Dissolved Organic/Inorganic Carbon	13-Feb-2019	17-Mar-2019				22-Feb-2019	22-Feb-2019		22-Feb-2019	
EPH CWG (Aliphatic) Filtered GC (W)	13-Feb-2019	18-Mar-2019				19-Feb-2019	19-Feb-2019		19-Feb-2019	
EPH CWG (Aliphatic) GC (S)	13-Feb-2019	18-Mar-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019
EPH CWG (Aromatic) Filtered GC (W)	13-Feb-2019	18-Mar-2019				19-Feb-2019	19-Feb-2019		19-Feb-2019	
EPH CWG (Aromatic) GC (S)	13-Feb-2019	18-Mar-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019
Fluoride	13-Feb-2019	18-Mar-2019				15-Feb-2019	15-Feb-2019		15-Feb-2019	
GRO by GC-FID (S)	13-Feb-2019	14-Mar-2019	11-Feb-2019	11-Feb-2019	14-Feb-2019	12-Feb-2019		11-Feb-2019	12-Feb-2019	15-Feb-2019
GRO by GC-FID (W)	12-Feb-2019	16-Mar-2019				19-Feb-2019	19-Feb-2019		19-Feb-2019	
Mercury Dissolved	13-Feb-2019	18-Mar-2019				18-Feb-2019	18-Feb-2019		18-Feb-2019	
Metals in solid samples by OES	14-Feb-2019	14-Mar-2019	13-Feb-2019	14-Feb-2019	14-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019
Nitrite by Kone (w)	13-Feb-2019	16-Mar-2019				15-Feb-2019	15-Feb-2019		15-Feb-2019	
PAH by GCMS	11-Feb-2019	15-Mar-2019	11-Feb-2019	13-Feb-2019	14-Feb-2019	13-Feb-2019	11-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019
PAH in waters by GC-MS (diss.filt)	13-Feb-2019	19-Mar-2019				19-Feb-2019	19-Feb-2019		19-Feb-2019	
PCB Congeners - Aqueous (W)	13-Feb-2019	20-Mar-2019				19-Feb-2019	19-Feb-2019		19-Feb-2019	
PCBs by GCMS	14-Feb-2019	15-Mar-2019	14-Feb-2019	18-Feb-2019	18-Feb-2019	12-Feb-2019	14-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019
pH	12-Feb-2019	13-Mar-2019	12-Feb-2019	11-Feb-2019	12-Feb-2019	12-Feb-2019	11-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019
pH Value of Filtered Water	12-Feb-2019	17-Mar-2019				19-Feb-2019	19-Feb-2019		19-Feb-2019	
Phenols by ms (w)	18-Feb-2019	20-Mar-2019				18-Feb-2019	20-Feb-2019		20-Feb-2019	
Phenols Spec MS (S)	18-Feb-2019	19-Mar-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019
Phosphate by Kone (w)	13-Feb-2019	18-Mar-2019				15-Feb-2019	15-Feb-2019		15-Feb-2019	
Sample description	09-Feb-2019	12-Mar-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019
Semi Volatile Organic Compounds	12-Feb-2019	18-Mar-2019				12-Feb-2019	12-Feb-2019		12-Feb-2019	
Sulphide	12-Feb-2019	19-Mar-2019				15-Feb-2019	15-Feb-2019		18-Feb-2019	
SVOC MS (W) - Aqueous	15-Feb-2019	20-Mar-2019				19-Feb-2019	19-Feb-2019		19-Feb-2019	
Total Organic Carbon	13-Feb-2019	15-Mar-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	12-Feb-2019	13-Feb-2019	14-Feb-2019	13-Feb-2019	14-Feb-2019
TPH CWG Filtered (W)	13-Feb-2019	18-Mar-2019				19-Feb-2019	19-Feb-2019		19-Feb-2019	
TPH CWG GC (S)	13-Feb-2019	18-Mar-2019	13-Feb-2019	13-Feb-2019	14-Feb-2019	13-Feb-2019	14-Feb-2019	13-Feb-2019	13-Feb-2019	15-Feb-2019
VOC MS (S)	12-Feb-2019	15-Mar-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	13-Feb-2019	12-Feb-2019	12-Feb-2019	13-Feb-2019	12-Feb-2019
VOC MS (W)	12-Feb-2019	18-Mar-2019				18-Feb-2019	18-Feb-2019		18-Feb-2019	

Validated

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Lab Sample No(s)	19257273	19257270	19253585	19253590	19253591	19253323	19253581	19253582	19253340	19253341
Customer Sample Ref.	WS29	WS35	WS 26	WS 28	WS 28	WS 30	WS 33	WS 33	WS 34	WS 34
AGS Ref.										
Depth	0.40	0.40	0.70	0.30	1.00	0.50	0.10	0.50	0.10	1.00
Type	Unspecified So	Unspecified So	Unspecified So	Unspecified So	Unspecified So	Unspecified So	Unspecified So	Unspecified So	Unspecified So	Unspecified So
Ammoniacal Nitrogen	18-Feb-2019	14-Feb-2019		18-Feb-2019						
Anions by Kone (soil)	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019
Anions by Kone (w)	21-Feb-2019	18-Feb-2019		21-Feb-2019						
Asbestos ID in Solid Samples	11-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	11-Feb-2019	12-Feb-2019	12-Feb-2019	11-Feb-2019	11-Feb-2019
Asbestos Quantification - Full				20-Feb-2019						
Boron Water Soluble	12-Feb-2019	12-Feb-2019	13-Feb-2019	12-Feb-2019	12-Feb-2019	13-Feb-2019	15-Feb-2019		13-Feb-2019	12-Feb-2019
CEN 10:1 Leachate (1 Stage)	13-Feb-2019			13-Feb-2019						
CEN 2:1 Leachate (1 Stage)		12-Feb-2019								
CEN Readings	15-Feb-2019	13-Feb-2019		15-Feb-2019						
Conductivity (at 20 deg.C)	19-Feb-2019	14-Feb-2019		19-Feb-2019						
Cyanide Comp/Free/Total/Thiocyanate	20-Feb-2019	19-Feb-2019	15-Feb-2019	20-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019		19-Feb-2019	15-Feb-2019
Dissolved Metals by ICP-MS	18-Feb-2019	14-Feb-2019		18-Feb-2019						
Dissolved Organic/Inorganic Carbon	22-Feb-2019	14-Feb-2019		21-Feb-2019						
EPH CWG (Aliphatic) Filtered GC (W)	19-Feb-2019	15-Feb-2019		19-Feb-2019						
EPH CWG (Aliphatic) GC (S)	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019
EPH CWG (Aromatic) Filtered GC (W)	19-Feb-2019	15-Feb-2019		19-Feb-2019						
EPH CWG (Aromatic) GC (S)	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019
Fluoride	15-Feb-2019	14-Feb-2019		15-Feb-2019						
GRO by GC-FID (S)	12-Feb-2019	15-Feb-2019	12-Feb-2019	11-Feb-2019	11-Feb-2019	12-Feb-2019	13-Feb-2019	12-Feb-2019	11-Feb-2019	11-Feb-2019
GRO by GC-FID (W)	19-Feb-2019	15-Feb-2019		18-Feb-2019						
Mercury Dissolved	18-Feb-2019	14-Feb-2019		18-Feb-2019						
Metals in solid samples by OES	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	14-Feb-2019		14-Feb-2019	15-Feb-2019
Nitrite by Kone (w)	15-Feb-2019	14-Feb-2019		15-Feb-2019						
PAH by GCMS	11-Feb-2019	12-Feb-2019	13-Feb-2019	11-Feb-2019	12-Feb-2019	12-Feb-2019	13-Feb-2019	12-Feb-2019	13-Feb-2019	11-Feb-2019
PAH in waters by GC-MS (diss.filt)	19-Feb-2019	14-Feb-2019		19-Feb-2019						
PCB Congeners - Aqueous (W)	19-Feb-2019	14-Feb-2019		19-Feb-2019						
PCBs by GCMS	14-Feb-2019	12-Feb-2019	18-Feb-2019	14-Feb-2019	14-Feb-2019	14-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	14-Feb-2019
pH	11-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019		11-Feb-2019	12-Feb-2019
pH Value of Filtered Water	19-Feb-2019	14-Feb-2019		19-Feb-2019						
Phenols by ms (w)	20-Feb-2019	18-Feb-2019		20-Feb-2019						
Phenols Spec MS (S)	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019
Phosphate by Kone (w)	15-Feb-2019	14-Feb-2019		15-Feb-2019						
Sample description	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019
Semi Volatile Organic Compounds	12-Feb-2019			12-Feb-2019						
Sulphide	18-Feb-2019	14-Feb-2019		15-Feb-2019						
SVOC MS (W) - Aqueous	19-Feb-2019	15-Feb-2019		19-Feb-2019						
Total Organic Carbon	12-Feb-2019	12-Feb-2019	13-Feb-2019	12-Feb-2019	12-Feb-2019	13-Feb-2019	13-Feb-2019		13-Feb-2019	12-Feb-2019
TPH CWG Filtered (W)	19-Feb-2019	15-Feb-2019		19-Feb-2019						
TPH CWG GC (S)	13-Feb-2019	15-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019
VOC MS (S)	13-Feb-2019	12-Feb-2019	11-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	13-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019
VOC MS (W)	18-Feb-2019	14-Feb-2019		18-Feb-2019						

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SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Lab Sample No(s)	19257263	19257265	19257267	19257268	19253326	19253329	19253596	19253597	19253578	19253579
Customer Sample Ref.	WS38	WS38	WS39	WS39	WS 36	WS 37	WS 40	WS 40	WS 41	WS 41
AGS Ref.										
Depth	0.20	0.70	0.20	0.70 - 0.90	0.50	0.20	1.00	1.50	1.00	0.50
Type	Unspecified So	Unspecified So	Unspecified So	Unspecified So	Unspecified So	Unspecified So	Unspecified So	Unspecified So	Unspecified So	Unspecified So
Ammoniacal Nitrogen	18-Feb-2019	18-Feb-2019	18-Feb-2019				18-Feb-2019		18-Feb-2019	
Anions by Kone (soil)	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019
Anions by Kone (w)	21-Feb-2019	21-Feb-2019	21-Feb-2019				21-Feb-2019		21-Feb-2019	
Asbestos ID in Solid Samples	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019
Boron Water Soluble	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	15-Feb-2019
CEN 10:1 Leachate (1 Stage)	13-Feb-2019	13-Feb-2019	13-Feb-2019				13-Feb-2019		13-Feb-2019	
CEN Readings	15-Feb-2019	15-Feb-2019	15-Feb-2019				15-Feb-2019		15-Feb-2019	
Conductivity (at 20 deg.C)	19-Feb-2019	19-Feb-2019	19-Feb-2019				19-Feb-2019		19-Feb-2019	
Cyanide Comp/Free/Total/Thiocyanate	22-Feb-2019	22-Feb-2019	20-Feb-2019	19-Feb-2019	15-Feb-2019	19-Feb-2019	20-Feb-2019	15-Feb-2019	20-Feb-2019	15-Feb-2019
Dissolved Metals by ICP-MS	18-Feb-2019	18-Feb-2019	18-Feb-2019				18-Feb-2019		18-Feb-2019	
Dissolved Organic/Inorganic Carbon	22-Feb-2019	22-Feb-2019	22-Feb-2019				22-Feb-2019		22-Feb-2019	
EPH CWG (Aliphatic) Filtered GC (W)	19-Feb-2019	19-Feb-2019	19-Feb-2019				19-Feb-2019		19-Feb-2019	
EPH CWG (Aliphatic) GC (S)	13-Feb-2019	13-Feb-2019	13-Feb-2019	15-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019
EPH CWG (Aromatic) Filtered GC (W)	19-Feb-2019	19-Feb-2019	19-Feb-2019				19-Feb-2019		19-Feb-2019	
EPH CWG (Aromatic) GC (S)	13-Feb-2019	13-Feb-2019	13-Feb-2019	14-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019
Fluoride	15-Feb-2019	15-Feb-2019	15-Feb-2019				15-Feb-2019		15-Feb-2019	
GRO by GC-FID (S)	12-Feb-2019	12-Feb-2019	13-Feb-2019	15-Feb-2019	15-Feb-2019	11-Feb-2019	11-Feb-2019	11-Feb-2019	11-Feb-2019	13-Feb-2019
GRO by GC-FID (W)	19-Feb-2019	18-Feb-2019	19-Feb-2019				19-Feb-2019		19-Feb-2019	
Mercury Dissolved	18-Feb-2019	18-Feb-2019	18-Feb-2019				18-Feb-2019		18-Feb-2019	
Metals in solid samples by OES	13-Feb-2019	14-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	14-Feb-2019	14-Feb-2019	14-Feb-2019	14-Feb-2019
Nitrite by Kone (w)	15-Feb-2019	15-Feb-2019	15-Feb-2019				15-Feb-2019		15-Feb-2019	
PAH by GCMS	12-Feb-2019	13-Feb-2019	12-Feb-2019	11-Feb-2019	12-Feb-2019	12-Feb-2019	13-Feb-2019	12-Feb-2019	13-Feb-2019	13-Feb-2019
PAH in waters by GC-MS (diss.filt)	19-Feb-2019	19-Feb-2019	19-Feb-2019				19-Feb-2019		19-Feb-2019	
PCB Congeners - Aqueous (W)	19-Feb-2019	19-Feb-2019	19-Feb-2019				19-Feb-2019		19-Feb-2019	
PCBs by GCMS	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	14-Feb-2019	14-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019
pH	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	11-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019
pH Value of Filtered Water	19-Feb-2019	19-Feb-2019	19-Feb-2019				19-Feb-2019		19-Feb-2019	
Phenols by ms (w)	20-Feb-2019	20-Feb-2019	20-Feb-2019				18-Feb-2019		20-Feb-2019	
Phenols Spec MS (S)	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019
Phosphate by Kone (w)	15-Feb-2019	15-Feb-2019	15-Feb-2019				15-Feb-2019		15-Feb-2019	
Sample description	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019
Semi Volatile Organic Compounds	12-Feb-2019	12-Feb-2019	12-Feb-2019				12-Feb-2019		12-Feb-2019	
Sulphide	18-Feb-2019	15-Feb-2019	15-Feb-2019				15-Feb-2019		15-Feb-2019	
SVOC MS (W) - Aqueous	19-Feb-2019	19-Feb-2019	19-Feb-2019				19-Feb-2019		19-Feb-2019	
Total Organic Carbon	14-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	14-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019
TPH CWG Filtered (W)	19-Feb-2019	19-Feb-2019	19-Feb-2019				19-Feb-2019		19-Feb-2019	
TPH CWG GC (S)	13-Feb-2019	13-Feb-2019	13-Feb-2019	15-Feb-2019	15-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019
VOC MS (S)	12-Feb-2019	11-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	13-Feb-2019
VOC MS (W)	18-Feb-2019	18-Feb-2019	18-Feb-2019				18-Feb-2019		18-Feb-2019	

Validated

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SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Lab Sample No(s)	19257276	19257278	19257283	19253318	19253587	19253588	19253903	19253906	19253909	19253911
Customer Sample Ref.	WS52	WS52	WS53	WS 42	WS 43	WS 43	WS 45	WS 45	WS 46	WS 46
AGS Ref.										
Depth	0.10	1.00	0.50	0.10	0.20	0.50	0.30	1.00	0.30	0.70
Type	Unspecified So	Unspecified So	Unspecified So	Unspecified So	Unspecified So	Unspecified So	Unspecified So	Unspecified So	Unspecified So	Unspecified So
Ammoniacal Nitrogen			18-Feb-2019		14-Feb-2019	18-Feb-2019	12-Feb-2019		18-Feb-2019	
Anions by Kone (soil)	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019
Anions by Kone (w)			21-Feb-2019		18-Feb-2019	21-Feb-2019	18-Feb-2019		21-Feb-2019	
Asbestos ID in Solid Samples	12-Feb-2019	12-Feb-2019	11-Feb-2019	11-Feb-2019	11-Feb-2019	11-Feb-2019	11-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019
Boron Water Soluble	13-Feb-2019	15-Feb-2019	13-Feb-2019	13-Feb-2019	15-Feb-2019	13-Feb-2019	13-Feb-2019	12-Feb-2019	13-Feb-2019	12-Feb-2019
CEN 10:1 Leachate (1 Stage)			13-Feb-2019			13-Feb-2019			13-Feb-2019	
CEN 2:1 Leachate (1 Stage)					12-Feb-2019		10-Feb-2019			
CEN Readings			15-Feb-2019		13-Feb-2019	15-Feb-2019	12-Feb-2019		15-Feb-2019	
Conductivity (at 20 deg.C)			19-Feb-2019		14-Feb-2019	19-Feb-2019	13-Feb-2019		19-Feb-2019	
Cyanide Comp/Free/Total/Thiocyanate	15-Feb-2019	15-Feb-2019	20-Feb-2019	19-Feb-2019	18-Feb-2019	20-Feb-2019	19-Feb-2019	15-Feb-2019	22-Feb-2019	15-Feb-2019
Dissolved Metals by ICP-MS			18-Feb-2019		14-Feb-2019	18-Feb-2019	12-Feb-2019		18-Feb-2019	
Dissolved Organic/Inorganic Carbon			22-Feb-2019		14-Feb-2019	22-Feb-2019	13-Feb-2019		22-Feb-2019	
EPH CWG (Aliphatic) Filtered GC (W)			20-Feb-2019		15-Feb-2019	19-Feb-2019	13-Feb-2019		19-Feb-2019	
EPH CWG (Aliphatic) GC (S)	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019
EPH CWG (Aromatic) Filtered GC (W)			20-Feb-2019		15-Feb-2019	19-Feb-2019	13-Feb-2019		19-Feb-2019	
EPH CWG (Aromatic) GC (S)	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019
Fluoride			15-Feb-2019		14-Feb-2019	15-Feb-2019	13-Feb-2019		15-Feb-2019	
GRO by GC-FID (S)	12-Feb-2019	13-Feb-2019	12-Feb-2019	11-Feb-2019	15-Feb-2019	11-Feb-2019	15-Feb-2019	11-Feb-2019	12-Feb-2019	11-Feb-2019
GRO by GC-FID (W)			18-Feb-2019		15-Feb-2019	18-Feb-2019	12-Feb-2019		19-Feb-2019	
Mercury Dissolved			18-Feb-2019		14-Feb-2019	18-Feb-2019	13-Feb-2019		18-Feb-2019	
Metals in solid samples by OES	13-Feb-2019	14-Feb-2019	14-Feb-2019	14-Feb-2019	14-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019
Nitrite by Kone (w)			15-Feb-2019		14-Feb-2019	15-Feb-2019	13-Feb-2019		15-Feb-2019	
PAH by GCMS	13-Feb-2019	13-Feb-2019	11-Feb-2019	11-Feb-2019	13-Feb-2019	12-Feb-2019	12-Feb-2019	11-Feb-2019	12-Feb-2019	12-Feb-2019
PAH in waters by GC-MS (diss.filt)			20-Feb-2019		14-Feb-2019	19-Feb-2019	13-Feb-2019		19-Feb-2019	
PCB Congeners - Aqueous (W)			19-Feb-2019		14-Feb-2019	19-Feb-2019	13-Feb-2019		19-Feb-2019	
PCBs by GCMS	14-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	12-Feb-2019	18-Feb-2019	12-Feb-2019
pH	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019
pH Value of Filtered Water			19-Feb-2019		14-Feb-2019	19-Feb-2019	12-Feb-2019		19-Feb-2019	
Phenols by ms (w)			20-Feb-2019		18-Feb-2019	20-Feb-2019	18-Feb-2019		20-Feb-2019	
Phenols Spec MS (S)	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019
Phosphate by Kone (w)			15-Feb-2019		14-Feb-2019	15-Feb-2019	13-Feb-2019		15-Feb-2019	
Sample description	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019
Semi Volatile Organic Compounds			12-Feb-2019		13-Feb-2019	12-Feb-2019	12-Feb-2019		12-Feb-2019	12-Feb-2019
Sulphide			15-Feb-2019		14-Feb-2019	18-Feb-2019	12-Feb-2019		18-Feb-2019	
SVOC MS (W) - Aqueous			19-Feb-2019		15-Feb-2019	19-Feb-2019	15-Feb-2019		25-Feb-2019	
Total Organic Carbon	13-Feb-2019	14-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	12-Feb-2019	13-Feb-2019	12-Feb-2019
TPH CWG Filtered (W)			20-Feb-2019		15-Feb-2019	19-Feb-2019	13-Feb-2019		19-Feb-2019	
TPH CWG GC (S)	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	15-Feb-2019	13-Feb-2019	15-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019
VOC MS (S)	12-Feb-2019	13-Feb-2019	13-Feb-2019	12-Feb-2019	13-Feb-2019	12-Feb-2019	13-Feb-2019	12-Feb-2019	13-Feb-2019	12-Feb-2019
VOC MS (W)			18-Feb-2019		14-Feb-2019	18-Feb-2019	12-Feb-2019		18-Feb-2019	

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SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Lab Sample No(s)	19257285	19257287	19257280	19257289	19257291	19253338	19253339
Customer Sample Ref.	WS54	WS54	WS57	WS58	WS58	WS 25A	WS 25A
AGS Ref.							
Depth	0.10	0.50	0.30	0.30	1.00	0.30	1.00
Type	Unspecified So	Unspecified So	Unspecified So	Unspecified So	Unspecified So	Unspecified So	Unspecified So
Ammoniacal Nitrogen			20-Feb-2019		18-Feb-2019	18-Feb-2019	
Anions by Kone (soil)	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019
Anions by Kone (w)			21-Feb-2019		21-Feb-2019	21-Feb-2019	
Asbestos ID in Solid Samples	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019
Boron Water Soluble	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019
CEN 10:1 Leachate (1 Stage)			13-Feb-2019		14-Feb-2019	13-Feb-2019	
CEN Readings			15-Feb-2019		16-Feb-2019	15-Feb-2019	
Conductivity (at 20 deg.C)			20-Feb-2019		19-Feb-2019	19-Feb-2019	
Cyanide Comp/Free/Total/Thiocyanate	15-Feb-2019	15-Feb-2019	26-Feb-2019	15-Feb-2019	20-Feb-2019	20-Feb-2019	19-Feb-2019
Dissolved Metals by ICP-MS			20-Feb-2019		19-Feb-2019	18-Feb-2019	
Dissolved Organic/Inorganic Carbon			22-Feb-2019		21-Feb-2019	21-Feb-2019	
EPH CWG (Aliphatic) Filtered GC (W)			19-Feb-2019		19-Feb-2019	19-Feb-2019	
EPH CWG (Aliphatic) GC (S)	14-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019
EPH CWG (Aromatic) Filtered GC (W)			19-Feb-2019		19-Feb-2019	19-Feb-2019	
EPH CWG (Aromatic) GC (S)	14-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019
Fluoride			22-Feb-2019		18-Feb-2019	15-Feb-2019	
GRO by GC-FID (S)	19-Feb-2019	13-Feb-2019	12-Feb-2019	13-Feb-2019	13-Feb-2019	11-Feb-2019	11-Feb-2019
GRO by GC-FID (W)			18-Feb-2019		19-Feb-2019	19-Feb-2019	
Mercury Dissolved			21-Feb-2019		18-Feb-2019	18-Feb-2019	
Metals in solid samples by OES	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	14-Feb-2019	13-Feb-2019
Nitrite by Kone (w)			21-Feb-2019		18-Feb-2019	18-Feb-2019	
PAH by GCMS	12-Feb-2019	12-Feb-2019	11-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	11-Feb-2019
PAH in waters by GC-MS (diss.filt)			19-Feb-2019		19-Feb-2019	19-Feb-2019	
PCB Congeners - Aqueous (W)			19-Feb-2019		19-Feb-2019	19-Feb-2019	
PCBs by GCMS	14-Feb-2019	14-Feb-2019	18-Feb-2019	14-Feb-2019	14-Feb-2019	18-Feb-2019	18-Feb-2019
pH	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019
pH Value of Filtered Water			20-Feb-2019		19-Feb-2019	19-Feb-2019	
Phenols by ms (w)			20-Feb-2019		20-Feb-2019	20-Feb-2019	
Phenols Spec MS (S)	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019
Phosphate by Kone (w)			21-Feb-2019		18-Feb-2019	15-Feb-2019	
Sample description	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019	09-Feb-2019
Semi Volatile Organic Compounds			12-Feb-2019		12-Feb-2019	12-Feb-2019	
Sulphide			22-Feb-2019		18-Feb-2019	18-Feb-2019	
SVOC MS (W) - Aqueous			19-Feb-2019		19-Feb-2019	19-Feb-2019	
Total Organic Carbon	13-Feb-2019	13-Feb-2019	14-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	14-Feb-2019
TPH CWG Filtered (W)			19-Feb-2019		19-Feb-2019	19-Feb-2019	
TPH CWG GC (S)	19-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019	13-Feb-2019
VOC MS (S)	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019	12-Feb-2019
VOC MS (W)			18-Feb-2019		19-Feb-2019	18-Feb-2019	

ASSOCIATED AQC DATA

Ammoniacal Nitrogen

Component	Method Code	QC 1951	QC 1901	QC 1936	QC 1948	QC 1907	QC 1903
Ammoniacal Nitrogen as N	TM099	**102.8** 93.14 : 108.60	**101.2** 93.14 : 108.60	**101.2** 93.14 : 108.60	**99.6** 93.14 : 108.60	**99.2** 93.14 : 108.60	**102.0** 93.14 : 108.60

Anions by Kone (soil)

Component	Method Code	QC 1902	QC 1930	QC 1935	QC 1938	QC 1941	QC 1978
Chloride (soluble)	TM243	70.00 : 130.00	70.00 : 130.00	**97.14** 70.00 : 130.00	70.00 : 130.00	70.00 : 130.00	78.01 : 122.19
Water Soluble Sulphate as SO4 2:1 Extract	TM243	70.00 : 130.00	70.00 : 130.00	**104.52** 70.00 : 130.00	70.00 : 130.00	70.00 : 130.00	75.60 : 131.10

Anions by Kone (w)

Component	Method Code	QC 1971	QC 1931	QC 1966
Chloride	TM184	**104.0** 92.93 : 115.43	**102.0** 94.04 : 108.61	**106.0** 92.93 : 115.43
Phosphate (Ortho as PO4)	TM184	96.40 : 108.40	95.74 : 105.80	96.40 : 108.40
Sulphate (soluble)	TM184	**104.0** 90.53 : 113.03	**102.4** 96.38 : 107.58	**100.8** 90.53 : 113.03
TON as NO3	TM184	**104.0** 96.26 : 111.21	**100.5** 92.98 : 109.90	**100.0** 96.26 : 111.21

Boron Water Soluble

Component	Method Code	QC 1921	QC 1951	QC 1983	QC 1930	QC 1964	QC 1956
Water Soluble Boron	TM222	**93.5** 86.05 : 109.75	**91.0** 86.05 : 109.75	**99.0** 86.05 : 109.75	**102.0** 86.05 : 109.75	**91.0** 86.05 : 109.75	**93.0** 86.05 : 109.75

Component	Method Code	QC 1925
Water Soluble Boron	TM222	**93.5** 86.05 : 109.75

Conductivity (at 20 deg.C)

Component	Method Code	QC 1937	QC 1934	QC 1983	QC 1970	QC 1919
Conductivity (at 20 deg.C)	TM120	**103.76** 98.50 : 107.52	**105.26** 98.50 : 107.52	**105.26** 98.50 : 107.52	**103.01** 98.50 : 107.52	**103.76** 98.50 : 107.52

Conductivity (at 20 deg.C)

Cyanide Comp/Free/Total/Thiocyanate

Component	Method Code	QC 1902	QC 1928	QC 1940	QC 1929	QC 1972	QC 1919
Free Cyanide	TM153	**102.0** 87.60 : 108.63	**97.8** 87.60 : 108.63	**99.5** 87.60 : 108.63			**96.7** 87.60 : 108.63
Free Cyanide (W)	TM227				**103.75** 93.25 : 112.75	**102.0** 93.25 : 112.75	
Thiocyanate	TM153	**95.81** 92.90 : 108.39	**93.41** 92.90 : 108.39	**94.61** 92.90 : 108.39			**92.22** 92.90 : 108.39
Thiocyanate (W)	TM227				**105.5** 96.25 : 111.25	**105.25** 96.25 : 111.25	
Total Cyanide	TM153	**109.29** 87.00 : 103.00	**105.71** 87.00 : 103.00	**110.0** 87.00 : 103.00			**104.29** 87.00 : 103.00
Total Cyanide (W)	TM227				**104.75** 92.25 : 111.75	**103.0** 92.25 : 111.75	

Component	Method Code	QC 1955	QC 1938	QC 1963	QC 1969	QC 1915	QC 1901
Free Cyanide	TM153	**95.1** 87.60 : 108.63					
Free Cyanide (W)	TM227		**105.75** 93.25 : 112.75	**108.5** 93.25 : 112.75	**107.5** 93.25 : 112.75	**101.75** 93.25 : 112.75	**99.5** 93.25 : 112.75
Thiocyanate	TM153	**92.22** 92.90 : 108.39					
Thiocyanate (W)	TM227		**108.0** 96.25 : 111.25	**109.0** 96.25 : 111.25	**107.5** 96.25 : 111.25	**102.0** 96.25 : 111.25	**106.75** 96.25 : 111.25
Total Cyanide	TM153	**105.71** 87.00 : 103.00					
Total Cyanide (W)	TM227		**105.0** 92.25 : 111.75	**107.75** 92.25 : 111.75	**108.0** 92.25 : 111.75	**104.0** 92.25 : 111.75	**99.5** 92.25 : 111.75

Component	Method Code	QC 1983	QC 1968
Free Cyanide	TM153	**98.1** 87.60 : 108.63	
Free Cyanide (W)	TM227		**104.5** 93.25 : 112.75
Thiocyanate	TM153	**95.21** 92.90 : 108.39	
Thiocyanate (W)	TM227		**104.75** 96.25 : 111.25
Total Cyanide	TM153	**105.71** 87.00 : 103.00	
Total Cyanide (W)	TM227		**105.75** 92.25 : 111.75

Dissolved Metals by ICP-MS

Component	Method Code	QC 1913	QC 1900	QC 1947	QC 1940	QC 1957	QC 1931
Aluminium	TM152	**102.33** 94.19 : 114.31	**103.67** 88.00 : 112.00	**108.33** 94.19 : 114.31	**106.67** 94.19 : 114.31	**105.0** 94.19 : 114.31	**105.67** 94.19 : 114.31
Antimony	TM152	**113.33** 79.80 : 122.00	**104.67** 88.00 : 112.00	**106.67** 79.80 : 122.00	**106.0** 79.80 : 122.00	**106.33** 79.80 : 122.00	**113.0** 79.80 : 122.00
Arsenic	TM152	**106.67** 90.42 : 111.32	**104.0** 88.00 : 112.00	**105.5** 90.42 : 111.32	**105.5** 90.42 : 111.32	**104.17** 90.42 : 111.32	**102.83** 90.42 : 111.32
Barium	TM152	**106.67** 90.79 : 113.16	**105.17** 88.00 : 112.00	**106.5** 90.79 : 113.16	**105.5** 90.79 : 113.16	**106.17** 90.79 : 113.16	**105.5** 90.79 : 113.16

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Dissolved Metals by ICP-MS

		QC 1913	QC 1900	QC 1947	QC 1940	QC 1957	QC 1931
Beryllium	TM152	**106.0** 93.25 : 120.04	**104.33** 88.00 : 112.00	**110.67** 93.25 : 120.04	**109.83** 93.25 : 120.04	**109.83** 93.25 : 120.04	**105.33** 93.25 : 120.04
Bismuth	TM152	**106.17** 94.65 : 117.05	**104.83** 91.90 : 112.20	**110.33** 94.65 : 117.05	**109.17** 94.65 : 117.05	**108.67** 94.65 : 117.05	**107.67** 94.65 : 117.05
Borate	TM152	**108.64** 88.00 : 112.00	**104.32** 88.00 : 112.00	**111.11** 88.00 : 112.00	**108.02** 88.00 : 112.00	**111.73** 88.00 : 112.00	**108.02** 88.00 : 112.00
Boron	TM152	**108.67** 86.68 : 117.67	**104.67** 88.00 : 112.00	**111.0** 86.68 : 117.67	**108.33** 86.68 : 117.67	**111.67** 86.68 : 117.67	**108.0** 86.68 : 117.67
Cadmium	TM152	**107.33** 94.60 : 112.40	**105.0** 88.00 : 112.00	**107.17** 94.60 : 112.40	**107.83** 94.60 : 112.40	**106.83** 94.60 : 112.40	**106.33** 94.60 : 112.40
Calcium	TM152	**104.67** 83.40 : 121.11	**102.0** 81.38 : 119.09	**106.67** 83.40 : 121.11	**105.33** 83.40 : 121.11	**105.33** 83.40 : 121.11	**105.33** 83.40 : 121.11
Chromium	TM152	**104.17** 93.28 : 110.91	**102.17** 88.00 : 112.00	**106.17** 93.28 : 110.91	**105.67** 93.28 : 110.91	**104.83** 93.28 : 110.91	**103.33** 93.28 : 110.91
Cobalt	TM152	**103.67** 84.39 : 114.26	**102.83** 88.00 : 112.00	**104.17** 84.39 : 114.26	**102.67** 84.39 : 114.26	**102.33** 84.39 : 114.26	**100.17** 84.39 : 114.26
Copper	TM152	**104.17** 88.86 : 118.72	**104.33** 85.52 : 115.00	**107.17** 88.86 : 118.72	**106.17** 88.86 : 118.72	**106.17** 88.86 : 118.72	**102.5** 88.86 : 118.72
Iron	TM152	**104.67** 92.00 : 113.00	**103.33** 92.00 : 113.00	**106.0** 92.00 : 113.00	**105.33** 92.00 : 113.00	**105.33** 92.00 : 113.00	**102.67** 92.00 : 113.00
Lead	TM152	**105.83** 89.25 : 115.12	**105.17** 88.00 : 112.00	**109.17** 89.25 : 115.12	**108.33** 89.25 : 115.12	**108.17** 89.25 : 115.12	**106.33** 89.25 : 115.12
Lithium	TM152	**102.0** 89.26 : 119.04	**101.67** 88.00 : 112.00	**107.0** 89.26 : 119.04	**107.17** 89.26 : 119.04	**105.67** 89.26 : 119.04	**102.0** 89.26 : 119.04
Magnesium	TM152	**107.33** 86.35 : 113.36	**104.0** 90.25 : 114.53	**108.67** 86.35 : 113.36	**104.67** 86.35 : 113.36	**104.67** 86.35 : 113.36	**104.0** 86.35 : 113.36
Manganese	TM152	**105.67** 94.24 : 112.74	**103.83** 88.00 : 112.00	**106.67** 94.24 : 112.74	**105.5** 94.24 : 112.74	**105.17** 94.24 : 112.74	**103.0** 94.24 : 112.74
Molybdenum	TM152	**104.33** 87.00 : 108.89	**101.67** 88.00 : 112.00	**100.5** 87.00 : 108.89	**101.33** 87.00 : 108.89	**100.67** 87.00 : 108.89	**101.0** 87.00 : 108.89
Nickel	TM152	**105.17** 92.11 : 110.56	**104.83** 88.00 : 112.00	**106.5** 92.11 : 110.56	**106.83** 92.11 : 110.56	**105.67** 92.11 : 110.56	**105.0** 92.11 : 110.56
Niobium	TM152		88.00 : 112.00				
Phosphorus	TM152	**107.5** 90.52 : 115.47	**104.0** 88.00 : 112.00	**109.33** 90.52 : 115.47	**106.67** 90.52 : 115.47	**105.83** 90.52 : 115.47	**103.83** 90.52 : 115.47
Potassium	TM152	**105.33** 90.23 : 109.87	**103.33** 91.13 : 112.48	**105.33** 90.23 : 109.87	**104.67** 90.23 : 109.87	**104.67** 90.23 : 109.87	**105.33** 90.23 : 109.87
Selenium	TM152	**108.67** 88.44 : 113.86	**106.17** 88.00 : 112.00	**107.5** 88.44 : 113.86	**107.33** 88.44 : 113.86	**107.67** 88.44 : 113.86	**104.0** 88.44 : 113.86
Silver	TM152	**97.67** 87.04 : 107.38	**96.17** 89.40 : 108.90	**91.67** 87.04 : 107.38	**92.17** 87.04 : 107.38	**91.67** 87.04 : 107.38	**81.67** 87.04 : 107.38
Sodium	TM152	**107.33** 97.63 : 110.31	**106.0** 92.03 : 108.97	**109.33** 97.63 : 110.31	**104.67** 97.63 : 110.31	**105.33** 97.63 : 110.31	**103.33** 97.63 : 110.31
Strontium	TM152	**106.33** 90.72 : 114.82	**104.0** 88.00 : 112.00	**105.33** 90.72 : 114.82	**104.67** 90.72 : 114.82	**104.33** 90.72 : 114.82	**105.0** 90.72 : 114.82
Tellurium	TM152	**107.0** 90.72 : 112.62	**104.33** 93.32 : 114.66	**105.83** 90.72 : 112.62	**106.17** 90.72 : 112.62	**105.0** 90.72 : 112.62	**98.5** 90.72 : 112.62
Thallium	TM152	**92.17** 86.08 : 122.48	**103.0** 88.00 : 112.00	**107.0** 86.08 : 122.48	**105.17** 86.08 : 122.48	**104.17** 86.08 : 122.48	**87.83** 86.08 : 122.48
Tin	TM152	**106.67** 91.00 : 109.00	**103.83** 91.00 : 109.00	**104.33** 91.00 : 109.00	**104.33** 91.00 : 109.00	**104.5** 91.00 : 109.00	**103.33** 91.00 : 109.00

Dissolved Metals by ICP-MS

		QC 1913	QC 1900	QC 1947	QC 1940	QC 1957	QC 1931
Titanium	TM152	**101.83** 91.87 : 102.47	**98.17** 85.48 : 103.18	**101.83** 91.87 : 102.47	**100.83** 91.87 : 102.47	**100.5** 91.87 : 102.47	**98.33** 91.87 : 102.47
Tungsten	TM152	**103.0** 78.12 : 132.82	**104.17** 88.00 : 112.00	**106.83** 78.12 : 132.82	**106.67** 78.12 : 132.82	**105.67** 78.12 : 132.82	**102.17** 78.12 : 132.82
Uranium	TM152	**104.5** 90.58 : 113.28	**103.17** 88.00 : 112.00	**109.83** 90.58 : 113.28	**108.83** 90.58 : 113.28	**108.0** 90.58 : 113.28	**106.83** 90.58 : 113.28
Vanadium	TM152	**103.33** 88.43 : 114.30	**101.67** 88.00 : 112.00	**104.5** 88.43 : 114.30	**105.17** 88.43 : 114.30	**109.17** 88.43 : 114.30	**103.5** 88.43 : 114.30
Zinc	TM152	**110.33** 86.52 : 115.27	**105.67** 88.00 : 112.00	**108.33** 86.52 : 115.27	**108.0** 86.52 : 115.27	**108.0** 86.52 : 115.27	**105.33** 86.52 : 115.27
Zirconium	TM152		88.00 : 112.00				

Component	Method Code	QC 1931	QC 1993
Aluminium	TM152	**100.67** 88.00 : 112.00	**105.67** 94.19 : 114.31
Antimony	TM152	**100.33** 88.00 : 112.00	**104.0** 79.80 : 122.00
Arsenic	TM152	**98.5** 88.00 : 112.00	**104.0** 90.42 : 111.32
Barium	TM152	**99.67** 88.00 : 112.00	**105.17** 90.79 : 113.16
Beryllium	TM152	**102.5** 88.00 : 112.00	**108.83** 93.25 : 120.04
Bismuth	TM152	**99.5** 91.90 : 112.20	**107.67** 94.65 : 117.05
Borate	TM152	**100.62** 88.00 : 112.00	**109.26** 88.00 : 112.00
Boron	TM152	**100.67** 88.00 : 112.00	**109.33** 86.68 : 117.67
Cadmium	TM152	**104.83** 88.00 : 112.00	**106.33** 94.60 : 112.40
Calcium	TM152	**102.0** 81.38 : 119.09	**108.67** 83.40 : 121.11
Chromium	TM152	**97.5** 88.00 : 112.00	**105.33** 93.28 : 110.91
Cobalt	TM152	**94.33** 88.00 : 112.00	**102.67** 84.39 : 114.26
Copper	TM152	**97.17** 85.52 : 115.00	**105.67** 88.86 : 118.72
Iron	TM152	**97.33** 92.00 : 113.00	**104.0** 92.00 : 113.00
Lead	TM152	**100.17** 88.00 : 112.00	**107.5** 89.25 : 115.12
Lithium	TM152	**101.33** 88.00 : 112.00	**106.0** 89.26 : 119.04
Magnesium	TM152	**102.0** 90.25 : 114.53	**106.67** 86.35 : 113.36
Manganese	TM152	**99.17** 88.00 : 112.00	**104.0** 94.24 : 112.74
Molybdenum	TM152	**96.33** 88.00 : 112.00	**101.33** 87.00 : 108.89
Nickel	TM152	**97.83** 88.00 : 112.00	**104.5** 92.11 : 110.56

Dissolved Metals by ICP-MS

		QC 1931	QC 1993
Niobium	TM152	88.00 : 112.00	
Phosphorus	TM152	**102.83** 88.00 : 112.00	**105.0** 90.52 : 115.47
Potassium	TM152	**103.33** 91.13 : 112.48	**107.33** 98.63 : 110.48
Selenium	TM152	**102.83** 88.00 : 112.00	**105.0** 88.44 : 113.86
Silver	TM152	**77.17** 89.40 : 108.90	**105.17** 94.40 : 114.74
Sodium	TM152	**102.67** 92.03 : 108.97	**106.67** 97.63 : 110.31
Strontium	TM152	**103.33** 88.00 : 112.00	**104.0** 90.72 : 114.82
Tellurium	TM152	**99.0** 93.32 : 114.66	**103.5** 90.72 : 112.62
Thallium	TM152	**90.83** 88.00 : 112.00	**103.5** 86.08 : 122.48
Tin	TM152	**98.67** 91.00 : 109.00	**103.33** 91.00 : 109.00
Titanium	TM152	**94.83** 85.48 : 103.18	**99.17** 91.87 : 102.47
Tungsten	TM152	**95.17** 88.00 : 112.00	**104.17** 78.12 : 132.82
Uranium	TM152	**99.67** 88.00 : 112.00	**107.5** 90.58 : 113.28
Vanadium	TM152	**97.17** 88.00 : 112.00	**106.33** 88.43 : 114.30
Zinc	TM152	**100.0** 88.00 : 112.00	**106.33** 86.52 : 115.27
Zirconium	TM152	88.00 : 112.00	

Dissolved Organic/Inorganic Carbon

Component	Method Code	QC 1964	QC 1967	QC 1973	QC 1918	QC 1997	QC 1937
Dissolved Inorganic Carbon	TM090	**100.0** 94.43 : 110.53	**99.0** 94.43 : 110.53	**108.5** 94.43 : 110.53	**113.67** 91.15 : 111.35	**116.0** 91.15 : 111.35	**110.0** 94.43 : 110.53
Dissolved Organic Carbon	TM090	**102.17** 99.25 : 108.95	**104.5** 99.25 : 108.95	**103.17** 99.25 : 108.95	**105.83** 97.18 : 109.58	**107.5** 97.18 : 109.58	**104.67** 99.25 : 108.95

Component	Method Code	QC 1953	QC 1956
Dissolved Inorganic Carbon	TM090	**103.67** 94.43 : 110.53	**100.5** 91.15 : 111.35
Dissolved Organic Carbon	TM090	**102.5** 99.25 : 108.95	**105.33** 97.18 : 109.58

EPH CWG (Aliphatic) GC (S)

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

EPH CWG (Aliphatic) GC (S)

Component	Method Code	QC 1929	QC 1994	QC 1965	QC 1948	QC 1904	QC 1903
Total Aliphatics >C12-C35	TM173	**82.29** 70.61 : 106.16	**82.08** 71.82 : 103.92	**76.46** 66.17 : 105.28	**94.79** 70.71 : 106.26	**71.88** 70.76 : 104.69	**81.04** 70.61 : 106.16

Component	Method Code	QC 1988
Total Aliphatics >C12-C35	TM173	**92.92** 71.82 : 103.92

EPH CWG (Aromatic) Filtered GC (W)

Component	Method Code	QC 1967	QC 1953	QC 1990	QC 1937
Total Aromatics >EC10-EC40	TM174	**82.44** 73.75 : 120.32	**80.98** 73.75 : 120.32	**85.37** 73.75 : 120.32	**94.39** 73.75 : 120.32

EPH CWG (Aromatic) GC (S)

Component	Method Code	QC 1929	QC 1994	QC 1965	QC 1948	QC 1904	QC 1903
Total Aromatics >EC12-EC35	TM173	**81.33** 67.75 : 104.04	**76.0** 68.32 : 103.07	**77.33** 65.78 : 102.90	**90.67** 65.82 : 105.00	**71.33** 68.16 : 102.29	**80.67** 67.75 : 104.04

Component	Method Code	QC 1988
Total Aromatics >EC12-EC35	TM173	**86.0** 68.32 : 103.07

Fluoride

Component	Method Code	QC 1989	QC 1964	QC 1914	QC 1949	QC 1980	QC 1957
Fluoride	TM104	**98.67** 93.20 : 104.48	**98.67** 93.20 : 104.48	**98.67** 93.20 : 104.48	**102.67** 95.51 : 107.24	**98.67** 93.20 : 104.48	**98.0** 93.20 : 104.48

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Fluoride

Component	Method Code	QC 1935
Fluoride	TM104	**104.0** 95.51 : 107.24

GRO by GC-FID (S)

Component	Method Code	QC 1948	QC 1931	QC 1983	QC 1904	QC 1934	QC 1937
QC	TM089	**99.25** 72.28 : 114.54	**109.46** 72.28 : 114.54	**101.56** 70.34 : 111.95	**78.93** 70.34 : 111.95	**85.06** 70.34 : 111.95	**82.8** 70.34 : 111.95

Component	Method Code	QC 1961	QC 1958
QC	TM089	**92.57** 70.01 : 104.45	**97.24** 70.34 : 111.95

GRO by GC-FID (W)

Component	Method Code	QC 1990	QC 1943	QC 1928	QC 1922	QC 1917	QC 1988
Benzene by GC	TM245	**98.5** 76.69 : 125.76	**99.5** 80.93 : 122.11	**102.0** 84.10 : 116.73	**97.0** 80.93 : 122.11	**96.0** 84.10 : 116.73	**92.5** 84.10 : 116.73
Ethylbenzene by GC	TM245	**100.5** 75.29 : 127.90	**103.5** 80.99 : 121.09	**105.5** 84.11 : 114.89	**100.0** 80.99 : 121.09	**98.0** 84.11 : 114.89	**95.5** 84.11 : 114.89
m & p Xylene by GC	TM245	**101.25** 74.88 : 129.10	**104.75** 82.77 : 123.19	**106.75** 83.73 : 116.33	**101.25** 82.77 : 123.19	**98.5** 83.73 : 116.33	**94.75** 83.73 : 116.33
MTBE GC-FID	TM245	**97.0** 78.63 : 126.62	**97.5** 80.06 : 123.27	**101.5** 84.42 : 117.50	**96.5** 80.06 : 123.27	**96.0** 84.42 : 117.50	**90.5** 84.42 : 117.50
o Xylene by GC	TM245	**100.0** 78.31 : 121.66	**103.0** 76.03 : 118.19	**105.5** 84.33 : 114.72	**100.5** 76.03 : 118.19	**98.5** 84.33 : 114.72	**97.0** 84.33 : 114.72
QC	TM245	**94.73** 64.44 : 127.67	**122.56** 76.13 : 145.89	**112.29** 60.71 : 137.65	**126.35** 76.13 : 145.89	**98.28** 60.71 : 137.65	**102.95** 60.71 : 137.65
Toluene by GC	TM245	**101.0** 76.34 : 125.74	**103.0** 82.78 : 121.99	**105.5** 84.73 : 116.85	**100.5** 82.78 : 121.99	**99.0** 84.73 : 116.85	**94.0** 84.73 : 116.85

Mercury Dissolved

Component	Method Code	QC 1941	QC 1971	QC 1932	QC 1988	QC 1924	QC 1919
Mercury Dissolved (CVAF)	TM183	**93.6** 75.00 : 111.00	**98.6** 75.00 : 111.00	**91.2** 75.00 : 111.00	**90.1** 75.00 : 111.00	**84.8** 75.00 : 111.00	**85.0** 75.00 : 111.00

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Mercury Dissolved

Component	Method Code	QC 1983
Mercury Dissolved (CVAF)	TM183	**98.0** 75.00 : 111.00

Metals in solid samples by OES

Component	Method Code	QC 1910	QC 1965	QC 1941	QC 1991	QC 1933	QC 1952
Aluminium	TM181	**100.88** 77.84 : 119.01	**90.27** 77.46 : 123.98	**93.81** 77.84 : 119.01	**109.73** 77.84 : 119.01	**100.88** 77.46 : 123.98	**110.62** 77.84 : 119.01
Antimony	TM181	**95.93** 88.24 : 108.30	**97.15** 87.04 : 111.16	**92.28** 84.28 : 107.67	**95.12** 88.24 : 108.30	**97.56** 87.04 : 111.16	**97.15** 84.28 : 107.67
Arsenic	TM181	**97.97** 91.21 : 109.74	**95.93** 87.34 : 110.87	**93.6** 87.05 : 109.36	**97.38** 91.21 : 109.74	**97.97** 87.34 : 110.87	**102.33** 87.05 : 109.36
Barium	TM181	**96.33** 82.49 : 109.34	**93.58** 80.73 : 115.16	**90.28** 82.49 : 109.34	**102.75** 82.49 : 109.34	**98.17** 80.73 : 115.16	**100.92** 82.49 : 109.34
Beryllium	TM181	**96.64** 90.00 : 109.18	**92.91** 89.47 : 112.97	**94.4** 85.44 : 109.61	**98.13** 90.00 : 109.18	**97.01** 89.47 : 112.97	**101.87** 85.44 : 109.61
Boron	TM181	**89.4** 76.57 : 104.15	**89.11** 76.57 : 104.15	**82.52** 73.51 : 104.66	**93.98** 76.57 : 104.15	**88.54** 76.57 : 104.15	**93.41** 73.51 : 104.66
Cadmium	TM181	**90.95** 82.95 : 110.25	**90.53** 82.98 : 105.97	**88.48** 81.46 : 106.43	**96.3** 82.95 : 110.25	**93.0** 82.98 : 105.97	**95.47** 81.46 : 106.43
Chromium	TM181	**95.13** 79.78 : 102.80	**86.61** 77.55 : 104.47	**88.64** 79.78 : 102.80	**94.12** 79.78 : 102.80	**93.51** 77.55 : 104.47	**96.96** 79.78 : 102.80
Cobalt	TM181	**88.68** 83.02 : 100.17	**88.99** 83.30 : 102.38	**85.22** 80.74 : 99.26	**88.68** 83.02 : 100.17	**88.36** 83.30 : 102.38	**93.4** 80.74 : 99.26
Copper	TM181	**93.66** 85.25 : 108.00	**96.83** 84.36 : 106.14	**91.9** 82.40 : 105.45	**95.07** 85.25 : 108.00	**95.42** 84.36 : 106.14	**96.48** 82.40 : 105.45
Iron	TM181	**100.0** 82.95 : 110.58	**90.48** 81.43 : 115.79	**96.03** 82.95 : 110.58	**104.76** 82.95 : 110.58	**99.21** 81.43 : 115.79	**106.35** 82.95 : 110.58
Lead	TM181	**87.61** 81.63 : 104.17	**89.64** 81.95 : 107.63	**86.04** 78.24 : 104.05	**88.51** 81.63 : 104.17	**95.95** 81.95 : 107.63	**91.67** 78.24 : 104.05
Manganese	TM181	**108.33** 99.46 : 120.54	**108.61** 97.73 : 122.27	**103.06** 94.29 : 119.51	**107.22** 99.46 : 120.54	**109.44** 97.73 : 122.27	**110.28** 94.29 : 119.51
Mercury	TM181	**93.72** 86.53 : 105.35	**93.24** 82.73 : 106.36	**90.58** 83.74 : 105.34	**92.51** 86.53 : 105.35	**93.96** 82.73 : 106.36	**96.62** 83.74 : 105.34
Molybdenum	TM181	**95.47** 89.41 : 107.75	**94.24** 86.61 : 111.07	**93.83** 87.11 : 106.87	**98.35** 89.41 : 107.75	**95.47** 86.61 : 111.07	**98.77** 87.11 : 106.87
Nickel	TM181	**90.22** 85.63 : 103.11	**91.2** 83.87 : 104.87	**88.26** 81.92 : 102.18	**93.4** 85.63 : 103.11	**89.98** 83.87 : 104.87	**94.87** 81.92 : 102.18
Phosphorus	TM181	**111.72** 94.56 : 124.28	**104.24** 92.65 : 125.47	**99.19** 94.56 : 124.28	**102.63** 94.56 : 124.28	**111.11** 92.65 : 125.47	**107.68** 94.56 : 124.28
Selenium	TM181	**96.47** 89.98 : 109.62	**92.55** 88.36 : 111.25	**93.73** 86.28 : 110.48	**98.04** 89.98 : 109.62	**95.29** 88.36 : 111.25	**98.82** 86.28 : 110.48
Strontium	TM181	**92.87** 84.00 : 104.25	**91.31** 83.94 : 111.48	**88.42** 79.13 : 102.79	**95.32** 84.00 : 104.25	**93.54** 83.94 : 111.48	**97.33** 79.13 : 102.79
Thallium	TM181	**93.81** 86.84 : 111.14	**56.64** 88.60 : 116.73	**56.64** 82.94 : 111.86	**57.52** 86.84 : 111.14	**93.81** 88.60 : 116.73	**56.64** 82.94 : 111.86
Tin	TM181	**96.58** 90.25 : 108.86	**97.34** 89.77 : 112.62	**97.34** 90.25 : 108.86	**101.14** 90.25 : 108.86	**98.1** 89.77 : 112.62	**103.42** 90.25 : 108.86
Titanium	TM181	**87.02** 66.23 : 102.06	**80.15** 66.29 : 105.96	**72.9** 66.23 : 102.06	**89.31** 66.23 : 102.06	**83.21** 66.29 : 105.96	**79.39** 66.23 : 102.06

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Metals in solid samples by OES

		QC 1910	QC 1965	QC 1941	QC 1991	QC 1933	QC 1952
Vanadium	TM181	**95.97** 86.37 : 107.94	**93.77** 84.11 : 113.29	**93.04** 86.37 : 107.94	**100.73** 86.37 : 107.94	**95.97** 84.11 : 113.29	**101.1** 86.37 : 107.94
Zinc	TM181	**97.13** 84.68 : 113.99	**92.81** 86.34 : 113.56	**94.05** 84.68 : 113.99	**99.59** 84.68 : 113.99	**96.92** 86.34 : 113.56	**102.26** 84.68 : 113.99

Component	Method Code	QC 1913	QC 1957	QC 1910	QC 1969	QC 1951	QC 1983
Aluminium	TM181	**94.69** 77.84 : 119.01	**99.12** 77.84 : 119.01	**93.81** 77.84 : 119.01	**102.65** 77.84 : 119.01	**98.23** 77.84 : 119.01	**97.35** 77.84 : 119.01
Antimony	TM181	**95.53** 84.28 : 107.67	**92.28** 84.28 : 107.67	**96.34** 84.28 : 107.67	**96.75** 84.28 : 107.67	**99.59** 84.28 : 107.67	**96.75** 84.28 : 107.67
Arsenic	TM181	**94.77** 87.05 : 109.36	**94.48** 87.05 : 109.36	**96.51** 87.05 : 109.36	**98.84** 87.05 : 109.36	**103.2** 87.05 : 109.36	**100.0** 87.05 : 109.36
Barium	TM181	**90.73** 82.49 : 109.34	**92.66** 82.49 : 109.34	**94.5** 82.49 : 109.34	**97.25** 82.49 : 109.34	**97.25** 82.49 : 109.34	**96.33** 82.49 : 109.34
Beryllium	TM181	**97.01** 85.44 : 109.61	**95.52** 85.44 : 109.61	**94.78** 85.44 : 109.61	**99.25** 85.44 : 109.61	**95.15** 85.44 : 109.61	**98.13** 85.44 : 109.61
Boron	TM181	**85.1** 73.51 : 104.66	**87.11** 73.51 : 104.66	**83.67** 73.51 : 104.66	**88.54** 73.51 : 104.66	**88.25** 73.51 : 104.66	**88.54** 73.51 : 104.66
Cadmium	TM181	**97.94** 81.46 : 106.43	**90.95** 81.46 : 106.43	**92.18** 81.46 : 106.43	**91.77** 81.46 : 106.43	**89.71** 81.46 : 106.43	**94.24** 81.46 : 106.43
Chromium	TM181	**91.89** 79.78 : 102.80	**91.08** 79.78 : 102.80	**89.86** 79.78 : 102.80	**96.15** 79.78 : 102.80	**94.52** 79.78 : 102.80	**94.93** 79.78 : 102.80
Cobalt	TM181	**86.79** 80.74 : 99.26	**86.16** 80.74 : 99.26	**88.36** 80.74 : 99.26	**89.94** 80.74 : 99.26	**94.97** 80.74 : 99.26	**90.25** 80.74 : 99.26
Copper	TM181	**92.96** 82.40 : 105.45	**92.08** 82.40 : 105.45	**92.25** 82.40 : 105.45	**94.89** 82.40 : 105.45	**96.3** 82.40 : 105.45	**95.42** 82.40 : 105.45
Iron	TM181	**97.62** 82.95 : 110.58	**98.41** 82.95 : 110.58	**96.83** 82.95 : 110.58	**103.17** 82.95 : 110.58	**96.03** 82.95 : 110.58	**98.41** 82.95 : 110.58
Lead	TM181	**85.81** 78.24 : 104.05	**86.94** 78.24 : 104.05	**88.74** 78.24 : 104.05	**92.57** 78.24 : 104.05	**94.59** 78.24 : 104.05	**92.12** 78.24 : 104.05
Manganese	TM181	**107.22** 94.29 : 119.51	**105.56** 94.29 : 119.51	**106.67** 94.29 : 119.51	**109.72** 94.29 : 119.51	**105.28** 94.29 : 119.51	**108.33** 94.29 : 119.51
Mercury	TM181	**90.1** 83.74 : 105.34	**90.58** 83.74 : 105.34	**92.51** 83.74 : 105.34	**95.65** 83.74 : 105.34	**100.72** 83.74 : 105.34	**95.41** 83.74 : 105.34
Molybdenum	TM181	**98.77** 87.11 : 106.87	**94.24** 87.11 : 106.87	**95.88** 87.11 : 106.87	**99.59** 87.11 : 106.87	**93.42** 87.11 : 106.87	**96.71** 87.11 : 106.87
Nickel	TM181	**92.67** 81.92 : 102.18	**89.98** 81.92 : 102.18	**89.0** 81.92 : 102.18	**93.64** 81.92 : 102.18	**89.98** 81.92 : 102.18	**92.67** 81.92 : 102.18
Phosphorus	TM181	**103.03** 94.56 : 124.28	**102.22** 94.56 : 124.28	**104.04** 94.56 : 124.28	**104.65** 94.56 : 124.28	**121.01** 94.56 : 124.28	**106.06** 94.56 : 124.28
Selenium	TM181	**96.08** 86.28 : 110.48	**94.12** 86.28 : 110.48	**93.33** 86.28 : 110.48	**98.04** 86.28 : 110.48	**94.12** 86.28 : 110.48	**98.43** 86.28 : 110.48
Strontium	TM181	**90.65** 79.13 : 102.79	**91.54** 79.13 : 102.79	**89.09** 79.13 : 102.79	**93.76** 79.13 : 102.79	**92.43** 79.13 : 102.79	**92.43** 79.13 : 102.79
Thallium	TM181	**96.46** 82.94 : 111.86	**56.64** 82.94 : 111.86	**96.9** 82.94 : 111.86	**101.33** 82.94 : 111.86	**100.44** 82.94 : 111.86	**99.12** 82.94 : 111.86
Tin	TM181	**100.76** 90.25 : 108.86	**103.04** 90.25 : 108.86	**99.24** 90.25 : 108.86	**100.76** 90.25 : 108.86	**95.06** 90.25 : 108.86	**98.1** 90.25 : 108.86
Titanium	TM181	**83.97** 66.23 : 102.06	**90.08** 66.23 : 102.06	**79.39** 66.23 : 102.06	**83.21** 66.23 : 102.06	**76.03** 66.23 : 102.06	**83.97** 66.23 : 102.06
Vanadium	TM181	**95.24** 86.37 : 107.94	**95.6** 86.37 : 107.94	**94.51** 86.37 : 107.94	**97.8** 86.37 : 107.94	**98.17** 86.37 : 107.94	**97.07** 86.37 : 107.94
Zinc	TM181	**95.89** 84.68 : 113.99	**97.13** 84.68 : 113.99	**94.46** 84.68 : 113.99	**98.15** 84.68 : 113.99	**99.38** 84.68 : 113.99	**97.95** 84.68 : 113.99

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Metals in solid samples by OES

Component	Method Code	QC 1937
Aluminium	TM181	**100.88** 77.46 : 123.98
Antimony	TM181	**97.15** 87.04 : 111.16
Arsenic	TM181	**101.45** 87.34 : 110.87
Barium	TM181	**97.25** 80.73 : 115.16
Beryllium	TM181	**97.76** 89.47 : 112.97
Boron	TM181	**82.81** 76.57 : 104.15
Cadmium	TM181	**92.18** 82.98 : 105.97
Chromium	TM181	**94.32** 77.55 : 104.47
Cobalt	TM181	**87.74** 83.30 : 102.38
Copper	TM181	**93.66** 84.36 : 106.14
Iron	TM181	**101.59** 81.43 : 115.79
Lead	TM181	**88.51** 81.95 : 107.63
Manganese	TM181	**109.72** 97.73 : 122.27
Mercury	TM181	**95.89** 82.73 : 106.36
Molybdenum	TM181	**95.47** 86.61 : 111.07
Nickel	TM181	**90.71** 83.87 : 104.87
Phosphorus	TM181	**106.87** 92.65 : 125.47
Selenium	TM181	**98.04** 88.36 : 111.25
Strontium	TM181	**92.87** 83.94 : 111.48
Thallium	TM181	**97.35** 88.60 : 116.73
Tin	TM181	**95.44** 89.77 : 112.62
Titanium	TM181	**74.27** 66.29 : 105.96
Vanadium	TM181	**95.24** 84.11 : 113.29
Zinc	TM181	**94.46** 86.34 : 113.56

PAH by GCMS

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

PAH by GCMS

Component	Method Code	QC 1977	QC 1994	QC 1906	QC 1924	QC 1951	QC 1900
Acenaphthene	TM218	**103.0** 84.53 : 114.86	**103.0** 76.82 : 113.72	**107.0** 84.53 : 114.86	**86.0** 84.53 : 114.86	**89.5** 84.53 : 114.86	**86.5** 76.79 : 103.90
Acenaphthylene	TM218	**98.0** 80.13 : 113.99	**101.5** 75.95 : 108.85	**104.0** 80.13 : 113.99	**82.0** 80.13 : 113.99	**86.0** 80.13 : 113.99	**85.5** 78.40 : 108.66
Anthracene	TM218	**97.5** 71.15 : 111.65	**108.5** 76.67 : 109.58	**103.0** 71.15 : 111.65	**90.5** 71.15 : 111.65	**89.0** 71.15 : 111.65	**90.5** 76.15 : 110.07
Benz(a)anthracene	TM218	**95.0** 74.78 : 122.48	**108.5** 70.05 : 119.30	**108.5** 74.78 : 122.48	**91.0** 74.78 : 122.48	**90.5** 74.78 : 122.48	**103.0** 73.77 : 119.26
Benzo(a)pyrene	TM218	**90.5** 70.68 : 115.92	**100.0** 68.22 : 116.60	**110.0** 70.68 : 115.92	**84.5** 70.68 : 115.92	**90.0** 70.68 : 115.92	**99.5** 73.20 : 114.18
Benzo(b)fluoranthene	TM218	**95.0** 73.56 : 121.32	**105.5** 75.44 : 113.45	**107.5** 73.56 : 121.32	**88.0** 73.56 : 121.32	**87.5** 73.56 : 121.32	**99.0** 75.36 : 117.58
Benzo(ghi)perylene	TM218	**88.5** 71.68 : 115.27	**93.5** 70.79 : 114.76	**104.5** 71.68 : 115.27	**75.0** 71.68 : 115.27	**85.5** 71.68 : 115.27	**96.0** 70.73 : 116.12
Benzo(k)fluoranthene	TM218	**93.0** 73.30 : 120.87	**103.5** 81.43 : 115.17	**107.5** 73.30 : 120.87	**89.5** 73.30 : 120.87	**84.5** 73.30 : 120.87	**106.5** 75.98 : 116.59
Chrysene	TM218	**93.5** 77.24 : 120.84	**103.5** 75.94 : 114.39	**104.5** 77.24 : 120.84	**86.5** 77.24 : 120.84	**86.5** 77.24 : 120.84	**99.0** 74.82 : 114.18
Dibenzo(ah)anthracene	TM218	**88.5** 72.03 : 116.78	**96.5** 71.87 : 118.97	**106.5** 72.03 : 116.78	**78.0** 72.03 : 116.78	**87.5** 72.03 : 116.78	**91.5** 69.17 : 115.30
Fluoranthene	TM218	**96.0** 78.65 : 113.45	**107.5** 77.92 : 113.69	**105.5** 78.65 : 113.45	**92.0** 78.65 : 113.45	**88.5** 78.65 : 113.45	**104.0** 75.88 : 112.84
Fluorene	TM218	**102.0** 76.95 : 117.18	**106.5** 82.02 : 108.34	**108.0** 76.95 : 117.18	**90.5** 76.95 : 117.18	**91.5** 76.95 : 117.18	**89.5** 78.50 : 114.02
Indeno(123cd)pyrene	TM218	**87.0** 68.53 : 118.42	**89.0** 67.80 : 113.60	**106.0** 68.53 : 118.42	**69.0** 68.53 : 118.42	**81.0** 68.53 : 118.42	**95.5** 80.09 : 117.12
Naphthalene	TM218	**101.0** 78.80 : 115.10	**99.0** 77.17 : 112.55	**104.0** 78.80 : 115.10	**83.0** 78.80 : 115.10	**91.5** 78.80 : 115.10	**92.0** 75.24 : 111.26
Phenanthrene	TM218	**101.5** 76.49 : 119.30	**107.0** 78.26 : 113.22	**110.0** 76.49 : 119.30	**92.5** 76.49 : 119.30	**92.5** 76.49 : 119.30	**88.5** 77.07 : 107.43
Pyrene	TM218	**96.0** 76.20 : 119.96	**107.0** 74.86 : 116.81	**106.5** 76.20 : 119.96	**92.0** 76.20 : 119.96	**88.5** 76.20 : 119.96	**105.0** 78.74 : 112.56

Component	Method Code	QC 1923	QC 1939
Acenaphthene	TM218	**95.5** 76.82 : 113.72	**97.5** 76.82 : 113.72
Acenaphthylene	TM218	**95.0** 75.95 : 108.85	**99.5** 75.95 : 108.85
Anthracene	TM218	**98.0** 76.67 : 109.58	**101.5** 76.67 : 109.58
Benz(a)anthracene	TM218	**89.5** 70.05 : 119.30	**98.5** 70.05 : 119.30
Benzo(a)pyrene	TM218	**85.0** 68.22 : 116.60	**94.0** 68.22 : 116.60
Benzo(b)fluoranthene	TM218	**85.0** 75.44 : 113.45	**91.0** 75.44 : 113.45
Benzo(ghi)perylene	TM218	**83.0** 70.79 : 114.76	**93.0** 70.79 : 114.76
Benzo(k)fluoranthene	TM218	**87.0** 81.43 : 115.17	**102.0** 81.43 : 115.17
Chrysene	TM218	**84.0** 75.94 : 114.39	**96.0** 75.94 : 114.39
Dibenzo(ah)anthracene	TM218	**82.5** 71.87 : 118.97	**94.0** 71.87 : 118.97

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

PAH by GCMS

		QC 1923	QC 1939
Fluoranthene	TM218	**96.5** 77.92 : 113.69	**103.5** 77.92 : 113.69
Fluorene	TM218	**96.5** 82.02 : 108.34	**103.5** 82.02 : 108.34
Indeno(123cd)pyrene	TM218	**73.5** 67.80 : 113.60	**92.0** 67.80 : 113.60
Naphthalene	TM218	**103.5** 77.17 : 112.55	**102.5** 77.17 : 112.55
Phenanthrene	TM218	**97.5** 78.26 : 113.22	**102.0** 78.26 : 113.22
Pyrene	TM218	**96.5** 74.86 : 116.81	**104.0** 74.86 : 116.81

PAH in waters by GC-MS (diss.filt)

Component	Method Code	QC 1914	QC 1976	QC 1960	QC 1905	QC 1944
Acenaphthene (diss.filt)	TM178	**109.2** 93.20 : 119.60	**110.0** 94.00 : 120.40	**111.2** 93.20 : 119.60	**106.4** 93.20 : 119.60	**107.6** 93.20 : 119.60
Acenaphthylene (diss.filt)	TM178	**108.0** 92.00 : 118.40	**108.4** 91.20 : 117.60	**112.4** 92.00 : 118.40	**109.6** 92.00 : 118.40	**107.2** 92.00 : 118.40
Anthracene (diss.filt)	TM178	**104.8** 90.80 : 114.80	**106.8** 91.20 : 112.80	**104.4** 90.80 : 114.80	**103.6** 90.80 : 114.80	**106.4** 90.80 : 114.80
Benzo(a)anthracene (diss.filt)	TM178	**103.2** 91.60 : 115.60	**105.2** 86.80 : 115.60	**104.8** 91.60 : 115.60	**96.0** 91.60 : 115.60	**100.8** 91.60 : 115.60
Benzo(a)pyrene (diss.filt)	TM178	**106.4** 91.20 : 120.00	**112.0** 90.40 : 116.80	**112.4** 91.20 : 120.00	**111.2** 91.20 : 120.00	**109.2** 91.20 : 120.00
Benzo(b)fluoranthene (diss.filt)	TM178	**105.6** 86.80 : 120.40	**106.4** 86.40 : 117.60	**111.2** 86.80 : 120.40	**104.4** 86.80 : 120.40	**110.4** 86.80 : 120.40
Benzo(g,h,i)perylene (diss.filt)	TM178	**100.8** 89.20 : 118.00	**104.4** 87.60 : 121.20	**106.4** 89.20 : 118.00	**103.2** 89.20 : 118.00	**105.2** 89.20 : 118.00
Benzo(k)fluoranthene (diss.filt)	TM178	**109.2** 94.40 : 125.60	**108.8** 91.20 : 124.80	**105.6** 94.40 : 125.60	**112.4** 94.40 : 125.60	**110.4** 94.40 : 125.60
Chrysene (diss.filt)	TM178	**111.6** 96.40 : 122.80	**111.2** 95.20 : 124.00	**109.6** 96.40 : 122.80	**111.2** 96.40 : 122.80	**106.8** 96.40 : 122.80
Dibenzo(a,h)anthracene (diss.filt)	TM178	**97.2** 93.60 : 132.00	**109.6** 84.80 : 118.40	**106.4** 93.60 : 132.00	**99.2** 93.60 : 132.00	**100.8** 93.60 : 132.00
Fluoranthene (diss.filt)	TM178	**111.6** 92.80 : 121.60	**112.0** 91.20 : 120.00	**116.0** 92.80 : 121.60	**112.4** 92.80 : 121.60	**112.4** 92.80 : 121.60
Fluorene (diss.filt)	TM178	**106.0** 93.60 : 120.00	**106.0** 93.20 : 119.60	**112.0** 93.60 : 120.00	**105.2** 93.60 : 120.00	**109.2** 93.60 : 120.00
Indeno(1,2,3-cd)pyrene (diss.filt)	TM178	**110.0** 82.40 : 120.80	**110.4** 86.80 : 115.60	**111.2** 82.40 : 120.80	**105.2** 82.40 : 120.80	**100.8** 82.40 : 120.80
Naphthalene (diss.filt)	TM178	**112.4** 88.40 : 126.80	**107.2** 90.40 : 126.40	**113.6** 88.40 : 126.80	**107.2** 88.40 : 126.80	**108.0** 88.40 : 126.80
Phenanthrene (diss.filt)	TM178	**106.8** 92.40 : 118.80	**104.4** 94.40 : 118.40	**113.2** 92.40 : 118.80	**105.6** 92.40 : 118.80	**110.8** 92.40 : 118.80
Pyrene (diss.filt)	TM178	**110.4** 90.40 : 124.00	**112.0** 93.60 : 120.00	**120.0** 90.40 : 124.00	**111.2** 90.40 : 124.00	**110.0** 90.40 : 124.00

PCB Congeners - Aqueous (W)

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

PCB Congeners - Aqueous (W)

Component	Method Code	QC 1986	QC 1933	QC 1948	QC 1949
PCB congener 101	TM197	**106.0** 85.28 : 119.60	**107.6** 85.28 : 119.60	**103.6** 85.28 : 119.60	**99.2** 85.28 : 119.60
PCB congener 105	TM197	**105.6** 81.16 : 119.80	**104.4** 81.16 : 119.80	**102.0** 81.16 : 119.80	**100.8** 81.16 : 119.80
PCB congener 114	TM197	**106.0** 88.32 : 118.08	**104.8** 88.32 : 118.08	**103.2** 88.32 : 118.08	**100.0** 88.32 : 118.08
PCB congener 118	TM197	**107.2** 87.76 : 117.04	**108.4** 87.76 : 117.04	**106.0** 87.76 : 117.04	**100.8** 87.76 : 117.04
PCB congener 123	TM197	**110.0** 86.80 : 117.28	**100.4** 86.80 : 117.28	**101.2** 86.80 : 117.28	**104.0** 86.80 : 117.28
PCB congener 126	TM197	**104.8** 84.56 : 116.00	**103.2** 84.56 : 116.00	**106.8** 84.56 : 116.00	**99.6** 84.56 : 116.00
PCB congener 138	TM197	**106.8** 83.00 : 117.80	**104.0** 83.00 : 117.80	**106.8** 83.00 : 117.80	**101.6** 83.00 : 117.80
PCB congener 153	TM197	**106.8** 84.12 : 117.00	**104.0** 84.12 : 117.00	**104.4** 84.12 : 117.00	**101.6** 84.12 : 117.00
PCB congener 156	TM197	**106.4** 82.24 : 119.20	**99.6** 82.24 : 119.20	**104.0** 82.24 : 119.20	**104.0** 82.24 : 119.20
PCB congener 157	TM197	**107.2** 84.96 : 116.40	**104.0** 84.96 : 116.40	**107.2** 84.96 : 116.40	**101.6** 84.96 : 116.40
PCB congener 167	TM197	**107.2** 81.64 : 119.32	**104.0** 81.64 : 119.32	**104.0** 81.64 : 119.32	**100.8** 81.64 : 119.32
PCB congener 169	TM197	**104.8** 84.60 : 117.96	**98.4** 84.60 : 117.96	**107.6** 84.60 : 117.96	**102.4** 84.60 : 117.96
PCB congener 180	TM197	**108.0** 80.40 : 119.04	**103.2** 80.40 : 119.04	**107.2** 80.40 : 119.04	**102.4** 80.40 : 119.04
PCB congener 189	TM197	**107.6** 81.56 : 119.00	**96.8** 81.56 : 119.00	**105.2** 81.56 : 119.00	**100.0** 81.56 : 119.00
PCB congener 28	TM197	**104.4** 83.20 : 117.04	**105.2** 83.20 : 117.04	**102.0** 83.20 : 117.04	**100.4** 83.20 : 117.04
PCB congener 52	TM197	**108.0** 81.84 : 119.52	**108.8** 81.84 : 119.52	**102.0** 81.84 : 119.52	**100.8** 81.84 : 119.52
PCB congener 77	TM197	**102.8** 81.96 : 117.24	**104.0** 81.96 : 117.24	**103.6** 81.96 : 117.24	**101.6** 81.96 : 117.24
PCB congener 81	TM197	**104.4** 82.28 : 120.20	**103.6** 82.28 : 120.20	**101.2** 82.28 : 120.20	**95.2** 82.28 : 120.20

PCBs by GCMS

Component	Method Code	QC 1988	QC 1934	QC 1989	QC 1971	QC 1990	QC 1902
PCB congener 101	TM168	**94.7** 79.46 : 109.70	**93.7** 73.09 : 112.63	**101.0** 79.46 : 109.70	**93.6** 73.09 : 112.63	73.09 : 112.63	**103.0** 73.09 : 112.63
PCB congener 105	TM168	**97.8** 77.82 : 109.32	**94.2** 70.08 : 112.92	**99.9** 77.82 : 109.32	**92.7** 70.08 : 112.92	70.08 : 112.92	**99.8** 70.08 : 112.92
PCB congener 114	TM168	**98.1** 78.15 : 110.49	**94.7** 71.45 : 111.53	**99.2** 78.15 : 110.49	**93.4** 71.45 : 111.53	71.45 : 111.53	**99.9** 71.45 : 111.53
PCB congener 118	TM168	**95.6** 78.85 : 110.11	**92.9** 70.76 : 113.78	**98.0** 78.85 : 110.11	**92.7** 70.76 : 113.78	70.76 : 113.78	**101.0** 70.76 : 113.78
PCB congener 123	TM168	**87.9** 77.04 : 109.44	**84.6** 69.96 : 112.50	**88.8** 77.04 : 109.44	**83.1** 69.96 : 112.50	69.96 : 112.50	**88.6** 69.96 : 112.50
PCB congener 126	TM168	**95.3** 77.79 : 112.65	**91.1** 70.61 : 116.15	**97.3** 77.79 : 112.65	**89.9** 70.61 : 116.15	70.61 : 116.15	**98.4** 70.61 : 116.15
PCB congener 138	TM168	**95.2** 82.92 : 114.57	**93.6** 69.88 : 115.78	**98.5** 82.92 : 114.57	**91.9** 69.88 : 115.78	69.88 : 115.78	**109.0** 69.88 : 115.78

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

PCBs by GCMS

		QC 1988	QC 1934	QC 1989	QC 1971	QC 1990	QC 1902
PCB congener 153	TM168	**95.5** 78.13 : 108.55	**92.0** 73.32 : 111.54	**97.0** 78.13 : 108.55	**91.7** 73.32 : 111.54	73.32 : 111.54	**105.0** 73.32 : 111.54
PCB congener 156	TM168	**96.6** 79.00 : 111.76	**92.1** 73.48 : 118.60	**97.9** 79.00 : 111.76	**90.6** 73.48 : 118.60	73.48 : 118.60	**98.4** 73.48 : 118.60
PCB congener 157	TM168	**94.2** 78.17 : 110.03	**90.5** 70.22 : 115.22	**96.7** 78.17 : 110.03	70.22 : 115.22	70.22 : 115.22	70.22 : 115.22
PCB congener 167	TM168	**102.0** 79.50 : 110.52	**97.7** 70.04 : 118.16	**105.0** 79.50 : 110.52	**96.7** 70.04 : 118.16	70.04 : 118.16	**104.0** 70.04 : 118.16
PCB congener 169	TM168	**101.0** 67.65 : 121.47	**98.4** 64.01 : 129.89	**103.0** 67.65 : 121.47	**98.2** 64.01 : 129.89	64.01 : 129.89	**105.0** 64.01 : 129.89
PCB congener 180	TM168	**99.6** 78.72 : 110.94	**97.1** 67.10 : 120.80	**101.0** 78.72 : 110.94	**94.8** 67.10 : 120.80	67.10 : 120.80	**106.0** 67.10 : 120.80
PCB congener 189	TM168	**99.9** 69.53 : 116.81	**97.3** 65.53 : 126.07	**98.3** 69.53 : 116.81	65.53 : 126.07	65.53 : 126.07	65.53 : 126.07
PCB congener 28	TM168	**96.0** 77.37 : 110.55	**96.5** 73.86 : 116.94	**99.0** 77.37 : 110.55	73.86 : 116.94	73.86 : 116.94	73.86 : 116.94
PCB congener 52	TM168	**95.7** 82.53 : 112.65	**95.3** 78.72 : 119.28	**102.0** 82.53 : 112.65	**96.0** 78.72 : 119.28	78.72 : 119.28	**104.0** 78.72 : 119.28
PCB congener 77	TM168	**105.0** 73.92 : 120.16	**101.0** 74.04 : 120.60	**109.0** 73.92 : 120.16	**102.0** 74.04 : 120.60	74.04 : 120.60	**110.0** 74.04 : 120.60
PCB congener 81	TM168	**96.7** 75.24 : 110.52	**97.0** 71.38 : 116.14	**102.0** 75.24 : 110.52	**97.5** 71.38 : 116.14	71.38 : 116.14	**106.0** 71.38 : 116.14

Component	Method Code	QC 1991	QC 1904	QC 1940
PCB congener 101	TM168	**103.0** 73.09 : 112.63	**96.9** 73.09 : 112.63	**91.9** 73.09 : 112.63
PCB congener 105	TM168	**104.0** 70.08 : 112.92	**97.7** 70.08 : 112.92	**94.3** 70.08 : 112.92
PCB congener 114	TM168	**103.0** 71.45 : 111.53	**96.1** 71.45 : 111.53	**92.9** 71.45 : 111.53
PCB congener 118	TM168	**103.0** 70.76 : 113.78	**95.1** 70.76 : 113.78	**93.2** 70.76 : 113.78
PCB congener 123	TM168	**91.5** 69.96 : 112.50	**85.7** 69.96 : 112.50	**83.1** 69.96 : 112.50
PCB congener 126	TM168	**100.0** 70.61 : 116.15	**93.3** 70.61 : 116.15	**89.7** 70.61 : 116.15
PCB congener 138	TM168	**102.0** 69.88 : 115.78	**95.1** 69.88 : 115.78	**92.8** 69.88 : 115.78
PCB congener 153	TM168	**103.0** 73.32 : 111.54	**95.1** 73.32 : 111.54	**92.3** 73.32 : 111.54
PCB congener 156	TM168	**102.0** 73.48 : 118.60	**95.2** 73.48 : 118.60	**92.5** 73.48 : 118.60
PCB congener 157	TM168	70.22 : 115.22	70.22 : 115.22	**89.3** 70.22 : 115.22
PCB congener 167	TM168	**108.0** 70.04 : 118.16	**100.0** 70.04 : 118.16	**98.2** 70.04 : 118.16
PCB congener 169	TM168	**109.0** 64.01 : 129.89	**102.0** 64.01 : 129.89	**98.5** 64.01 : 129.89
PCB congener 180	TM168	**107.0** 67.10 : 120.80	**100.0** 67.10 : 120.80	**97.3** 67.10 : 120.80
PCB congener 189	TM168	65.53 : 126.07	65.53 : 126.07	**96.3** 65.53 : 126.07
PCB congener 28	TM168	73.86 : 116.94	73.86 : 116.94	**93.4** 73.86 : 116.94

PCBs by GCMS

		QC 1991	QC 1904	QC 1940
PCB congener 52	TM168	**105.0** 78.72 : 119.28	**98.0** 78.72 : 119.28	**94.0** 78.72 : 119.28
PCB congener 77	TM168	**111.0** 74.04 : 120.60	**104.0** 74.04 : 120.60	**98.0** 74.04 : 120.60
PCB congener 81	TM168	**105.0** 71.38 : 116.14	**98.1** 71.38 : 116.14	**94.8** 71.38 : 116.14

pH

Component	Method Code	QC 1918	QC 1952	QC 1967	QC 1917	QC 1902	QC 1964
pH	TM133	**99.89** 97.03 : 101.14	**97.37** 97.03 : 101.14	**98.28** 97.03 : 101.14	**98.63** 97.03 : 101.14	**99.66** 97.03 : 101.14	**98.4** 97.03 : 101.14

Component	Method Code	QC 1981
pH	TM133	**100.34** 98.63 : 101.37

pH Value of Filtered Water

Component	Method Code	QC 1984	QC 1931	QC 1943	QC 1917	QC 1901	QC 1973
pH Value of Filtered Water	TM256	**99.87** 99.73 : 102.16	**100.27** 99.73 : 102.16	**102.02** 99.00 : 100.71	**100.81** 99.73 : 102.16	**101.21** 99.73 : 102.16	**101.35** 99.73 : 102.16

Phenols by ms (w)

Component	Method Code	QC 1903	QC 1922	QC 1924	QC 1965
2,3,4,6-tetrachlorophenol	TM205	**104.63** 67.00 : 128.50	**89.13** 67.00 : 128.50	**110.5** 67.00 : 128.50	**104.75** 67.00 : 128.50
2,4,5-trichlorophenol	TM205	**105.88** 70.75 : 134.50	**94.25** 70.75 : 134.50	**119.25** 70.75 : 134.50	**114.87** 70.75 : 134.50
2,4,6-trichlorophenol	TM205	**106.75** 69.88 : 134.38	**94.75** 69.88 : 134.38	**119.13** 69.88 : 134.38	**114.0** 69.88 : 134.38
2,4-dichlorophenol	TM205	**106.13** 69.88 : 134.38	**96.88** 69.88 : 134.38	**118.38** 69.88 : 134.38	**110.25** 69.88 : 134.38
2,4-dimethylphenol	TM205	**105.13** 67.50 : 138.00	**102.13** 67.50 : 138.00	**115.0** 67.50 : 138.00	**109.12** 67.50 : 138.00
2,6-dichlorophenol	TM205	**105.0** 70.13 : 133.13	**96.25** 70.13 : 133.13	**118.63** 70.13 : 133.13	**112.38** 70.13 : 133.13
2-chlorophenol	TM205	**105.88** 68.50 : 133.00	**101.5** 68.50 : 133.00	**117.25** 68.50 : 133.00	**106.63** 68.50 : 133.00
2-methylphenol	TM205	**106.25** 70.63 : 137.38	**105.75** 70.63 : 137.38	**119.0** 70.63 : 137.38	**110.25** 70.63 : 137.38
2-nitrophenol	TM205	**100.5** 58.88 : 126.38	**96.38** 58.88 : 126.38	**102.63** 58.88 : 126.38	**113.87** 58.88 : 126.38

Phenols by ms (w)

		QC 1903	QC 1922	QC 1924	QC 1965
3-methylphenol	TM205	**105.5** 71.25 : 138.75	**104.0** 71.25 : 138.75	**121.25** 71.25 : 138.75	**111.0** 71.25 : 138.75
4-chloro-3-methylphenol	TM205	**108.62** 74.25 : 138.00	**100.13** 74.25 : 138.00	**123.25** 74.25 : 138.00	**112.38** 74.25 : 138.00
4-methylphenol	TM205	**107.25** 74.13 : 137.13	**105.13** 74.13 : 137.13	**122.38** 74.13 : 137.13	**111.0** 74.13 : 137.13
4-nitrophenol	TM205	**108.5** 68.50 : 136.75	**96.75** 68.50 : 136.75	**111.25** 68.50 : 136.75	**112.38** 68.50 : 136.75
Pentachlorophenol	TM205	**86.0** 47.74 : 105.49	**83.13** 47.74 : 105.49	**90.88** 47.74 : 105.49	**86.25** 47.74 : 105.49
Phenol	TM205	**106.13** 67.27 : 72.73	**108.38** 67.27 : 72.73	**121.0** 67.27 : 72.73	**108.88** 67.27 : 72.73

Phosphate by Kone (w)

Component	Method Code	QC 1969	QC 1921	QC 1960	QC 1999	QC 1988	QC 1904
Phosphate (Ortho as PO4)	TM184	**99.6** 96.40 : 109.60	**102.0** 96.40 : 109.60	**99.2** 96.40 : 109.60	**100.4** 96.40 : 109.60	**100.0** 96.40 : 109.60	**102.4** 96.40 : 109.60

Semi Volatile Organic Compounds

Component	Method Code	QC 1925	QC 1962	QC 1957
4-Bromophenylphenylether (Soil)	TM157	**89.5** 66.75 : 125.25	**98.0** 66.75 : 125.25	**97.0** 63.50 : 114.50
Benzo(a)anthracene (Soil)	TM157	**86.0** 67.40 : 120.50	**100.5** 67.40 : 120.50	**102.5** 71.89 : 120.91
Hexachlorobutadiene (Soil)	TM157	**94.5** 68.25 : 126.75	**101.5** 68.25 : 126.75	**100.0** 69.80 : 117.77
Naphthalene (Soil)	TM157	**92.0** 67.55 : 125.45	**97.0** 67.55 : 125.45	**98.0** 70.00 : 115.00
Nitrobenzene (Soil)	TM157	**91.0** 66.50 : 123.50	**100.0** 66.50 : 123.50	**101.0** 70.00 : 118.00
Phenol (Soil)	TM157	**94.5** 69.92 : 114.02	**101.5** 69.92 : 114.02	**96.5** 72.00 : 117.00

Sulphide

Component	Method Code	QC 1901	QC 1939	QC 1946	QC 1912	QC 1987	QC 1974
Sulphide	TM101	**97.33** 88.90 : 112.50	**107.33** 88.90 : 112.50	**100.67** 88.90 : 112.50	**102.67** 88.90 : 112.50	**103.33** 88.90 : 112.50	**102.0** 88.90 : 112.50

Component	Method Code	QC 1929	QC 1967
Sulphide	TM101	**98.67** 88.90 : 112.50	**107.33** 88.90 : 112.50

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

SVOC MS (W) - Aqueous

Component	Method Code	QC 1999	QC 1970	QC 1937	QC 1975	QC 1956	QC 1962
4-Bromophenylphenylether	TM176	**89.6** 55.76 : 105.20	**84.0** 58.88 : 100.16	**72.64** 58.88 : 100.16	**70.48** 58.88 : 100.16	**96.0** 55.76 : 105.20	**86.4** 55.76 : 105.20
Benzo(a)anthracene	TM176	**85.6** 59.28 : 107.76	**85.6** 58.56 : 106.08	**74.48** 58.56 : 106.08	**71.12** 58.56 : 106.08	**98.4** 59.28 : 107.76	**91.2** 59.28 : 107.76
Benzo(a)pyrene	TM176	**80.8** 54.40 : 105.76	**84.0** 55.84 : 106.24	**73.04** 55.84 : 106.24	**70.24** 55.84 : 106.24	**99.2** 54.40 : 105.76	**96.0** 54.40 : 105.76
Butylbenzyl phthalate	TM176	**88.0** 49.84 : 109.84	**96.8** 45.10 : 118.90	**79.52** 45.10 : 118.90	**79.92** 45.10 : 118.90	**91.2** 49.84 : 109.84	**84.0** 49.84 : 109.84
Hexachlorobutadiene	TM176	**73.44** 48.64 : 95.68	**70.24** 49.76 : 92.00	**60.0** 49.76 : 92.00	**59.92** 49.76 : 92.00	**85.6** 48.64 : 95.68	**83.2** 48.64 : 95.68
Naphthalene	TM176	**92.8** 63.04 : 111.04	**84.0** 65.68 : 110.32	**74.08** 65.68 : 110.32	**75.04** 65.68 : 110.32	**102.4** 63.04 : 111.04	**100.0** 63.04 : 111.04
Nitrobenzene	TM176	**81.6** 59.92 : 108.40	**79.28** 60.56 : 102.80	**65.6** 60.56 : 102.80	**68.16** 60.56 : 102.80	**90.4** 59.92 : 108.40	**77.2** 59.92 : 108.40
Phenol	TM176	**47.76** 38.16 : 63.60	**50.8** 39.44 : 60.56	**43.04** 39.44 : 60.56	**45.36** 39.44 : 60.56	**55.36** 38.16 : 63.60	**50.16** 38.16 : 63.60

Total Organic Carbon

Component	Method Code	QC 1907	QC 1997	QC 1935	QC 1963	QC 1991	QC 1999
Total Organic Carbon	TM132	**101.17** 88.47 : 112.82	**100.39** 88.47 : 112.82	**95.31** 88.47 : 112.82	**95.31** 88.47 : 112.82	**97.66** 88.47 : 112.82	**94.92** 88.47 : 112.82

Component	Method Code	QC 1957	QC 1933	QC 1988	QC 1912
Total Organic Carbon	TM132	**101.95** 88.47 : 112.82	**103.91** 88.47 : 112.82	**101.95** 88.47 : 112.82	**94.14** 69.88 : 102.67

VOC MS (S)

Component	Method Code	QC 1963	QC 1954	QC 1996	QC 1944	QC 1915	QC 1988
1,1,1,2-tetrachloroethane	TM116	**94.8** 79.10 : 119.66	**108.4** 77.56 : 115.55	**100.6** 79.10 : 119.66	**94.4** 79.10 : 119.66	**108.2** 77.56 : 115.55	**102.8** 79.10 : 119.66
1,1,1-Trichloroethane	TM116	**101.2** 87.51 : 115.37	**111.6** 73.73 : 118.05	**96.8** 88.88 : 119.66	**97.0** 87.51 : 115.37	**107.8** 73.73 : 118.05	**97.0** 88.88 : 119.66
1,1,2-Trichloroethane	TM116	**93.2** 75.16 : 112.70	**103.4** 77.12 : 116.04	**89.8** 75.16 : 112.70	**92.6** 75.16 : 112.70	**104.8** 77.12 : 116.04	**91.6** 75.16 : 112.70
1,1-Dichloroethane	TM116	**102.2** 89.44 : 121.71	**114.0** 74.46 : 129.15	**93.0** 77.84 : 124.12	**98.8** 89.44 : 121.71	**112.8** 74.46 : 129.15	**87.0** 77.84 : 124.12
1,2-Dichloroethane	TM116	**103.4** 86.58 : 129.62	**120.0** 87.98 : 127.86	**101.0** 86.58 : 129.62	**102.0** 86.58 : 129.62	**116.6** 87.98 : 127.86	**101.4** 86.58 : 129.62
1,4-Dichlorobenzene	TM116	**101.4** 71.61 : 124.63	**106.6** 72.76 : 126.34	**95.4** 71.61 : 124.63	**95.4** 71.61 : 124.63	**96.0** 72.76 : 126.34	**97.4** 71.61 : 124.63
2-Chlorotoluene	TM116	**97.4** 66.81 : 118.43	**103.6** 72.40 : 116.20	**91.6** 66.81 : 118.43	**92.2** 66.81 : 118.43	**106.2** 72.40 : 116.20	**90.6** 66.81 : 118.43
4-Chlorotoluene	TM116	**93.6** 65.88 : 114.76	**103.0** 66.90 : 112.46	**87.4** 65.88 : 114.76	**86.8** 65.88 : 114.76	**100.4** 66.90 : 112.46	**92.4** 65.88 : 114.76
Benzene	TM116	**97.8** 88.66 : 121.07	**109.4** 81.05 : 117.28	**94.2** 93.16 : 123.63	**96.2** 88.66 : 121.07	**107.8** 81.05 : 117.28	**95.2** 93.16 : 123.63

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

VOC MS (S)

		QC 1963	QC 1954	QC 1996	QC 1944	QC 1915	QC 1988
Carbon Disulphide	TM116	**99.4** 75.11 : 124.81	**110.4** 74.91 : 122.14	**88.4** 75.11 : 124.81	**92.4** 75.11 : 124.81	**106.8** 74.91 : 122.14	**83.0** 75.11 : 124.81
Carbontetrachloride	TM116	**102.8** 82.35 : 126.46	**113.8** 80.31 : 124.50	**103.4** 82.35 : 126.46	**104.8** 82.35 : 126.46	**113.8** 80.31 : 124.50	**104.8** 82.35 : 126.46
Chlorobenzene	TM116	**95.8** 82.88 : 122.42	**110.0** 75.00 : 115.53	**97.8** 82.88 : 122.42	**93.8** 82.88 : 122.42	**112.0** 75.00 : 115.53	**99.0** 82.88 : 122.42
Chloroform	TM116	**103.8** 93.02 : 122.86	**120.0** 87.40 : 122.49	**97.8** 82.52 : 123.25	**100.4** 93.02 : 122.86	**115.4** 87.40 : 122.49	**95.8** 82.52 : 123.25
Chloromethane	TM116	**124.4** 52.88 : 131.36	**120.0** 58.11 : 136.20	**103.2** 55.37 : 133.35	**120.4** 52.88 : 131.36	**115.2** 58.11 : 136.20	**89.0** 55.37 : 133.35
Cis-1,2-Dichloroethene	TM116	**107.0** 78.27 : 128.90	**114.0** 80.67 : 126.72	**97.8** 78.27 : 128.90	**102.8** 78.27 : 128.90	**112.0** 80.67 : 126.72	**94.6** 78.27 : 128.90
Dibromomethane	TM116	**90.6** 71.69 : 119.43	**101.6** 67.80 : 121.75	**91.4** 71.69 : 119.43	**92.6** 71.69 : 119.43	**103.4** 67.80 : 121.75	**95.4** 71.69 : 119.43
Dichloromethane	TM116	**111.8** 89.49 : 128.89	**128.6** 81.11 : 133.25	**99.0** 81.68 : 125.21	**106.0** 89.49 : 128.89	**119.2** 81.11 : 133.25	**93.0** 81.68 : 125.21
Ethylbenzene	TM116	**88.6** 75.93 : 116.76	**102.0** 75.92 : 110.41	**91.8** 83.56 : 122.99	**84.6** 75.93 : 116.76	**103.2** 75.92 : 110.41	**92.4** 83.56 : 122.99
Hexachlorobutadiene	TM116	**77.0** 7.32 : 139.00	**65.8** 12.82 : 152.73	**67.8** 7.32 : 139.00	**74.6** 7.32 : 139.00	**87.2** 12.82 : 152.73	**83.8** 7.32 : 139.00
Isopropylbenzene	TM116	**92.6** 52.15 : 132.52	**98.0** 54.21 : 117.17	**88.8** 52.15 : 132.52	**86.2** 52.15 : 132.52	**102.2** 54.21 : 117.17	**91.4** 52.15 : 132.52
Naphthalene	TM116	**95.2** 80.29 : 135.77	**115.4** 80.86 : 128.81	**92.2** 79.29 : 125.59	**93.0** 80.29 : 135.77	**111.6** 80.86 : 128.81	**93.2** 79.29 : 125.59
o-Xylene	TM116	**88.8** 68.16 : 107.61	**102.0** 67.52 : 107.60	**91.4** 68.16 : 107.61	**84.0** 68.16 : 107.61	**98.2** 67.52 : 107.60	**92.8** 68.16 : 107.61
p/m-Xylene	TM116	**86.2** 73.52 : 108.71	**99.3** 68.32 : 108.91	**91.9** 77.41 : 112.71	**84.4** 73.52 : 108.71	**98.1** 68.32 : 108.91	**93.3** 77.41 : 112.71
Sec-Butylbenzene	TM116	**84.6** 44.71 : 117.87	**80.0** 44.91 : 118.40	**80.2** 44.71 : 117.87	**84.6** 44.71 : 117.87	**93.2** 44.91 : 118.40	**87.0** 44.71 : 117.87
Tetrachloroethene	TM116	**98.8** 81.43 : 126.65	**115.0** 76.95 : 121.02	**109.4** 81.43 : 126.65	**96.4** 81.43 : 126.65	**111.8** 76.95 : 121.02	**110.2** 81.43 : 126.65
Toluene	TM116	**90.0** 85.50 : 114.89	**101.0** 74.24 : 107.42	**89.2** 87.82 : 116.21	**90.0** 85.50 : 114.89	**103.2** 74.24 : 107.42	**91.8** 87.82 : 116.21
Trichloroethene	TM116	**97.6** 79.80 : 112.33	**109.0** 77.61 : 111.54	**94.8** 79.80 : 112.33	**96.0** 79.80 : 112.33	**107.4** 77.61 : 111.54	**99.2** 79.80 : 112.33
Trichlorofluoromethane	TM116	**109.8** 88.86 : 128.82	**128.2** 71.31 : 128.41	**110.6** 72.76 : 118.80	**109.4** 88.86 : 128.82	**124.4** 71.31 : 128.41	**108.2** 72.76 : 118.80
Vinyl Chloride	TM116	**108.2** 64.90 : 133.10	**106.4** 68.26 : 133.45	**93.4** 64.90 : 133.10	**102.8** 64.90 : 133.10	**105.0** 68.26 : 133.45	**82.0** 64.90 : 133.10

Component	Method Code	QC 1922	QC 1939	QC 1921
1,1,1,2-tetrachloroethane	TM116	**99.6** 79.10 : 119.66	**104.6** 77.56 : 115.55	**114.2** 79.10 : 119.66
1,1,1-Trichloroethane	TM116	**100.2** 87.51 : 115.37	**106.6** 73.73 : 118.05	**106.2** 88.88 : 119.66
1,1,2-Trichloroethane	TM116	**95.0** 75.16 : 112.70	**100.4** 77.12 : 116.04	**101.0** 75.16 : 112.70
1,1-Dichloroethane	TM116	**103.8** 89.44 : 121.71	**109.0** 74.46 : 129.15	**109.6** 77.84 : 124.12
1,2-Dichloroethane	TM116	**101.4** 86.58 : 129.62	**117.2** 87.98 : 127.86	**121.2** 86.58 : 129.62
1,4-Dichlorobenzene	TM116	**95.6** 71.61 : 124.63	**106.8** 72.76 : 126.34	**109.2** 71.61 : 124.63

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

VOC MS (S)

		QC 1922	QC 1939	QC 1921
2-Chlorotoluene	TM116	**98.8** 66.81 : 118.43	**108.0** 72.40 : 116.20	**95.8** 66.81 : 118.43
4-Chlorotoluene	TM116	**92.2** 65.88 : 114.76	**102.4** 66.90 : 112.46	**92.0** 65.88 : 114.76
Benzene	TM116	**100.6** 88.66 : 121.07	**108.4** 91.01 : 117.67	**105.4** 93.16 : 123.63
Carbon Disulphide	TM116	**97.2** 75.11 : 124.81	**114.0** 74.91 : 122.14	**108.2** 75.11 : 124.81
Carbontetrachloride	TM116	**106.6** 82.35 : 126.46	**105.0** 80.31 : 124.50	**113.0** 82.35 : 126.46
Chlorobenzene	TM116	**95.2** 82.88 : 122.42	**103.4** 75.00 : 115.53	**108.0** 82.88 : 122.42
Chloroform	TM116	**105.4** 93.02 : 122.86	**108.2** 87.40 : 122.49	**114.0** 82.52 : 123.25
Chloromethane	TM116	**124.4** 52.88 : 131.36	**125.0** 65.05 : 142.63	**118.2** 55.37 : 133.35
Cis-1,2-Dichloroethene	TM116	**106.2** 78.27 : 128.90	**110.4** 80.67 : 126.72	**112.2** 78.27 : 128.90
Dibromomethane	TM116	**95.4** 71.69 : 119.43	**93.0** 67.80 : 121.75	**102.8** 71.69 : 119.43
Dichloromethane	TM116	**114.4** 89.49 : 128.89	**121.8** 81.11 : 133.25	**126.0** 81.68 : 125.21
Ethylbenzene	TM116	**88.4** 75.93 : 116.76	**101.8** 75.92 : 110.41	**96.6** 83.56 : 122.99
Hexachlorobutadiene	TM116	**85.8** 7.32 : 139.00	**73.6** 12.82 : 152.73	**83.4** 7.32 : 139.00
Isopropylbenzene	TM116	**91.4** 52.15 : 132.52	**104.8** 54.21 : 117.17	**87.4** 52.15 : 132.52
Naphthalene	TM116	**93.4** 80.29 : 135.77	**109.2** 80.86 : 128.81	**110.2** 79.29 : 125.59
o-Xylene	TM116	**86.2** 68.16 : 107.61	**98.8** 82.80 : 107.93	**96.6** 68.16 : 107.61
p/m-Xylene	TM116	**86.1** 73.52 : 108.71	**99.3** 68.32 : 108.91	**94.1** 77.41 : 112.71
Sec-Butylbenzene	TM116	**88.0** 44.71 : 117.87	**94.4** 44.91 : 118.40	**82.0** 44.71 : 117.87
Tetrachloroethene	TM116	**104.4** 81.43 : 126.65	**106.2** 76.95 : 121.02	**110.2** 81.43 : 126.65
Toluene	TM116	**91.2** 85.50 : 114.89	**98.8** 74.24 : 107.42	**95.2** 87.82 : 116.21
Trichloroethene	TM116	**99.6** 79.80 : 112.33	**103.8** 77.61 : 111.54	**103.4** 79.80 : 112.33
Trichlorofluoromethane	TM116	**116.2** 88.86 : 128.82	**106.2** 71.31 : 128.41	**111.2** 80.52 : 132.12
Vinyl Chloride	TM116	**109.2** 64.90 : 133.10	**110.6** 68.26 : 133.45	**99.8** 64.90 : 133.10

VOC MS (W)

CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

VOC MS (W)

Component	Method Code	QC 1902	QC 1978	QC 1969	QC 1970	QC 1959	QC 1915
1,1,1,2-Tetrachloroethane	TM208	**98.5** 78.82 : 115.90	**109.0** 78.82 : 115.90	**105.5** 81.85 : 113.65	**107.0** 78.82 : 115.90	**101.5** 81.85 : 113.65	**105.5** 81.85 : 113.65
1,1,1-Trichloroethane	TM208	**99.0** 79.61 : 114.35	**105.0** 79.61 : 114.35	**101.0** 81.48 : 111.75	**105.5** 79.61 : 114.35	**99.0** 81.48 : 111.75	**100.5** 81.48 : 111.75
1,1-Dichloroethane	TM208	**98.0** 79.99 : 118.57	**104.5** 79.99 : 118.57	**103.5** 79.60 : 118.57	**97.0** 79.99 : 118.57	**100.5** 79.60 : 118.57	**102.0** 79.60 : 118.57
1,2-Dichloroethane	TM208	**98.5** 79.35 : 124.02	**104.5** 79.35 : 124.02	**108.0** 77.72 : 133.33	**109.5** 79.35 : 124.02	**104.5** 77.72 : 133.33	**107.0** 77.72 : 133.33
2-Chlorotoluene	TM208	**106.0** 79.67 : 114.74	**118.0** 79.67 : 114.74	**106.0** 82.89 : 116.61	**102.0** 79.67 : 114.74	**102.5** 82.89 : 116.61	**104.5** 82.89 : 116.61
4-Chlorotoluene	TM208	**103.5** 80.15 : 113.42	**119.0** 80.15 : 113.42	**105.0** 79.46 : 115.88	**101.5** 80.15 : 113.42	**103.5** 79.46 : 115.88	**105.0** 79.46 : 115.88
Benzene	TM208	**100.0** 84.37 : 119.68	**108.0** 84.37 : 119.68	**105.5** 81.22 : 118.60	**109.5** 84.37 : 119.68	**102.5** 81.22 : 118.60	**103.5** 81.22 : 118.60
Bromomethane	TM208	**92.0** 68.41 : 115.99	**90.5** 68.41 : 115.99	**96.0** 66.94 : 108.55	**86.0** 68.41 : 115.99	**89.5** 66.94 : 108.55	**100.0** 68.25 : 113.64
Carbontetrachloride	TM208	**98.0** 79.73 : 118.91	**106.0** 79.73 : 118.91	**102.5** 86.16 : 119.10	**107.0** 79.73 : 118.91	**103.5** 86.16 : 119.10	**101.5** 86.16 : 119.10
Chlorobenzene	TM208	**102.5** 89.49 : 115.83	**114.0** 89.49 : 115.83	**107.0** 81.61 : 113.62	**112.0** 89.49 : 115.83	**104.5** 81.61 : 113.62	**107.5** 87.25 : 116.65
Chloroform	TM208	**94.5** 82.31 : 120.71	**99.0** 82.31 : 120.71	**107.0** 83.01 : 121.64	**108.5** 82.31 : 120.71	**103.0** 83.01 : 121.64	**102.5** 83.01 : 121.64
Chloromethane	TM208	**112.5** 62.46 : 124.98	**105.0** 62.46 : 124.98	**114.0** 58.04 : 120.53	**99.5** 62.46 : 124.98	**106.0** 58.04 : 120.53	**109.5** 65.28 : 130.05
Cis-1,2-Dichloroethene	TM208	**98.0** 84.04 : 126.19	**104.0** 84.04 : 126.19	**107.5** 82.23 : 124.89	**110.0** 84.04 : 126.19	**104.5** 82.23 : 124.89	**104.0** 82.23 : 124.89
Dichloromethane	TM208	**100.0** 81.20 : 120.83	**106.0** 81.20 : 120.83	**113.0** 78.23 : 120.65	**96.0** 81.20 : 120.83	**106.5** 78.23 : 120.65	**106.5** 78.23 : 120.65
Ethylbenzene	TM208	**92.0** 80.54 : 112.31	**102.0** 80.54 : 112.31	**100.5** 79.55 : 110.51	**99.5** 80.54 : 112.31	**99.5** 79.55 : 110.51	**99.5** 79.55 : 110.51
Hexachlorobutadiene	TM208	**82.0** 59.76 : 107.25	**87.5** 59.76 : 107.25	**106.0** 67.63 : 111.28	**97.5** 59.76 : 107.25	**94.5** 67.63 : 111.28	**98.5** 67.63 : 111.28
o-Xylene	TM208	**94.0** 79.22 : 112.31	**108.5** 79.22 : 112.31	**104.0** 79.71 : 111.54	**102.5** 79.22 : 112.31	**102.0** 79.71 : 111.54	**103.5** 90.42 : 112.27
p/m-Xylene	TM208	**94.0** 79.85 : 111.06	**112.75** 79.85 : 111.06	**102.0** 79.64 : 111.14	**100.75** 79.85 : 111.06	**101.25** 79.64 : 111.14	**102.25** 84.45 : 113.50
Tert-butyl methyl ether	TM208	**96.5** 70.94 : 119.66	**98.0** 70.94 : 119.66	**105.0** 70.18 : 125.95	**86.0** 70.94 : 119.66	**95.5** 70.18 : 125.95	**90.5** 70.18 : 125.95
Tetrachloroethene	TM208	**102.0** 87.13 : 116.26	**100.0** 87.13 : 116.26	**101.5** 80.43 : 115.53	**96.5** 87.13 : 116.26	**98.5** 80.43 : 115.53	**98.5** 80.43 : 115.53
Toluene	TM208	**100.5** 81.59 : 111.56	**100.5** 81.59 : 111.56	**102.5** 79.88 : 116.83	**99.0** 81.59 : 111.56	**99.5** 79.88 : 116.83	**100.5** 79.88 : 116.83
Trichloroethene	TM208	**99.0** 79.53 : 112.32	**100.5** 79.53 : 112.32	**101.5** 82.30 : 112.45	**106.0** 79.53 : 112.32	**99.0** 82.30 : 112.45	**101.0** 82.30 : 112.45
Vinyl Chloride	TM208	**98.0** 68.68 : 119.35	**95.5** 68.68 : 119.35	**97.0** 66.89 : 111.22	**87.5** 68.68 : 119.35	**91.5** 66.89 : 111.22	**90.5** 66.89 : 111.22

The above information details the reference name of the analytical quality control sample (AQC) that has been run with the samples contained in this report for the different methods of analysis.
The figure detailed is the percentage recovery result for the AQC.
The subscript numbers below are the percentage recovery lower control limit (LCL) and the upper control limit (UCL). The percentage recovery result for the AQC should be between these limits to be statistically in control.

CERTIFICATE OF ANALYSIS

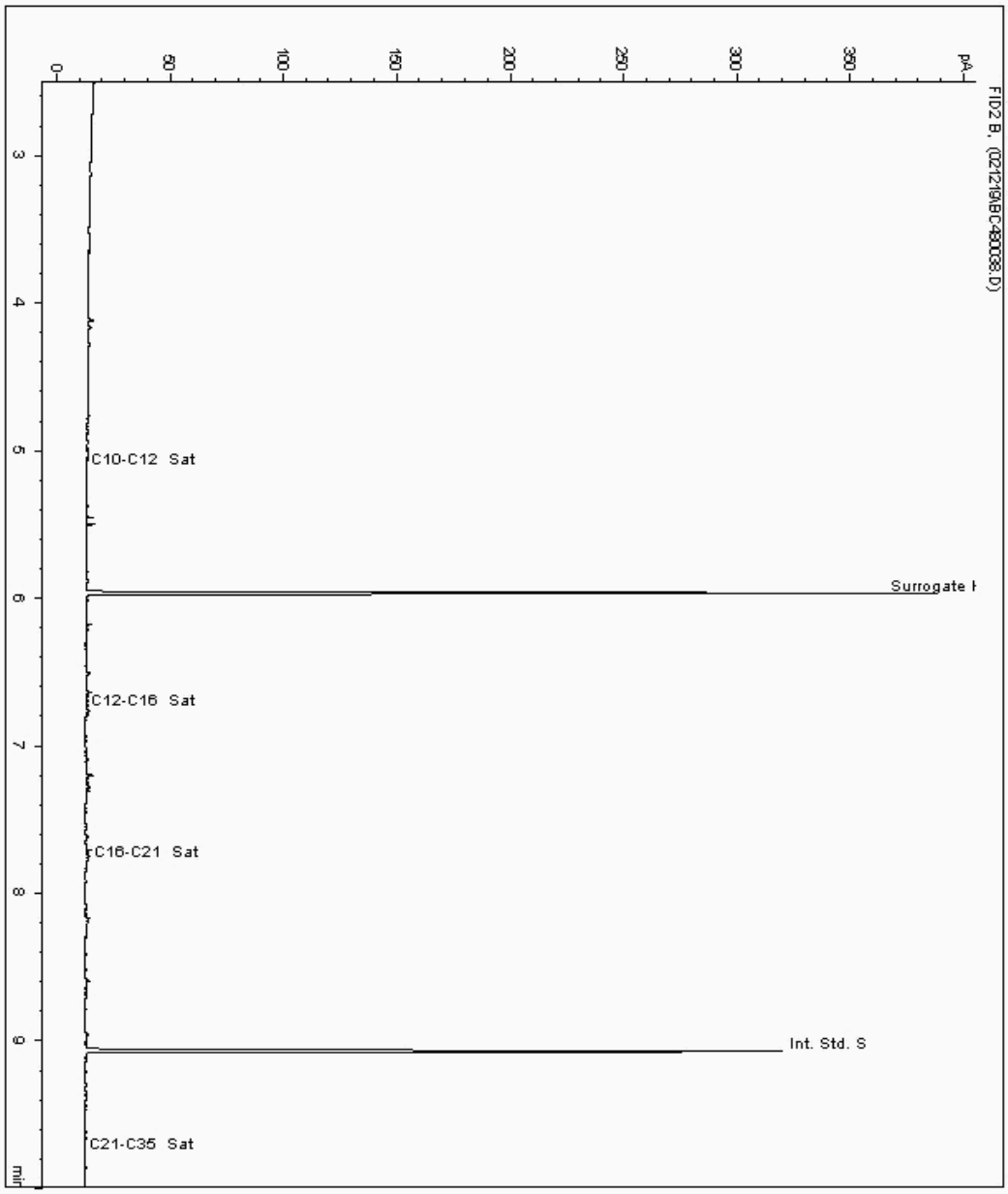
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19328853 **Depth :** 0.10 - 0.20
Sample ID : WS22

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18122795-
Date Acquired : 13/02/2019 11:40:08 PM
Units : ppb
Dilution : WS22 [0.10 - 0.20] CEN 2 1->
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

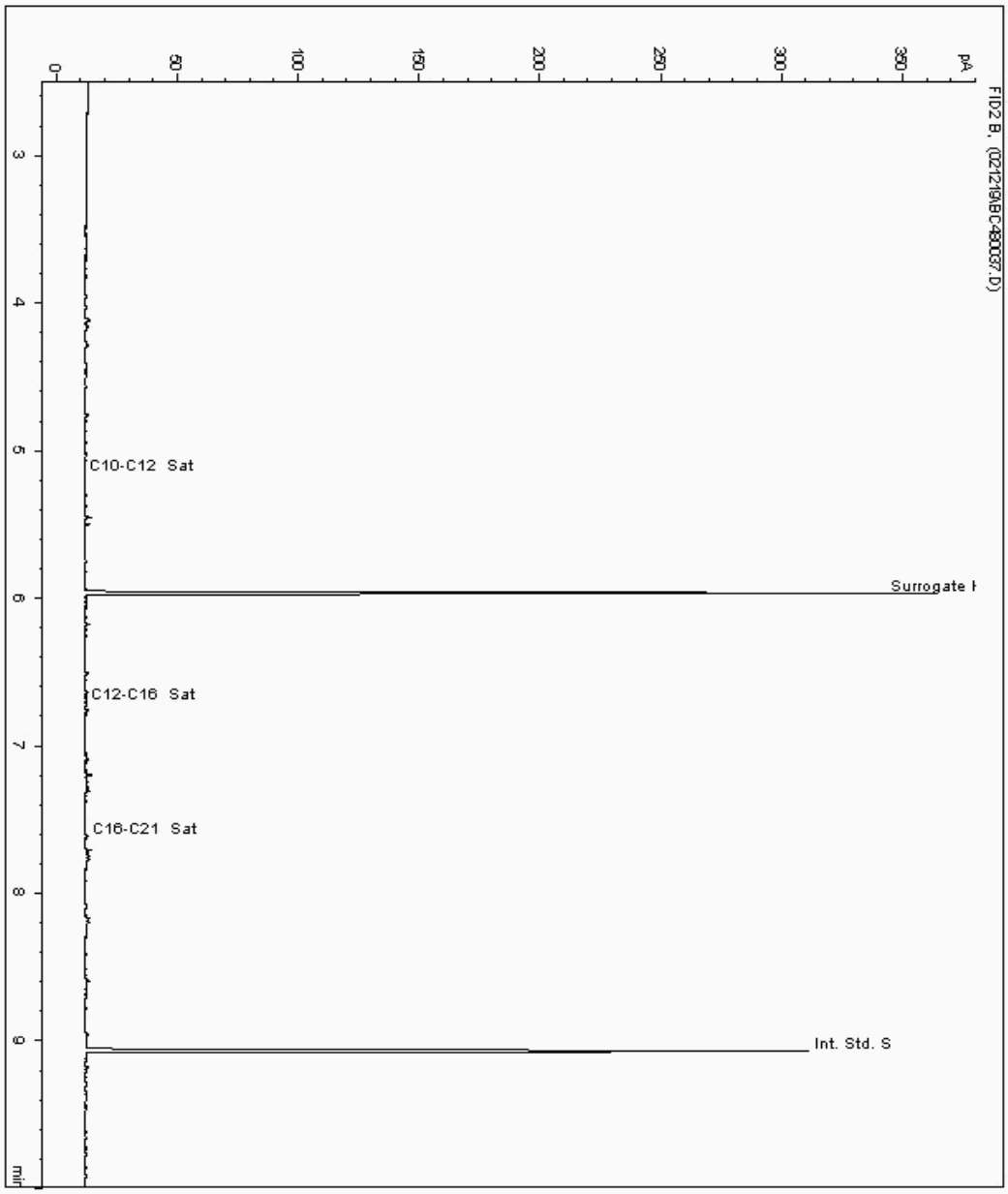
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19328905 **Depth :** 0.30
Sample ID : WS 45

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18123522-
Date Acquired : 13/02/2019 11:17:11 PM
Units : ppb
Dilution : WS 45 [0.30] CEN 2 1 ->
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

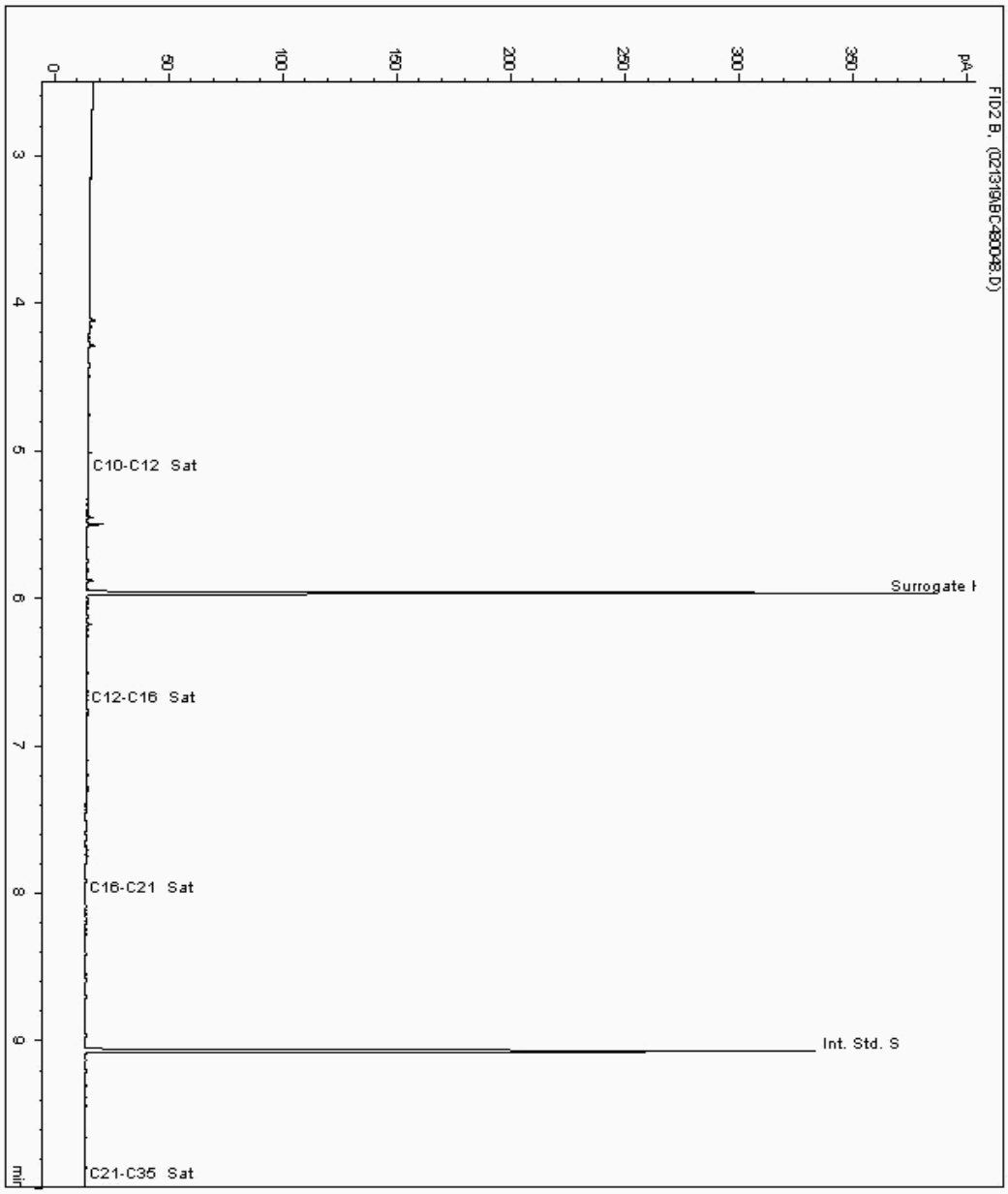
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19343542 **Depth :** 0.40
Sample ID : WS35

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18122847-
Date Acquired : 14/02/2019 11:48:58 PM
Units : ppb
Dilution : WS35 [0.40] CEN 2 1 ->
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

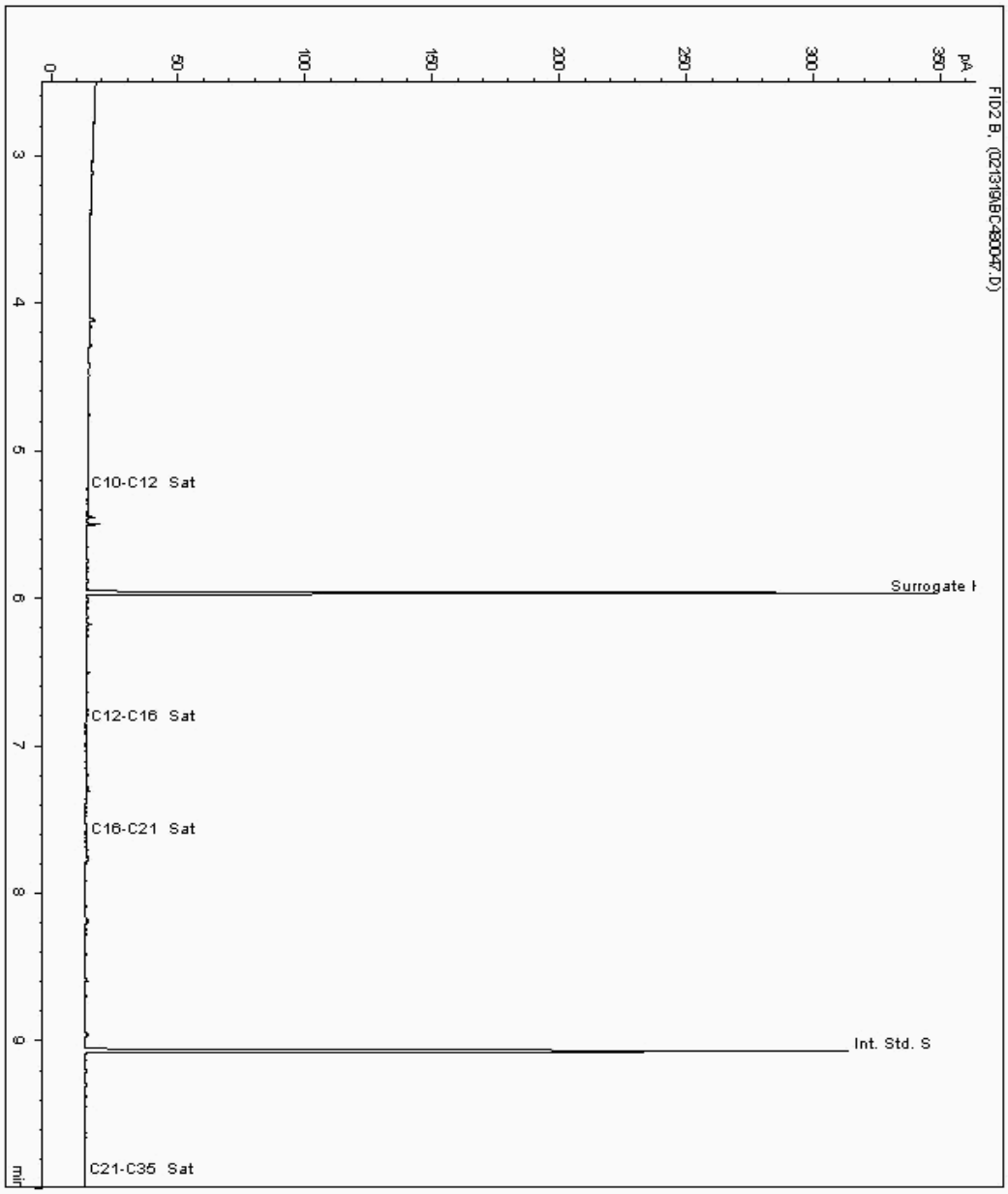
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19343556 **Depth :** 0.20
Sample ID : WS 43

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18123474-
Date Acquired : 14/02/2019 11:27:26 PM
Units : ppb
Dilution : WS 43 [0.20] CEN 2 1 ->
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

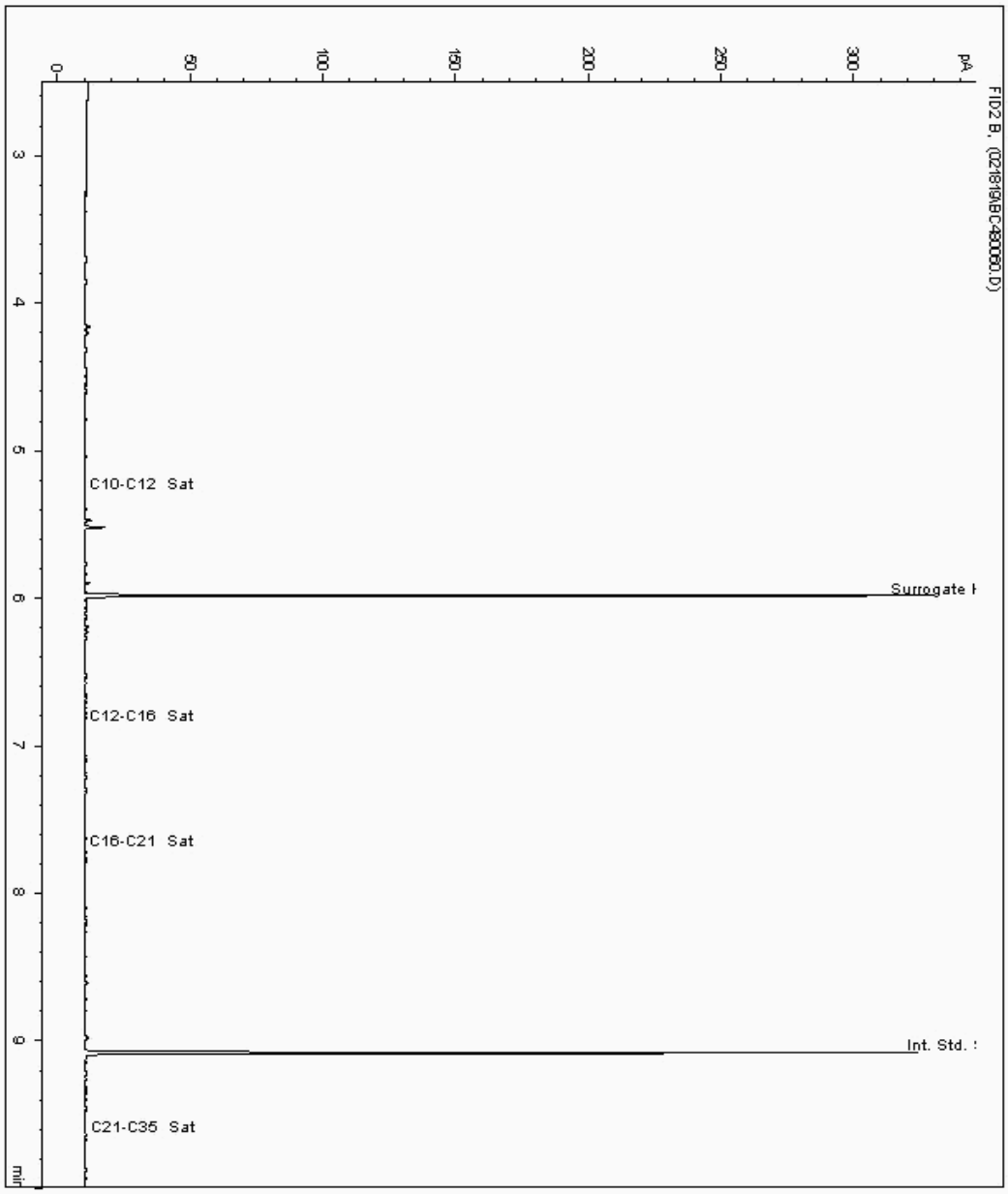
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19354098 **Depth :** 0.30
Sample ID : WS 28

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18179775-
Date Acquired : 19/02/2019 12:57:14 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

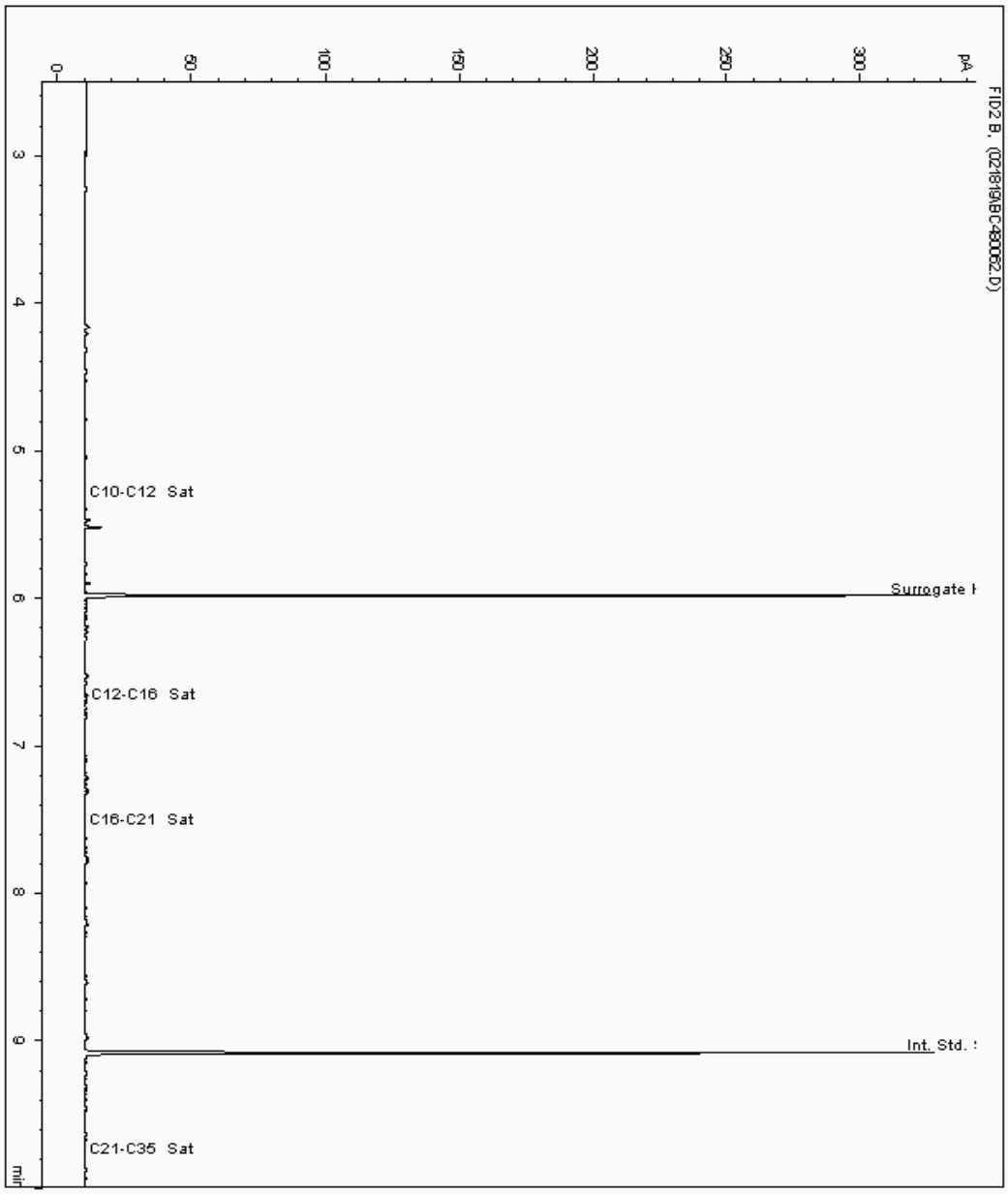
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19354107 **Depth :** 0.30
Sample ID : WS57

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18180040
Date Acquired : 19/02/2019 13:41:00 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

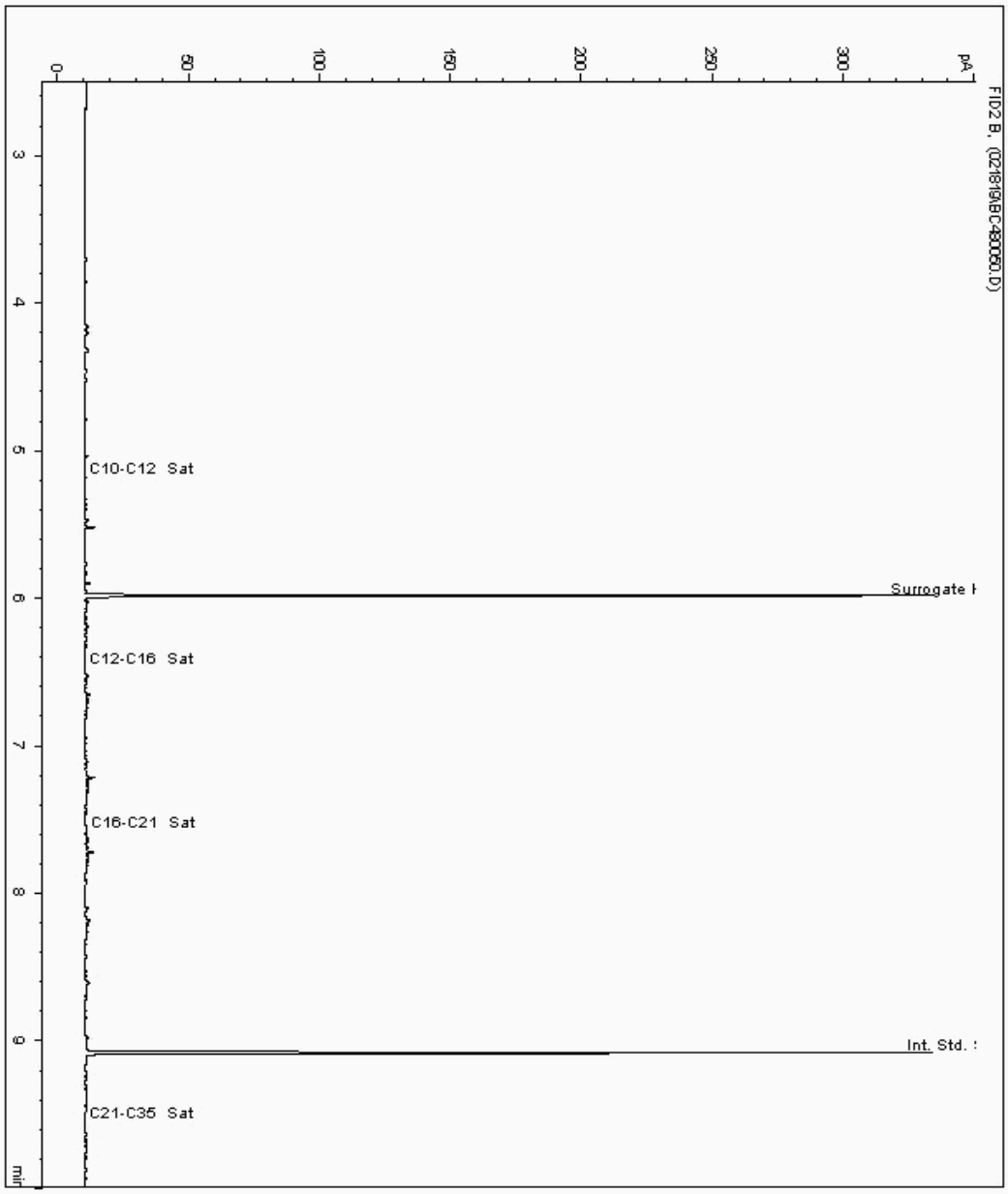
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19355946 **Depth :** 0.40
Sample ID : WS29

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18179910-
Date Acquired : 19/02/2019 09:22:49 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

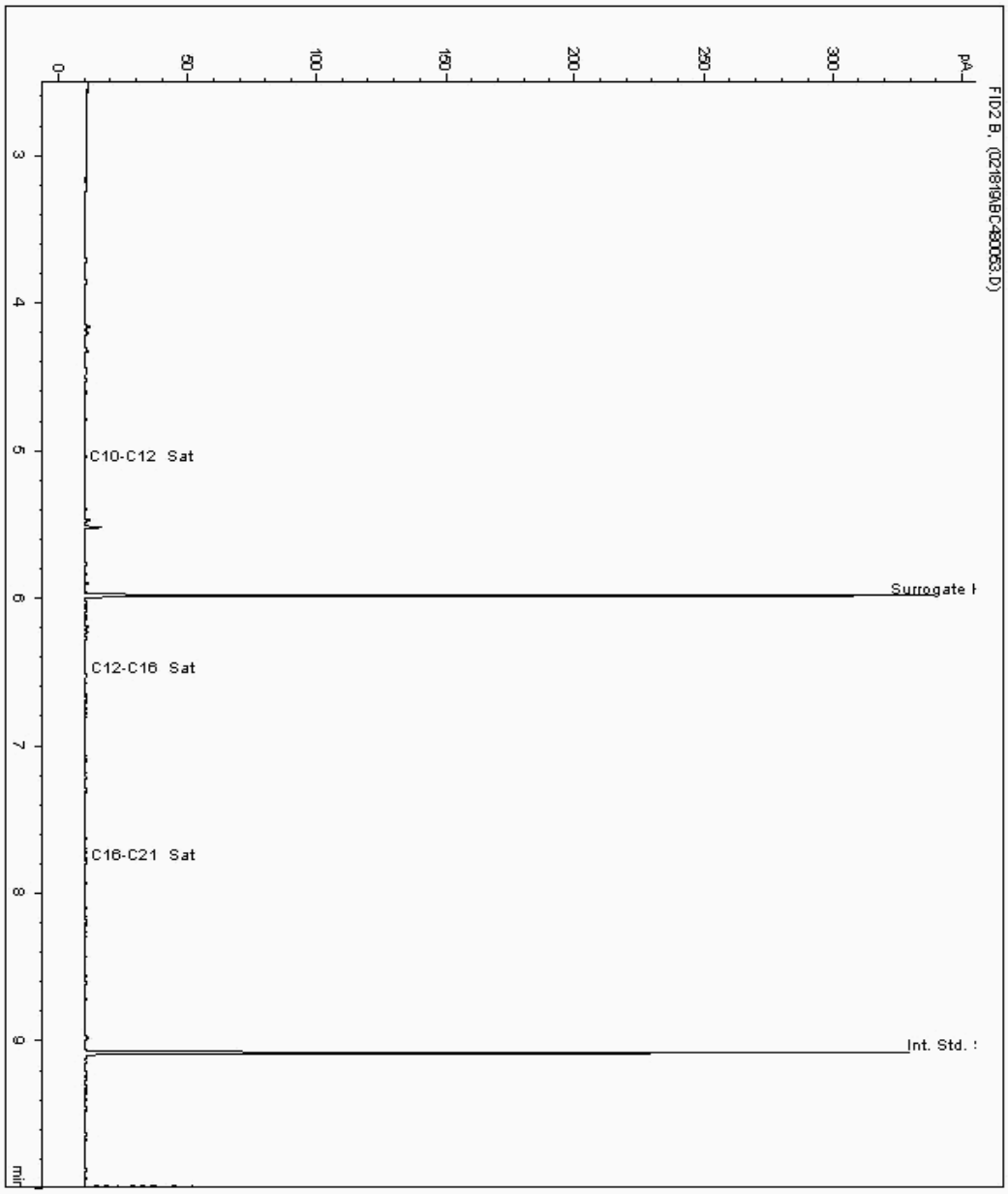
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19356009 **Depth :** 0.50
Sample ID : WS 43

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18179854-
Date Acquired : 19/02/2019 10:27:03 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

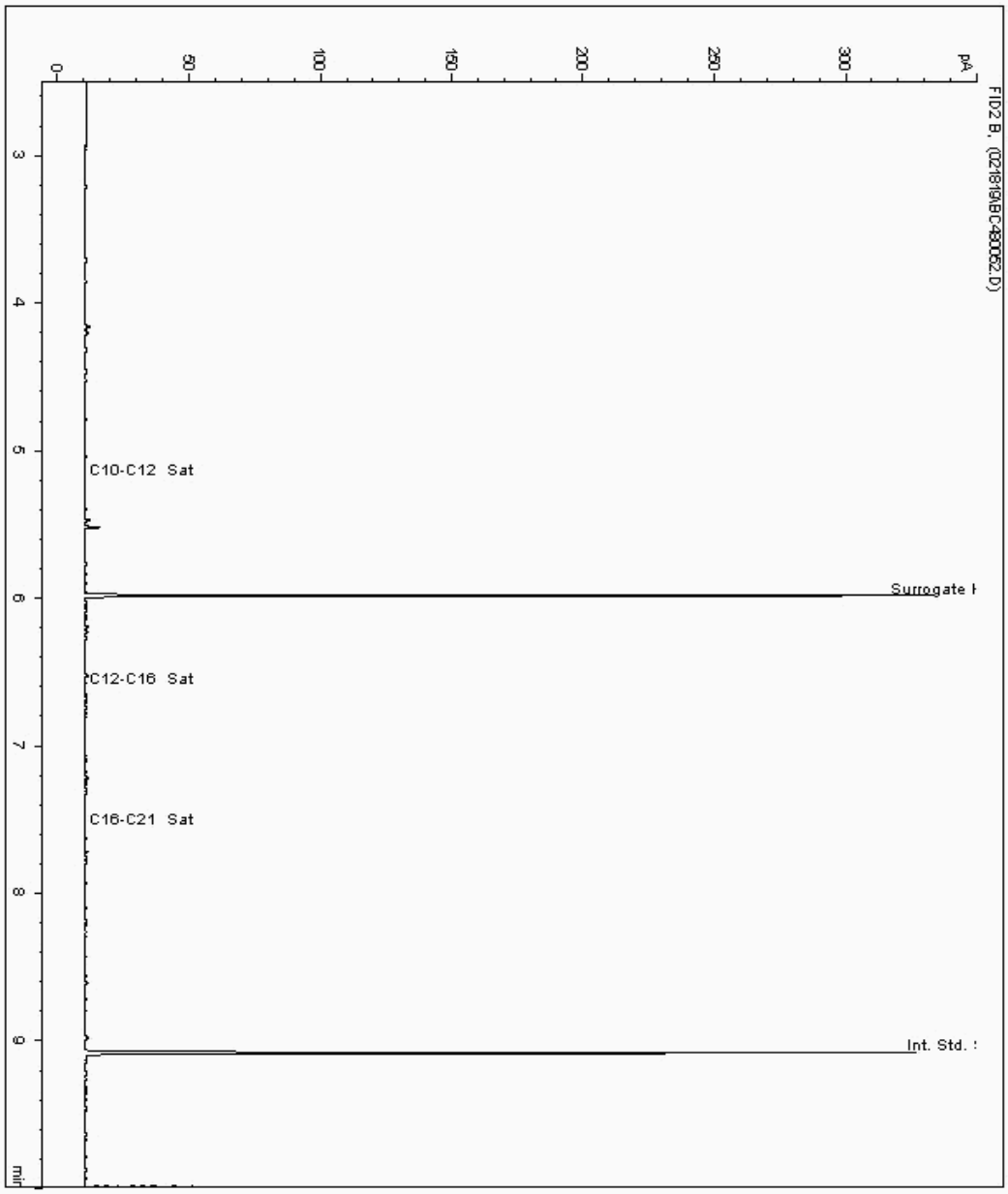
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19356016 **Depth :** 0.30
Sample ID : WS 46

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18179880-
Date Acquired : 19/02/2019 10:05:45 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.033



CERTIFICATE OF ANALYSIS

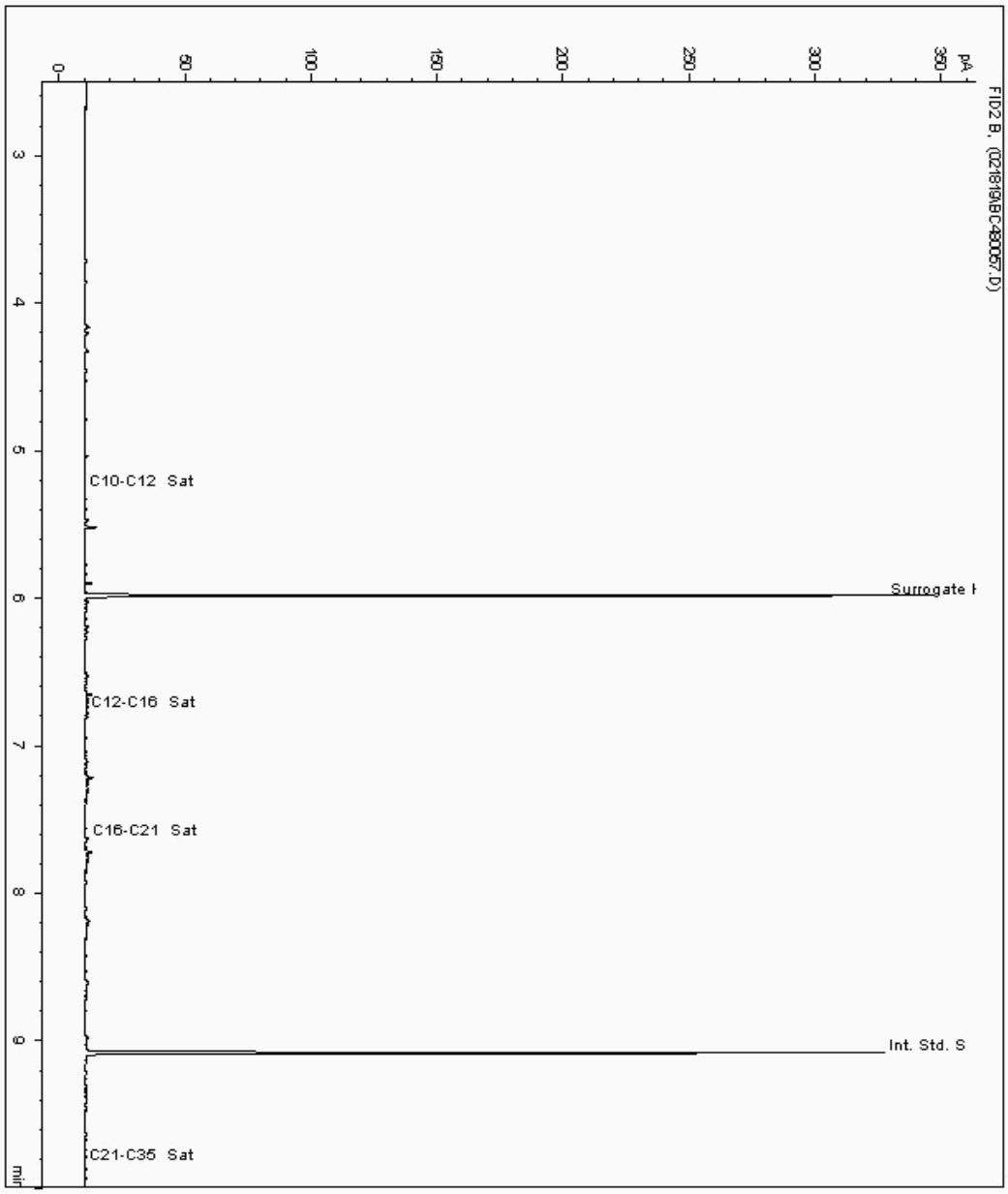
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19356038 **Depth :** 0.20
Sample ID : WS38

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18179936-
Date Acquired : 19/02/2019 11:52:57 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

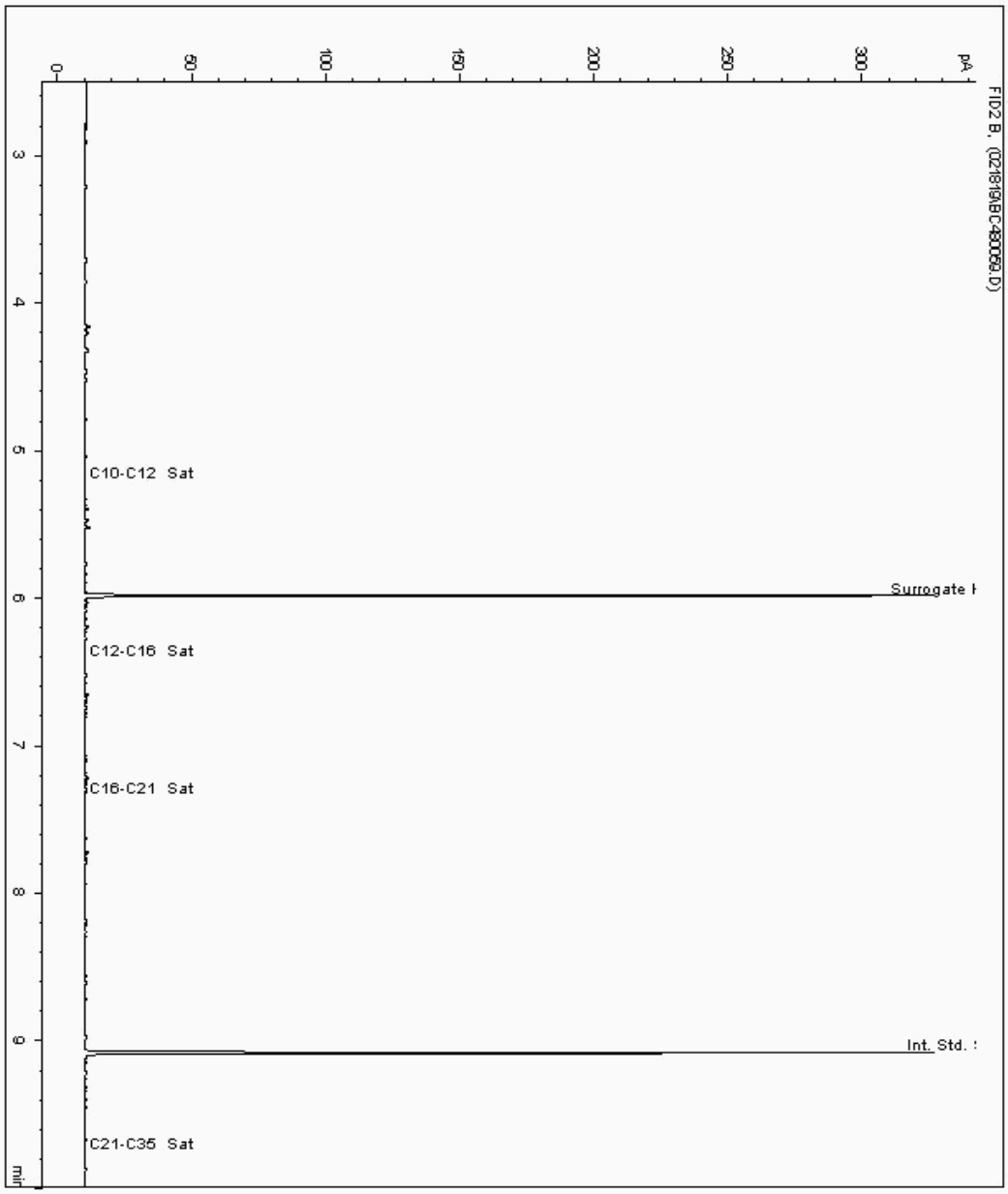
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19356047 **Sample ID :** WS 41 **Depth :** 1.00

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18179831-
Date Acquired : 19/02/2019 12:35:51 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.033



CERTIFICATE OF ANALYSIS

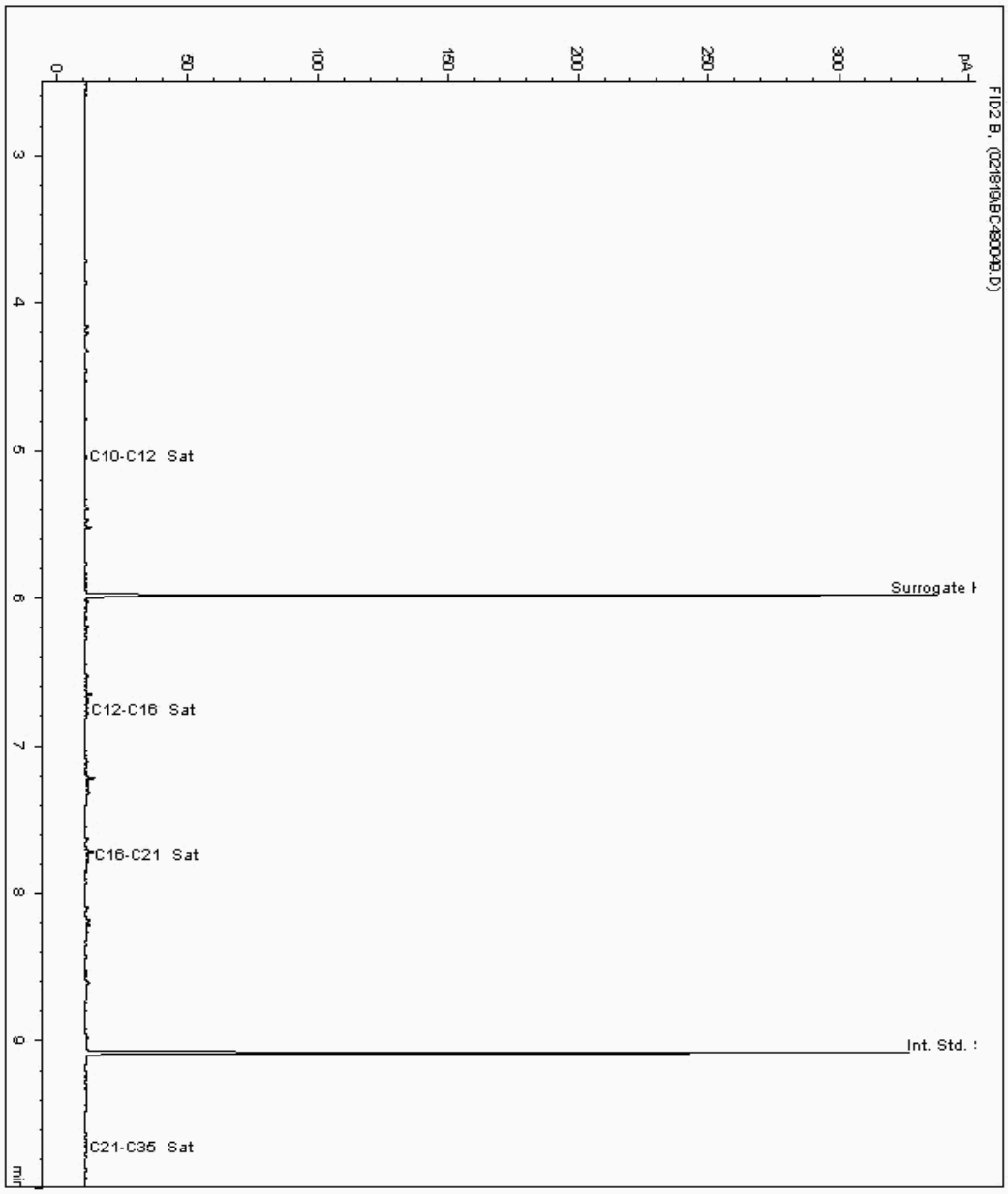
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19356067 **Depth :** 1.50
Sample ID : WS 20

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18179693-
Date Acquired : 19/02/2019 09:01:32 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.050



CERTIFICATE OF ANALYSIS

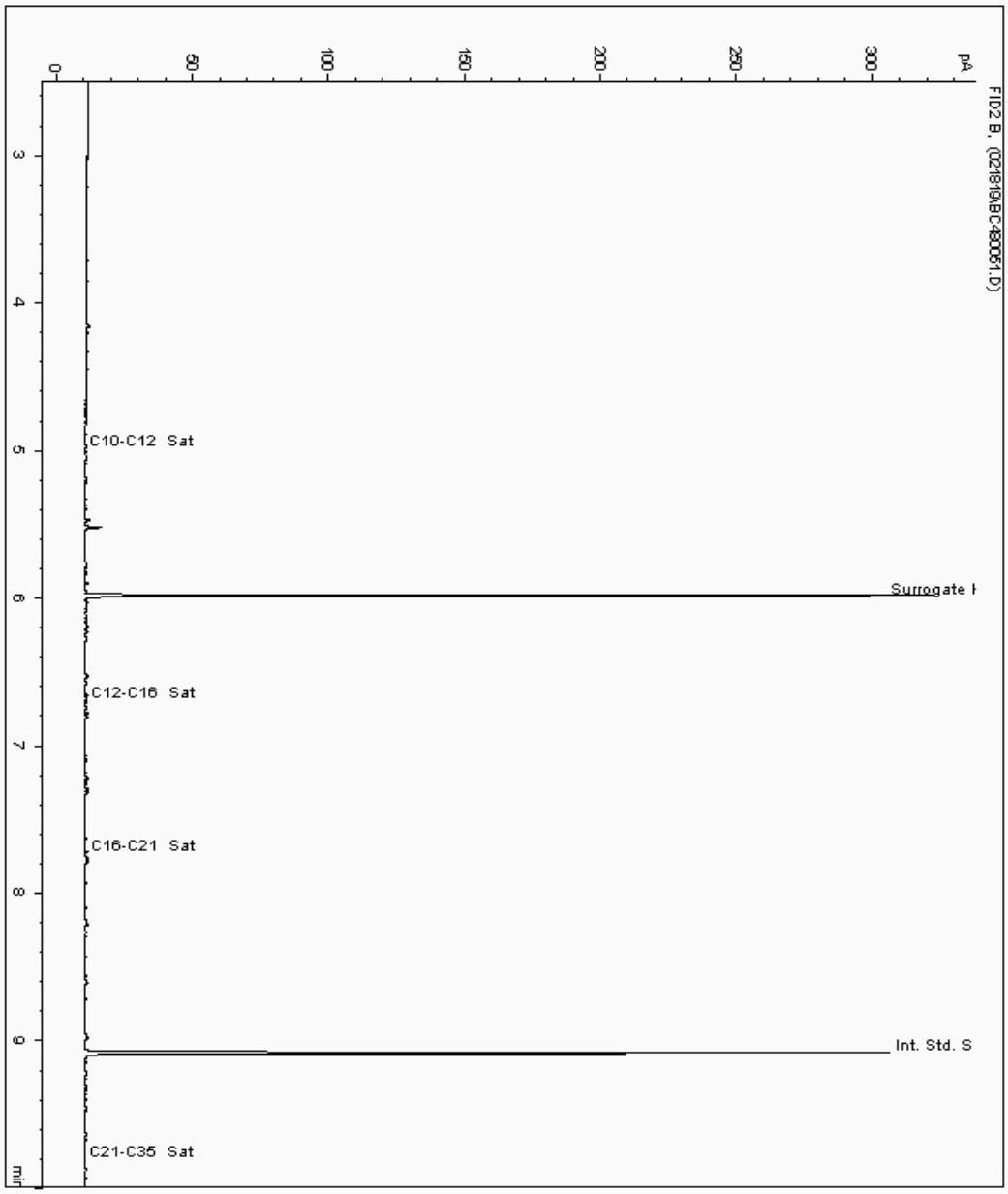
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19356082 **Depth :** 1.00
Sample ID : WS 40

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18179808-
Date Acquired : 19/02/2019 09:44:14 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.050



CERTIFICATE OF ANALYSIS

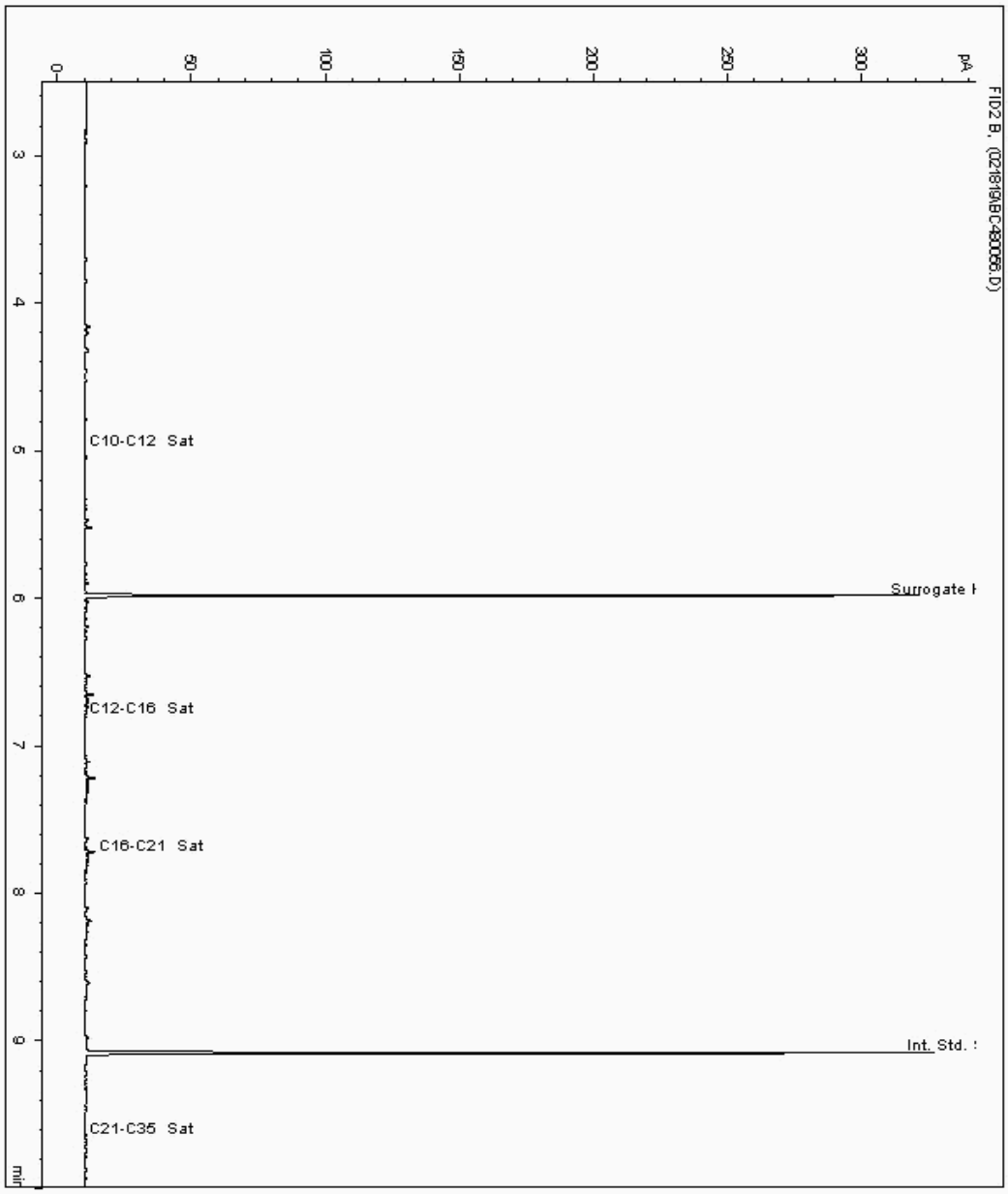
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19356094 **Depth :** 0.70
Sample ID : WS38

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18179960-
Date Acquired : 19/02/2019 11:31:26 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

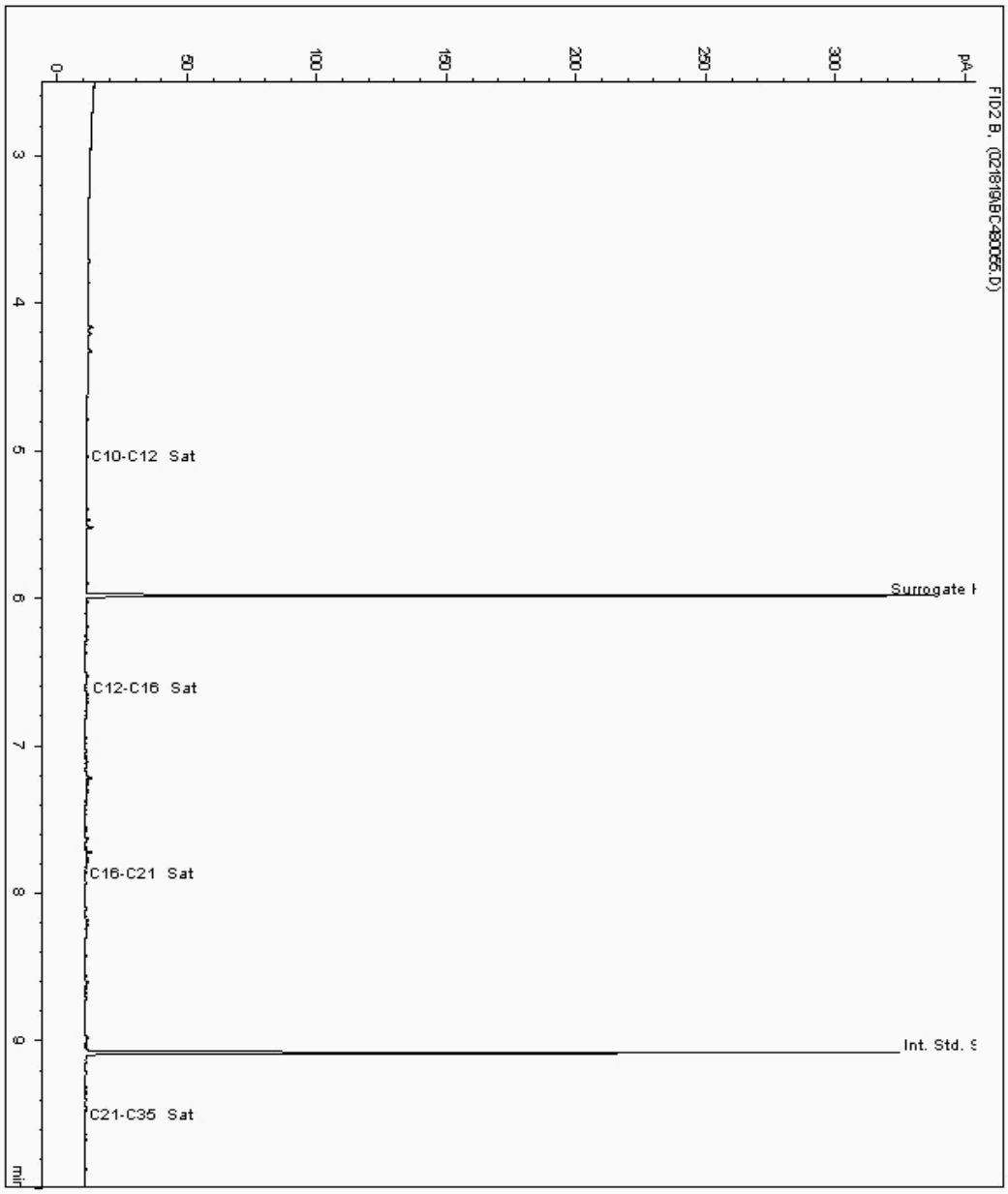
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19356131 **Depth :** 0.20
Sample ID : WS39

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18179986-
Date Acquired : 19/02/2019 11:09:59 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

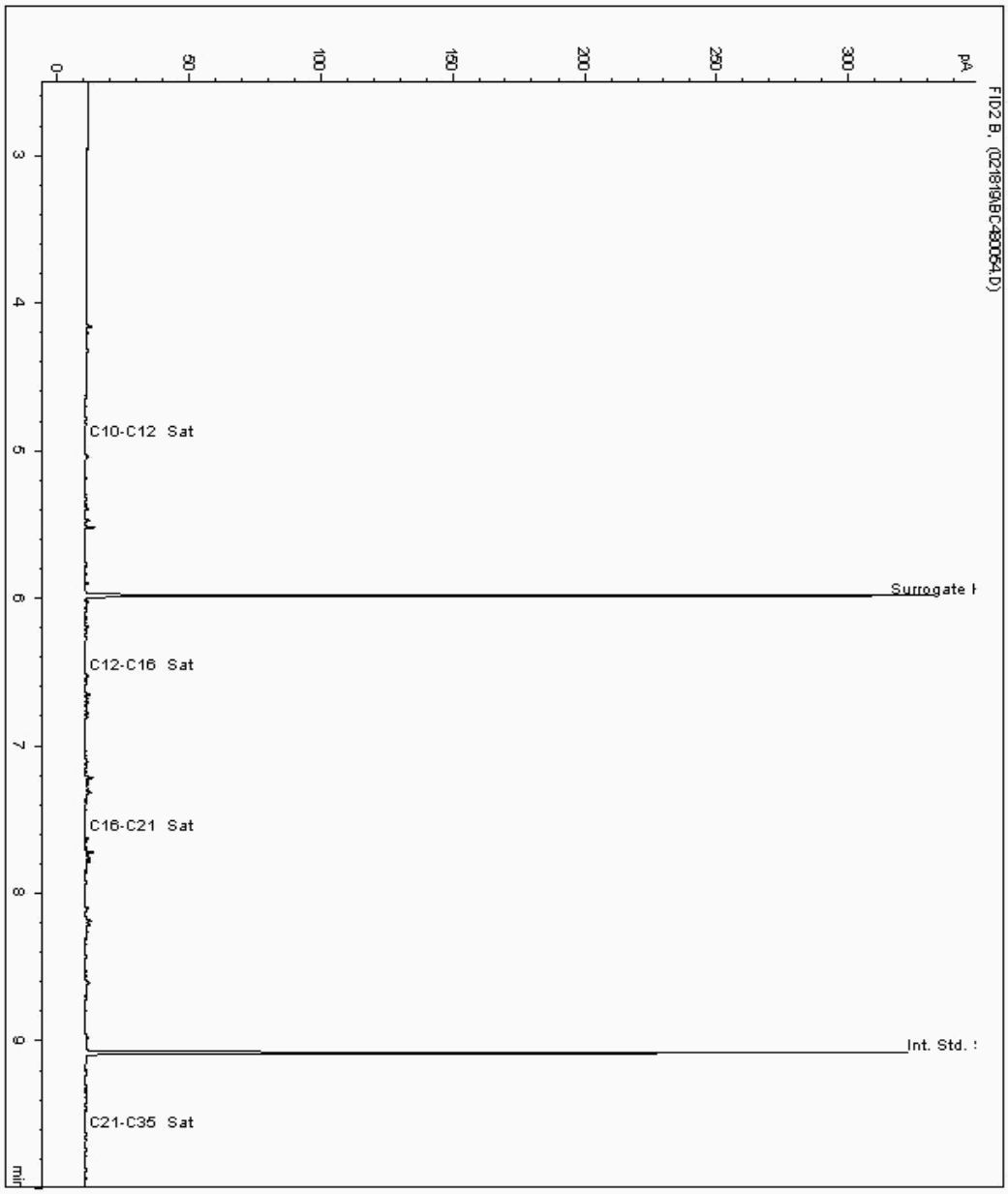
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19356171 **Depth :** 0.20
Sample ID : WS 23

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18179717-
Date Acquired : 19/02/2019 10:48:25 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.033



CERTIFICATE OF ANALYSIS

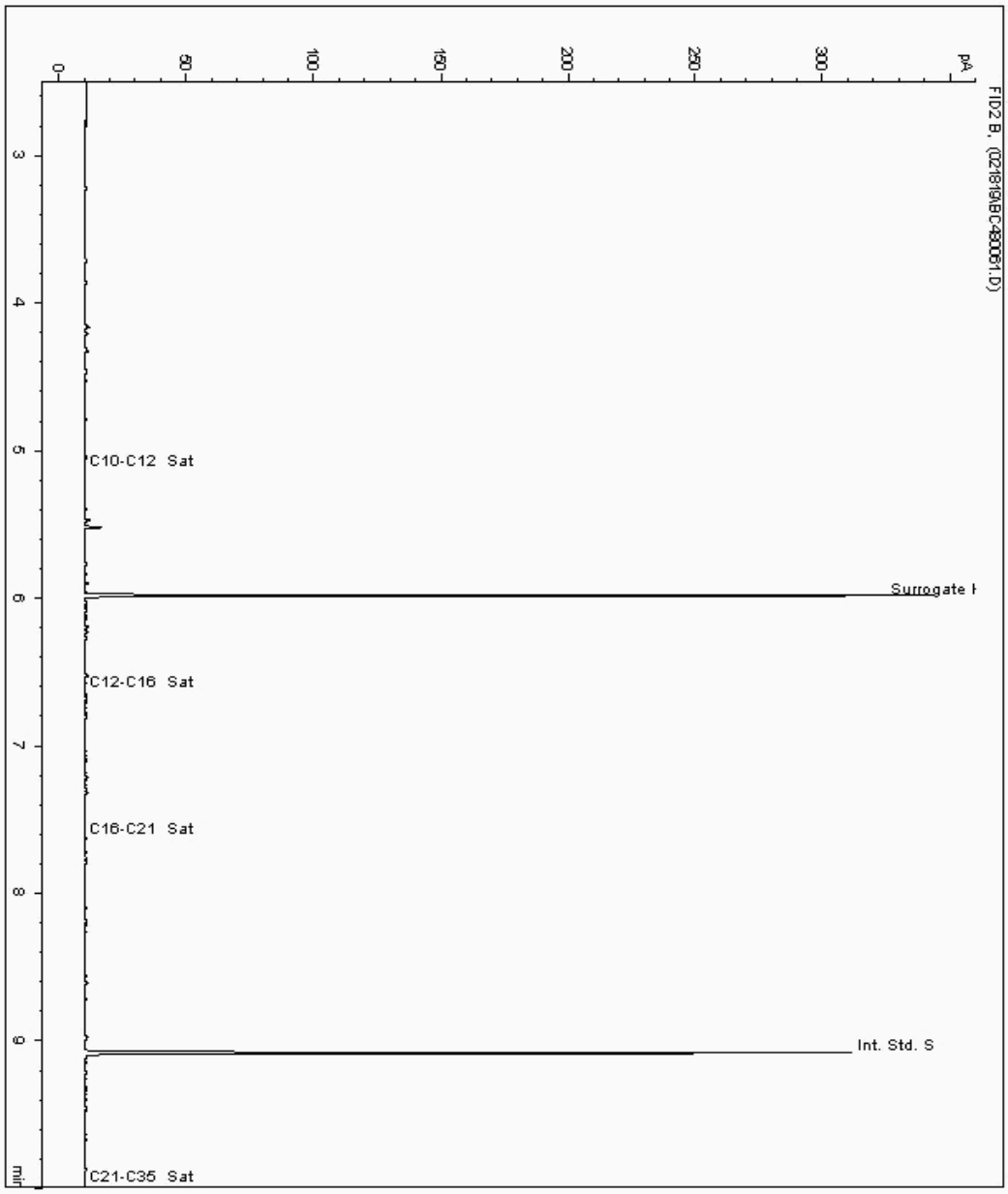
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19356193 **Depth :** 1.20
Sample ID : WS 16

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18179654-
Date Acquired : 19/02/2019 13:18:51 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.033



CERTIFICATE OF ANALYSIS

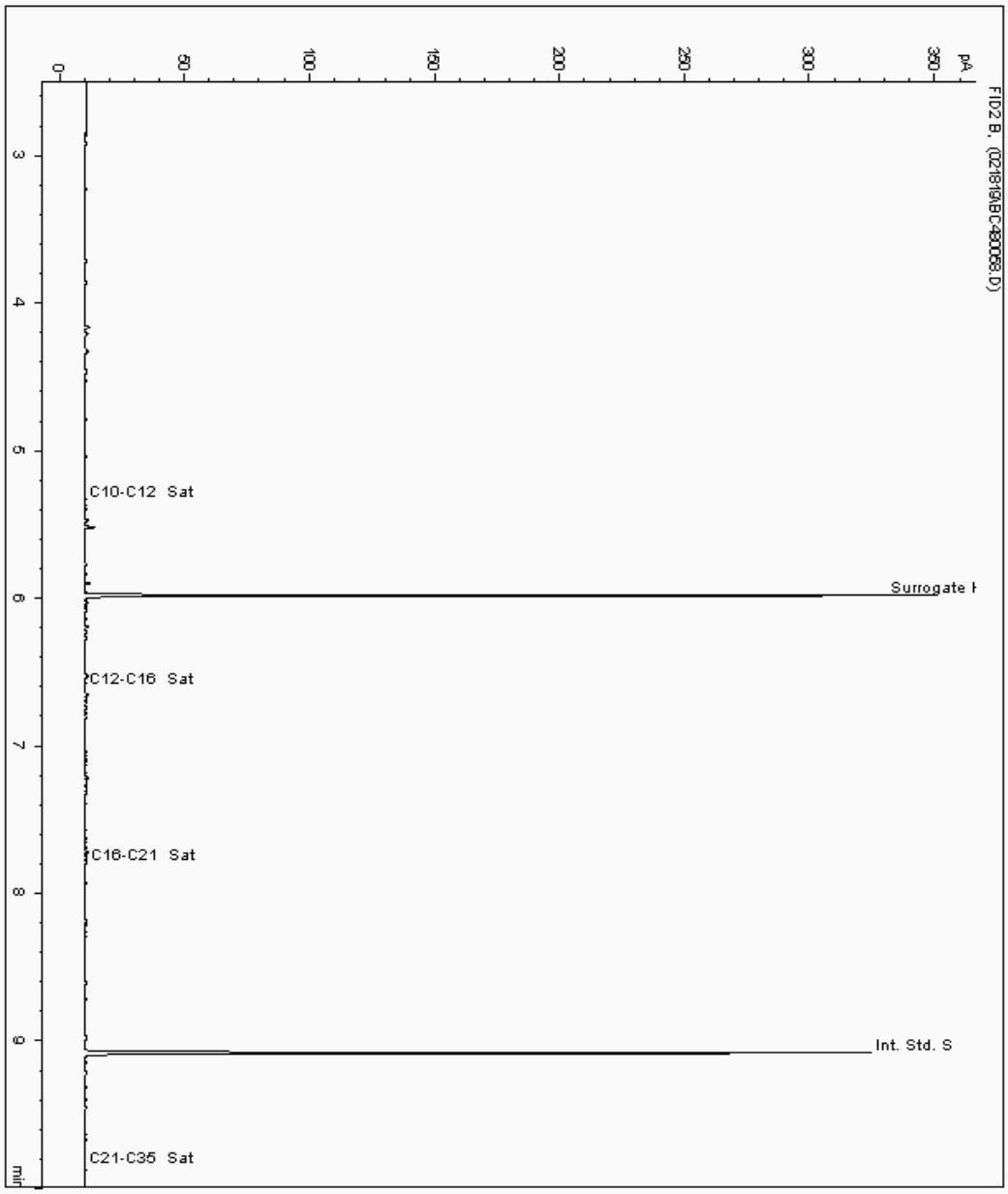
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19356230 **Depth :** 0.30
Sample ID : WS 25A

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18179747-
Date Acquired : 19/02/2019 12:14:32 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.033



CERTIFICATE OF ANALYSIS

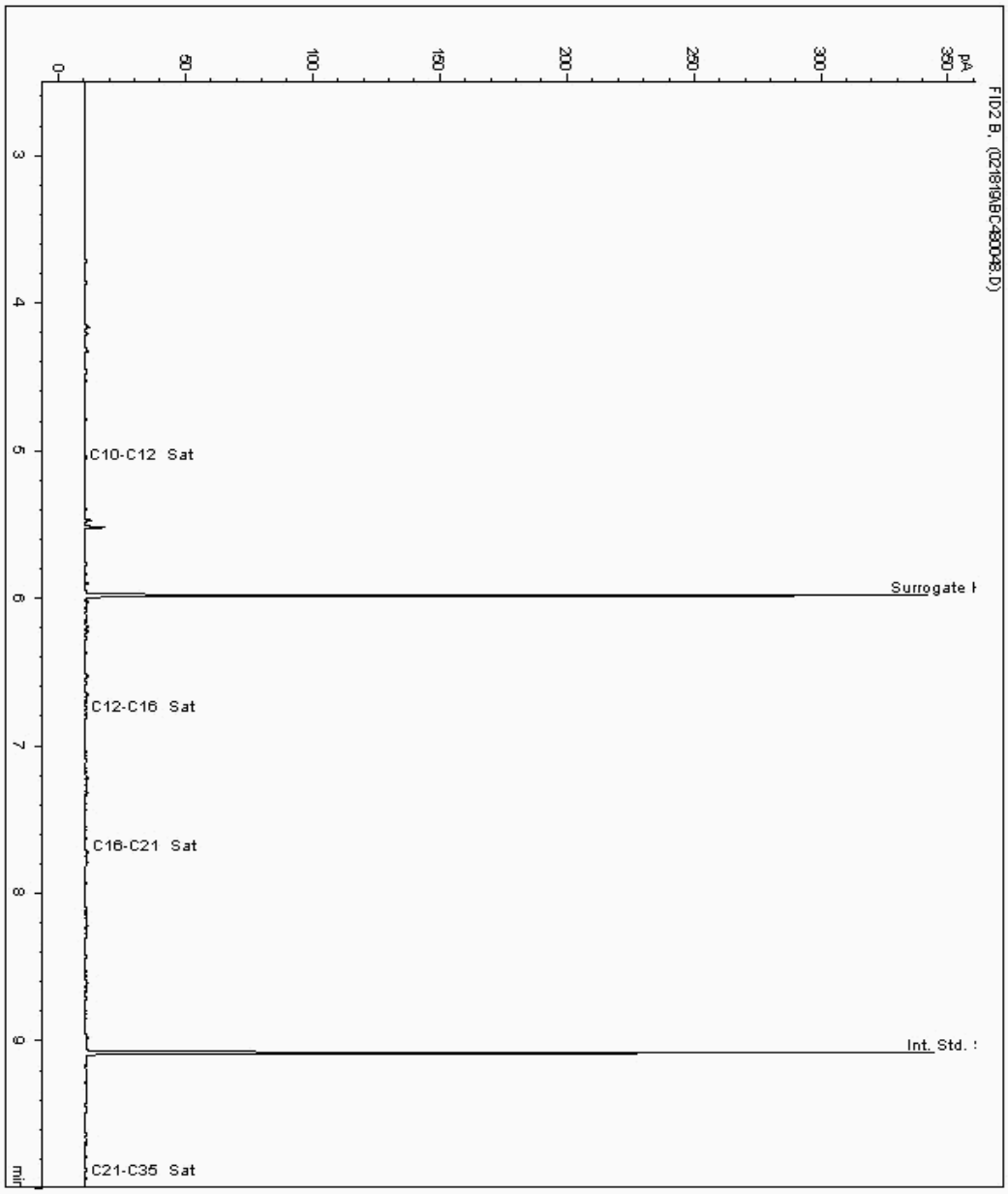
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19367579 **Depth :** 1.00
Sample ID : WS58

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18180069-
Date Acquired : 19/02/2019 08:39:58 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

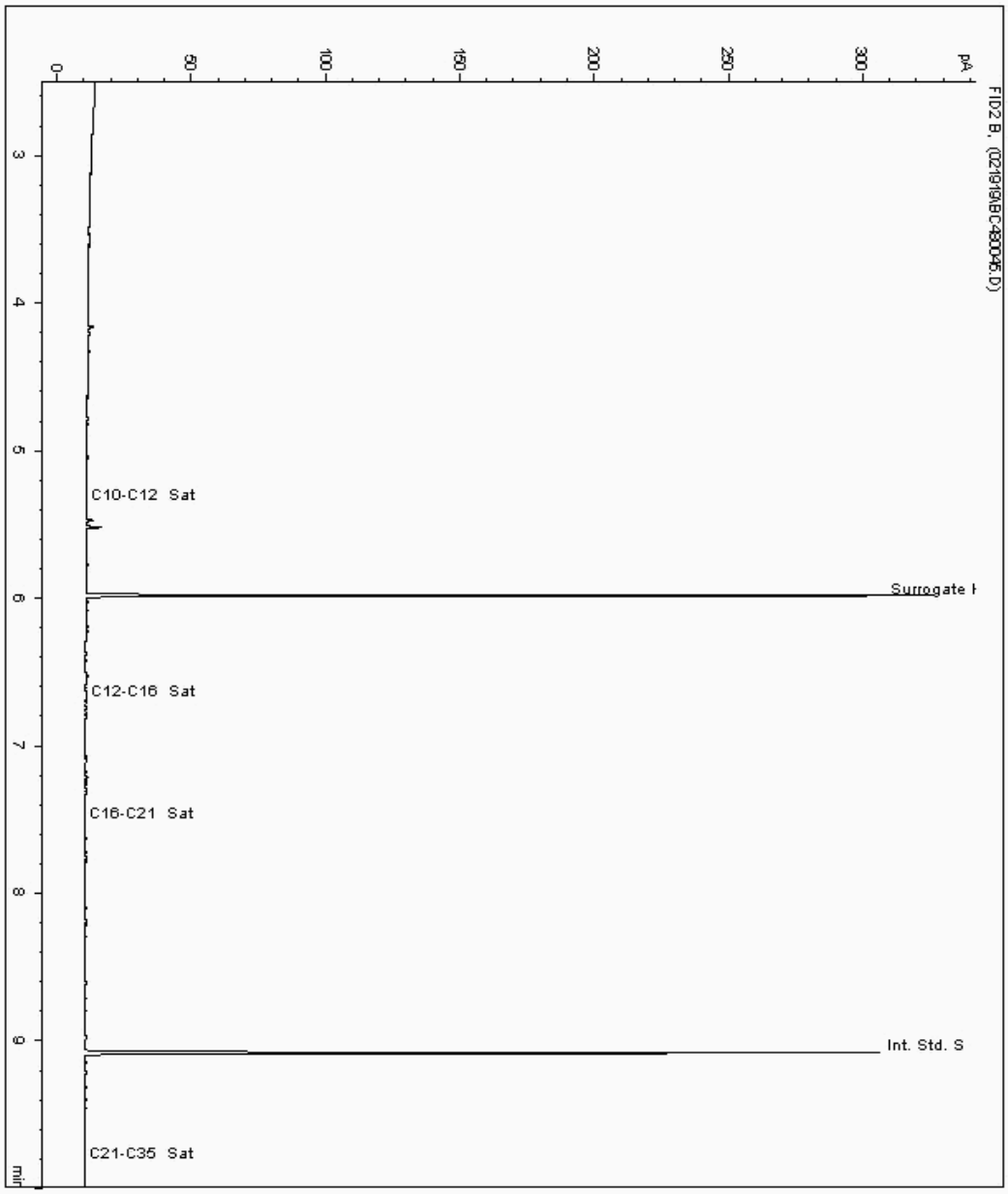
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19388237 **Depth :** 0.50
Sample ID : WS53

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18221548-
Date Acquired : 20/02/2019 13:24:45 PM
Units : ppb
Dilution : WS53 [0.50] CEN 10 1 ->
CF : 1
Multiplier : 0.057



CERTIFICATE OF ANALYSIS

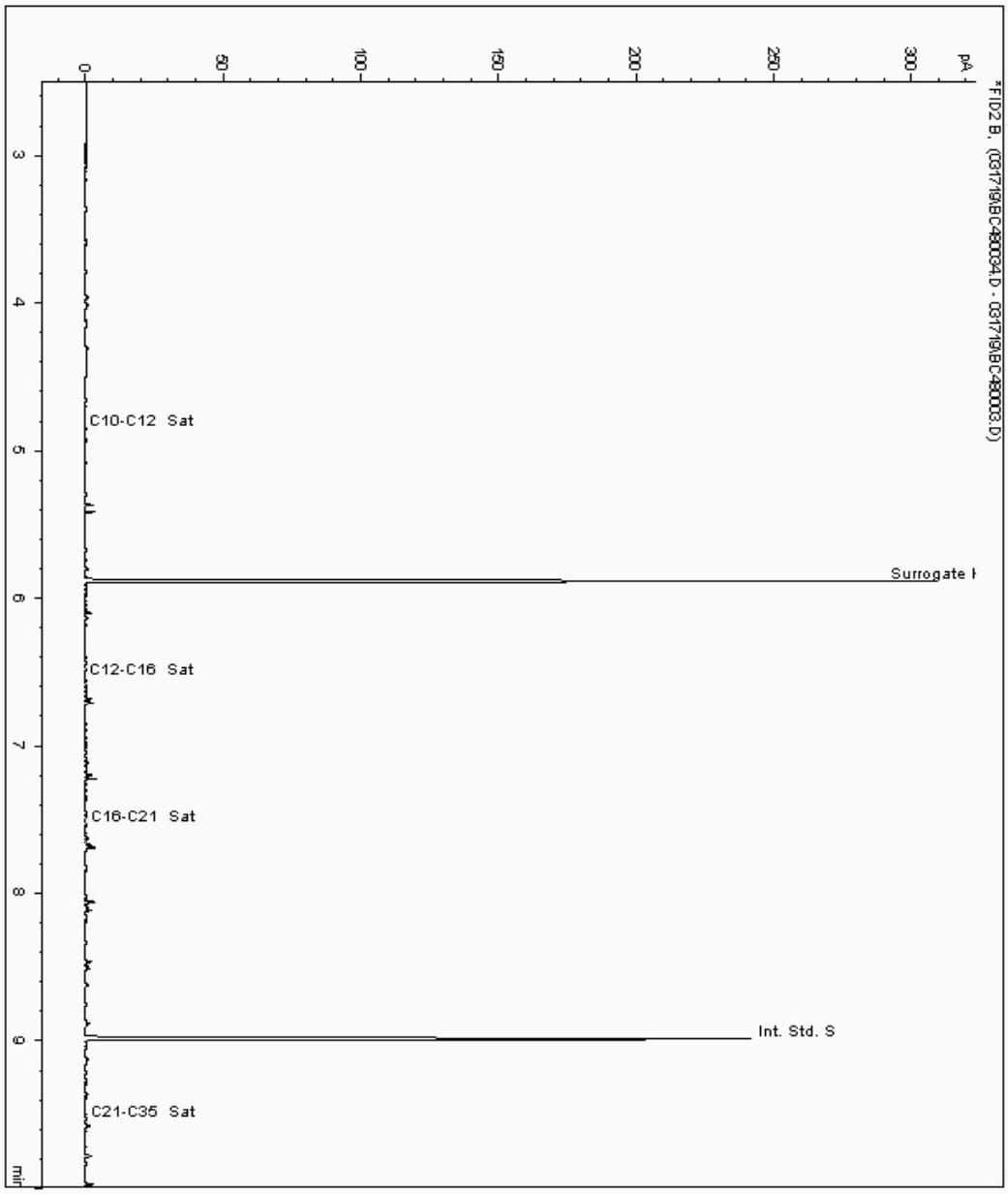
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19554433 **Depth :** 0.30 - 0.30
Sample ID : WS 07

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18361540-
Date Acquired : 18/03/2019 01:54:00 PM
Units : ppb
Dilution : WS 07 [0.30 - 0.30] CEN 10->
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

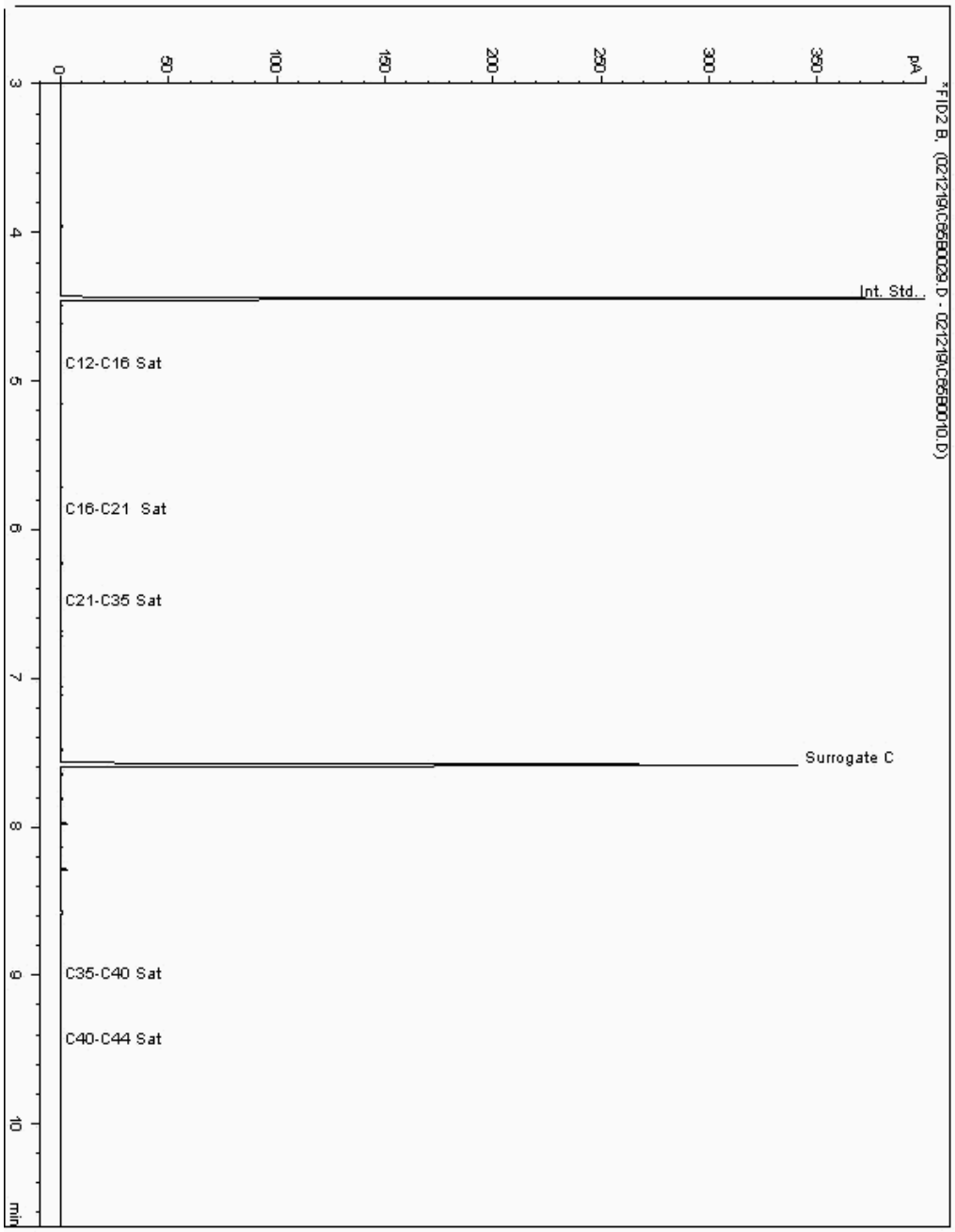
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19309043 **Depth :** 0.10
Sample ID : WS 42

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18119753-
Date Acquired : 12/02/2019 21:46:45 PM
Units : ppb
Dilution: WS 42[0.10] ->



CERTIFICATE OF ANALYSIS

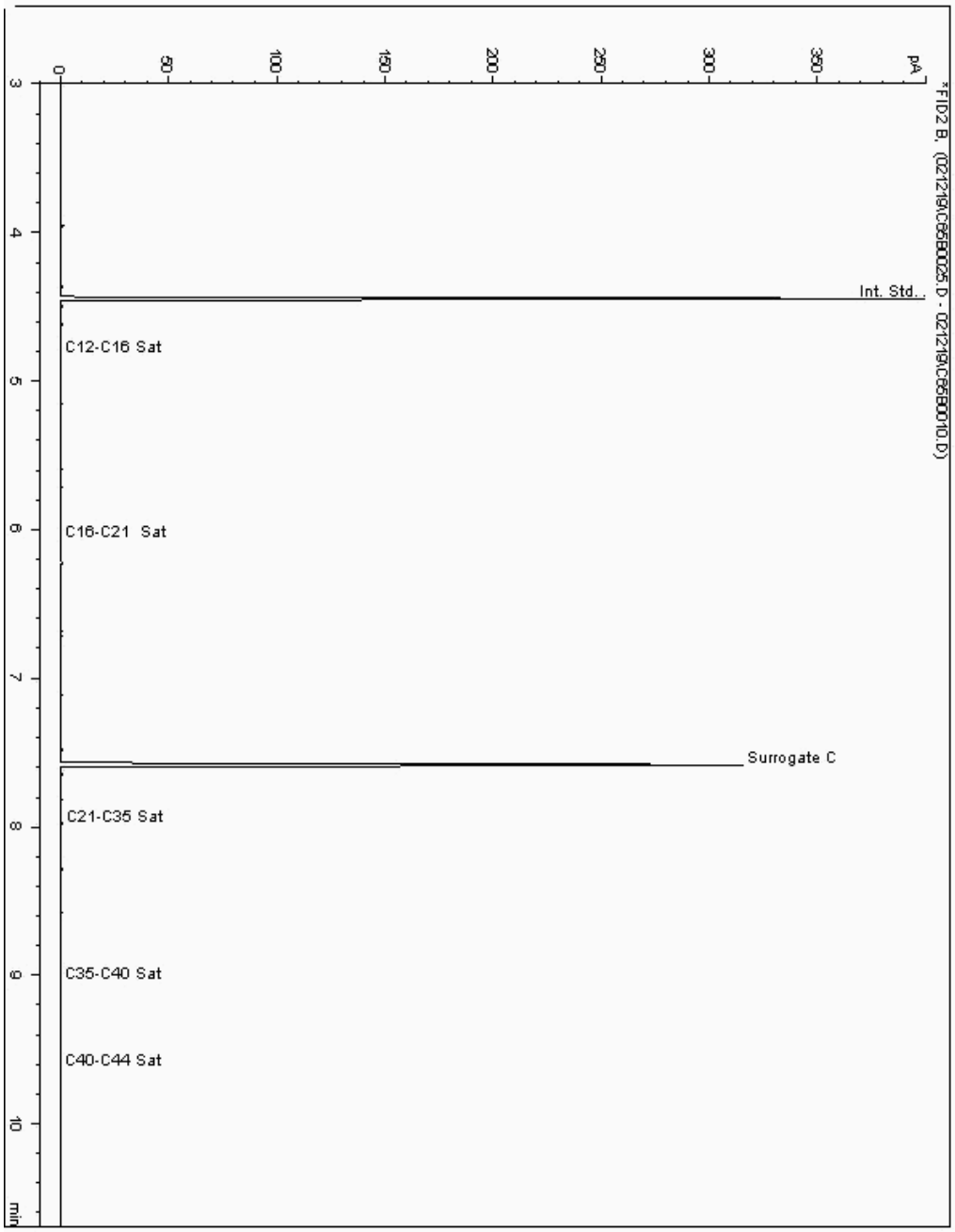
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19309202 **Depth :** 1.00
Sample ID : WS 25A

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18121000-
Date Acquired : 12/02/2019 20:33:04 PM
Units : ppb
Dilution: WS 25A[1.00] ->



CERTIFICATE OF ANALYSIS

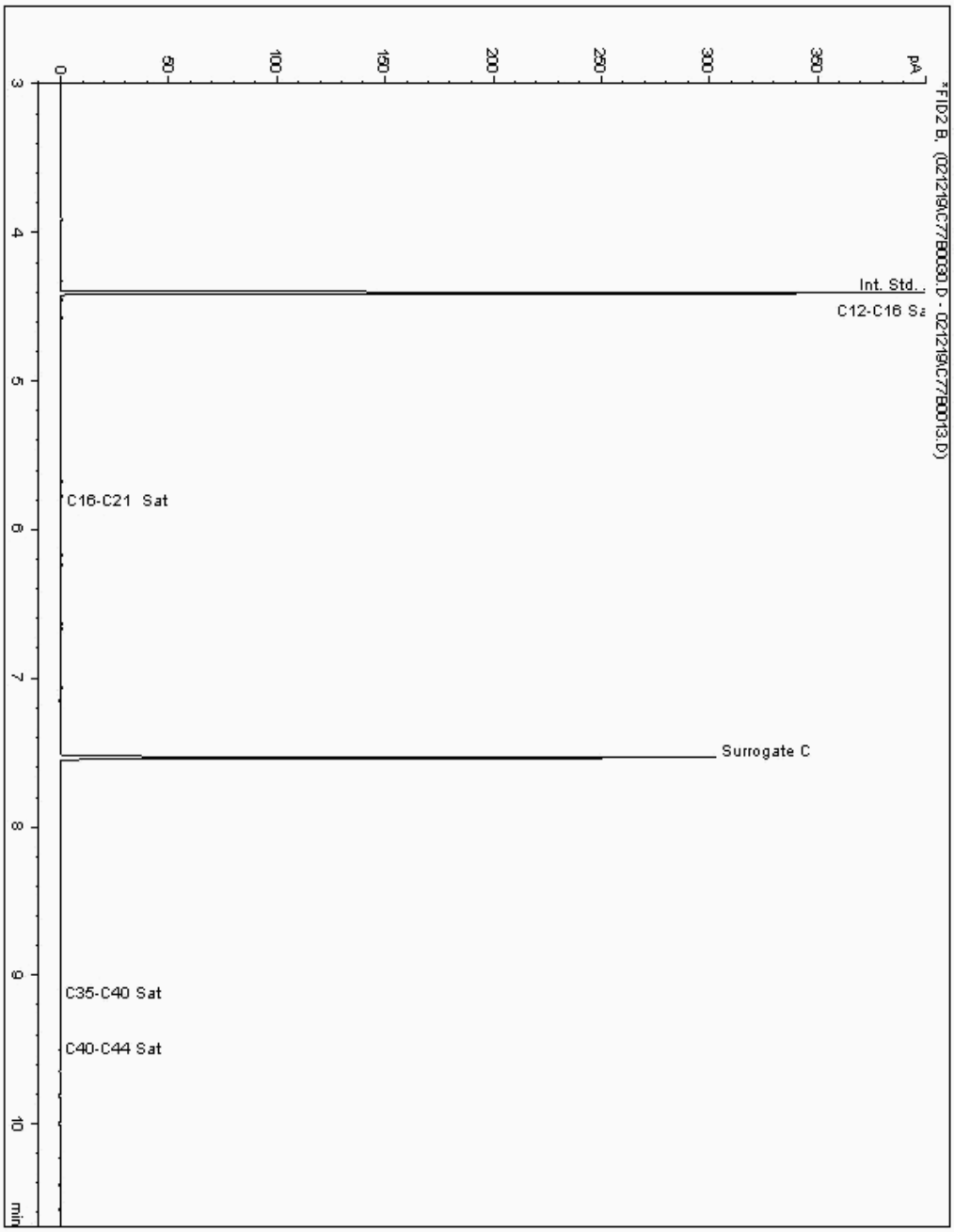
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19309309 **Depth :** 0.20
Sample ID : WS 10

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18121888-
Date Acquired : 12/02/2019 21:53:22 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

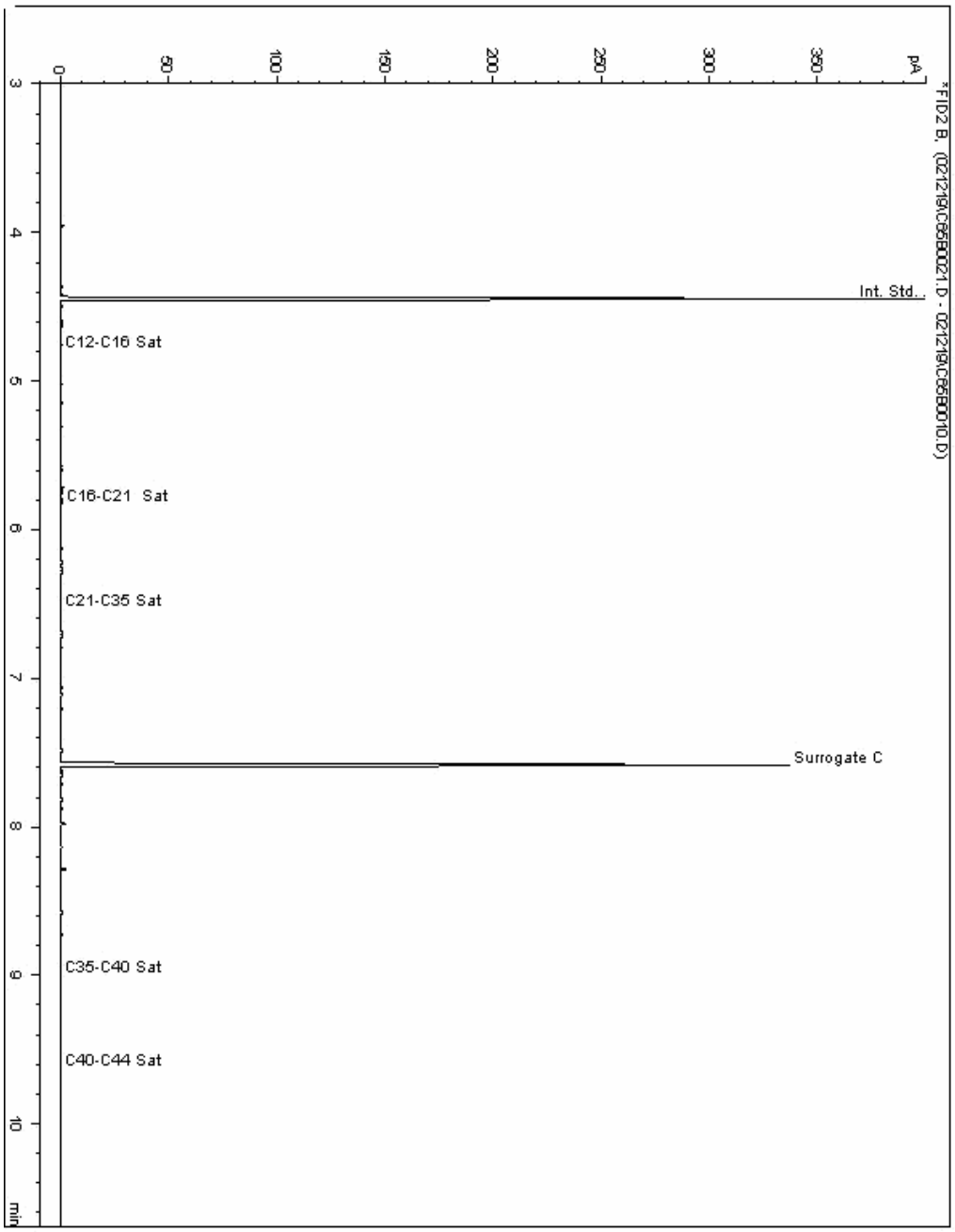
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19309400 **Depth :** 1.50
Sample ID : WS 20

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18120890-
Date Acquired : 12/02/2019 19:19:41 PM
Units : ppb
Dilution: WS 20[1.50] ->



CERTIFICATE OF ANALYSIS

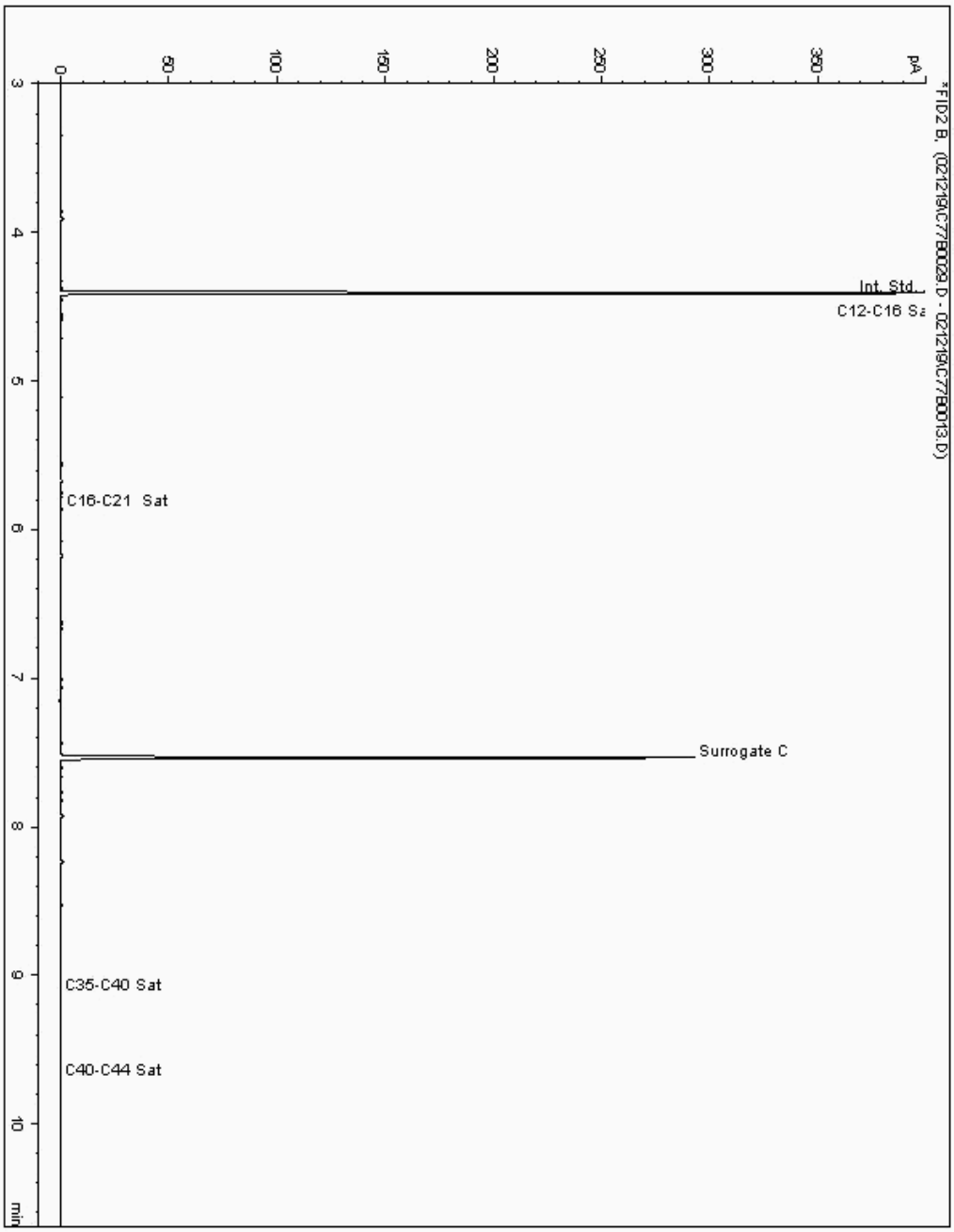
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19309567 **Depth :** 0.50
Sample ID : WS 10

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18121911-
Date Acquired : 12/02/2019 21:33:05 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

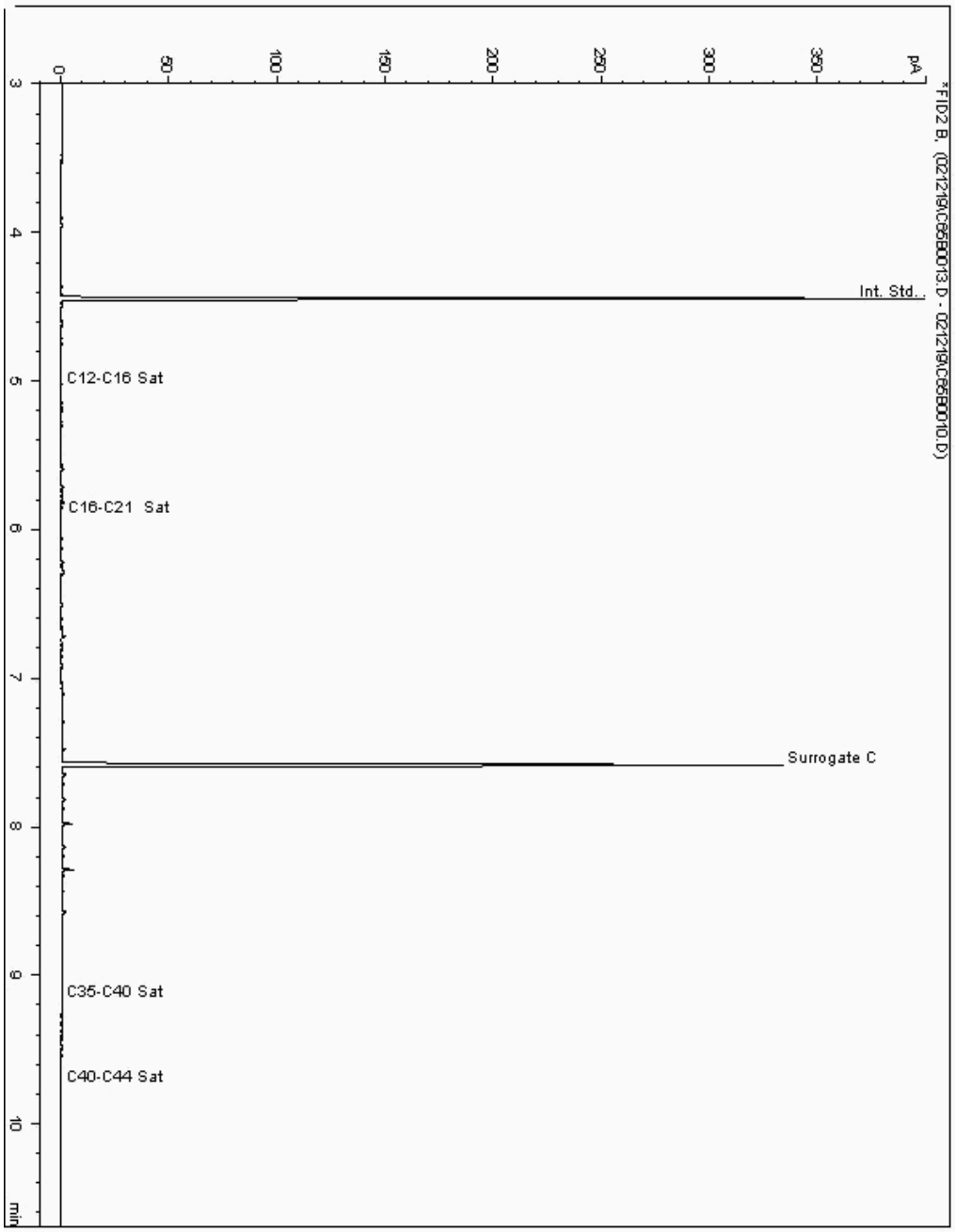
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19309997 **Depth :** 0.30
Sample ID : WS 25A

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18120967-
Date Acquired : 12/02/2019 17:09:40 PM
Units : ppb
Dilution: WS 25A[0.30] ->



CERTIFICATE OF ANALYSIS

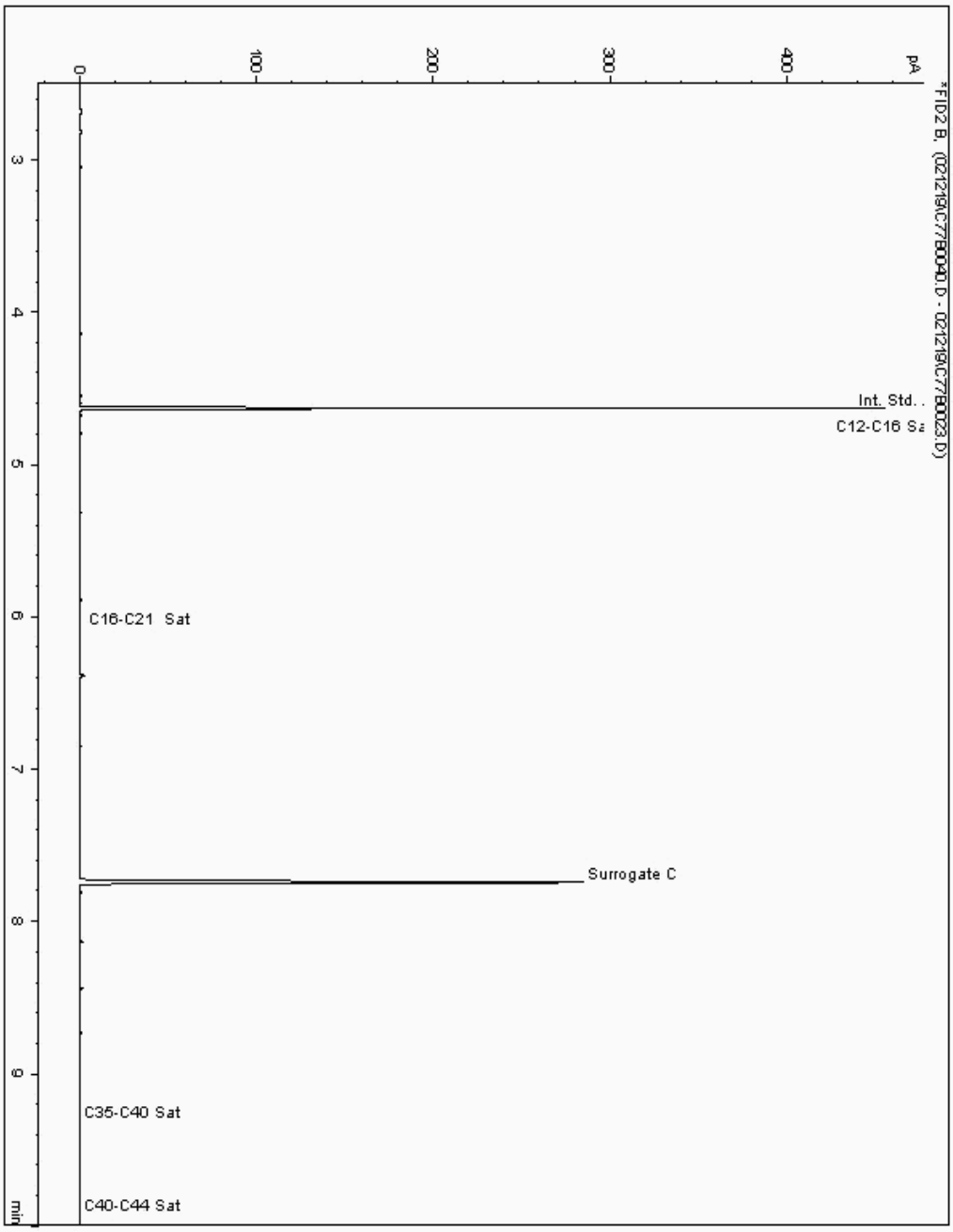
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19310021 **Depth :** 0.30
Sample ID : WS57

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18122198-
Date Acquired : 2/13/2019 12:03:52 AM
Units : ppb
Dilution :
CF : 1
Multiplier : 1.000



CERTIFICATE OF ANALYSIS

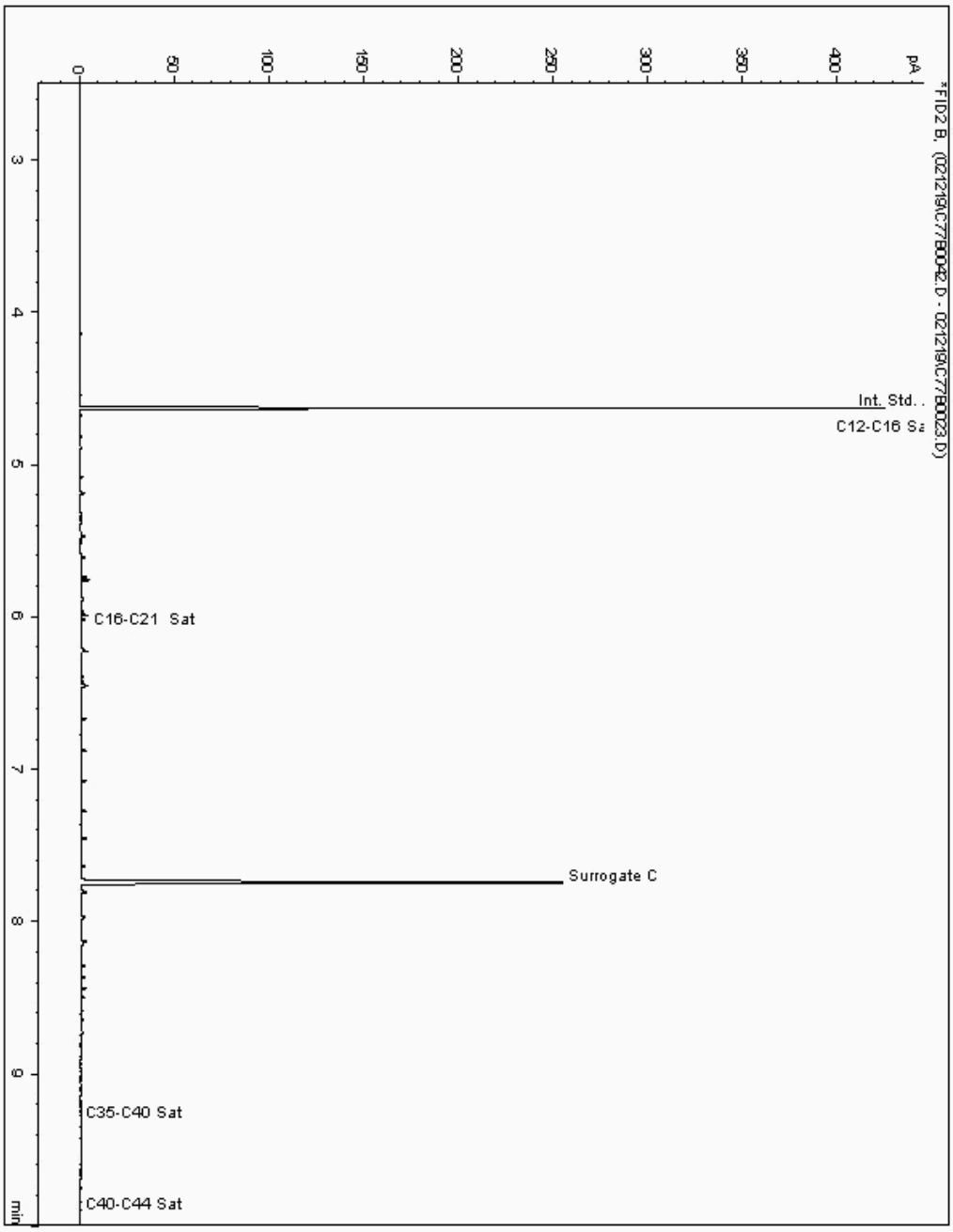
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19310122 **Depth :** 0.30
Sample ID : WS 28

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18121936-
Date Acquired : 2/13/2019 12:43:44 AM
Units : ppb
Dilution :
CF : 1
Multiplier : 1.010



CERTIFICATE OF ANALYSIS

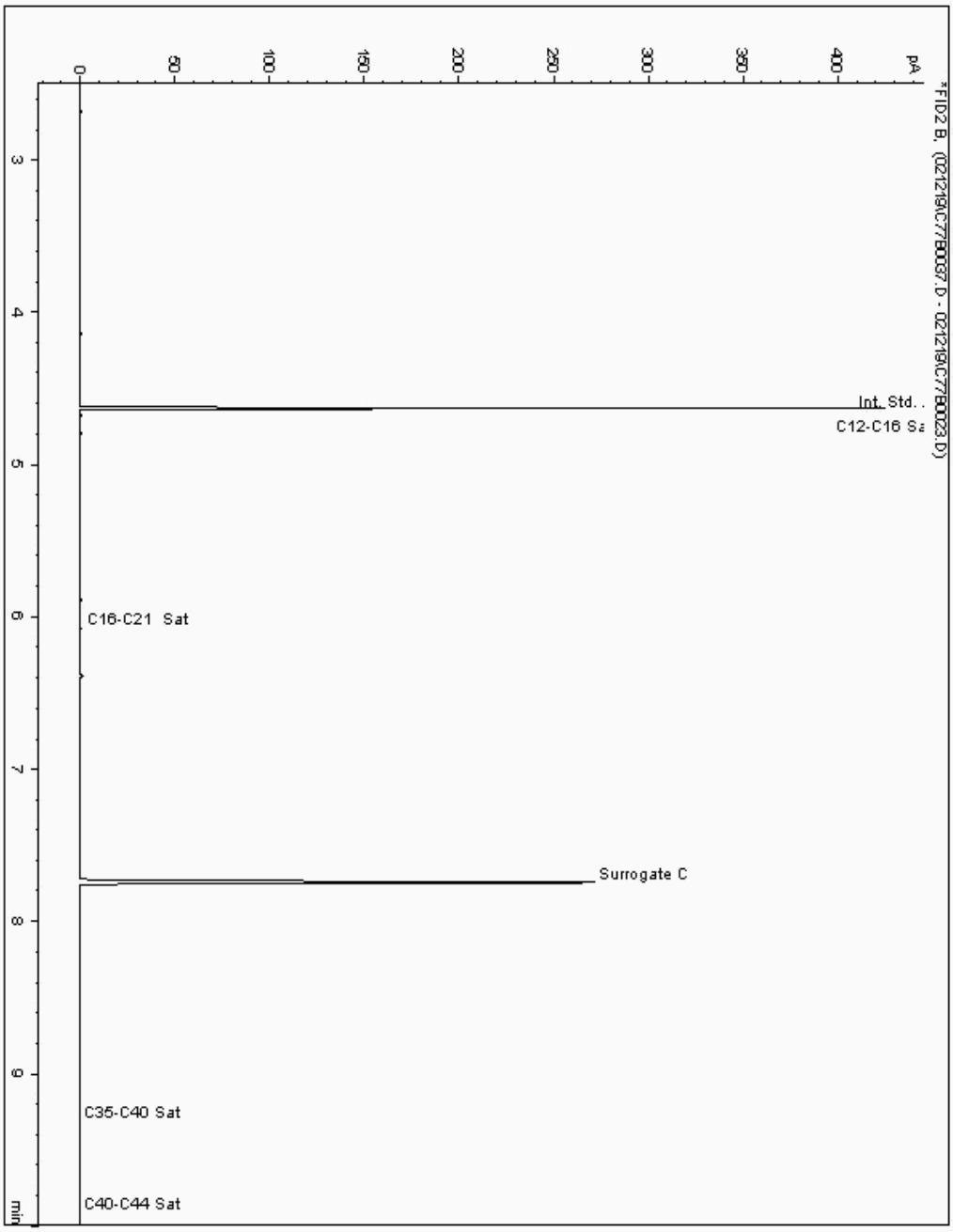
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19310167 **Depth :** 0.70
Sample ID : WS38

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18119124-
Date Acquired : 2/12/2019 11:03:53 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.950



CERTIFICATE OF ANALYSIS

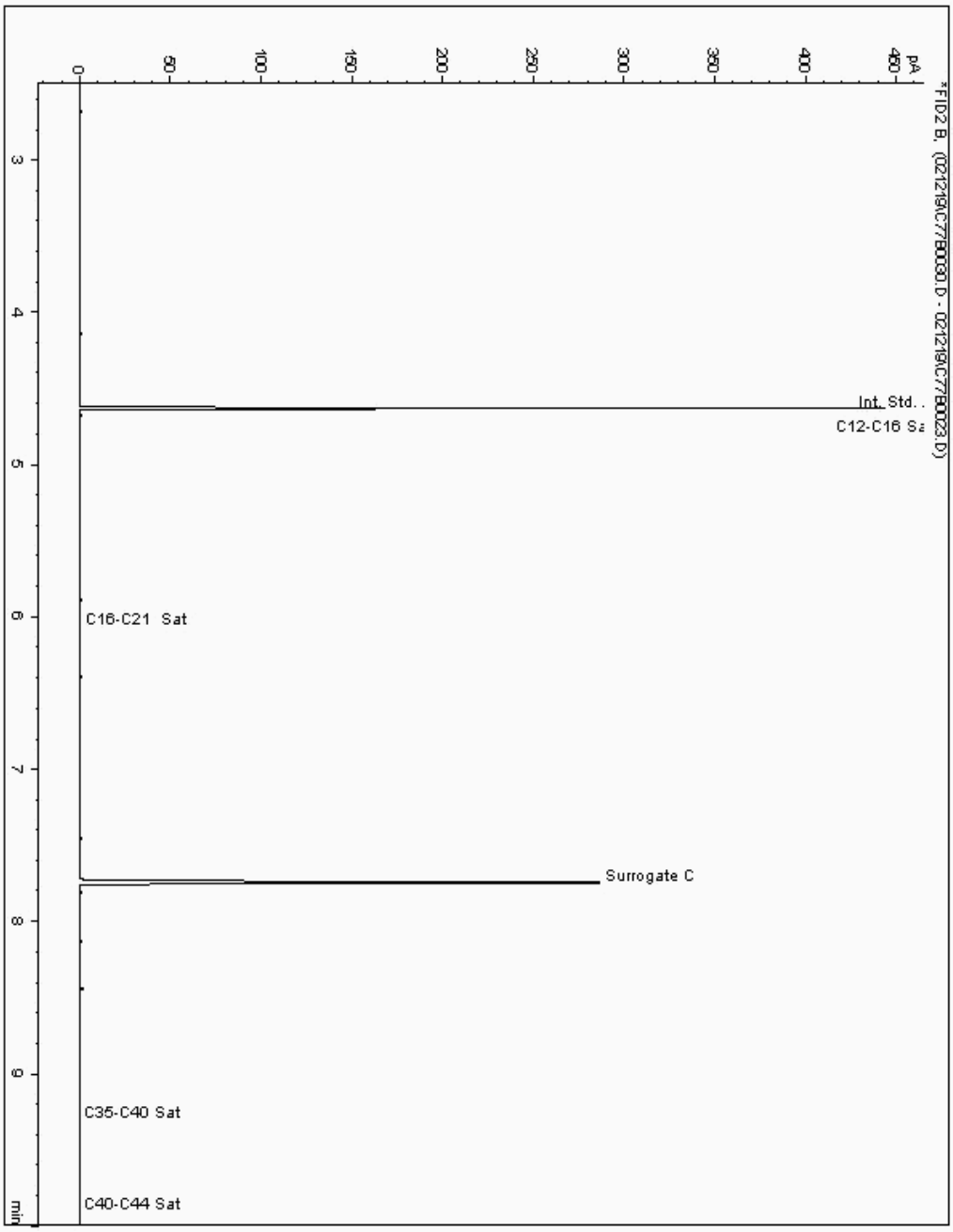
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19310274 **Depth :** 1.00
Sample ID : WS 28

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18121958-
Date Acquired : 2/12/2019 9:00:36 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 1.030



CERTIFICATE OF ANALYSIS

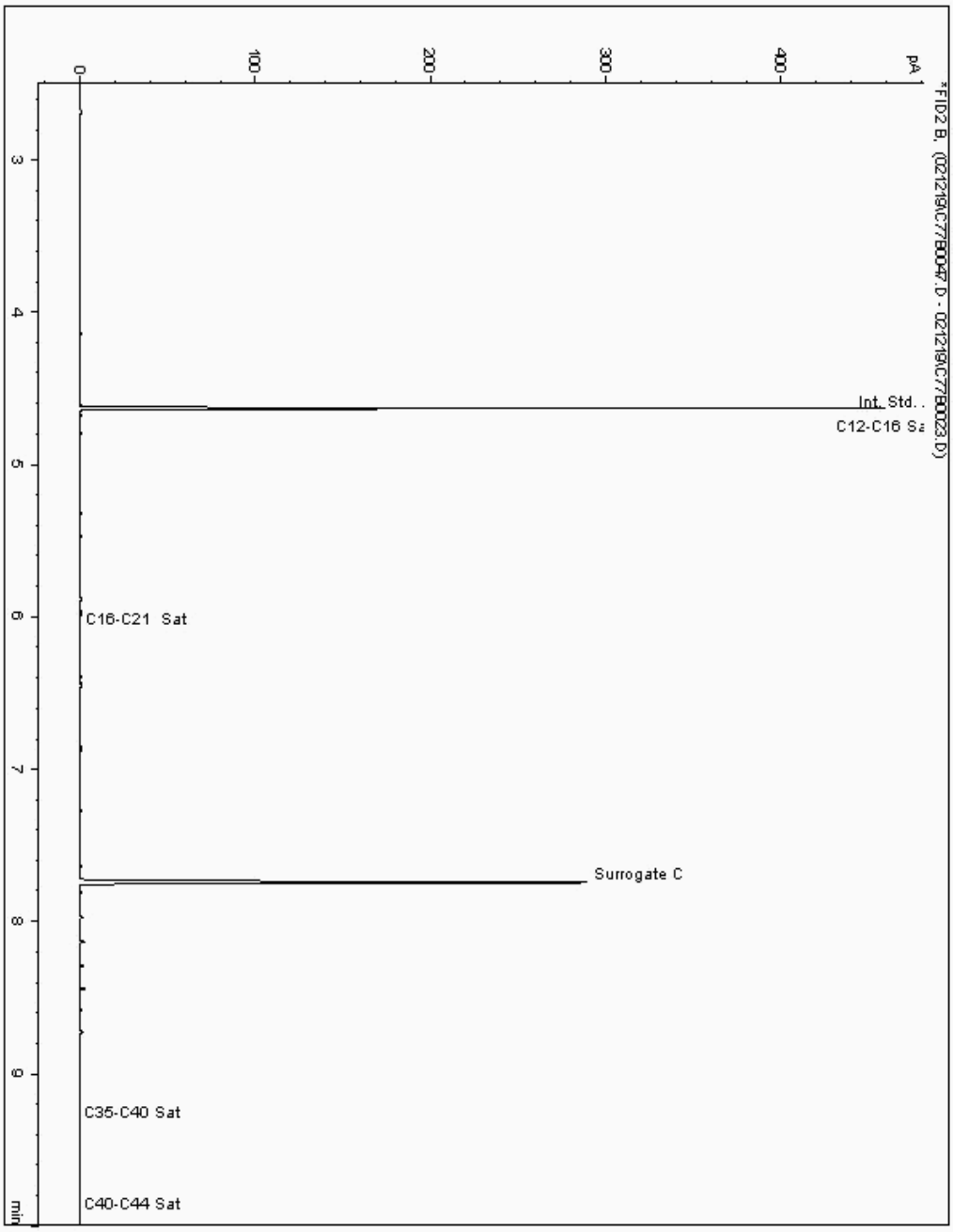
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19310334 **Depth :** 1.00
Sample ID : WS52

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18122148-
Date Acquired : 2/13/2019 2:07:31 AM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.990



CERTIFICATE OF ANALYSIS

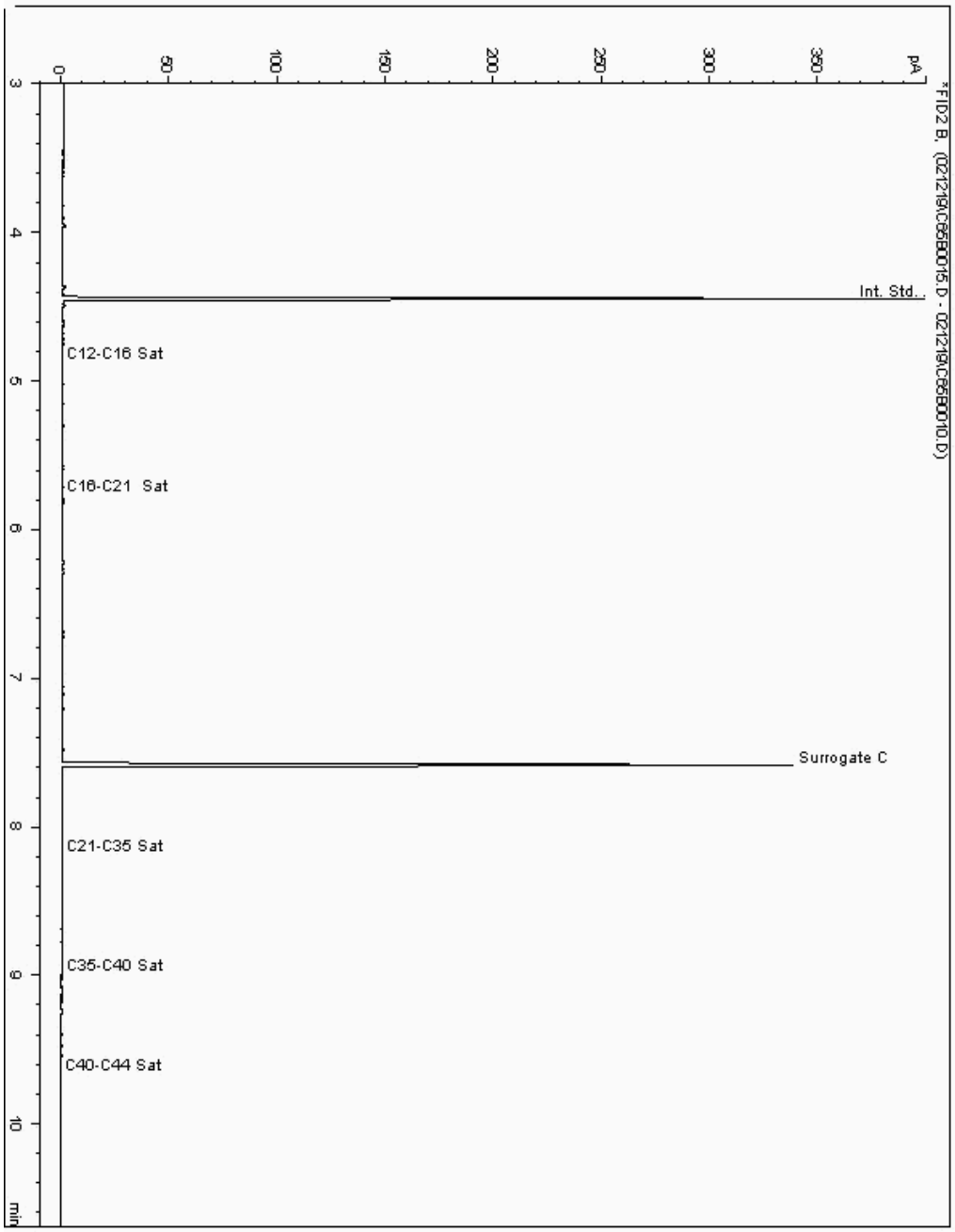
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19310402 **Depth :** 0.10
Sample ID : WS 34

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18121032-
Date Acquired : 12/02/2019 17:42:22 PM
Units : ppb
Dilution: WS 34[0.10] ->



CERTIFICATE OF ANALYSIS

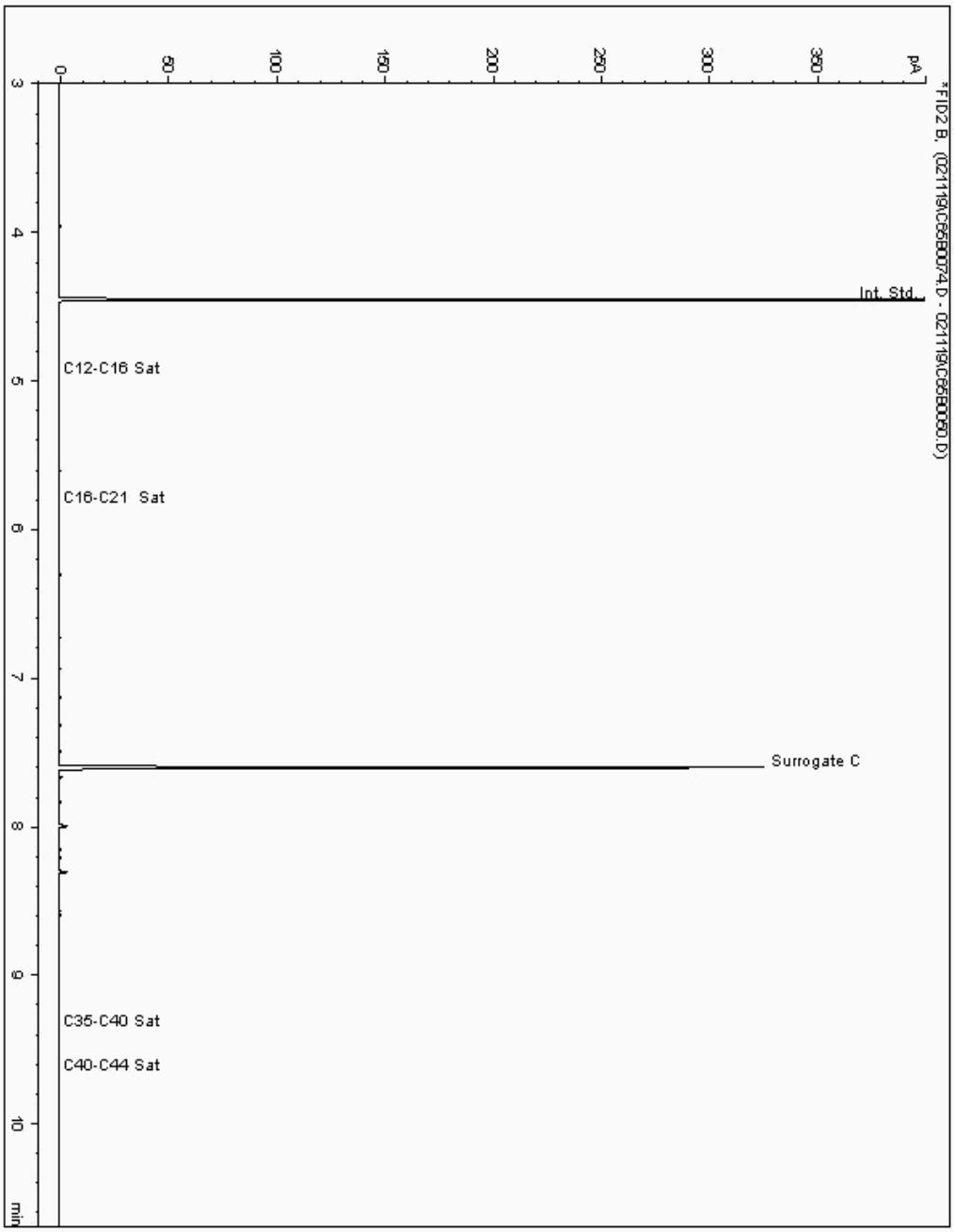
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19310428 **Depth :** 1.00
Sample ID : WS 40

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18121982-
Date Acquired : 12/02/2019 15:47:22 PM
Units : ppb
Dilution: WS 40[1.00] ->



CERTIFICATE OF ANALYSIS

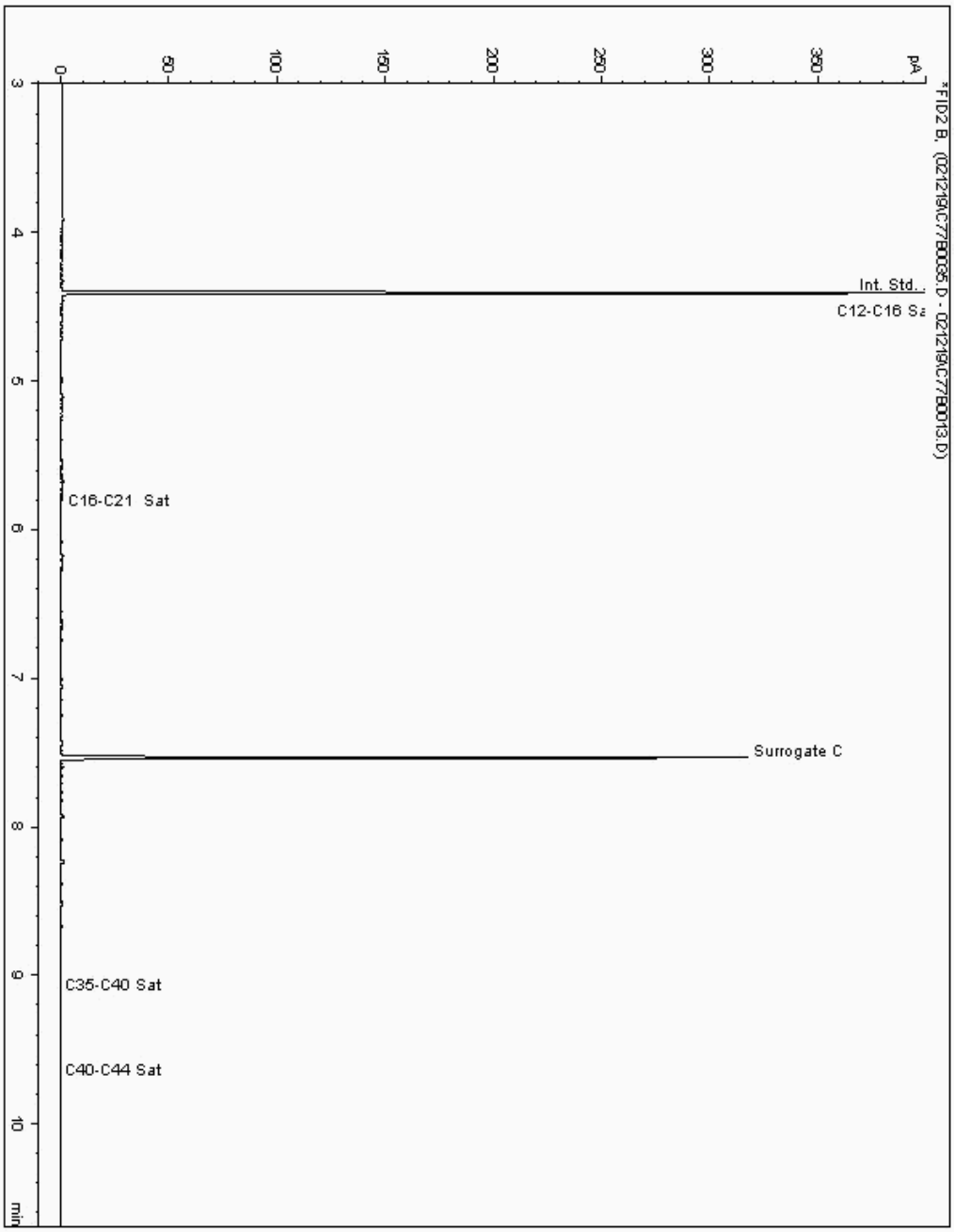
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19310484 **Depth :** 0.10 - 0.20
Sample ID : WS22

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18119299-
Date Acquired : 12/02/2019 23:25:39 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

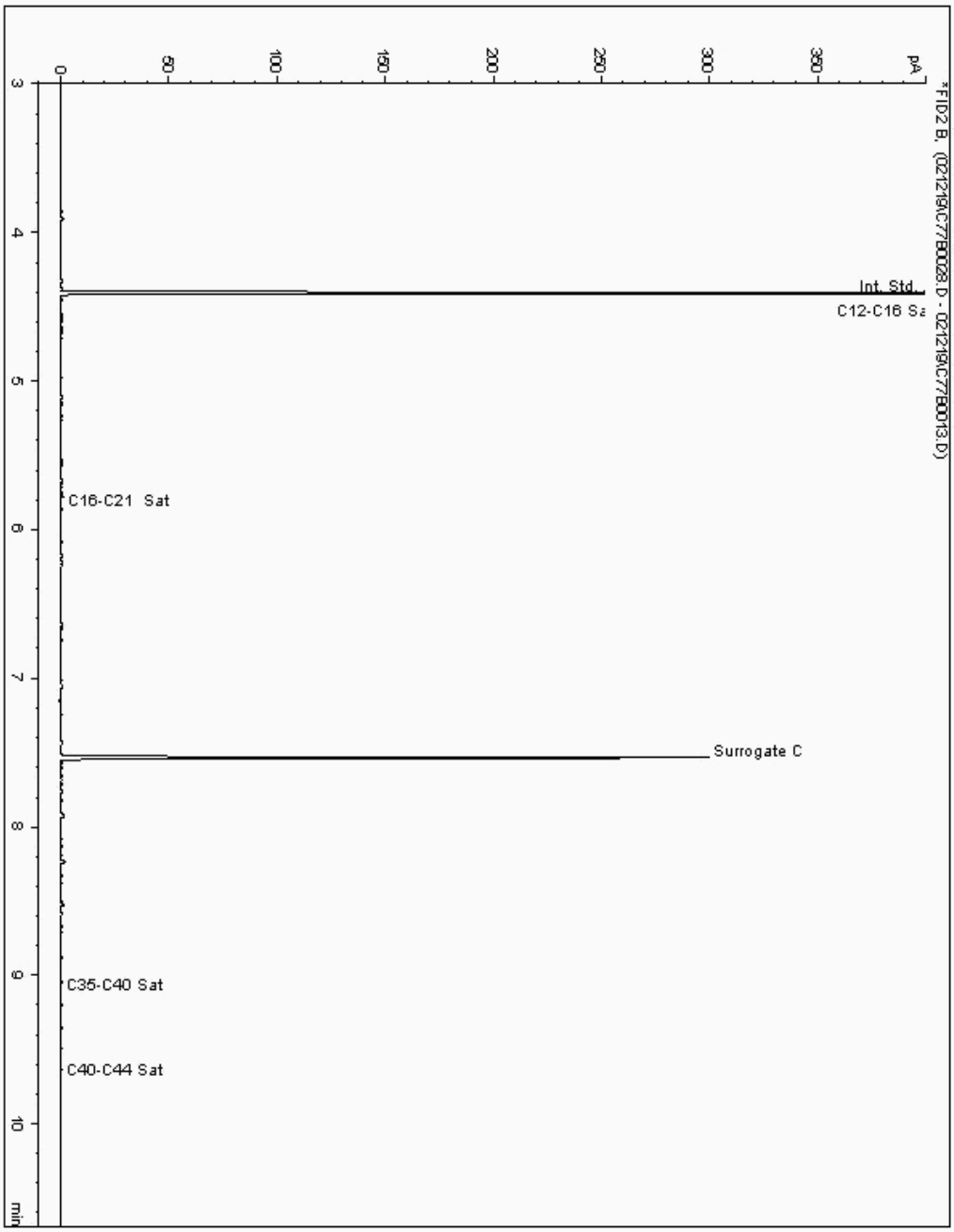
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19310494 **Depth :** 1.00
Sample ID : WS 34

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18121056-
Date Acquired : 12/02/2019 21:12:59 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

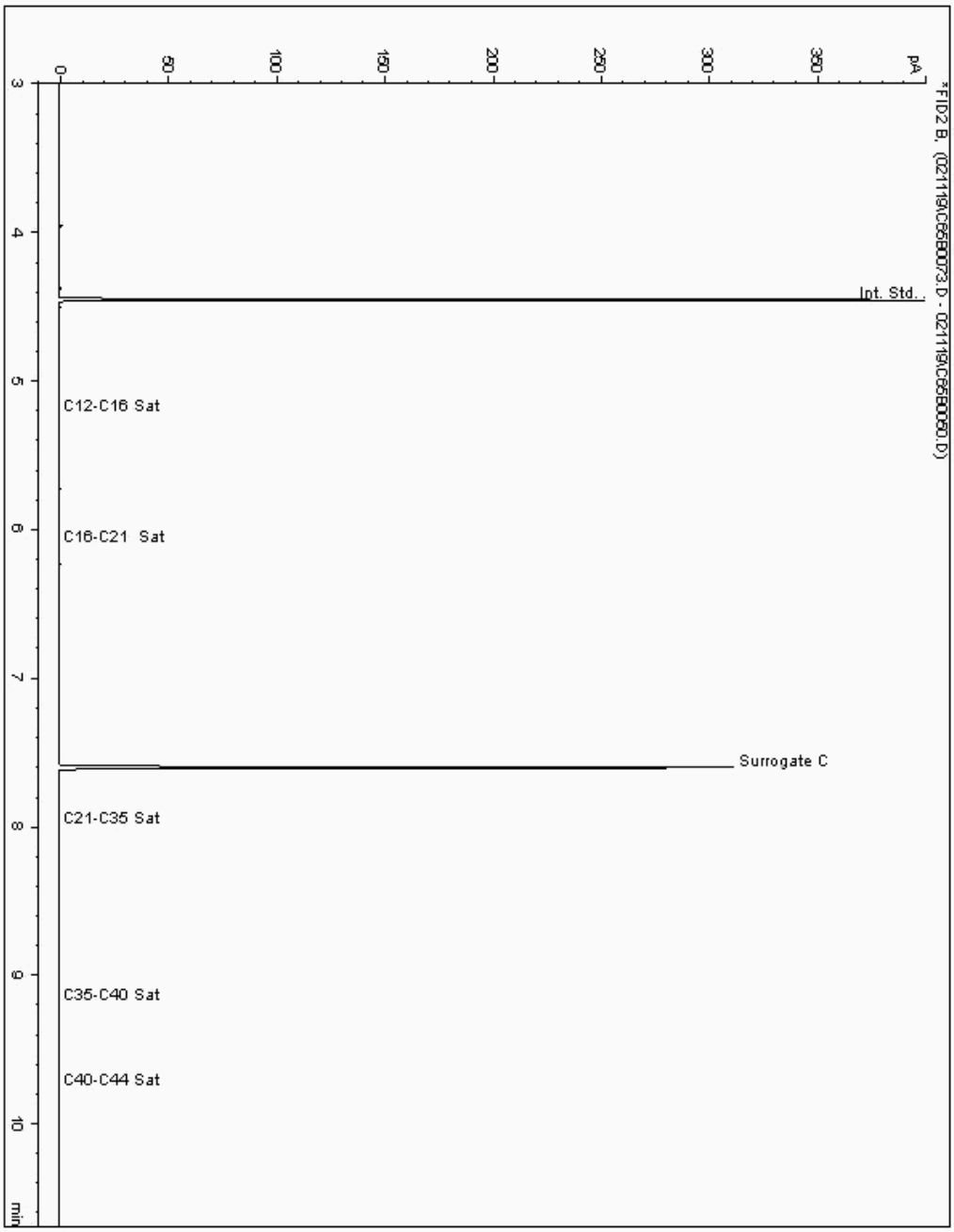
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19310586 **Depth :** 1.50
Sample ID : WS 40

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18122005-
Date Acquired : 12/02/2019 15:02:11 PM
Units : ppb
Dilution: WS 40[1.50] ->



CERTIFICATE OF ANALYSIS

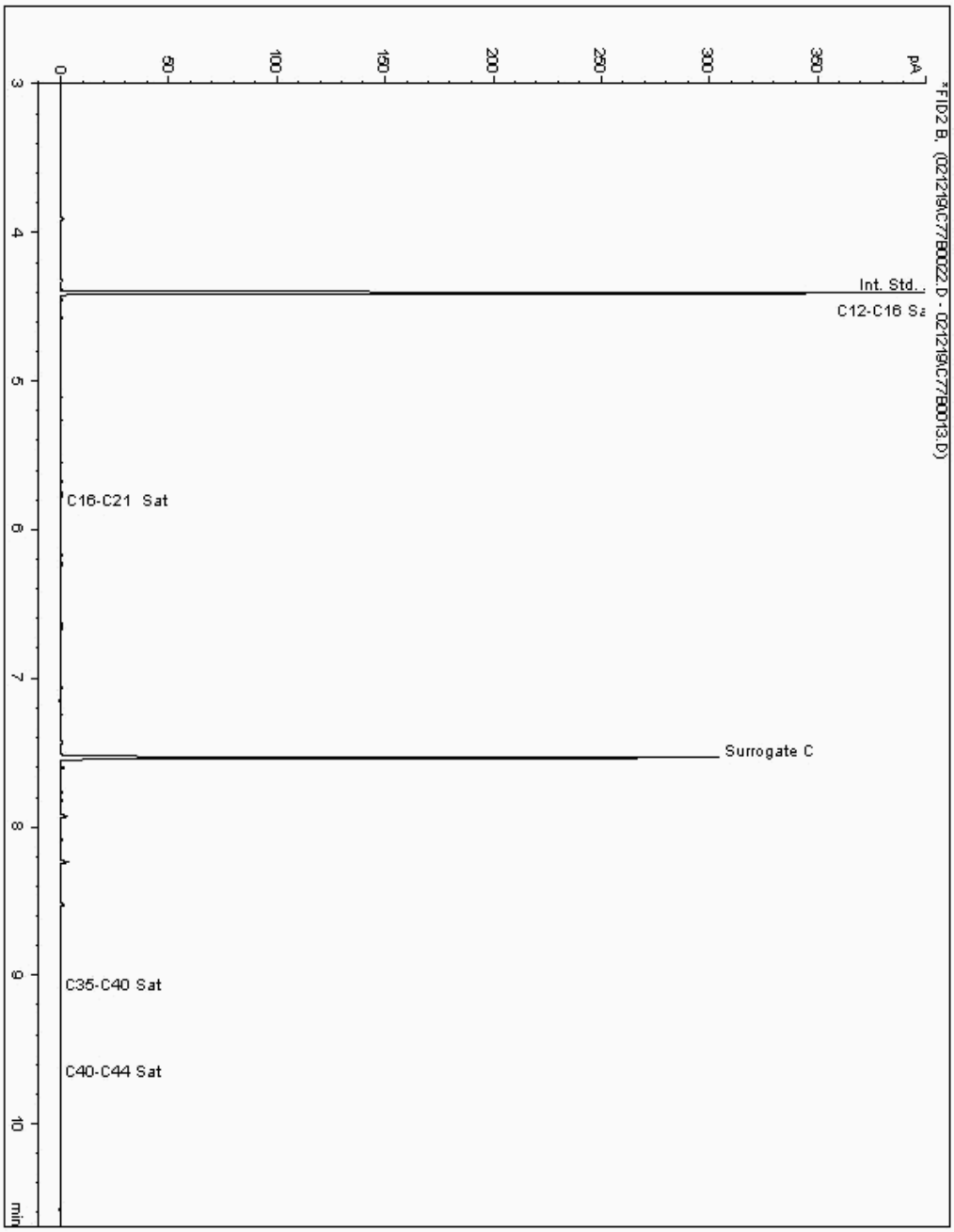
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19310602 **Depth :** 0.50
Sample ID : WS 36

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18121866-
Date Acquired : 12/02/2019 19:37:12 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

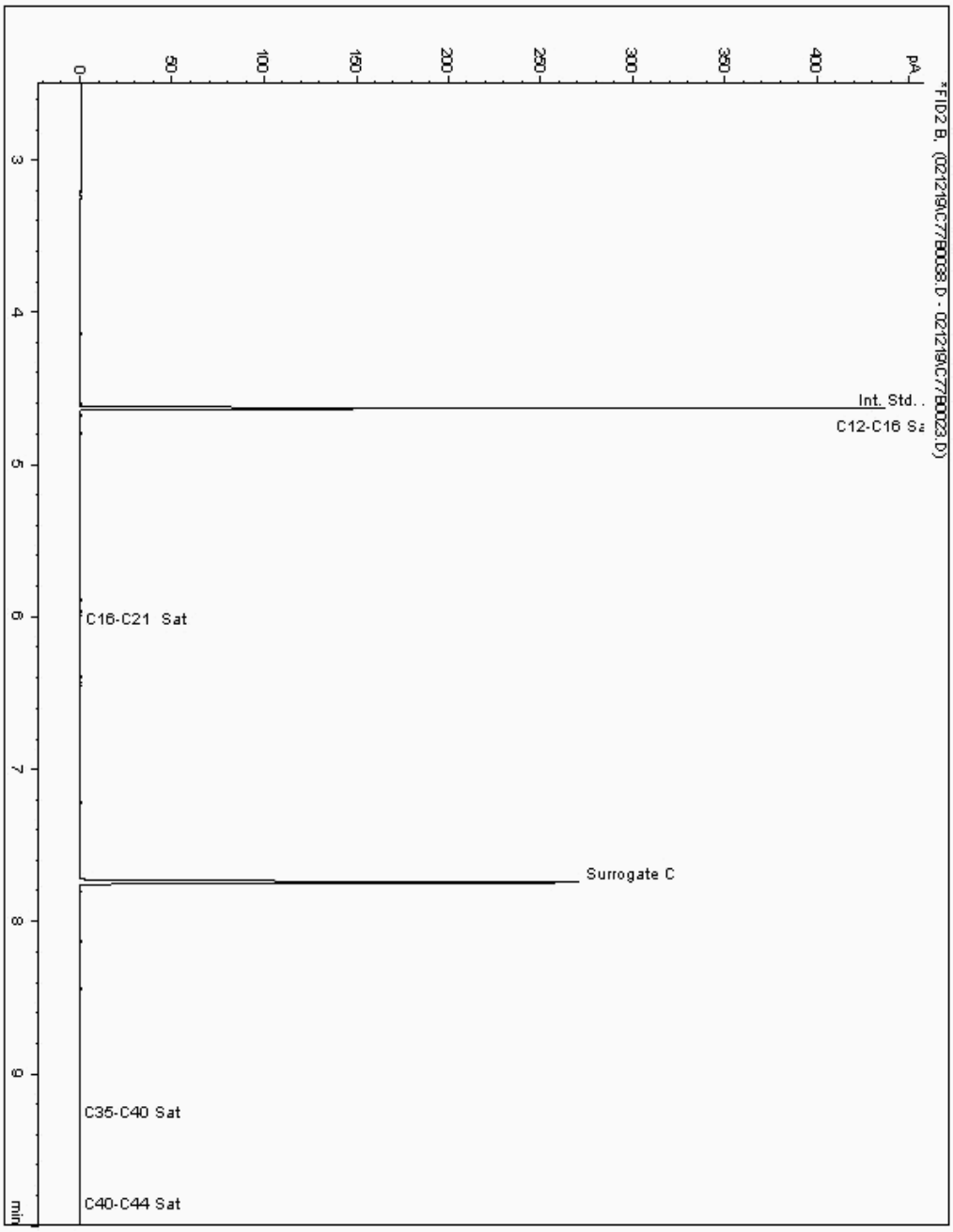
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19310628 **Depth :** 1.00
Sample ID : WS 41

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18118376-
Date Acquired : 2/12/2019 11:23:52 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 1.020



CERTIFICATE OF ANALYSIS

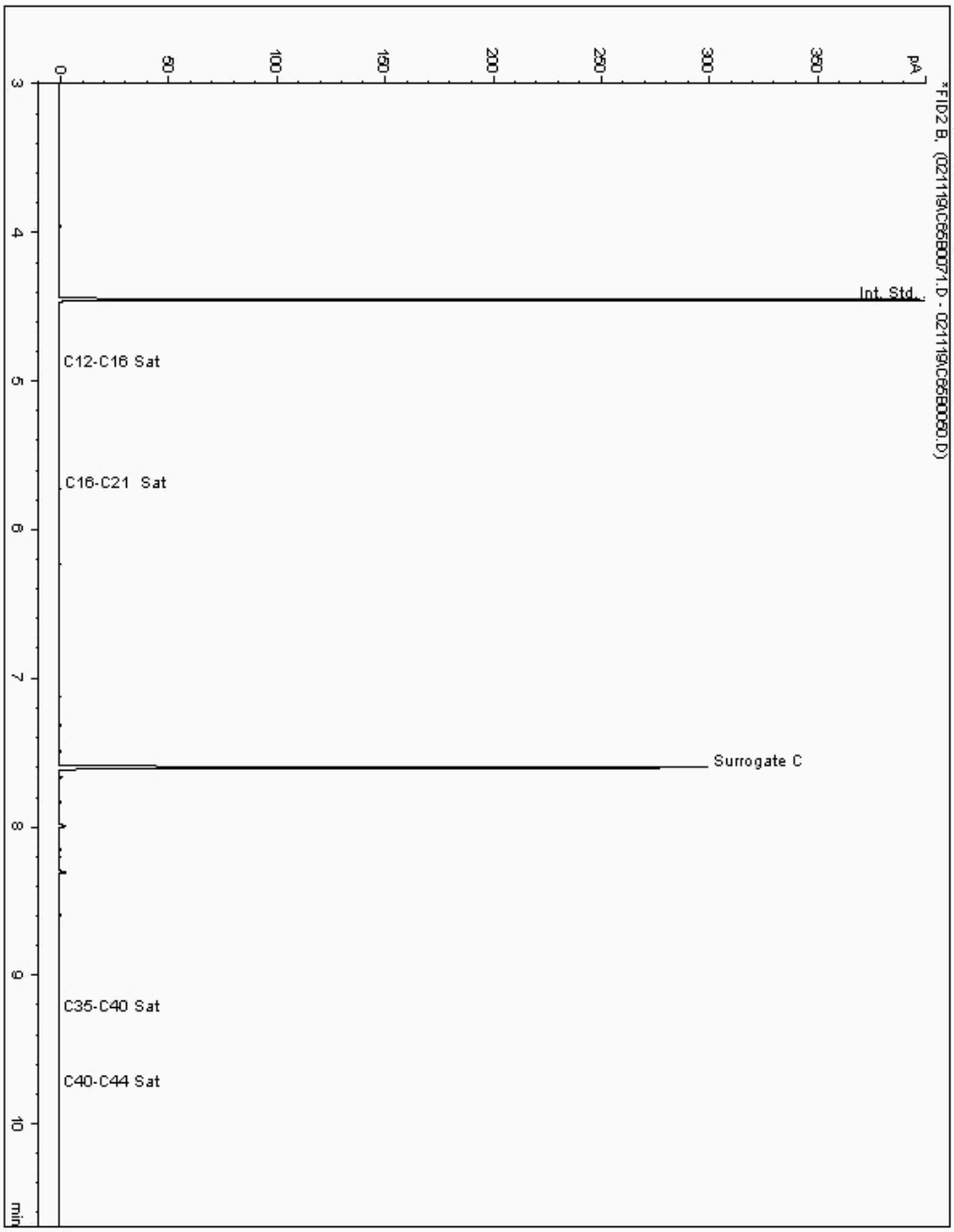
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19310694 **Depth :** 0.30
Sample ID : WS 45

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18120253-
Date Acquired : 12/02/2019 14:29:34 PM
Units : ppb
Dilution: WS 45[0.30] ->



CERTIFICATE OF ANALYSIS

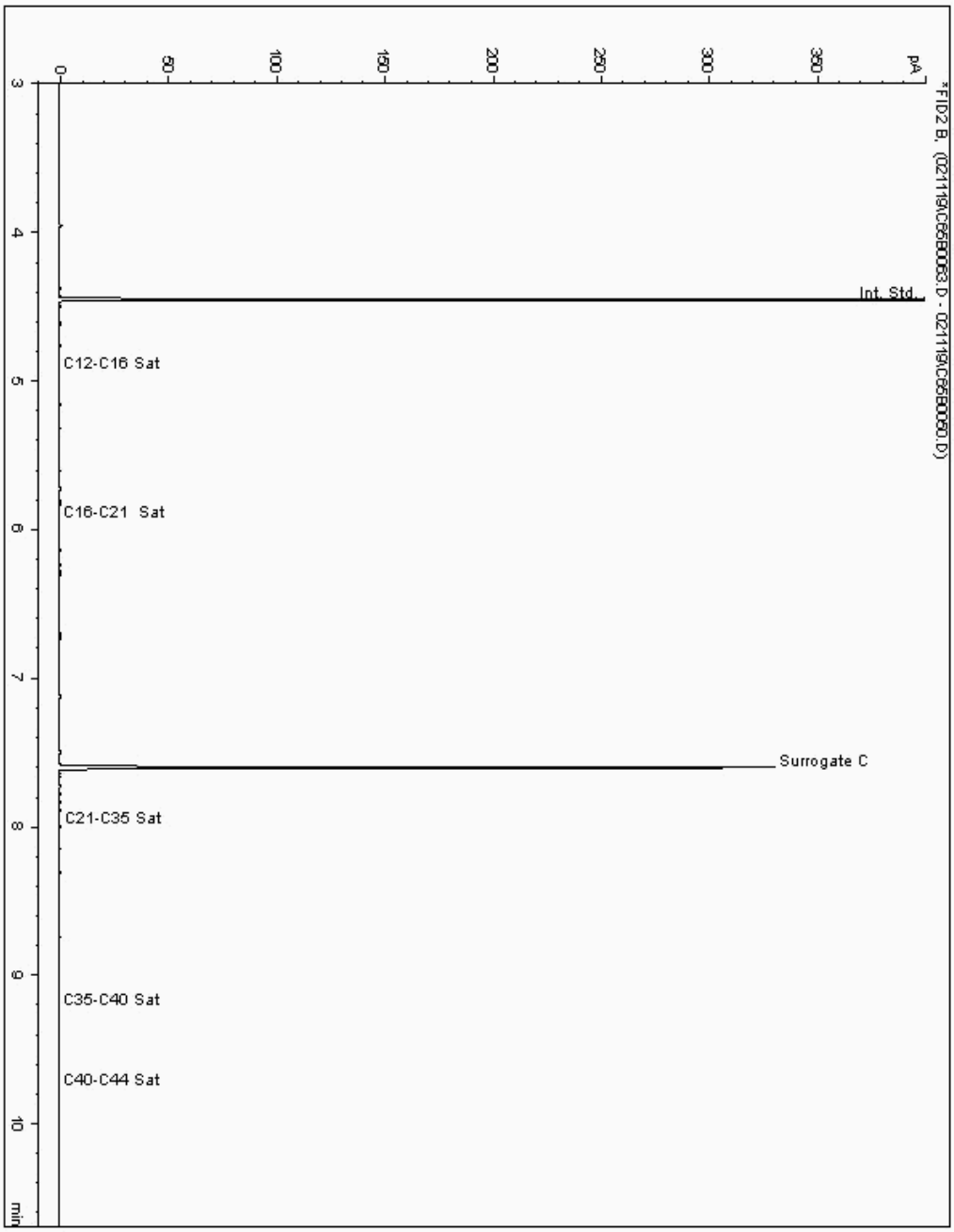
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19310699 **Depth :** 0.50
Sample ID : WS 30

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18122053-
Date Acquired : 12/02/2019 07:32:05 PM
Units : ppb
Dilution: WS 30[0.50] ->



CERTIFICATE OF ANALYSIS

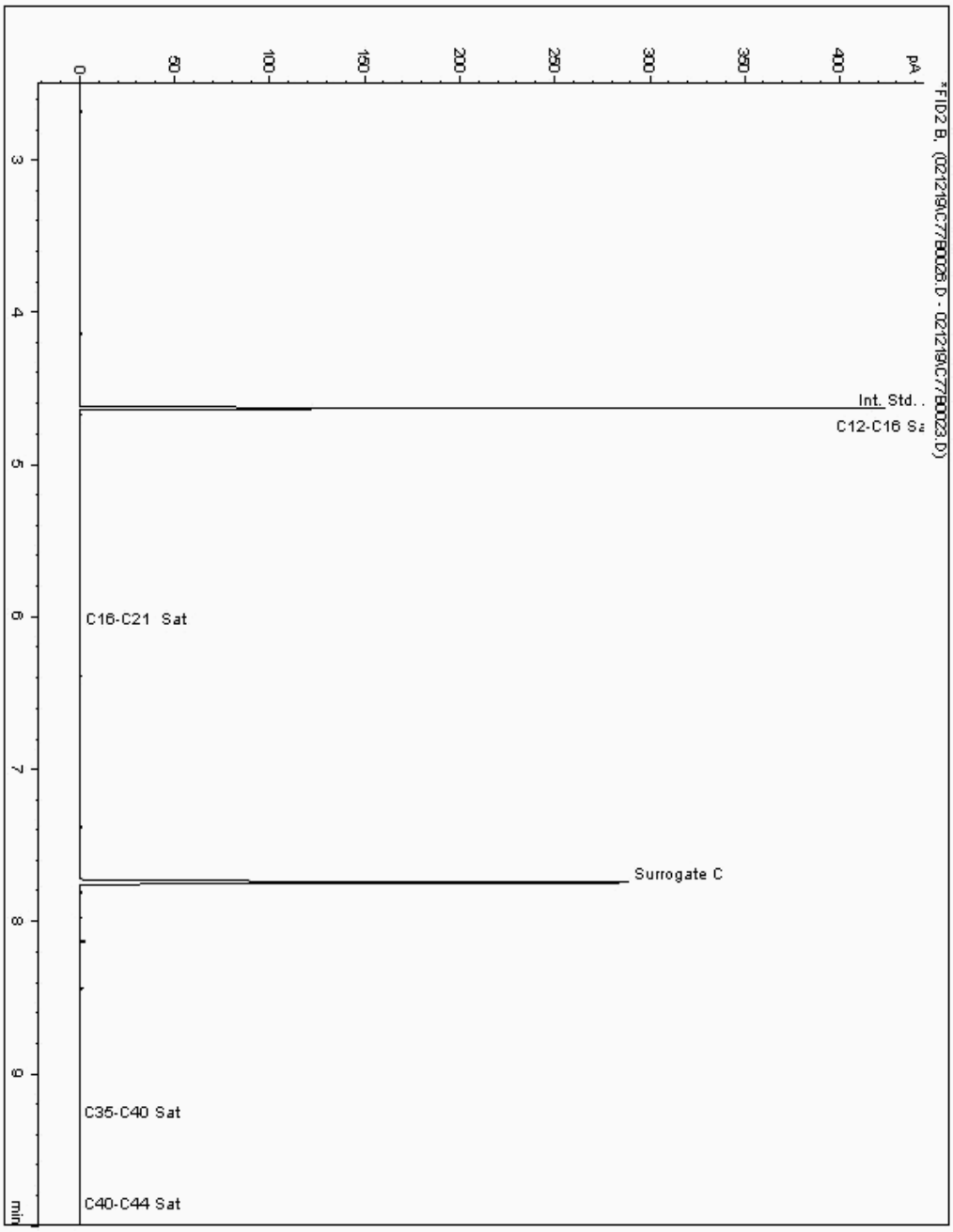
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19310838 **Depth :** 0.50
Sample ID : WS 41

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18118188-
Date Acquired : 2/12/2019 7:40:50 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 1.040



CERTIFICATE OF ANALYSIS

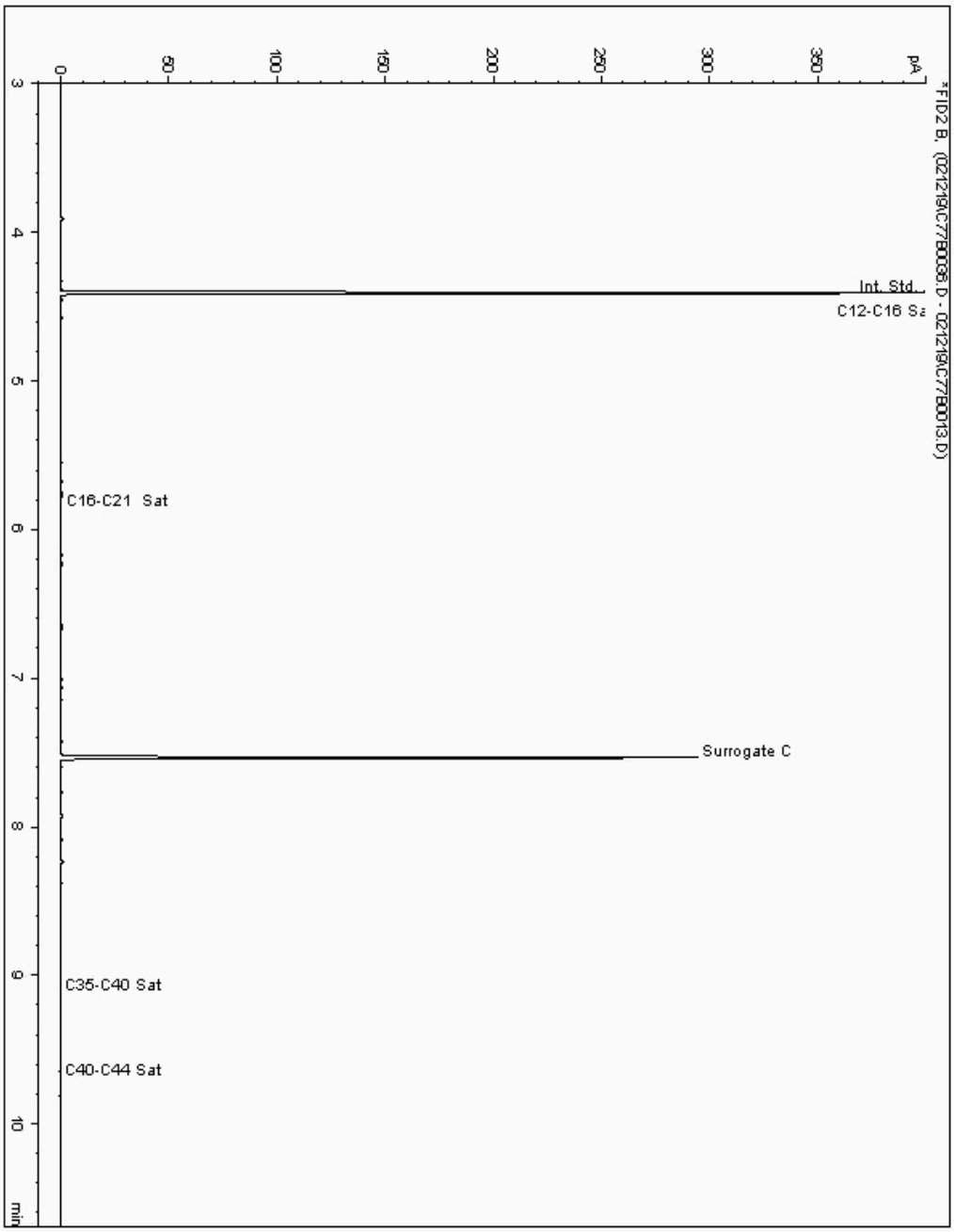
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19310848 **Depth :** 1.00
Sample ID : WS58

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18122317-
Date Acquired : 12/02/2019 23:45:43 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

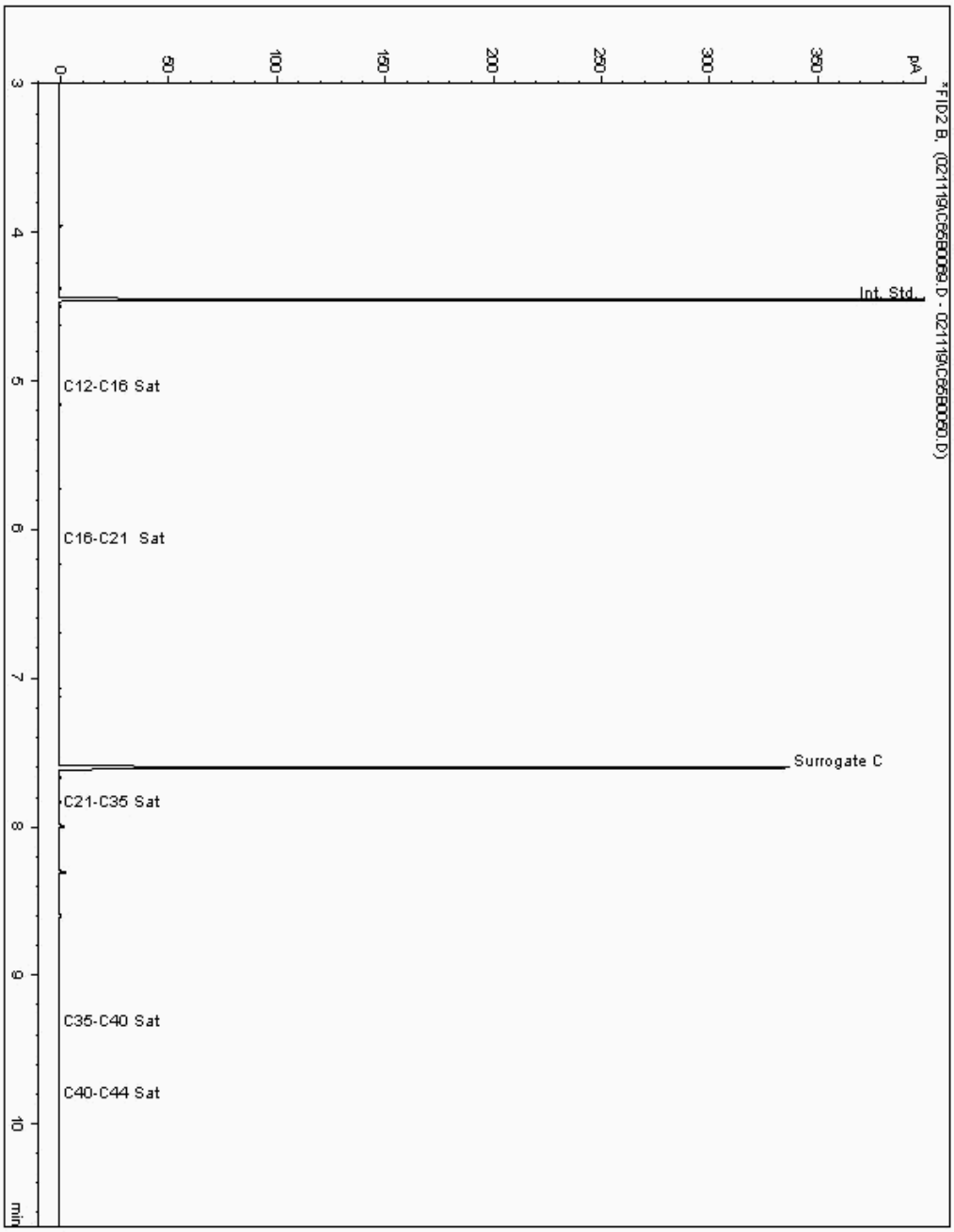
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19310859 **Depth :** 0.20
Sample ID : WS 37

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18119845-
Date Acquired : 12/02/2019 09:24:30 PM
Units : ppb
Dilution: WS 37[0.20] ->



CERTIFICATE OF ANALYSIS

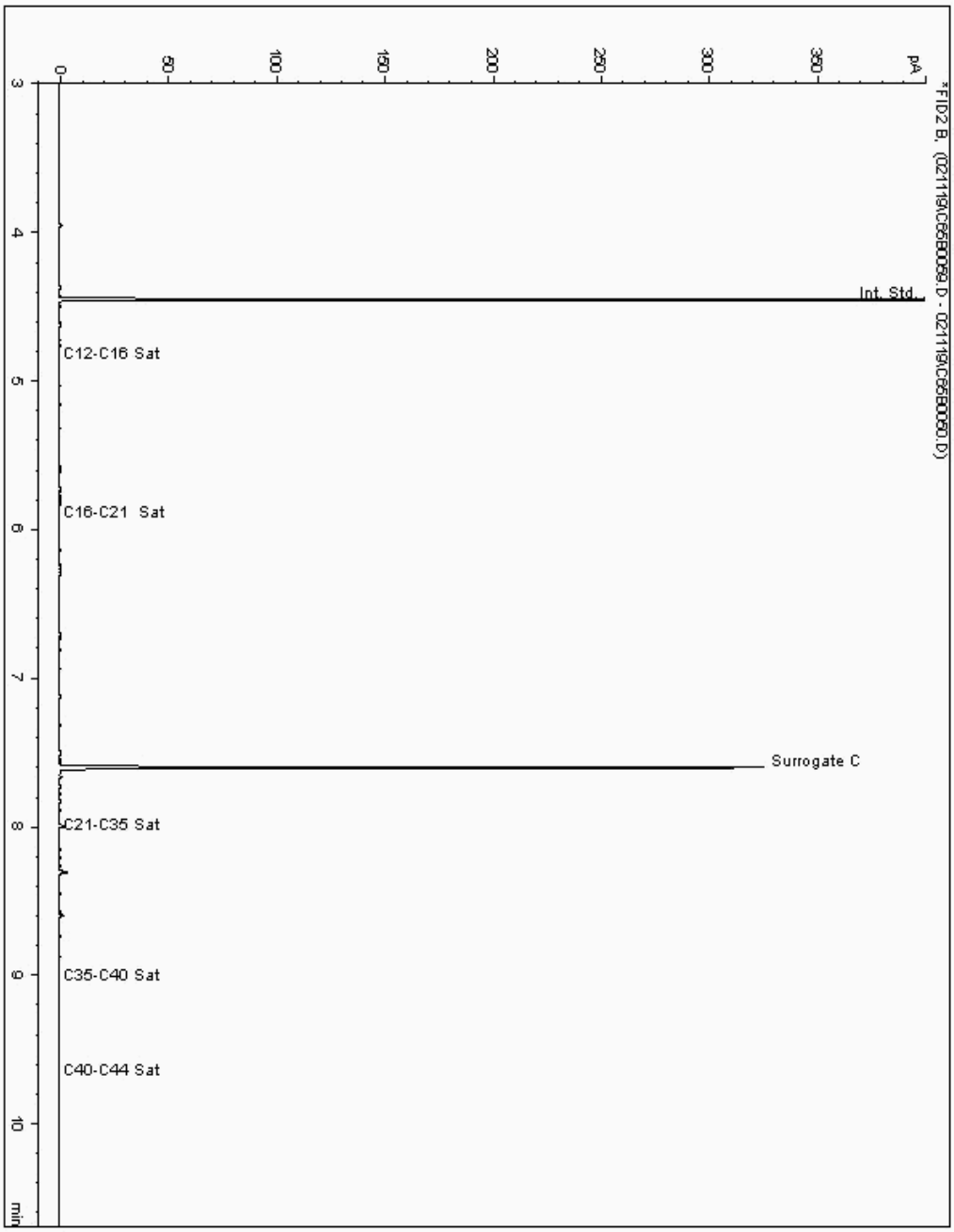
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19310865 **Depth :** 1.00
Sample ID : WS 45

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18120377-
Date Acquired : 12/02/2019 06:19:45 PM
Units : ppb
Dilution: WS 45[1.00] ->



CERTIFICATE OF ANALYSIS

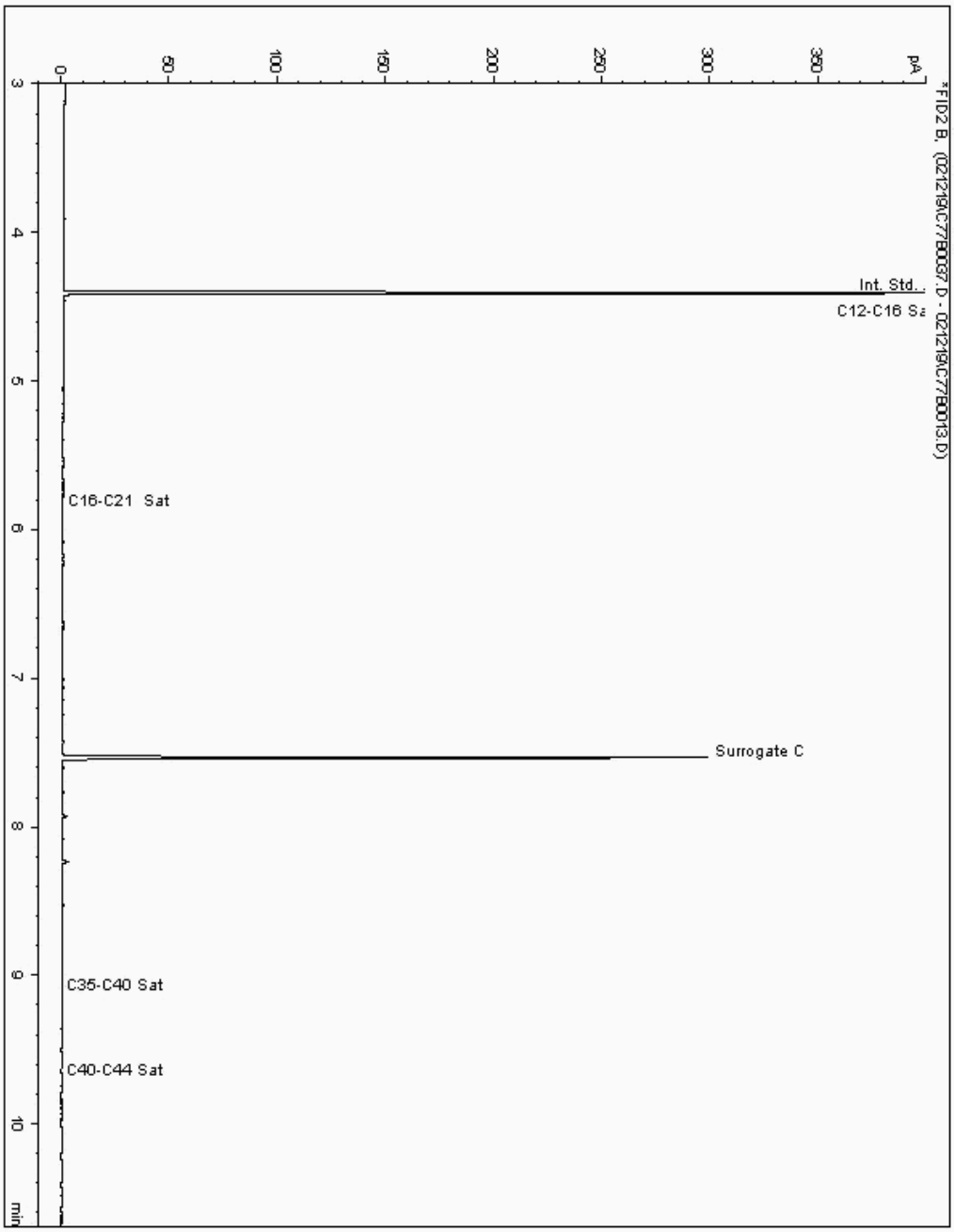
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19310965 **Depth :** 0.10
Sample ID : WS 33

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18118229-
Date Acquired : 13/02/2019 00:06:01 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

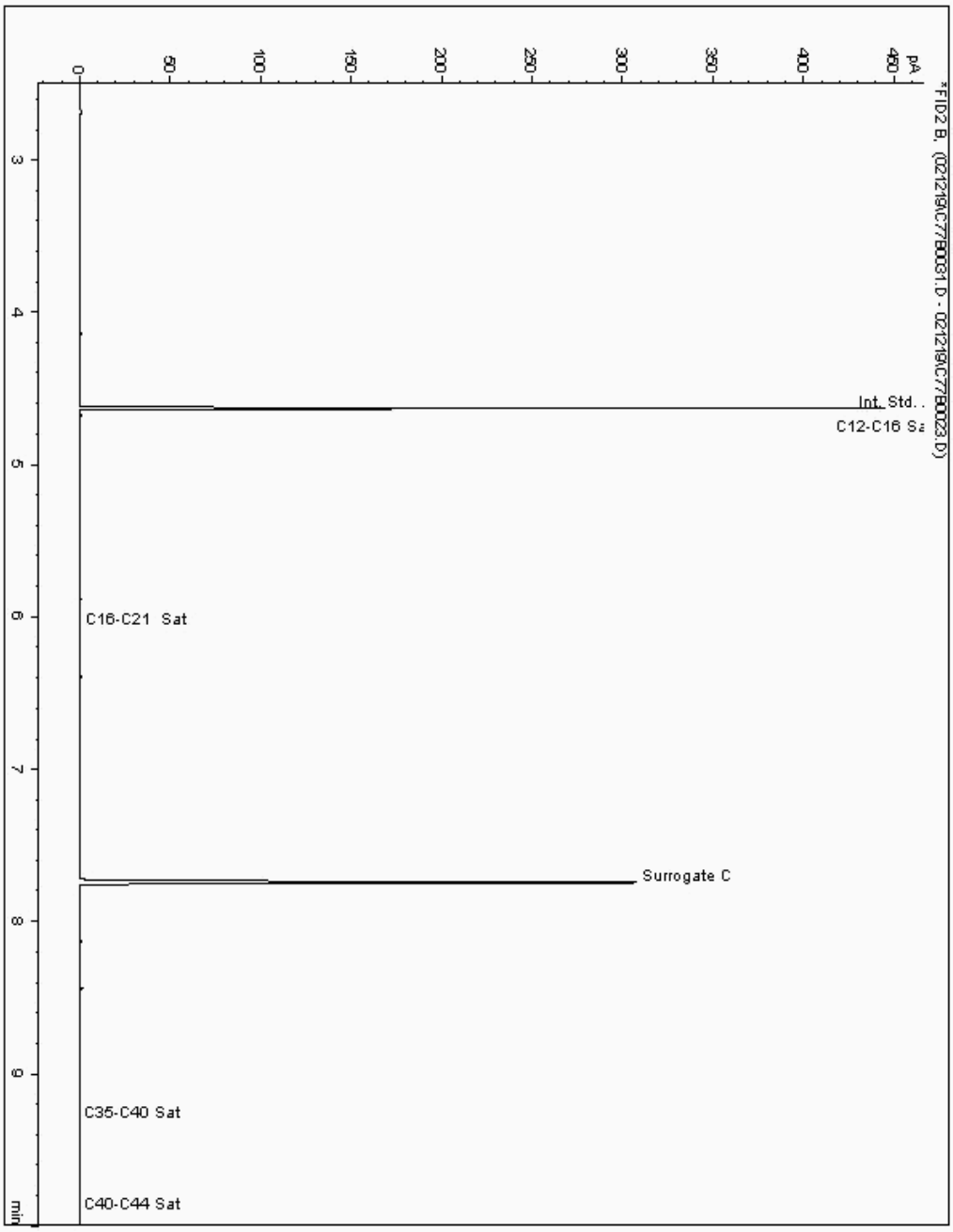
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19311002 **Depth :** 0.70
Sample ID : WS 46

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18120565-
Date Acquired : 2/12/2019 9:20:30 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 1.010



CERTIFICATE OF ANALYSIS

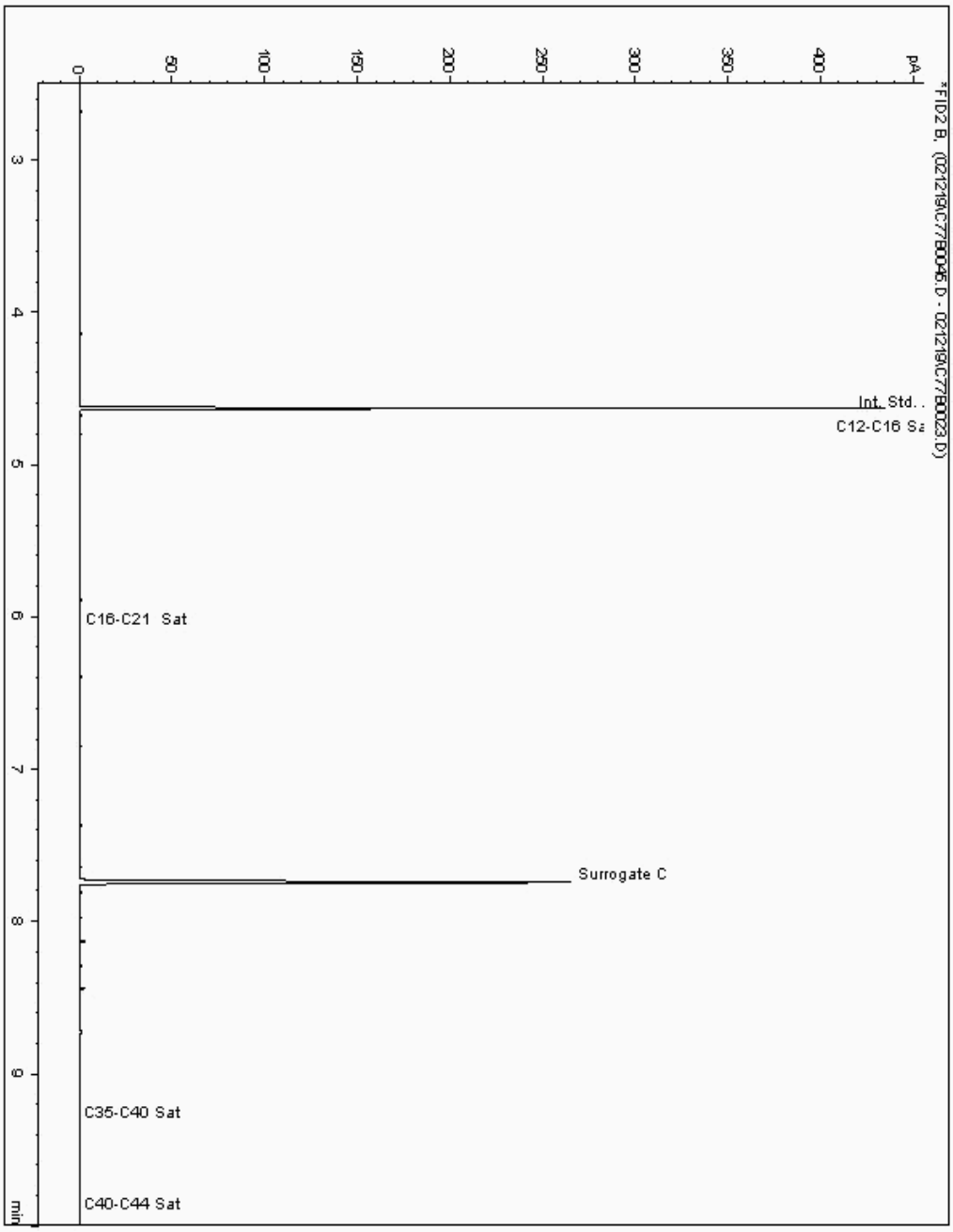
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19311038 **Depth :** 0.30
Sample ID : WS58

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18122288-
Date Acquired : 2/13/2019 1:27:19 AM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.960



CERTIFICATE OF ANALYSIS

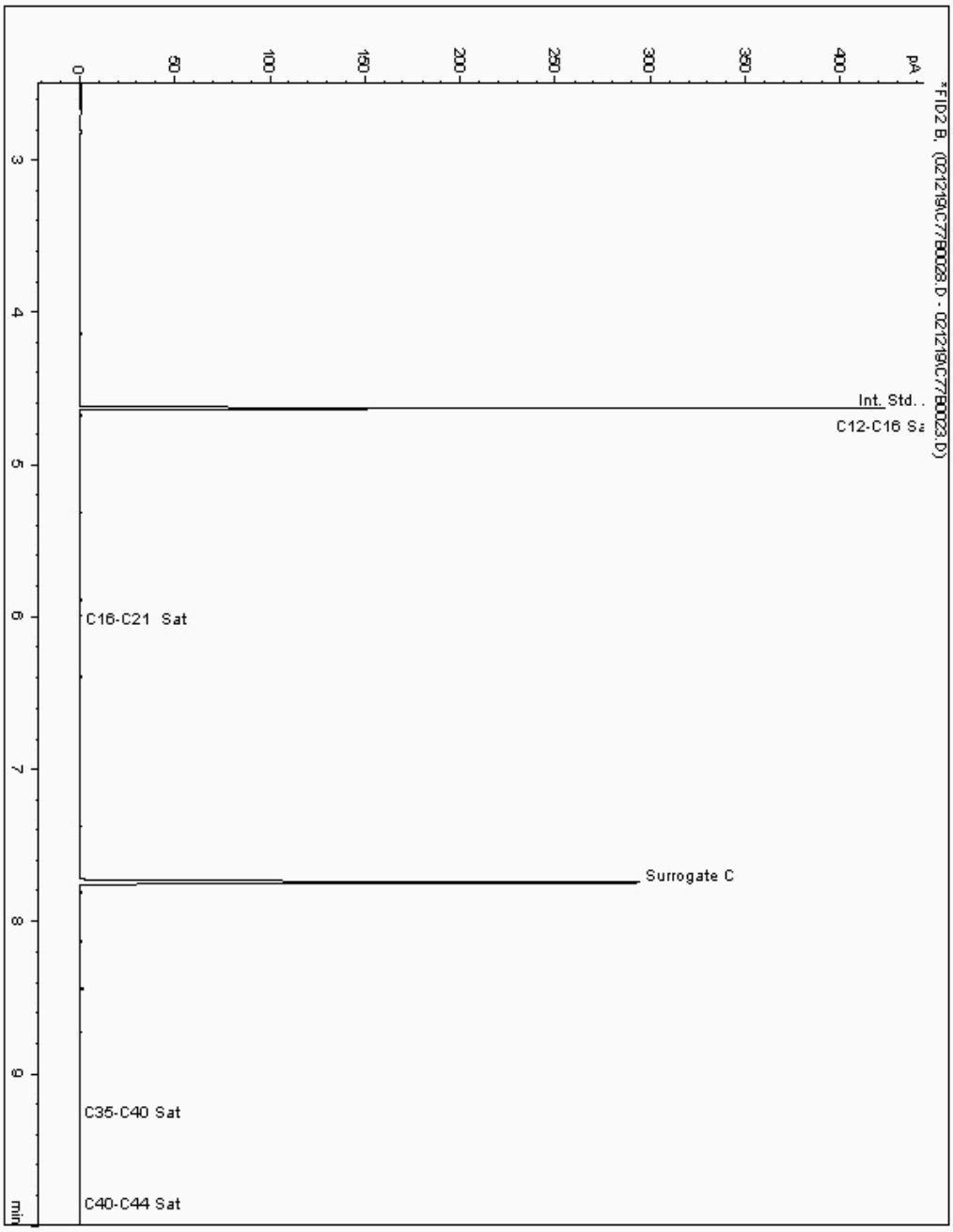
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19311137 **Depth :** 1.20
Sample ID : WS 16

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18118403-
Date Acquired : 2/12/2019 8:20:41 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 1.030



CERTIFICATE OF ANALYSIS

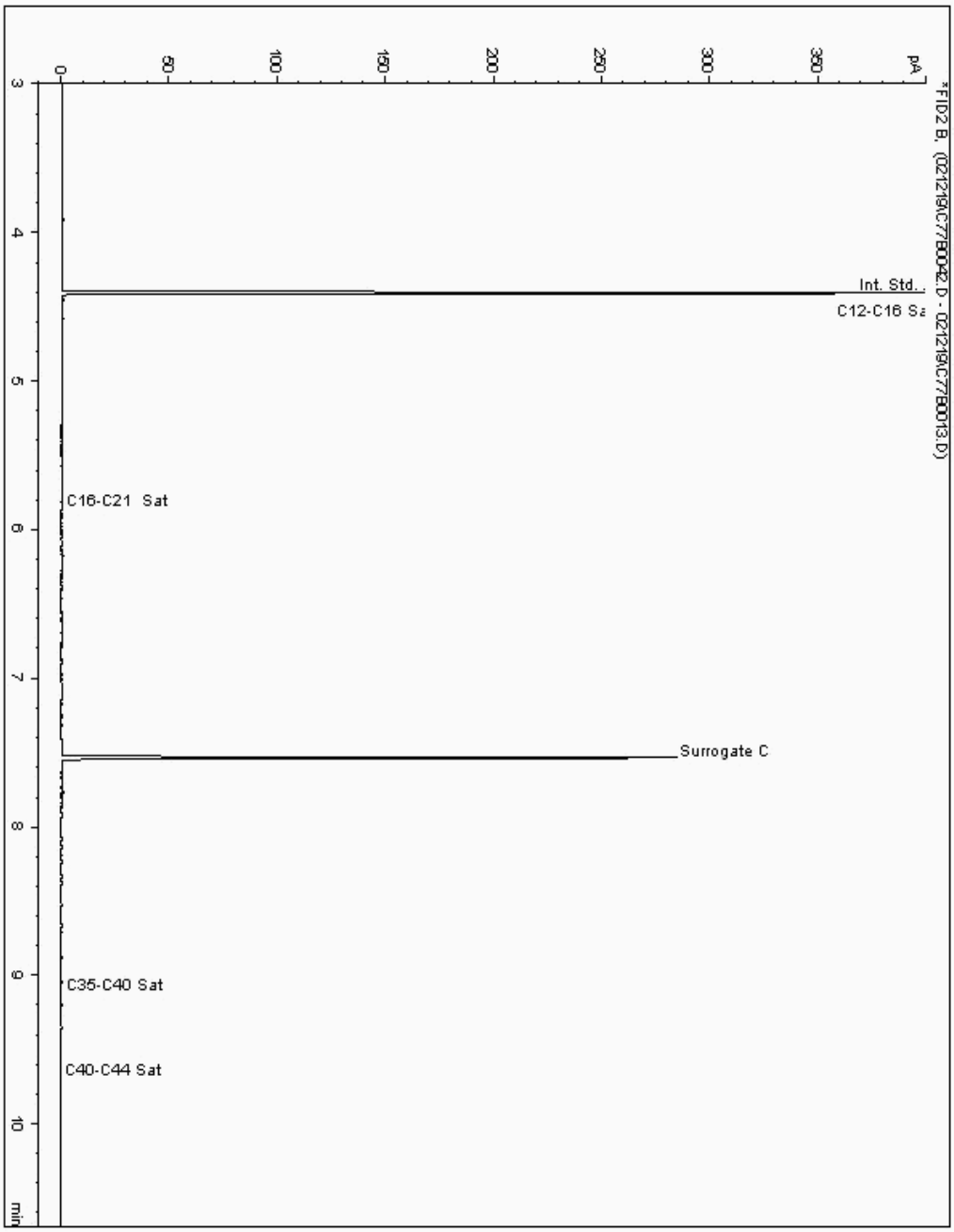
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19311140 **Depth :** 0.50
Sample ID : WS 33

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18118251-
Date Acquired : 13/02/2019 01:29:59 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

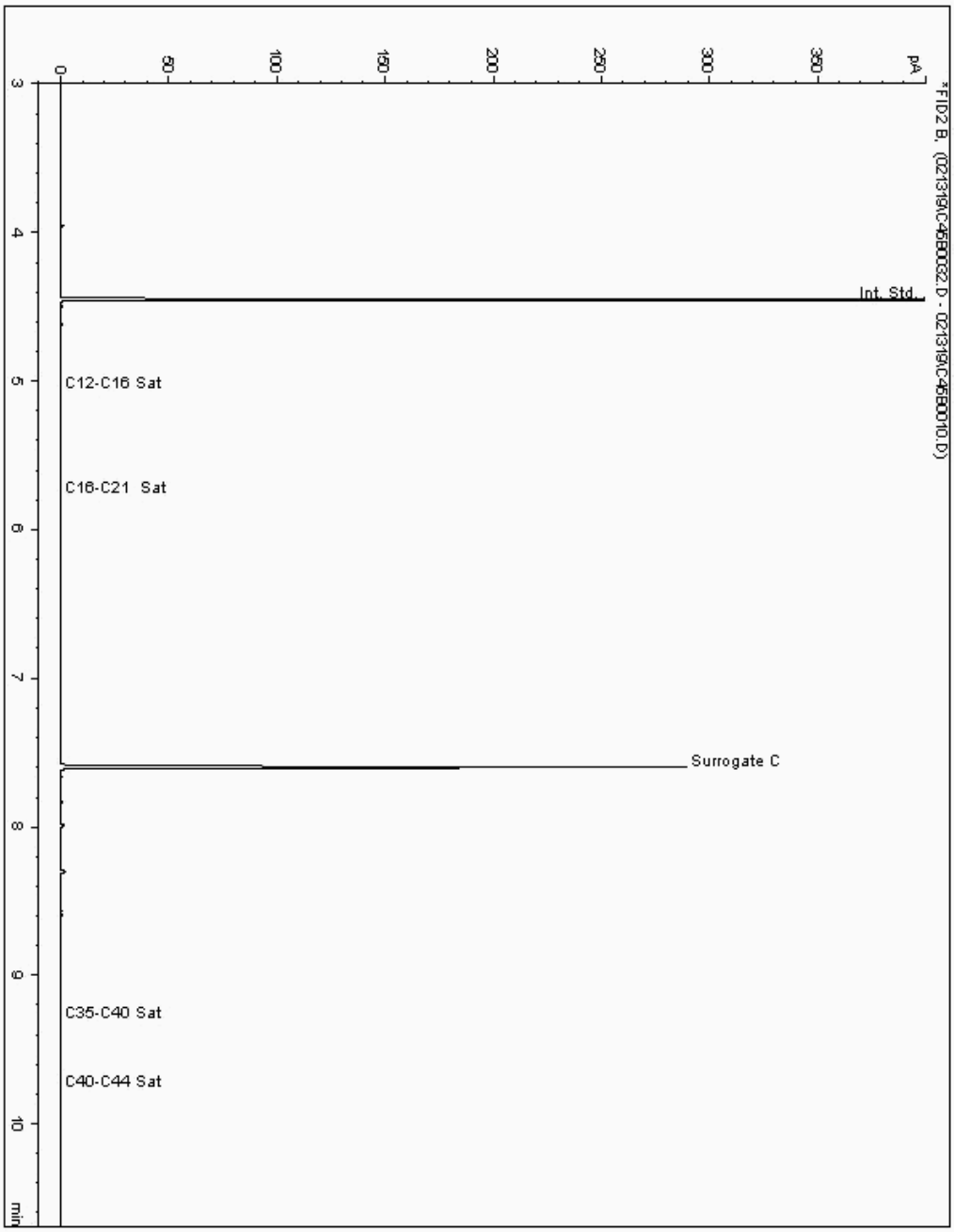
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19311357 **Depth :** 0.10
Sample ID : WS54

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18122235-
Date Acquired : 13/02/2019 19:37:37 PM
Units : ppb
Dilution: WS54[0.10] ->



CERTIFICATE OF ANALYSIS

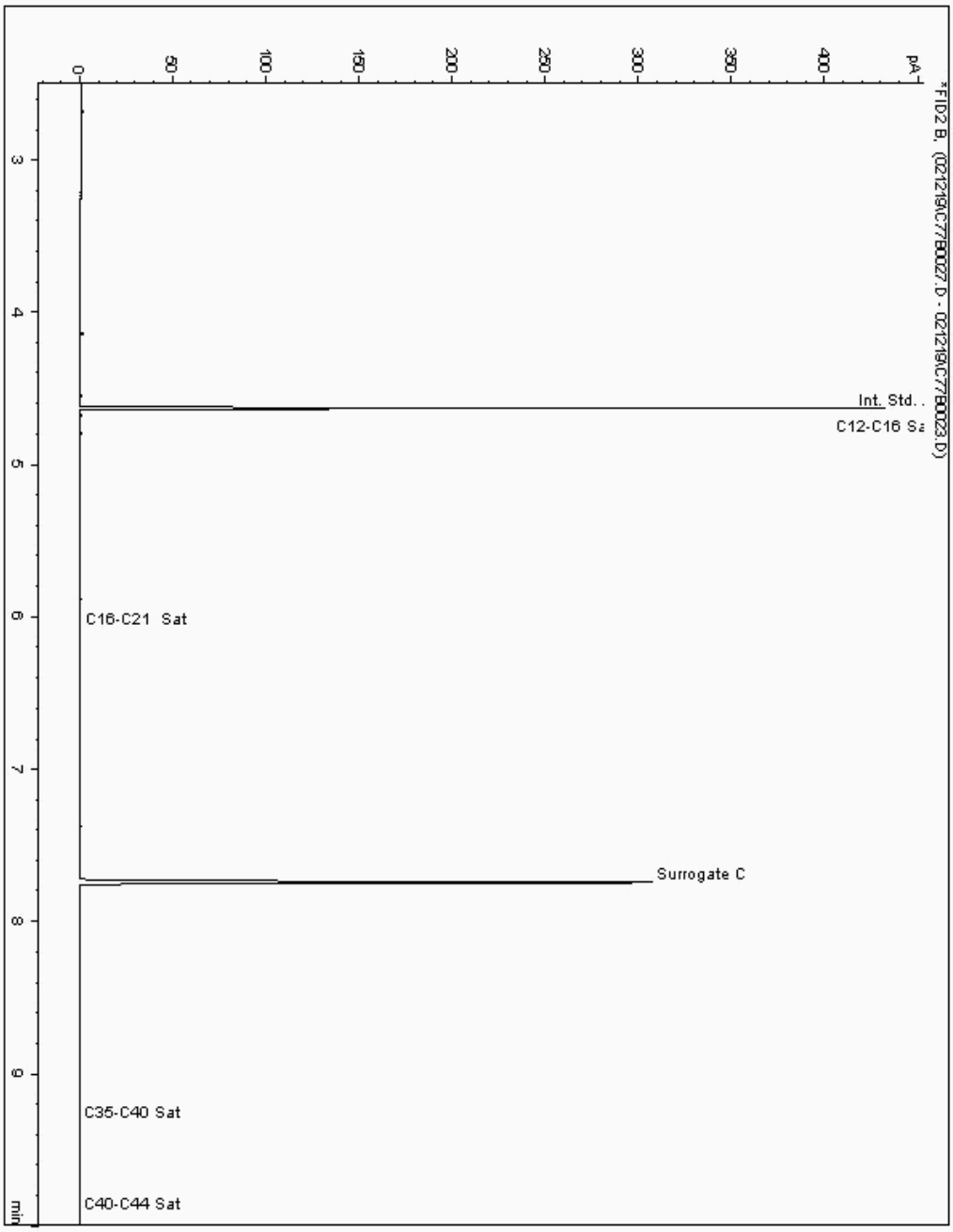
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19311372 **Depth :** 0.70
Sample ID : WS 26

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18118273-
Date Acquired : 2/12/2019 8:00:45 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 1.010



CERTIFICATE OF ANALYSIS

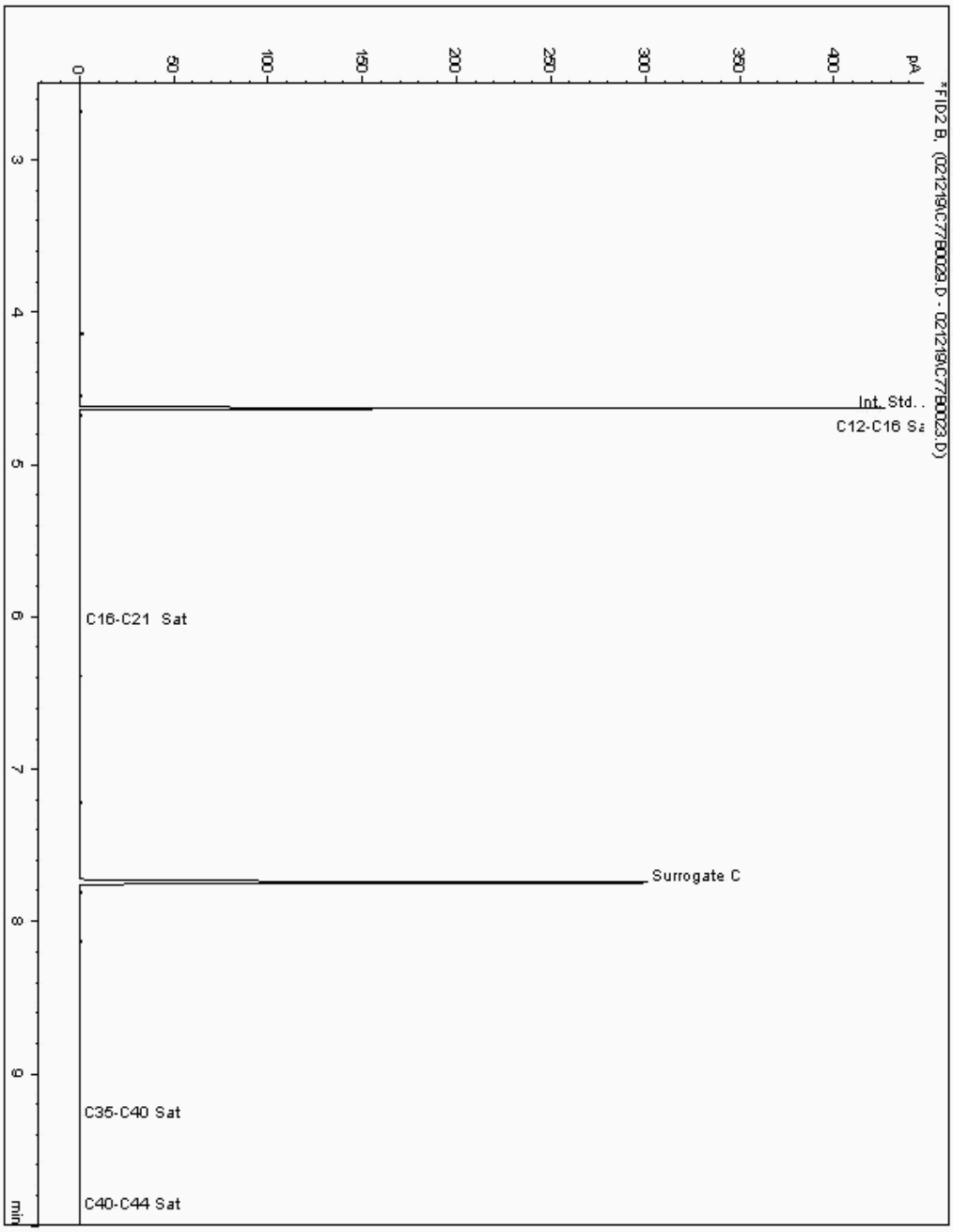
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19311412 **Depth :** 0.20
Sample ID : WS 23

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18118463-
Date Acquired : 2/12/2019 8:40:38 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 1.030



CERTIFICATE OF ANALYSIS

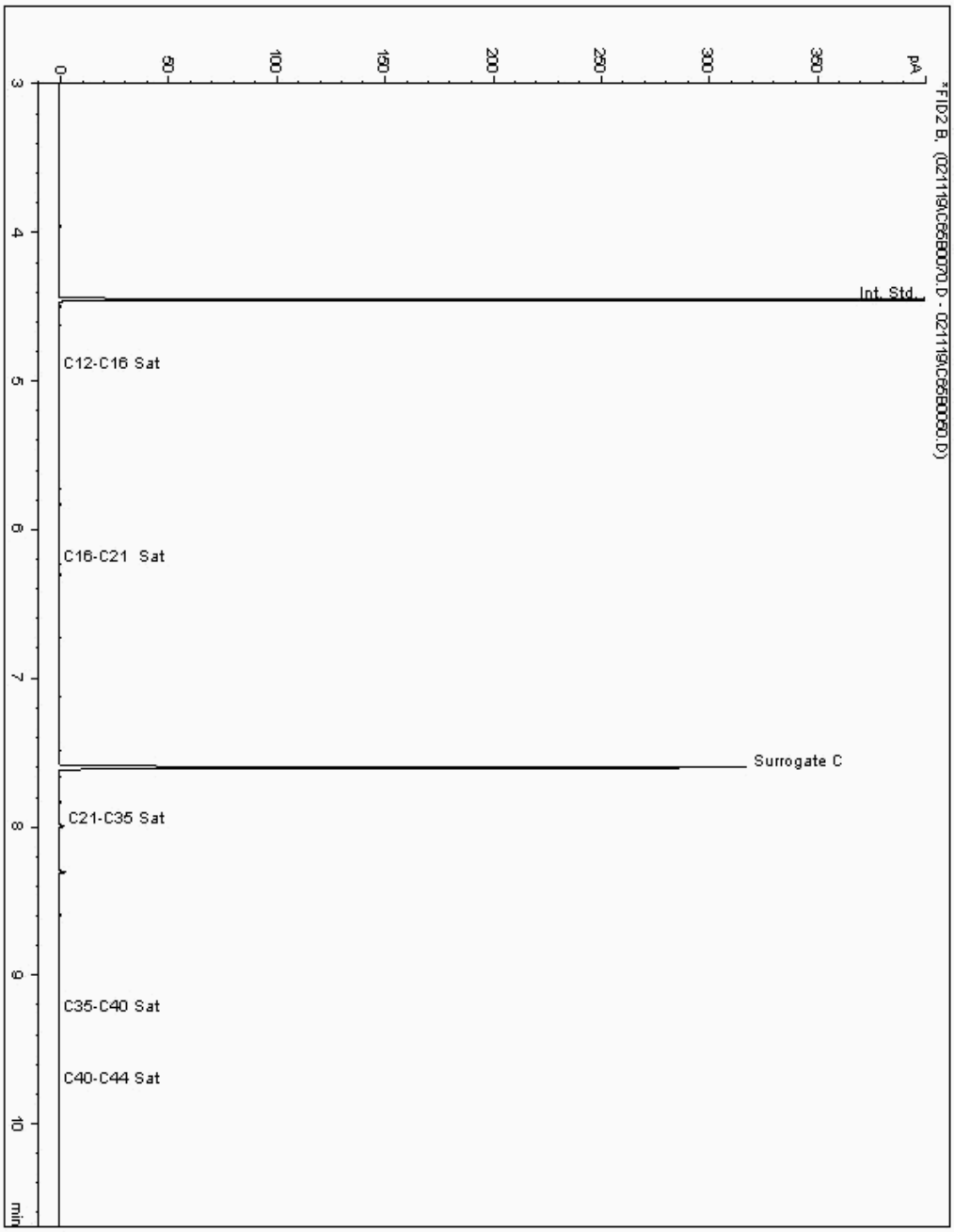
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19311486 **Depth :** 0.40
Sample ID : WS35

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18119197-
Date Acquired : 12/02/2019 09:44:35 PM
Units : ppb
Dilution: WS35[0.40] ->



CERTIFICATE OF ANALYSIS

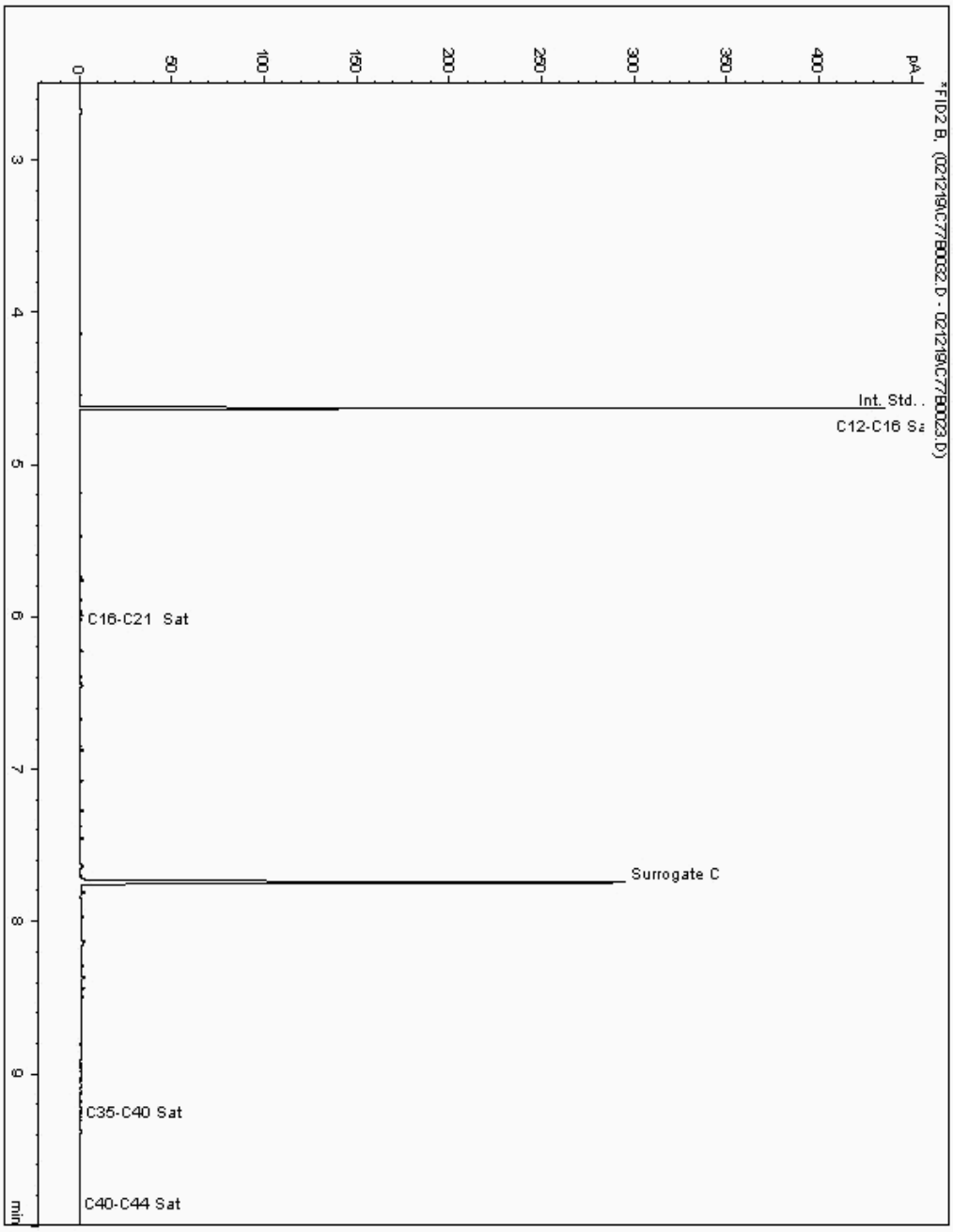
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19311505 **Depth :** 0.20
Sample ID : WS 43

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18119952-
Date Acquired : 2/12/2019 9:40:23 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 1.050



CERTIFICATE OF ANALYSIS

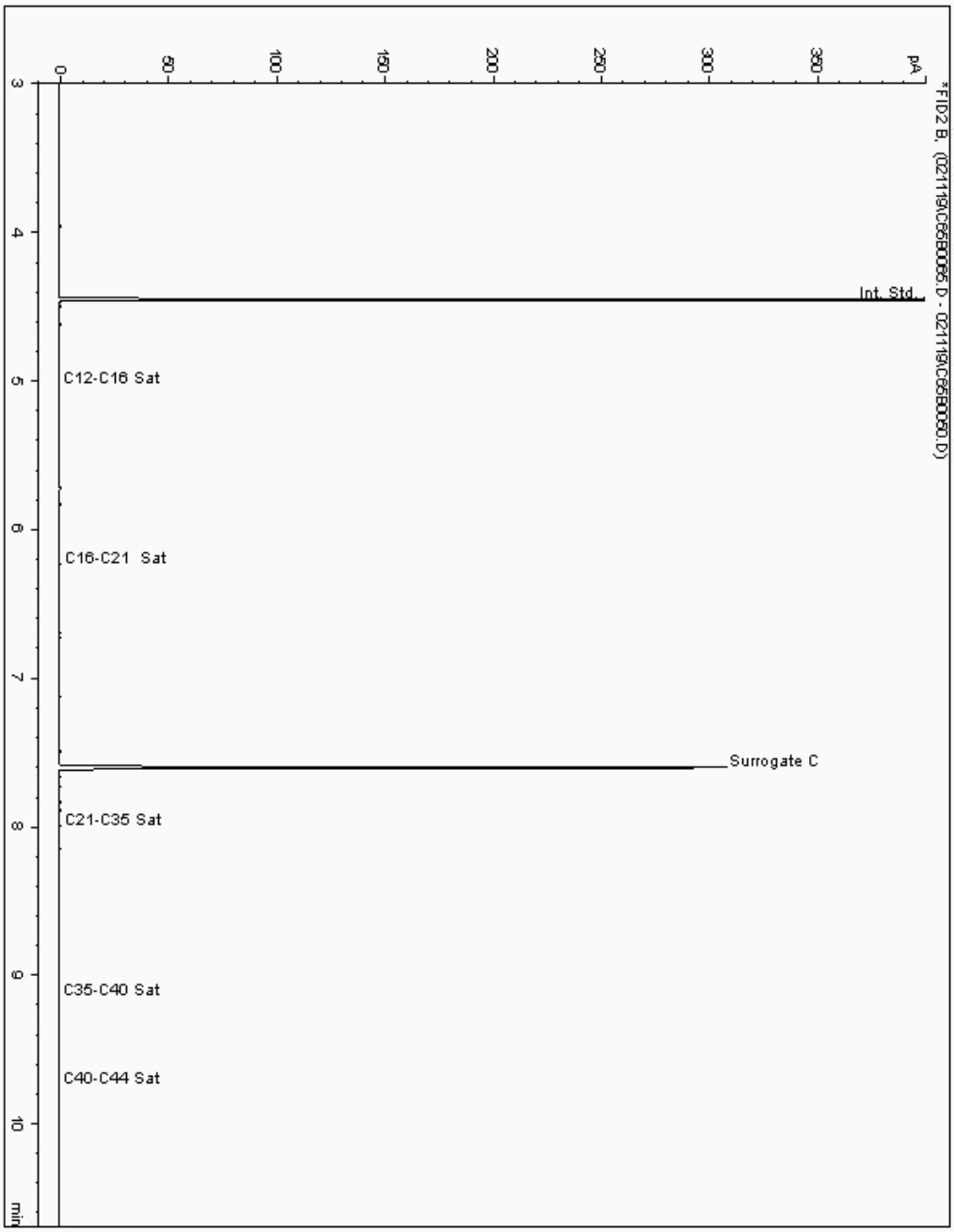
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19311519 **Depth :** 0.30 - 0.50
Sample ID : WS 23

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18118340-
Date Acquired : 12/02/2019 08:12:13 PM
Units : ppb
Dilution: WS 23[0.30 - 0.50] ->



CERTIFICATE OF ANALYSIS

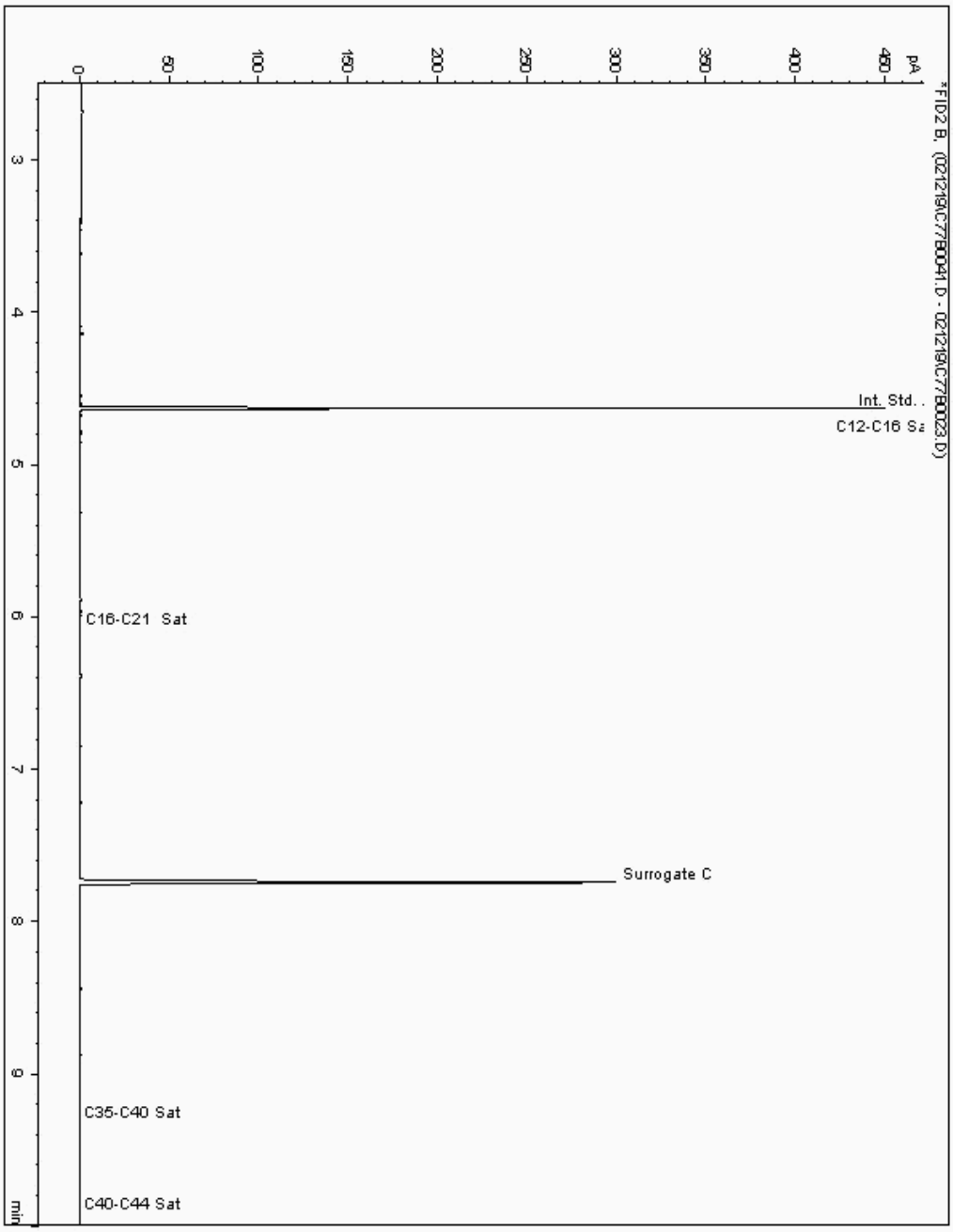
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19311677 **Depth :** 0.50
Sample ID : WS54

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18122265-
Date Acquired : 2/13/2019 12:23:47 AM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.980



CERTIFICATE OF ANALYSIS

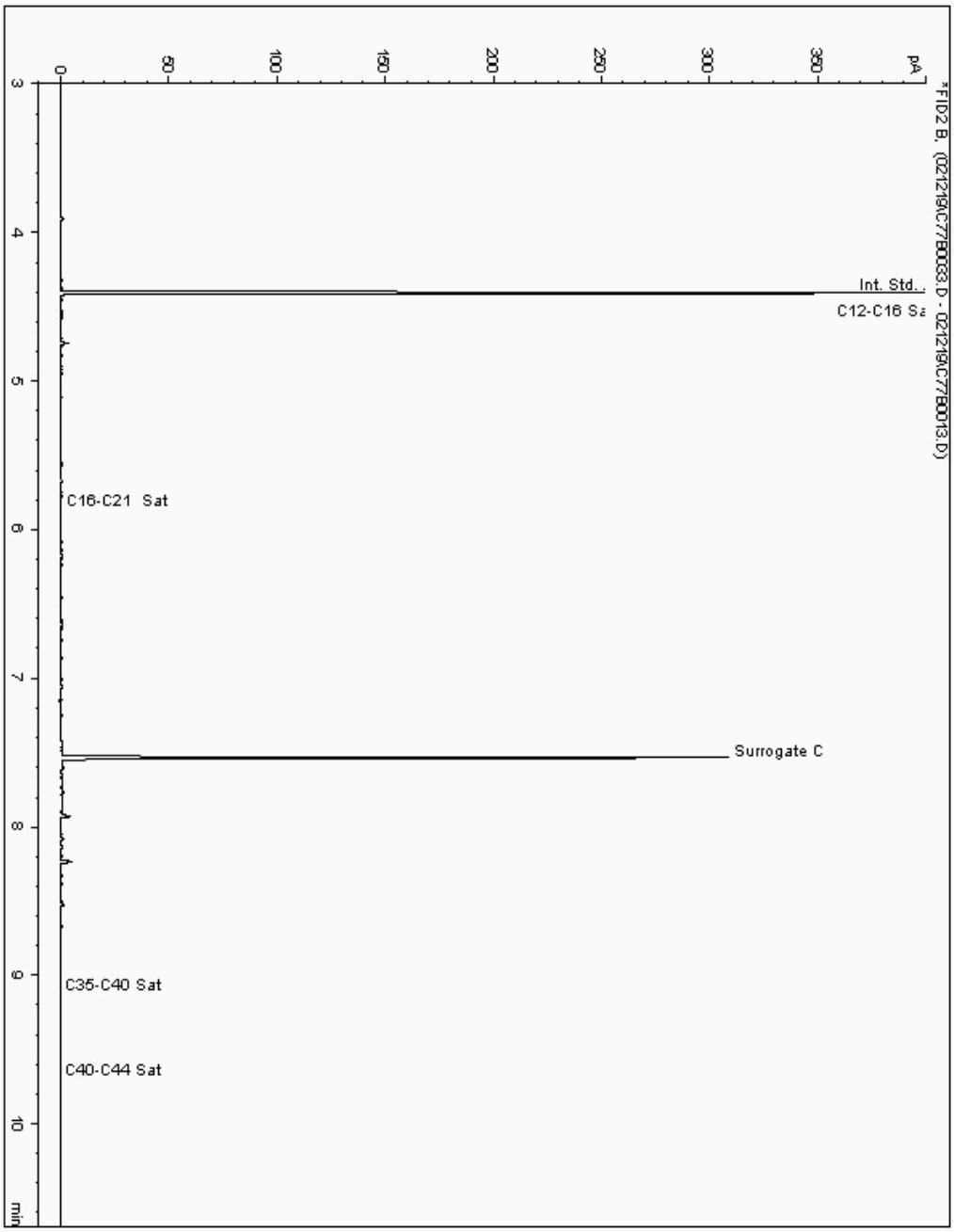
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19311745 **Depth :** 0.40
Sample ID : WS29

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18119247-
Date Acquired : 12/02/2019 22:45:18 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

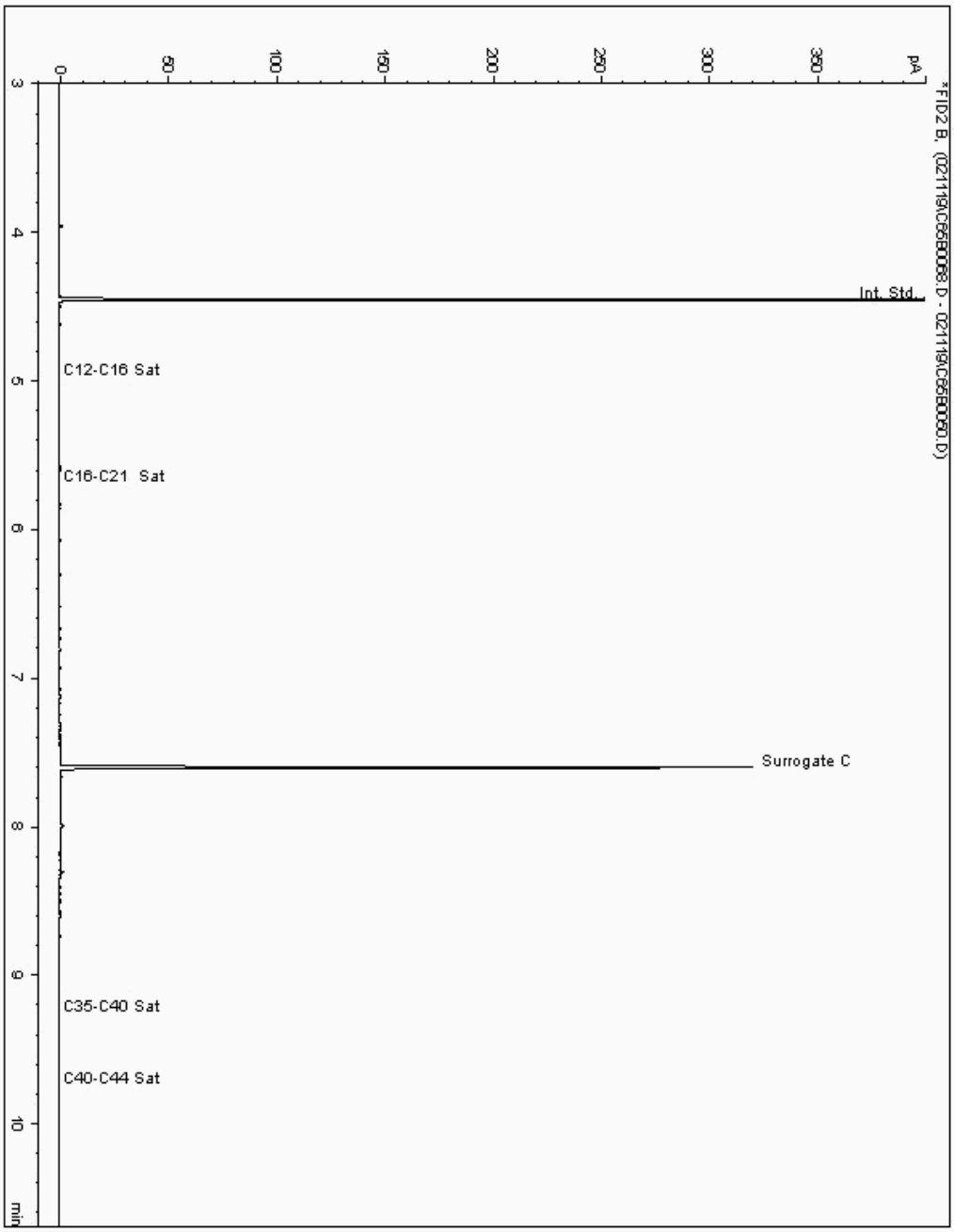
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19311753 **Depth :** 0.50
Sample ID : WS53

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18122030-
Date Acquired : 12/02/2019 09:04:20 PM
Units : ppb
Dilution: WS53[0.50] ->



CERTIFICATE OF ANALYSIS

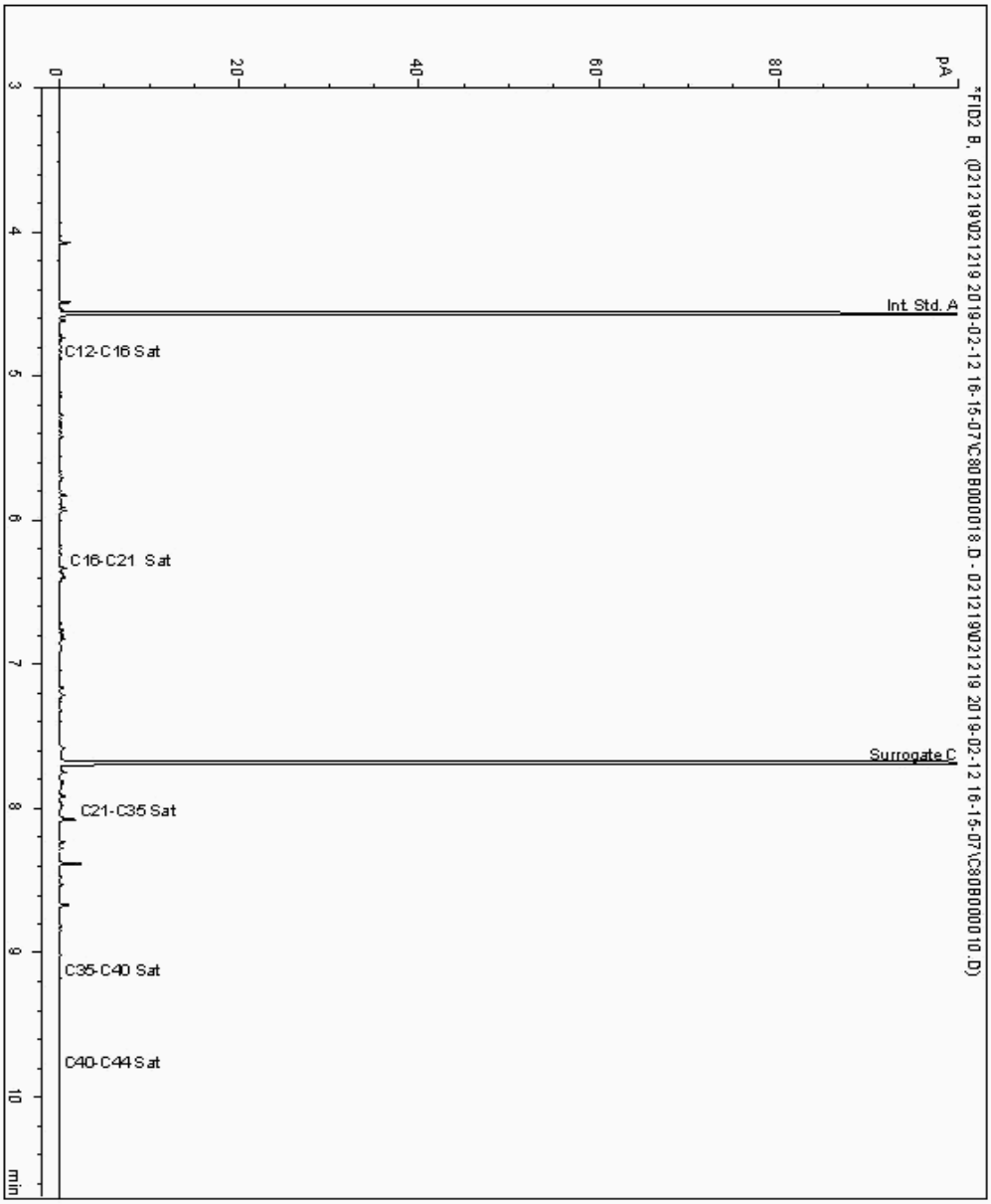
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19311891 **Depth :** 0.70 - 0.90
Sample ID : WS39

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18119173-
Date Acquired : 12/02/19 21:58:21
Units : ppb
Dilution :
CF : 1
Multiplier : 0.990



CERTIFICATE OF ANALYSIS

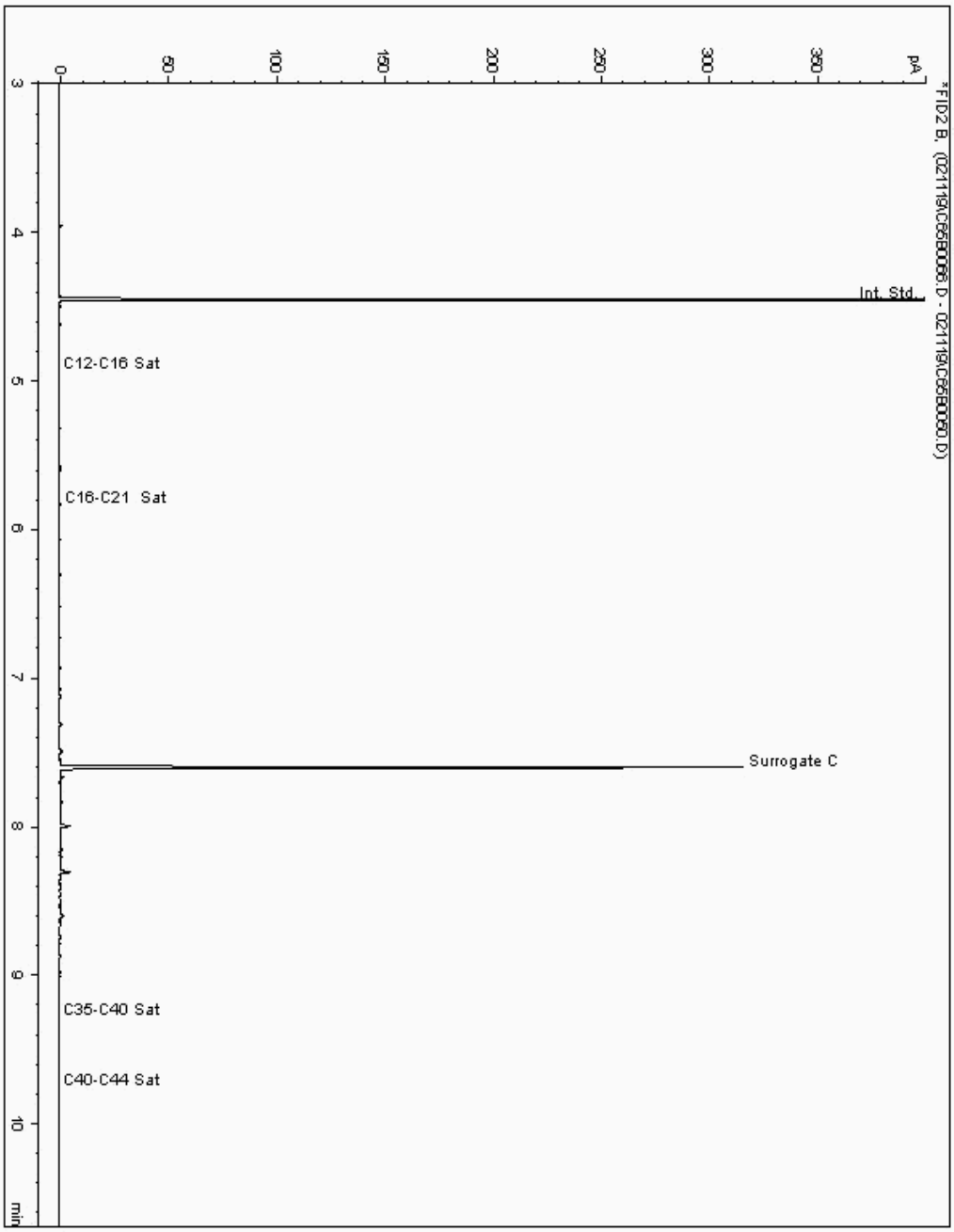
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19312057 **Depth :** 0.20
Sample ID : WS39

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18119149-
Date Acquired : 12/02/2019 08:32:22 PM
Units : ppb
Dilution: WS39[0.20] ->



CERTIFICATE OF ANALYSIS

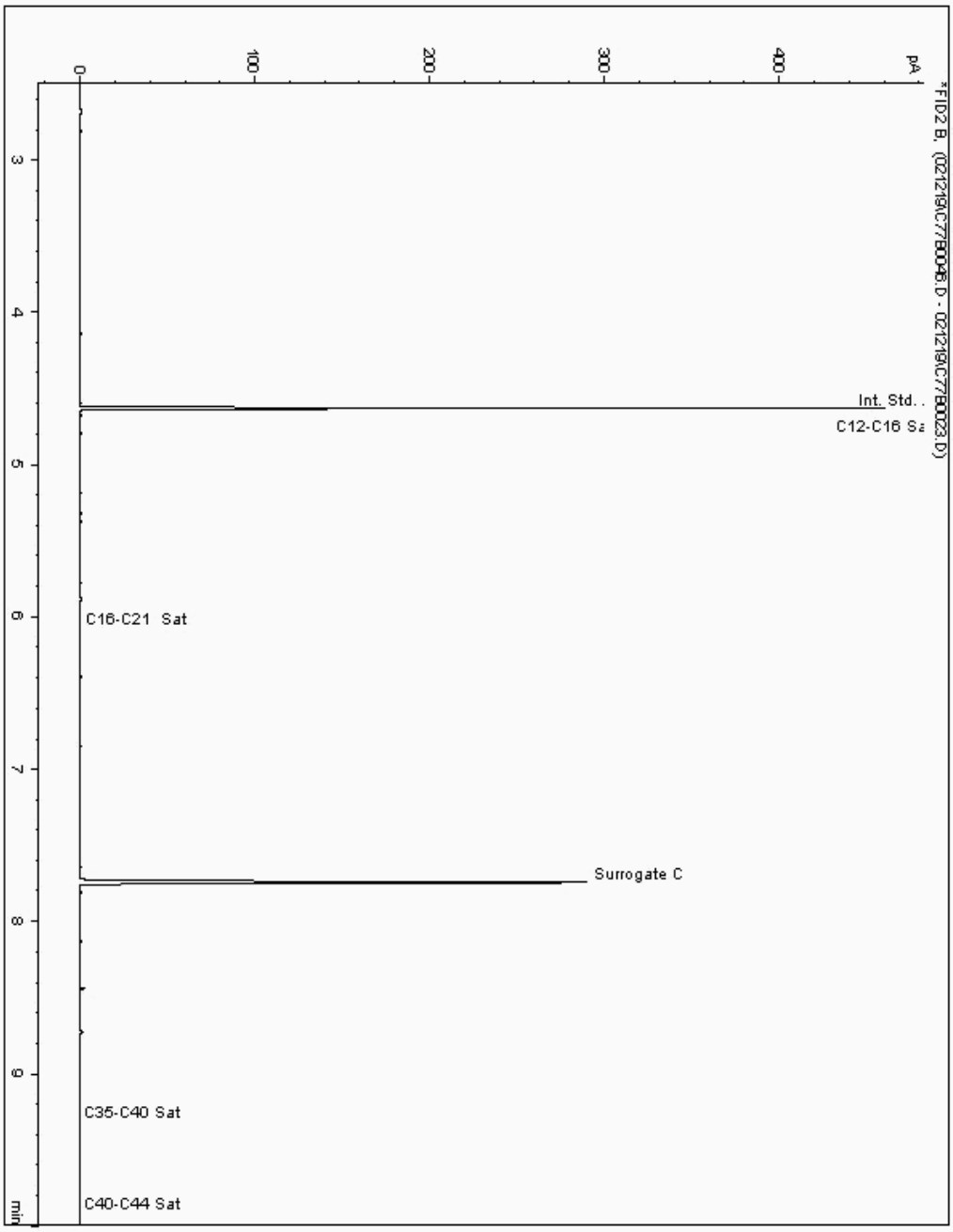
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19312246 **Depth :** 0.50
Sample ID : WS 43

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18120085-
Date Acquired : 2/13/2019 1:47:27 AM
Units : ppb
Dilution :
CF : 1
Multiplier : 1.020



CERTIFICATE OF ANALYSIS

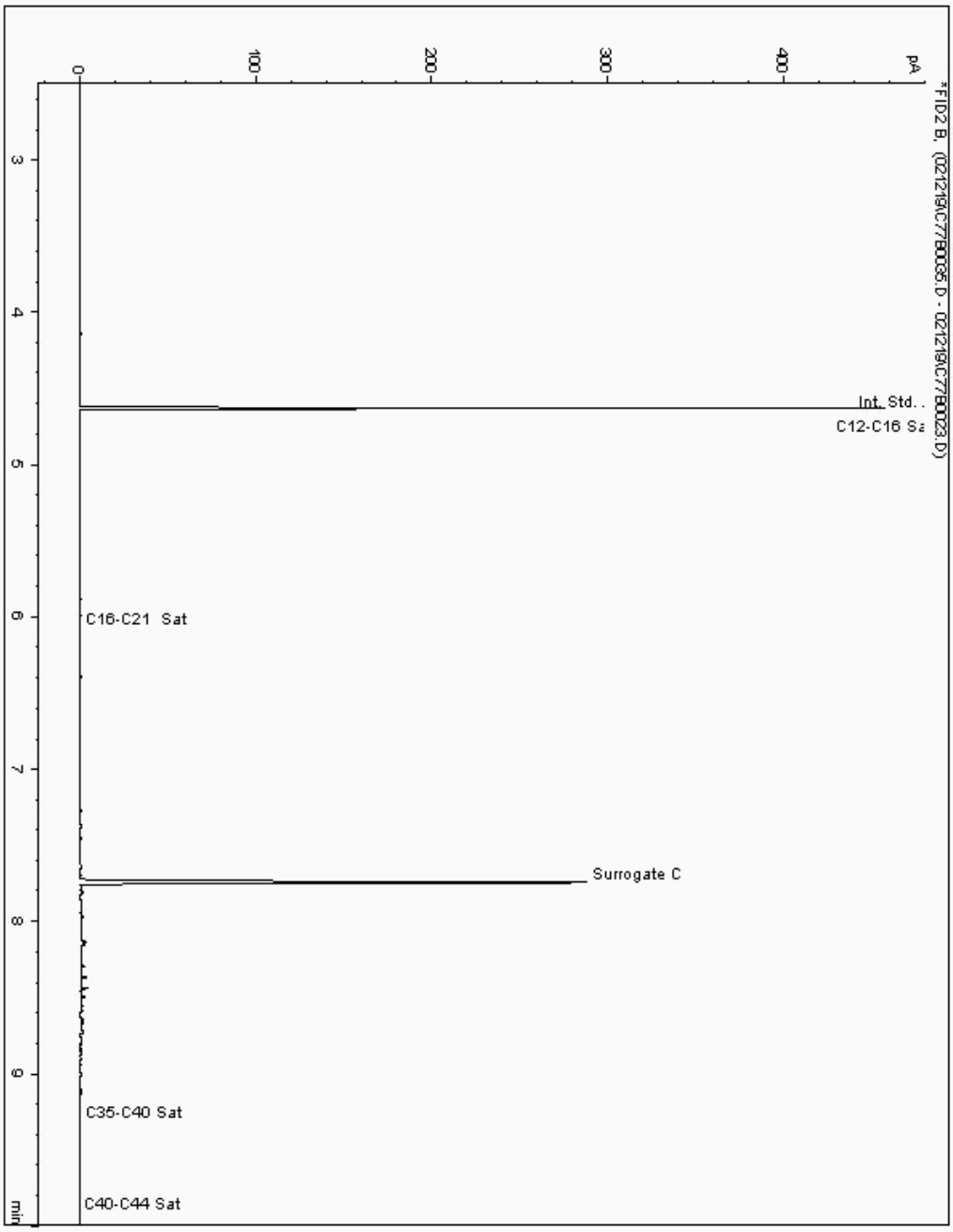
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19312451 **Depth :** 0.30
Sample ID : WS 46

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18120456-
Date Acquired : 2/12/2019 10:23:55 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.990



CERTIFICATE OF ANALYSIS

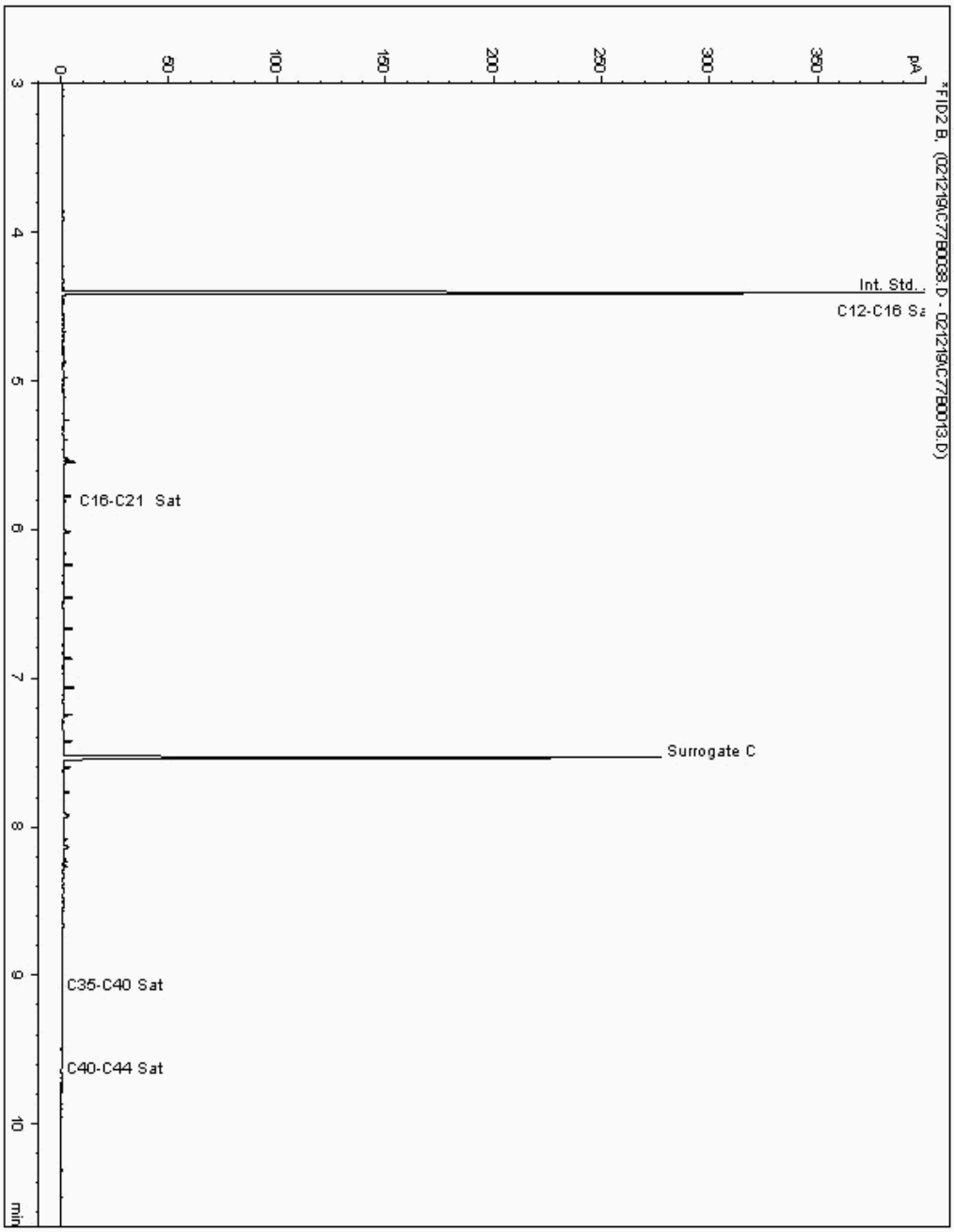
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19312828 **Depth :** 0.20
Sample ID : WS38

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18119096-
Date Acquired : 13/02/2019 00:26:04 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

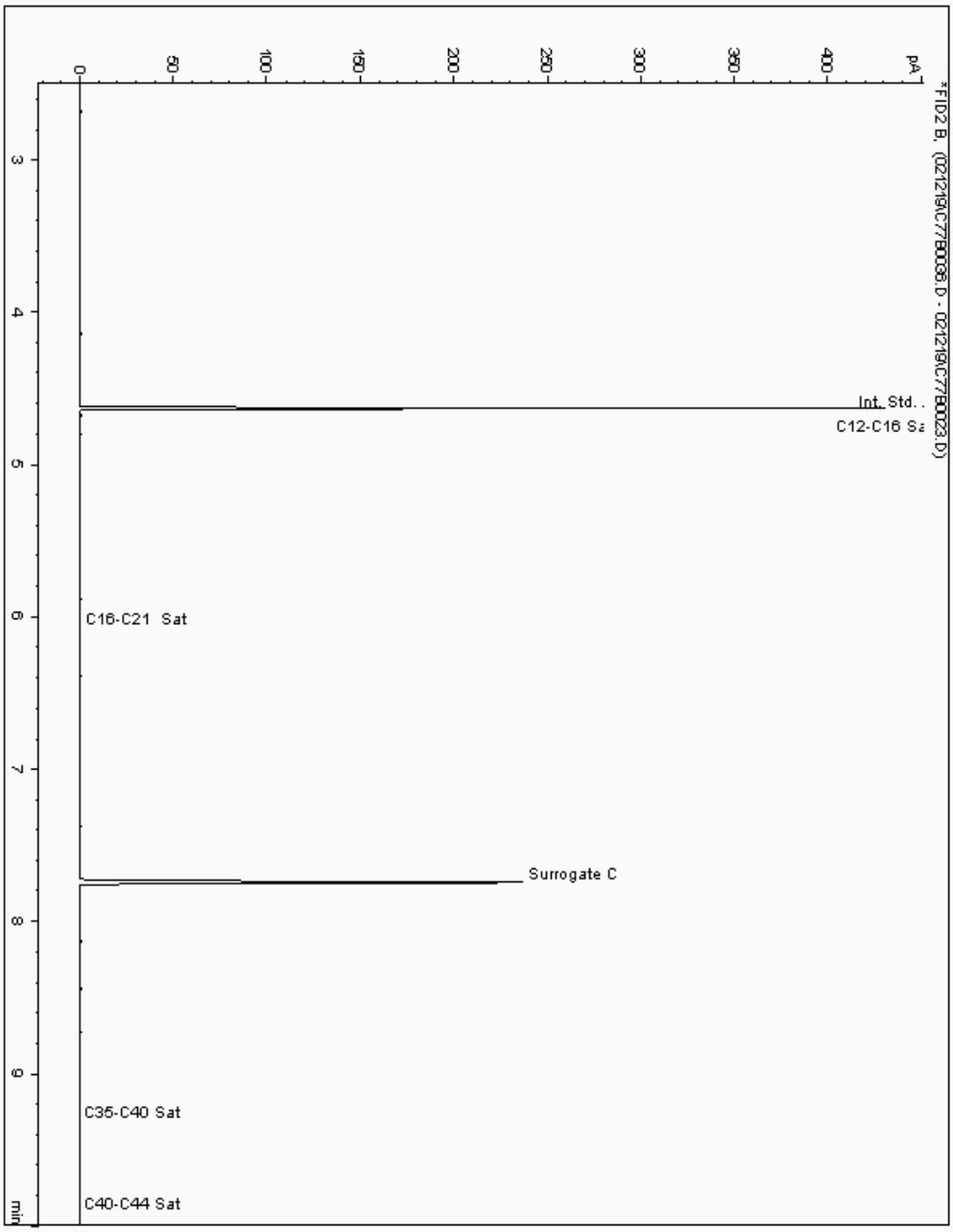
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19312838 **Depth :** 0.60
Sample ID : WS 16

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18118296-
Date Acquired : 2/12/2019 10:43:54 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 1.020



CERTIFICATE OF ANALYSIS

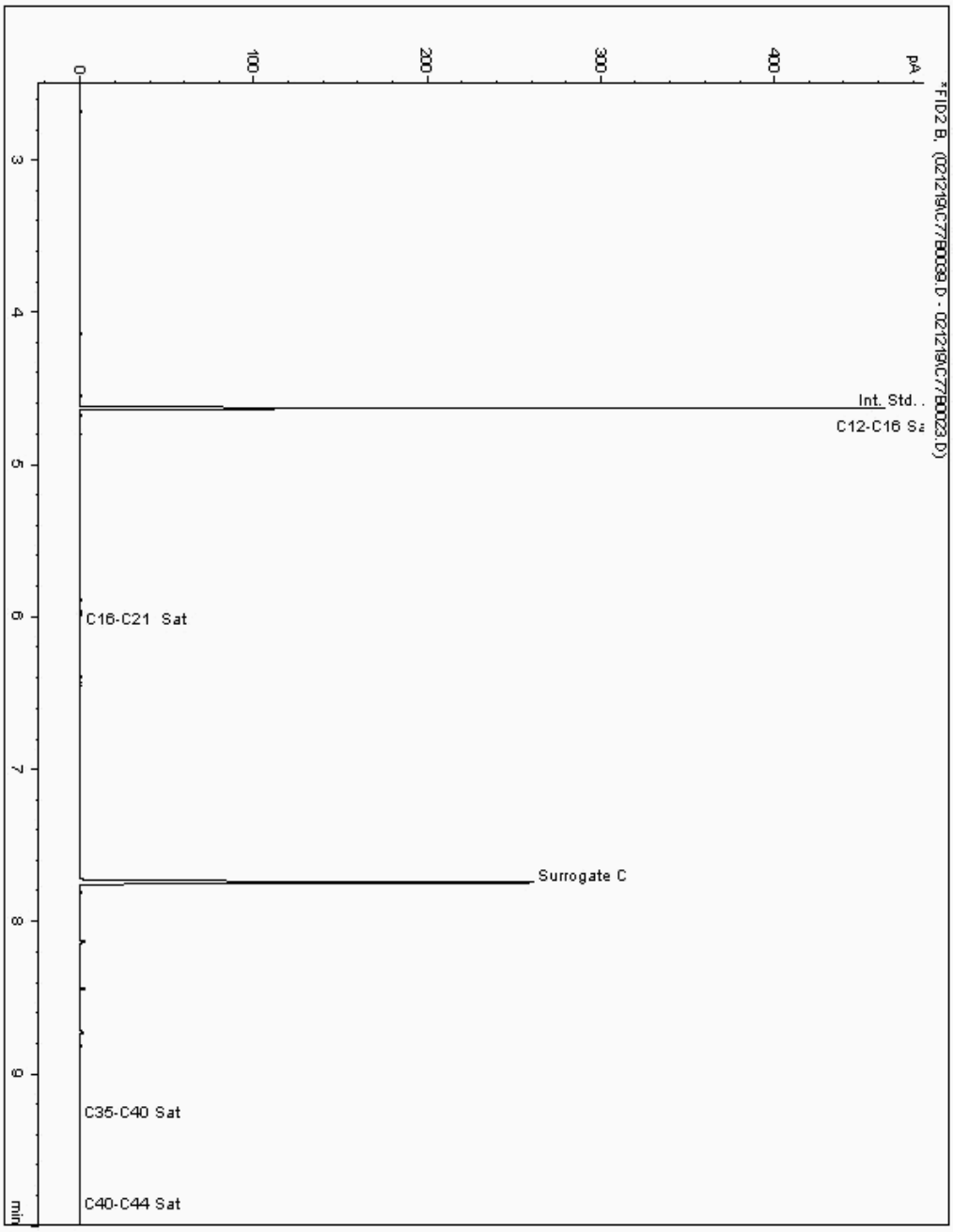
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19313030 **Depth :** 0.10
Sample ID : WS52

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18122113-
Date Acquired : 2/12/2019 11:43:54 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.960



CERTIFICATE OF ANALYSIS

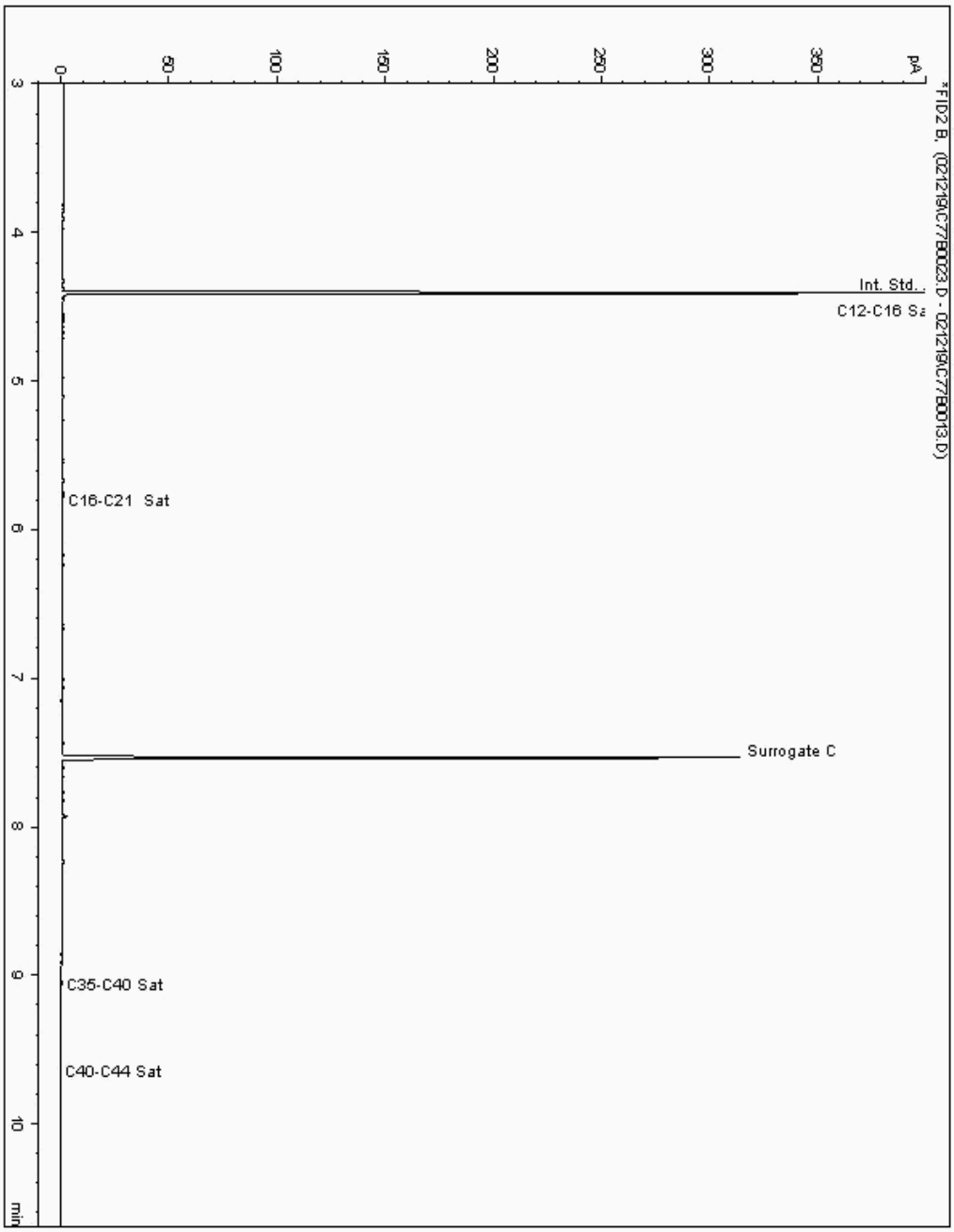
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19314017 **Depth :** 2.00
Sample ID : WS 20

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18120933-
Date Acquired : 12/02/2019 19:57:16 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

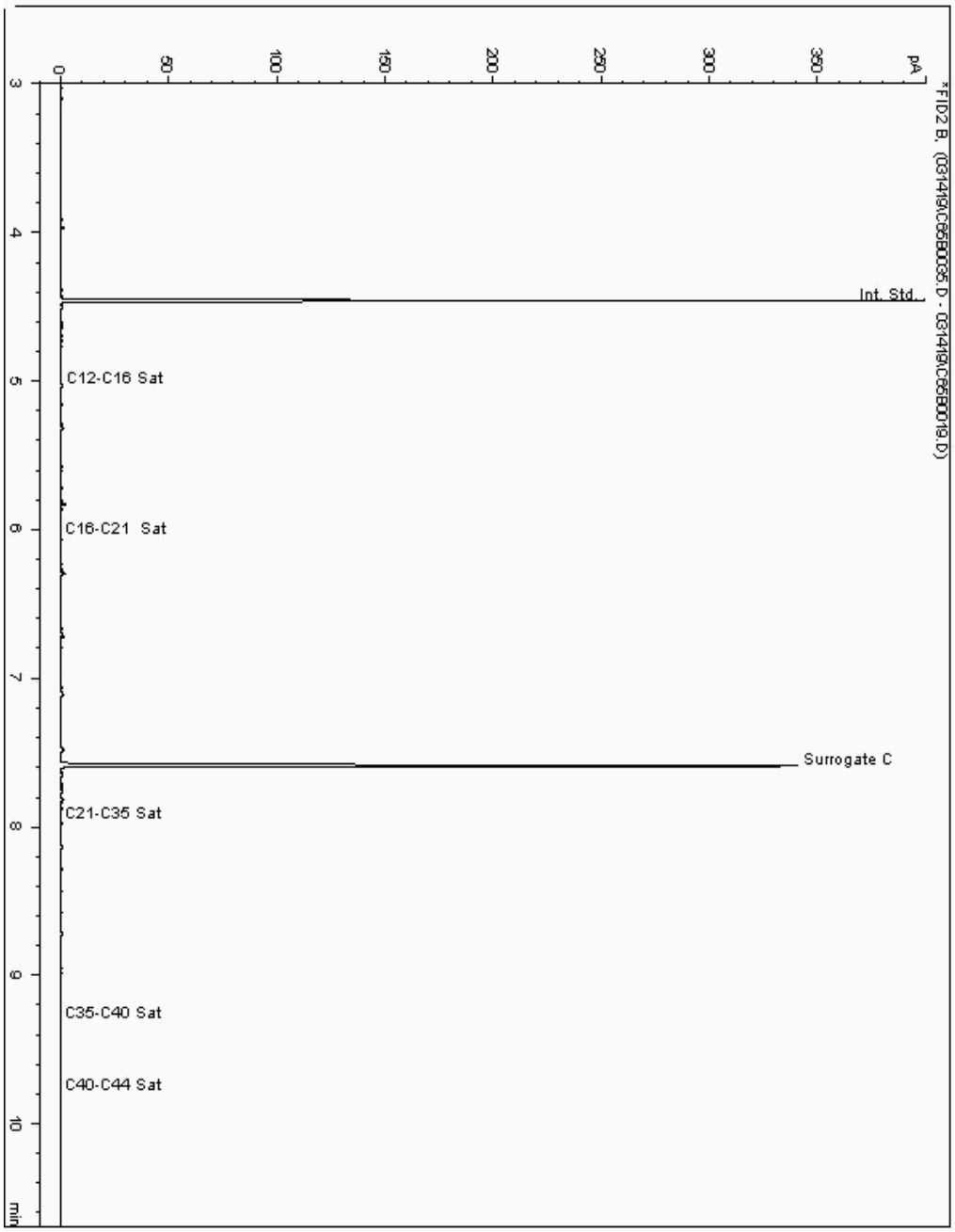
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19525524 **Depth :** 0.30 - 0.30
Sample ID : WS 07

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18345464-
Date Acquired : 14/03/2019 20:40:52 PM
Units : ppb
Dilution: WS 07[0.30 - 0.30] ->



CERTIFICATE OF ANALYSIS

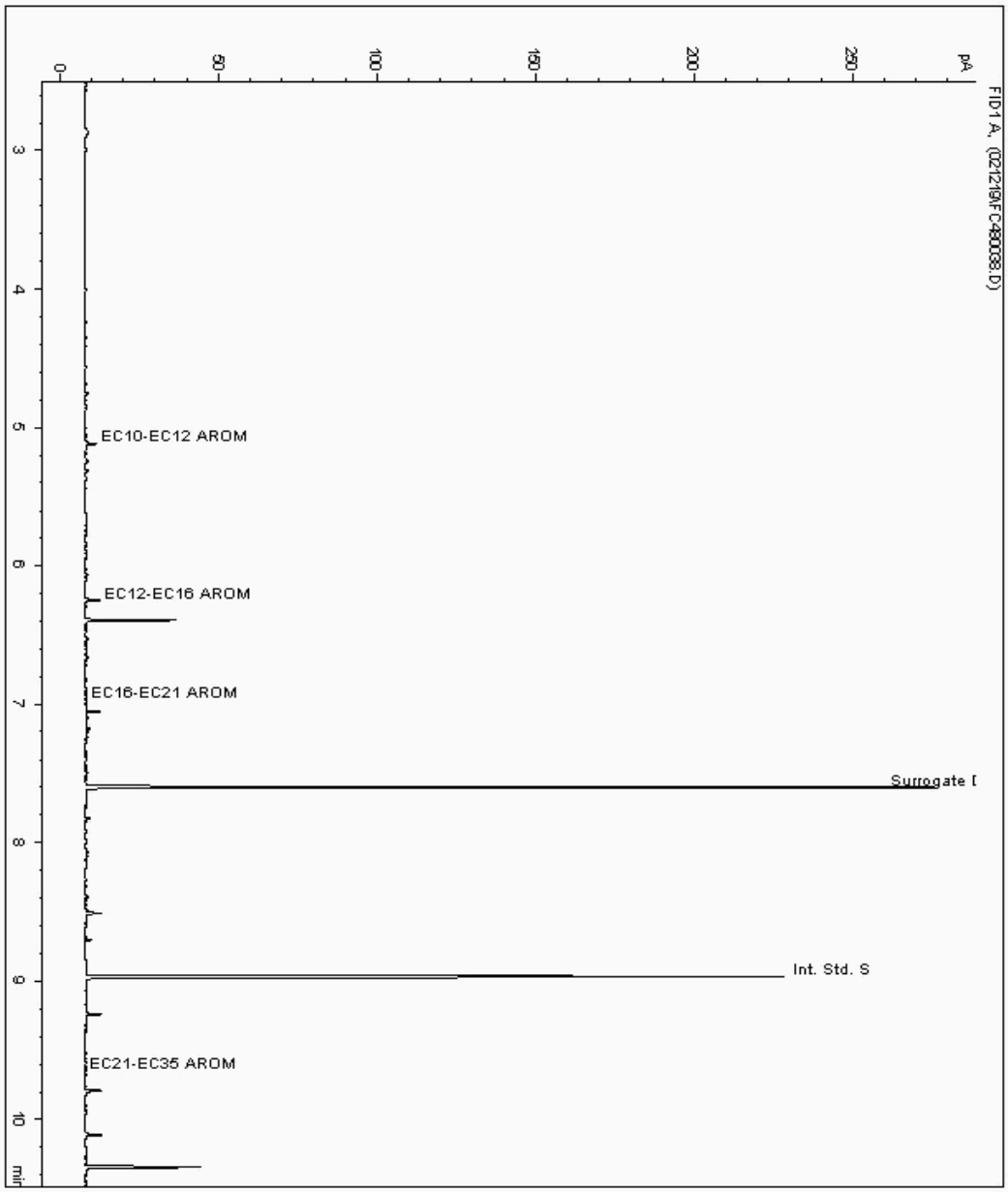
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19328853 **Depth :** 0.10 - 0.20
Sample ID : WS22

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18122796-
Date Acquired : 13/02/2019 11:40:08 PM
Units : ppb
Dilution : WS22 [0.10 - 0.20] CEN 2 1->
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

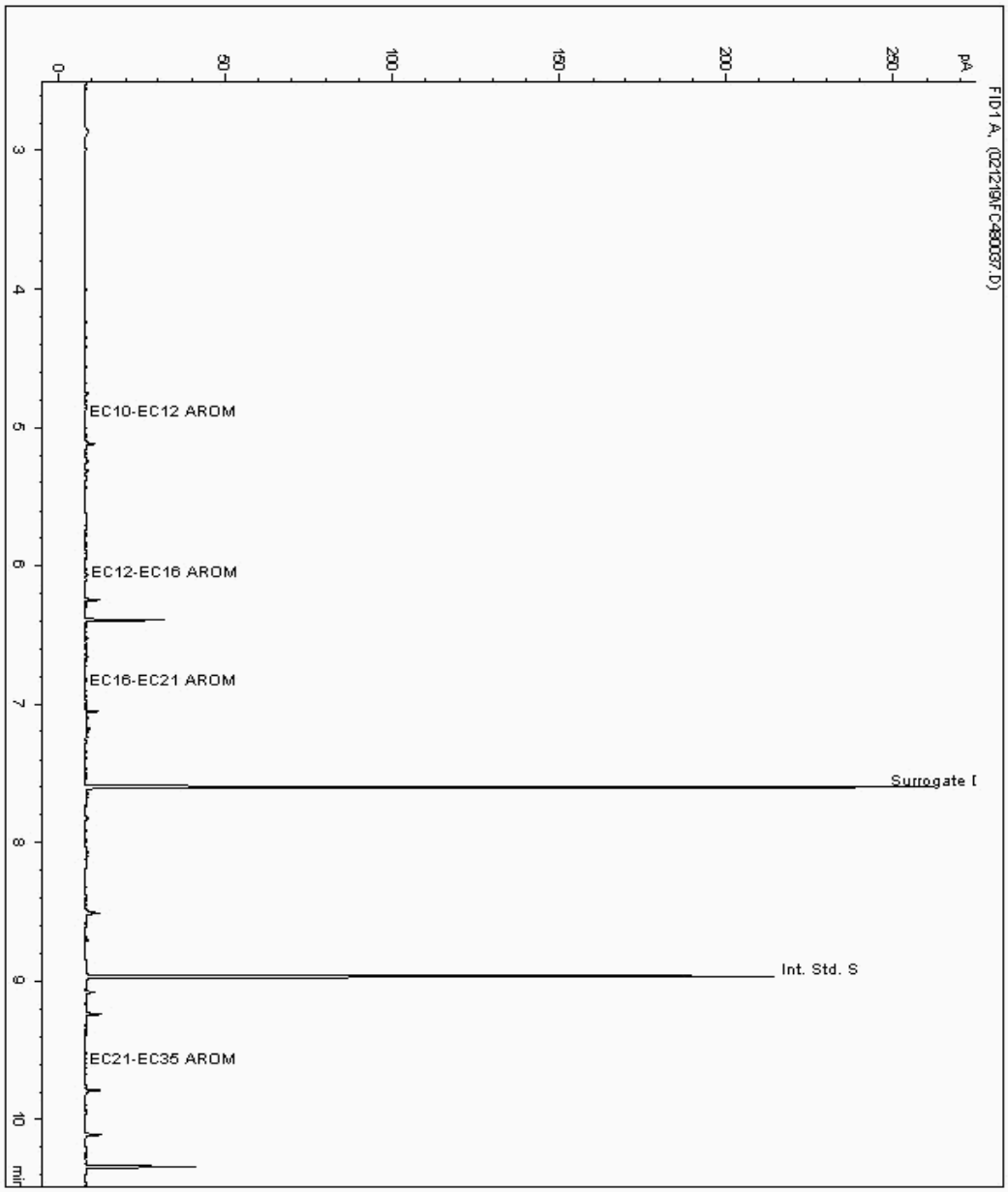
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19328905 **Depth :** 0.30
Sample ID : WS 45

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18123523-
Date Acquired : 13/02/2019 11:17:11 PM
Units : ppb
Dilution : WS 45 [0.30] CEN 2 1 ->
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

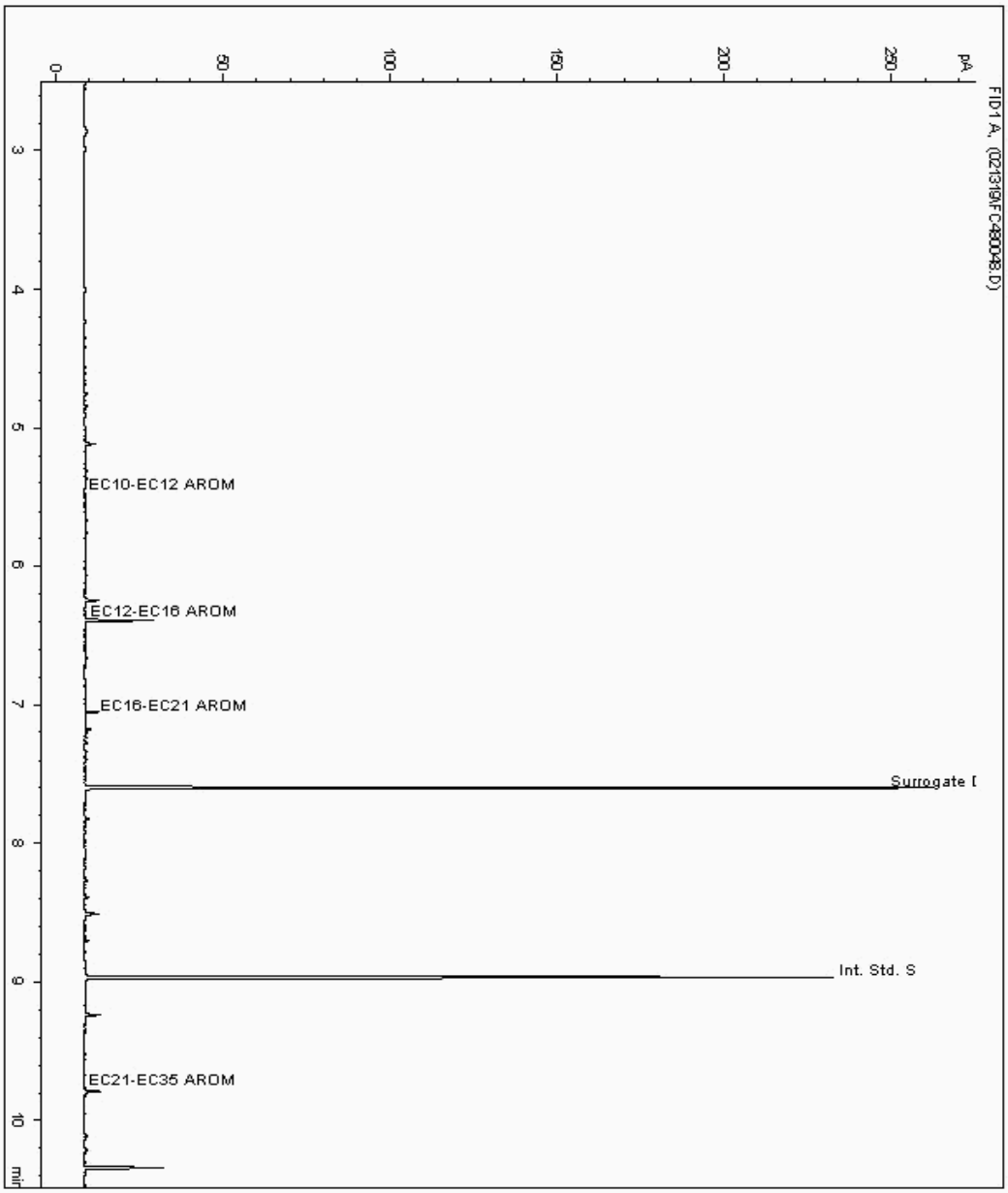
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19343542 **Depth :** 0.40
Sample ID : WS35

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18122848-
Date Acquired : 14/02/2019 11:48:58 PM
Units : ppb
Dilution : WS35 [0.40] CEN 2 1 ->
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

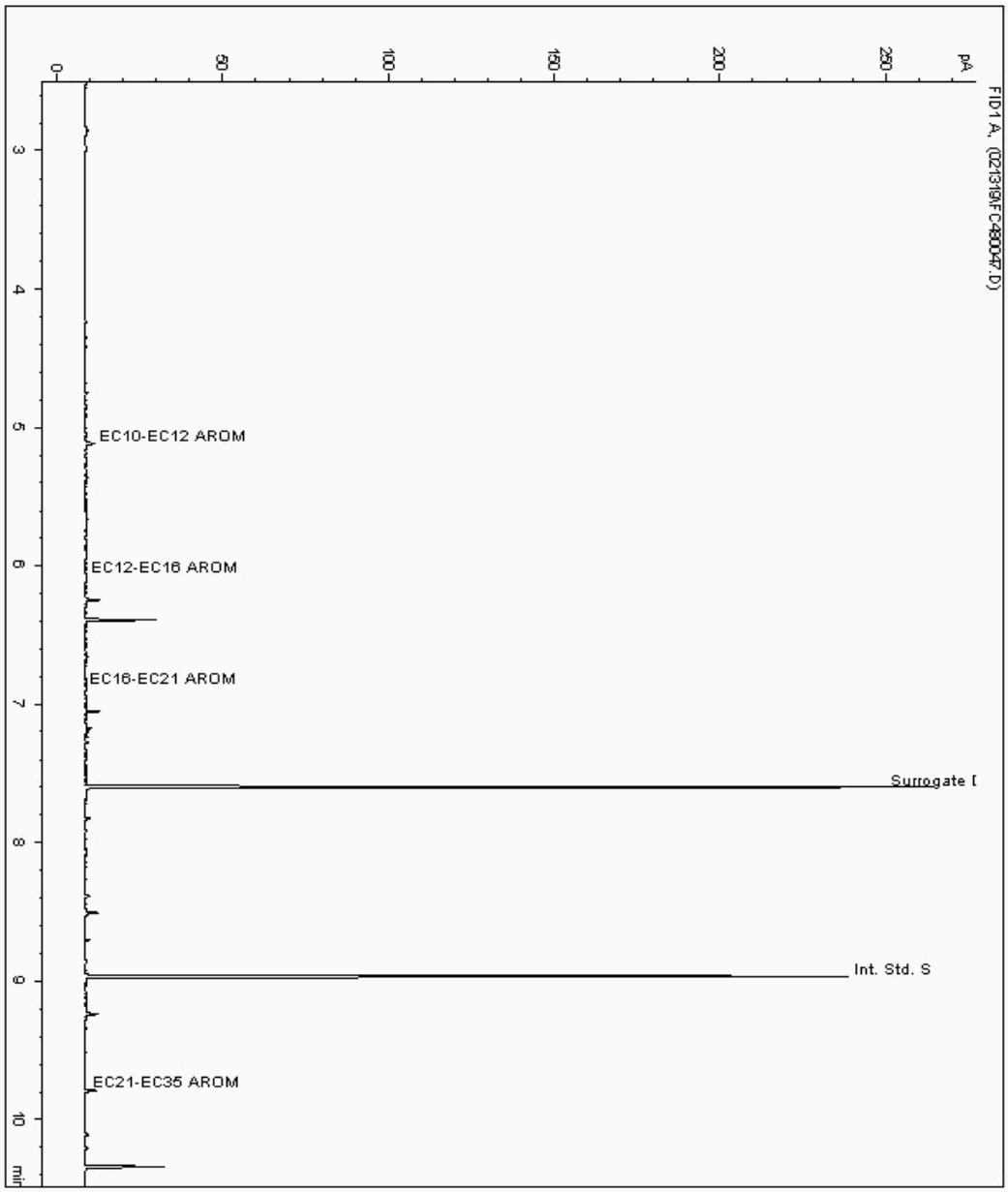
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19343556 **Depth :** 0.20
Sample ID : WS 43

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18123475-
Date Acquired : 14/02/2019 11:27:26 PM
Units : ppb
Dilution : WS 43 [0.20] CEN 2 1 ->
CF : 1
Multiplier : 0.025

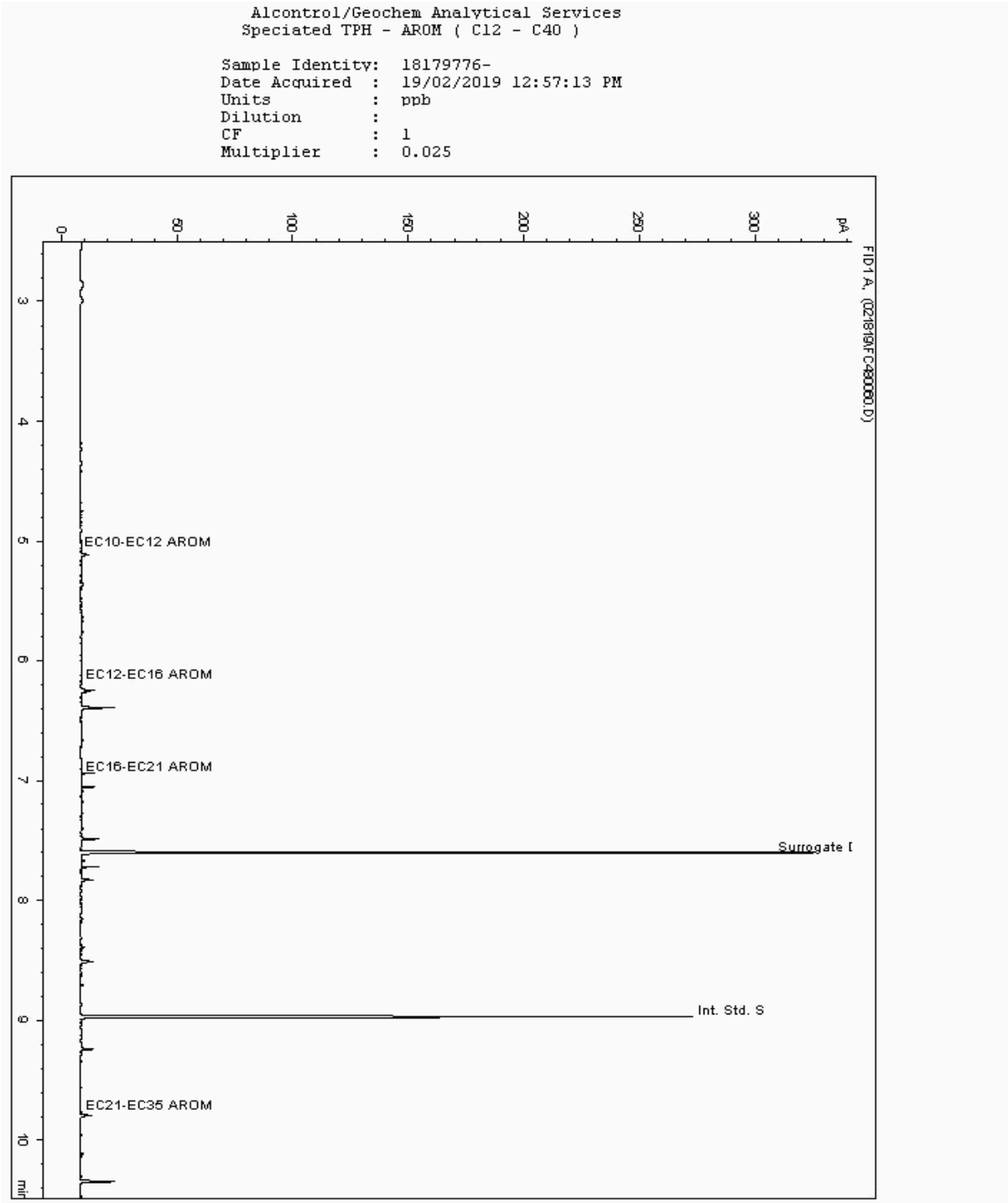


CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19354098 **Depth :** 0.30
Sample ID : WS 28



CERTIFICATE OF ANALYSIS

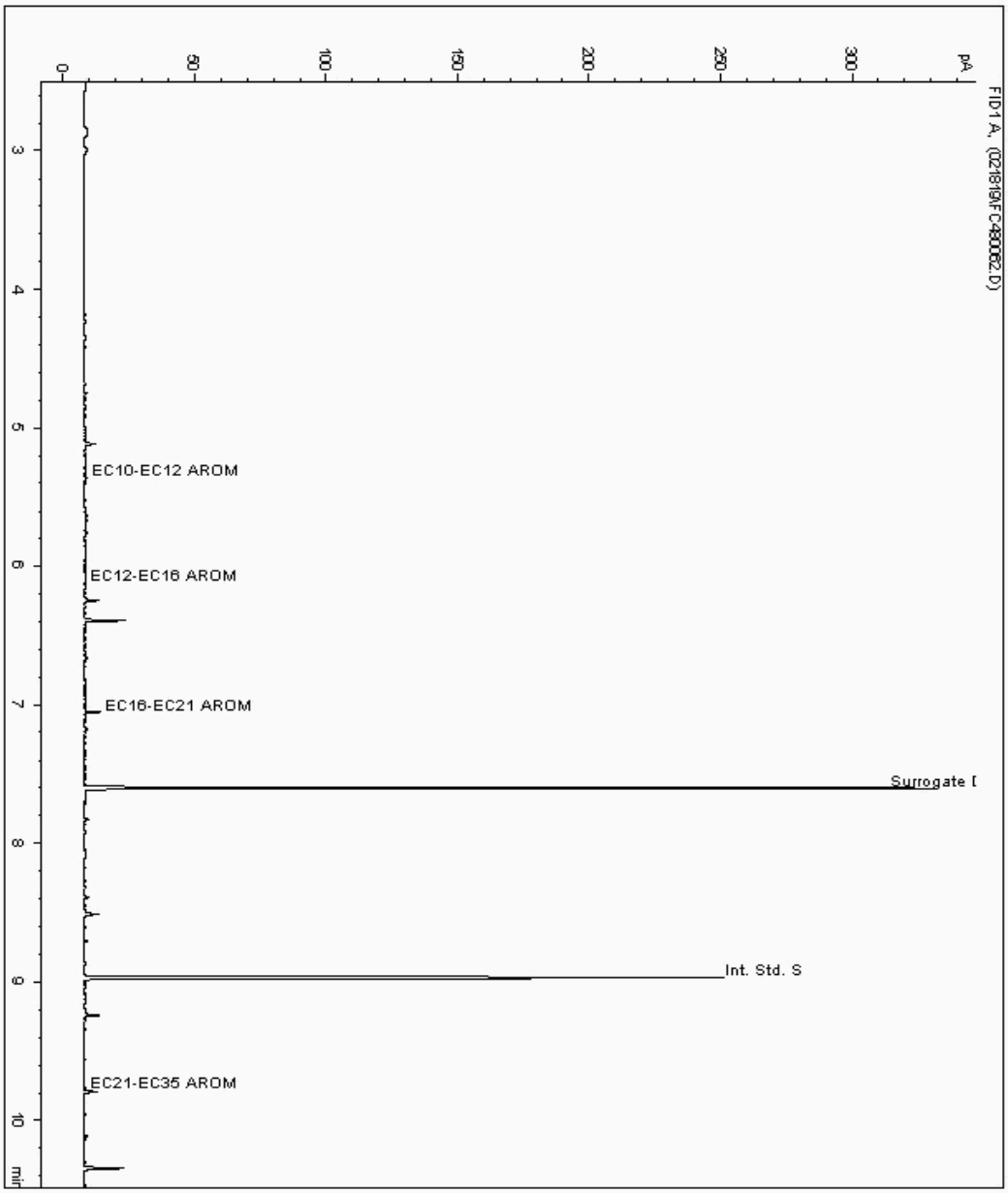
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19354107 **Depth :** 0.30
Sample ID : WS57

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180041-
Date Acquired : 19/02/2019 13:41:01 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

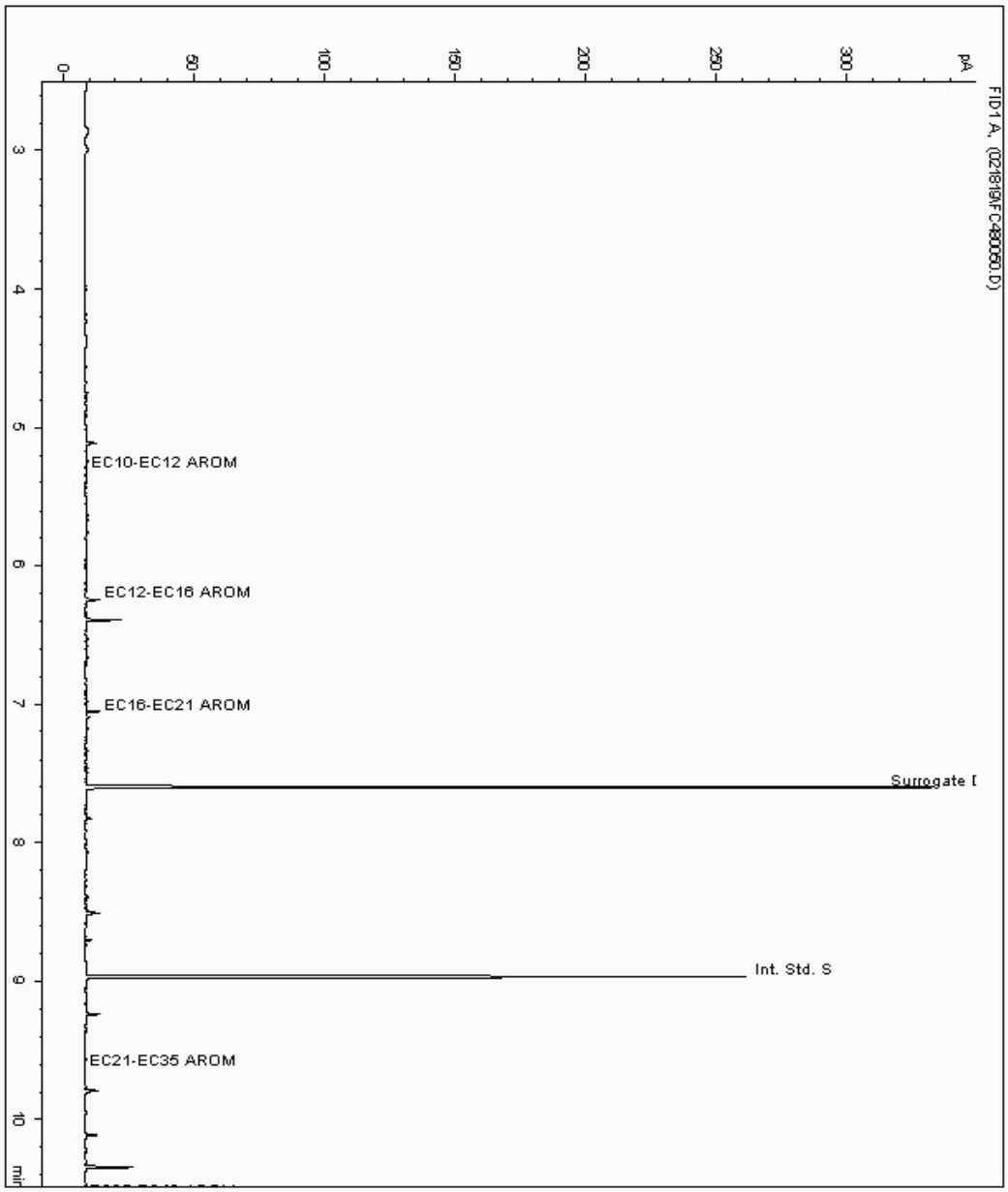
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19355946 **Depth :** 0.40
Sample ID : WS29

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18179911-
Date Acquired : 19/02/2019 09:22:48 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

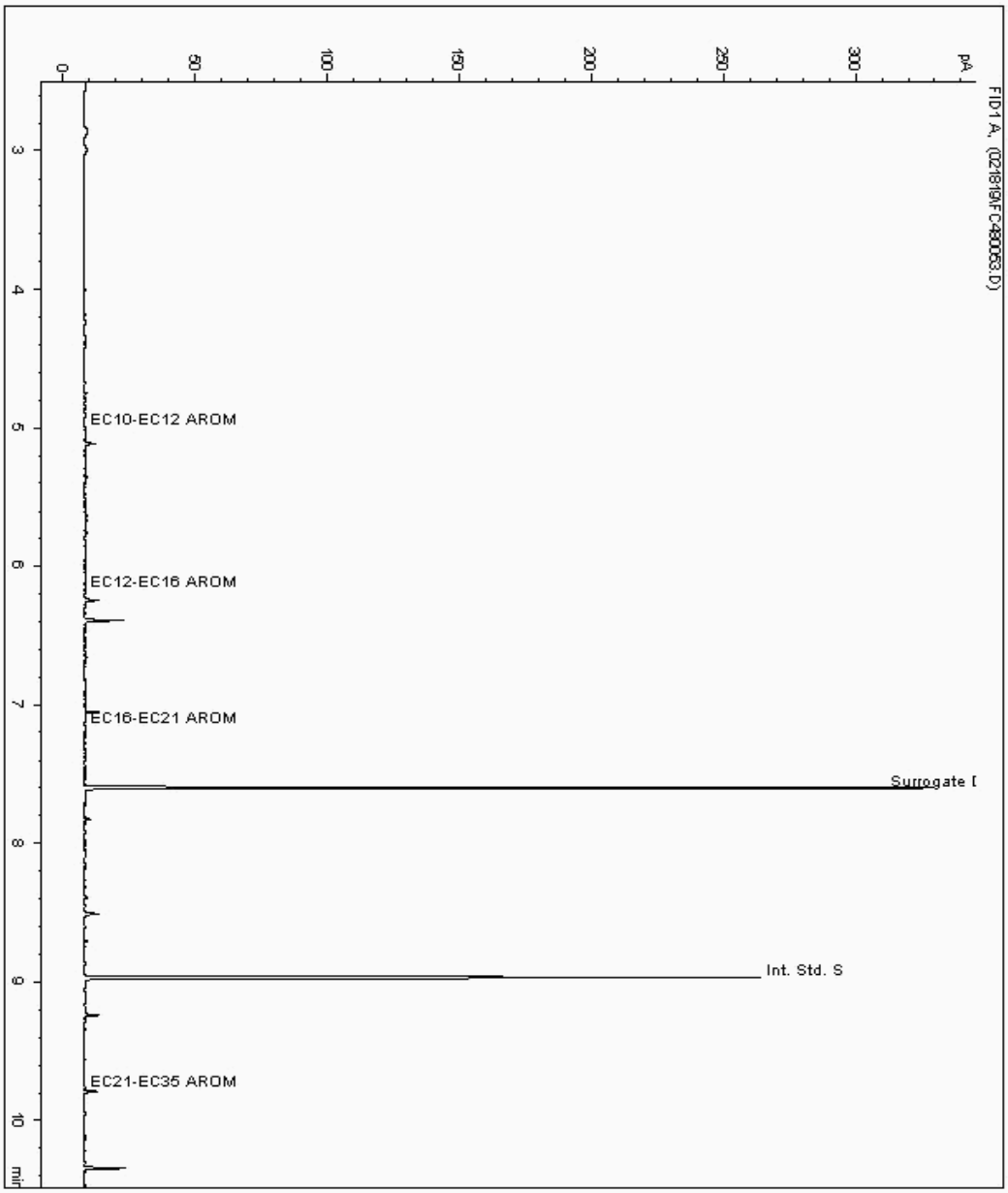
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19356009 **Depth :** 0.50
Sample ID : WS 43

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18179855-
Date Acquired : 19/02/2019 10:27:02 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

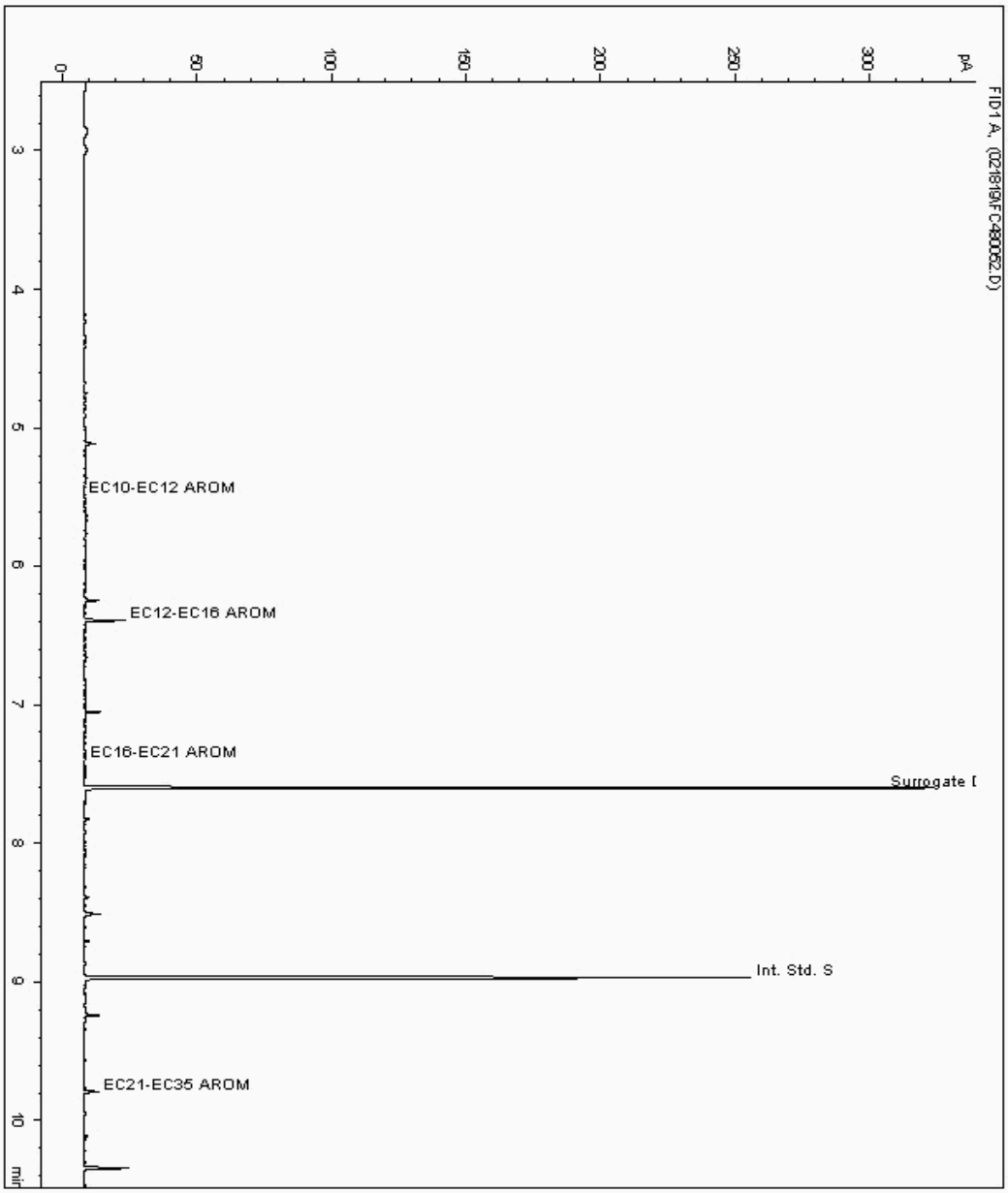
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19356016 **Depth :** 0.30
Sample ID : WS 46

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18179881-
Date Acquired : 19/02/2019 10:05:44 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.033



CERTIFICATE OF ANALYSIS

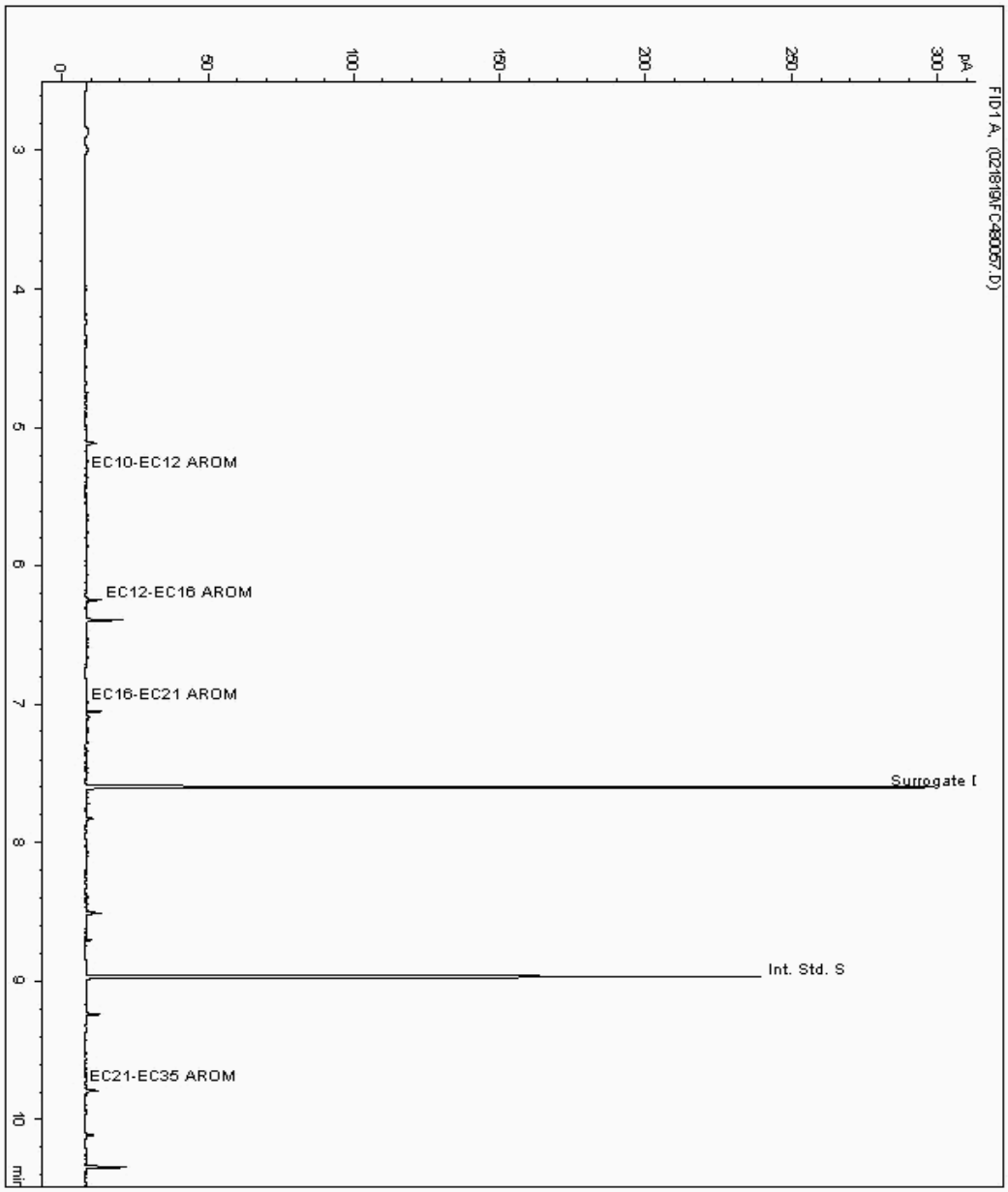
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19356038 **Depth :** 0.20
Sample ID : WS38

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18179937-
Date Acquired : 19/02/2019 11:52:58 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

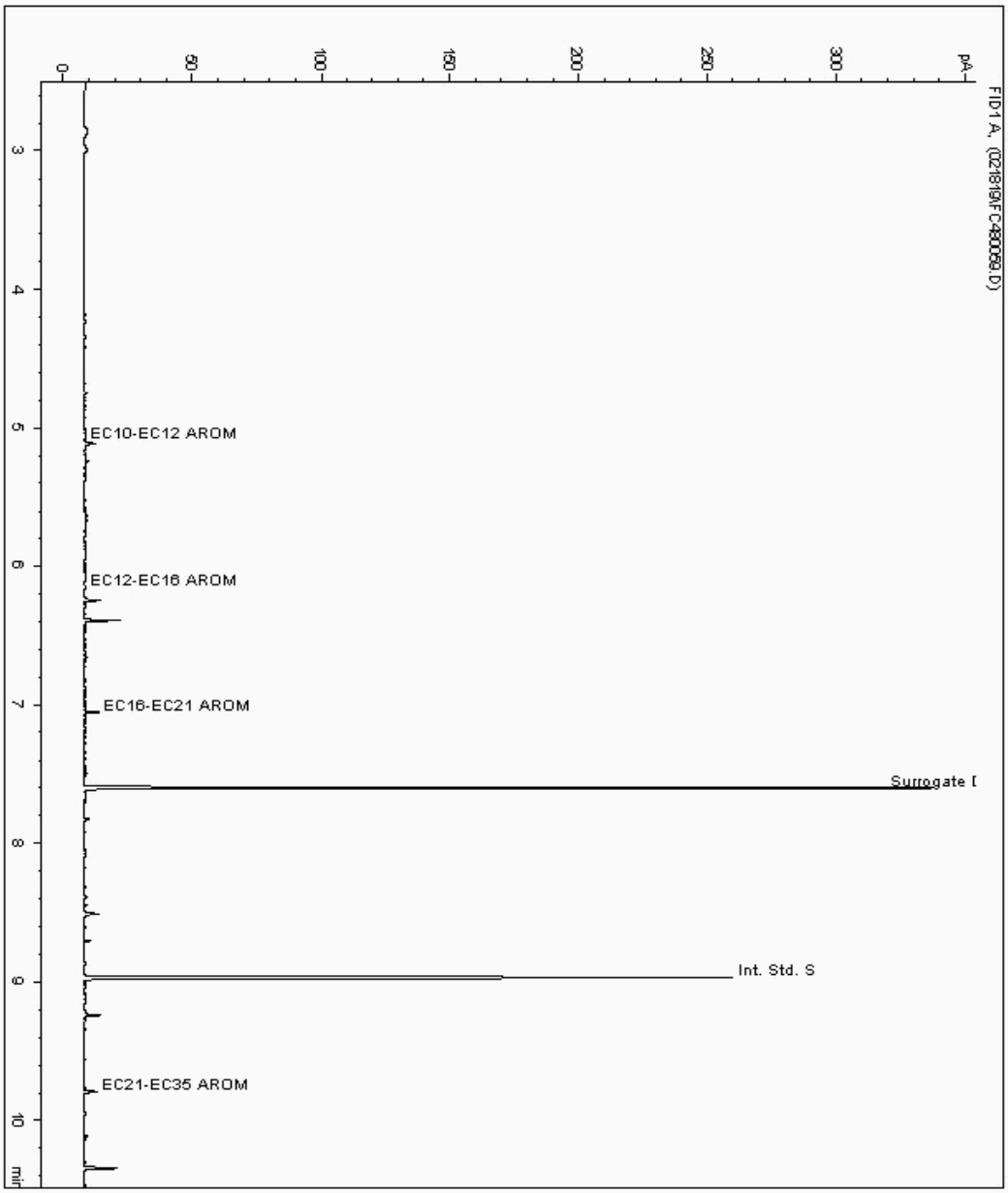
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19356047 **Depth :** 1.00
Sample ID : WS 41

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18179832-
Date Acquired : 19/02/2019 12:35:51 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.033



CERTIFICATE OF ANALYSIS

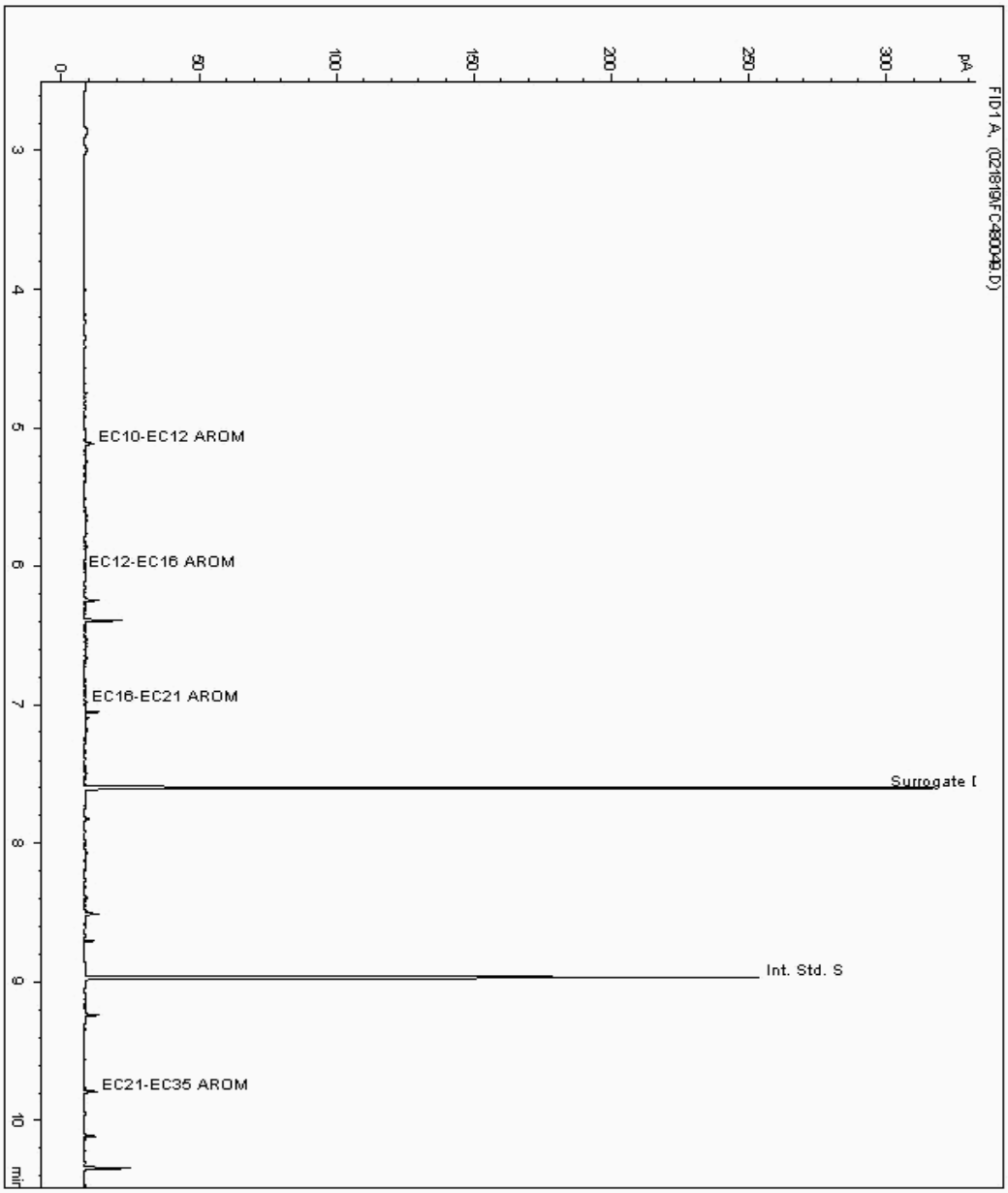
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19356067 **Depth :** 1.50
Sample ID : WS 20

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18179694-
Date Acquired : 19/02/2019 09:01:31 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.050



CERTIFICATE OF ANALYSIS

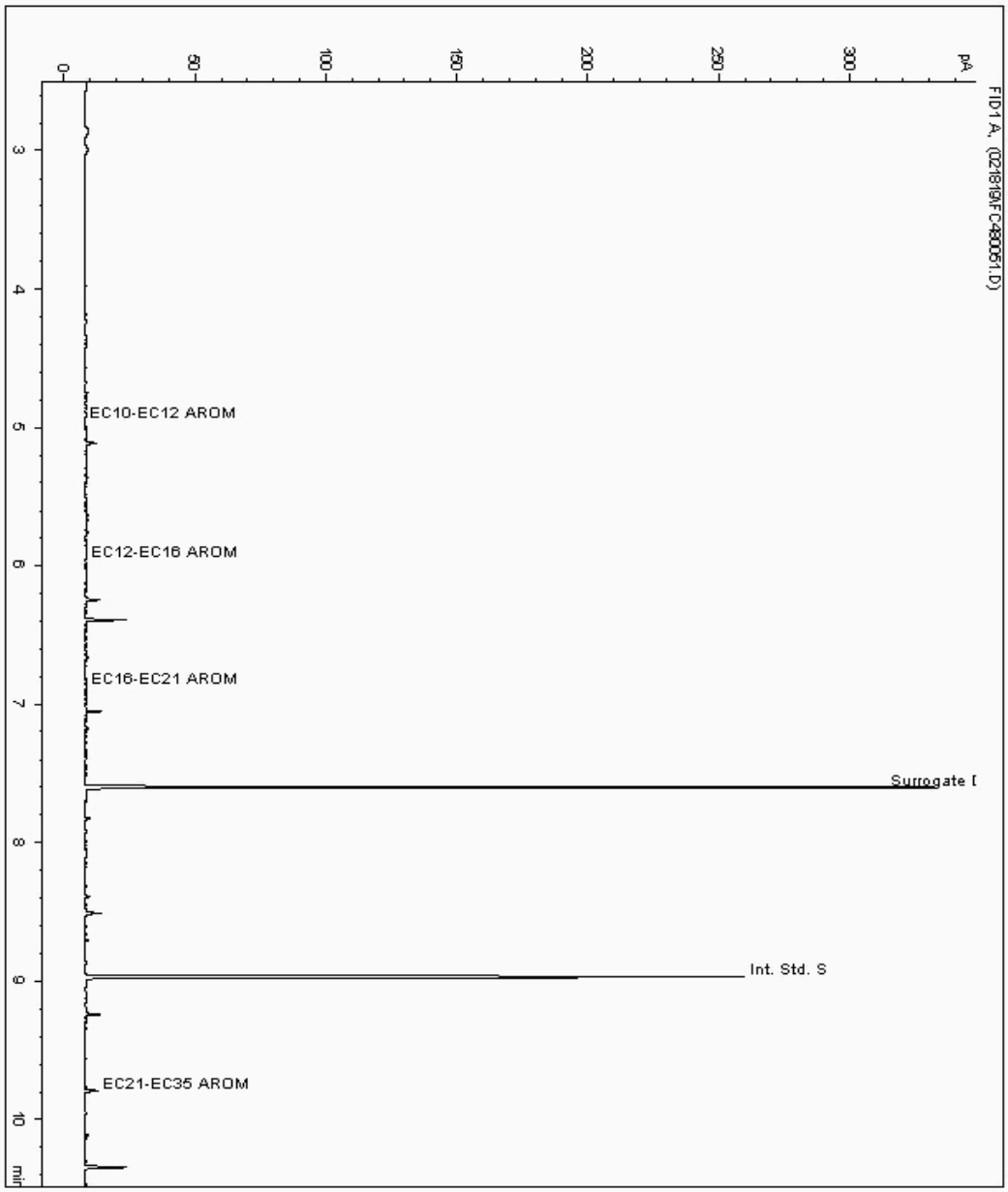
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19356082 **Depth :** 1.00
Sample ID : WS 40

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18179809-
Date Acquired : 19/02/2019 09:44:13 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.050



CERTIFICATE OF ANALYSIS

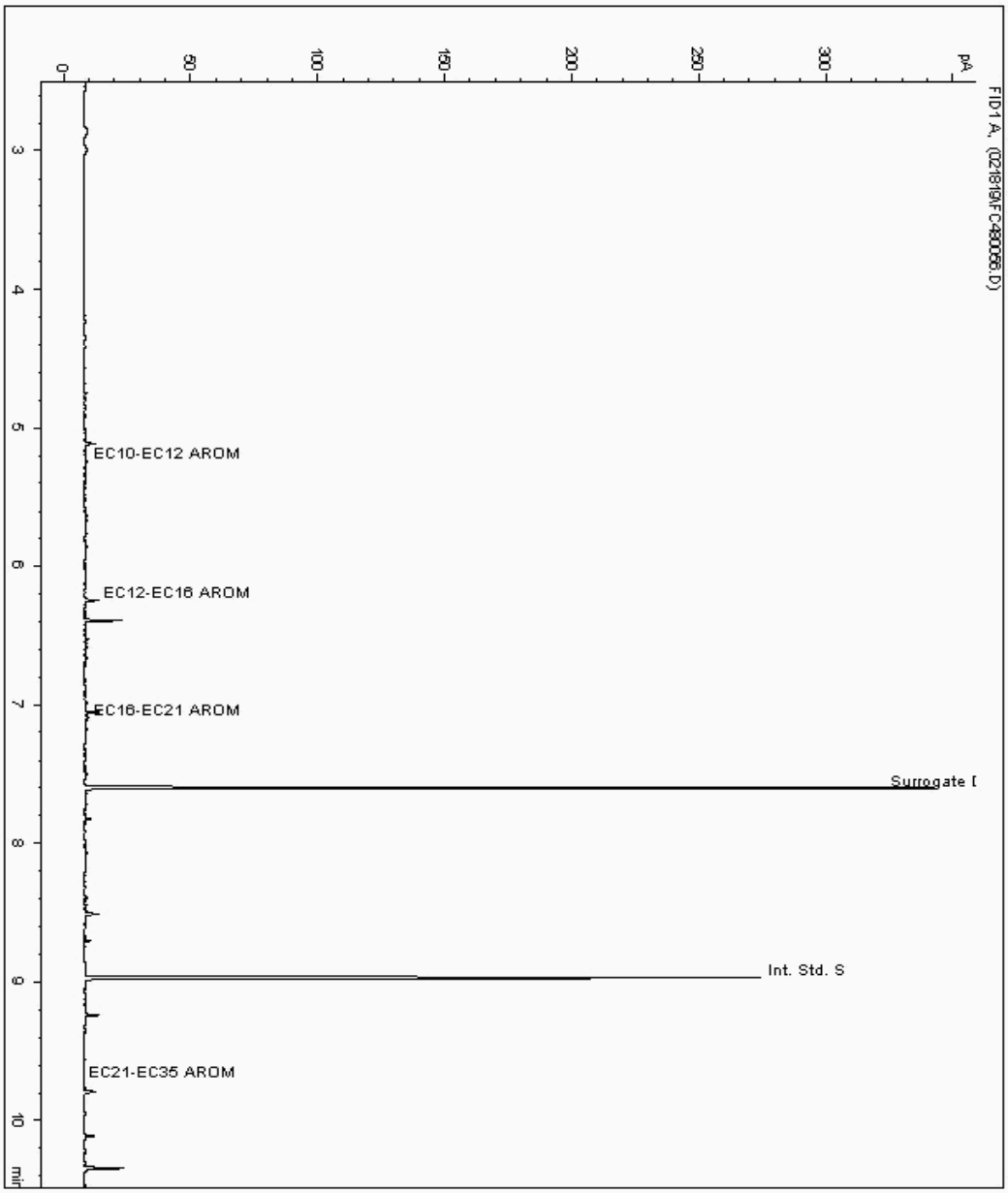
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19356094 **Depth :** 0.70
Sample ID : WS38

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18179961-
Date Acquired : 19/02/2019 11:31:25 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

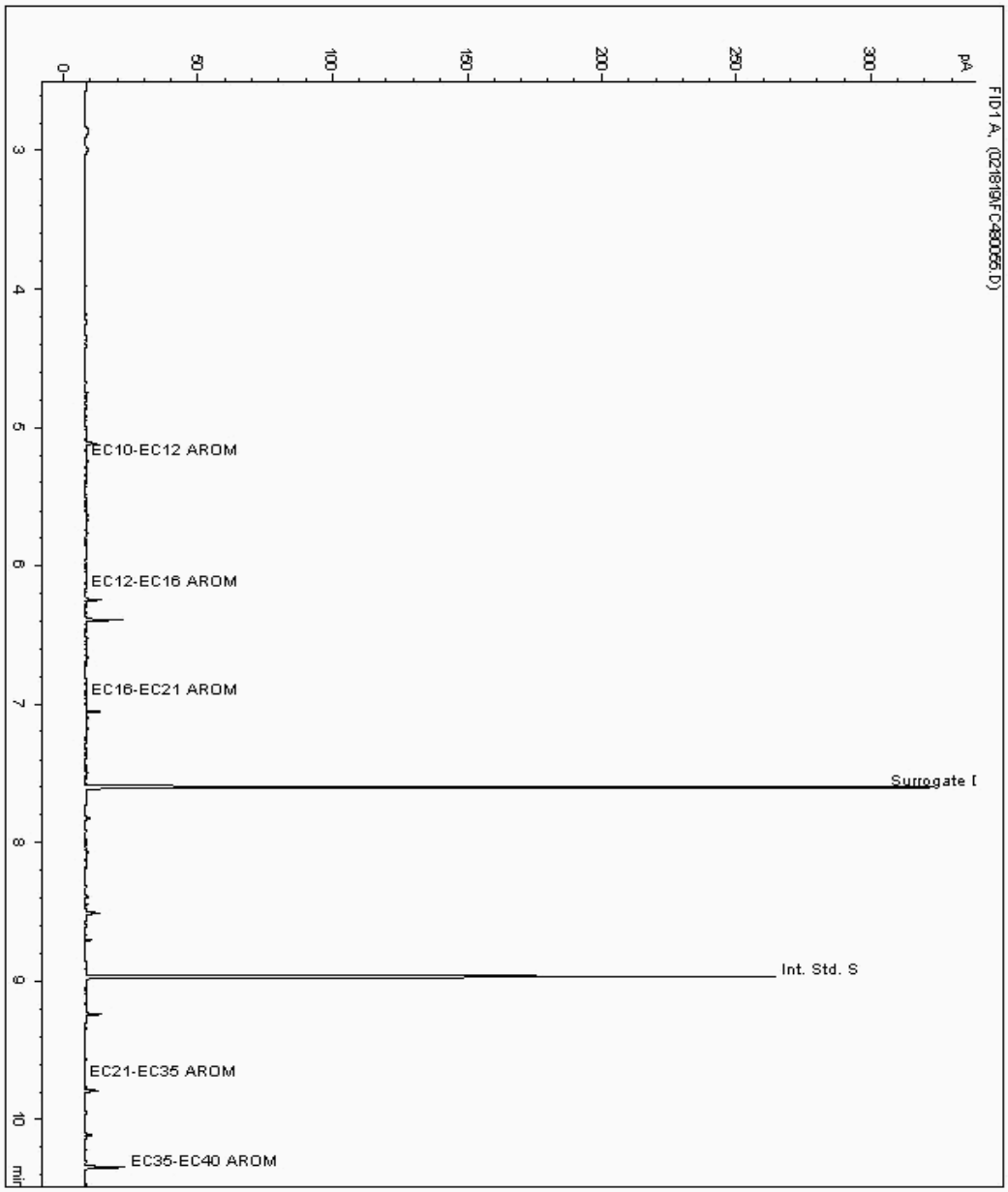
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19356131 **Depth :** 0.20
Sample ID : WS39

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18179987-
Date Acquired : 19/02/2019 11:09:58 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

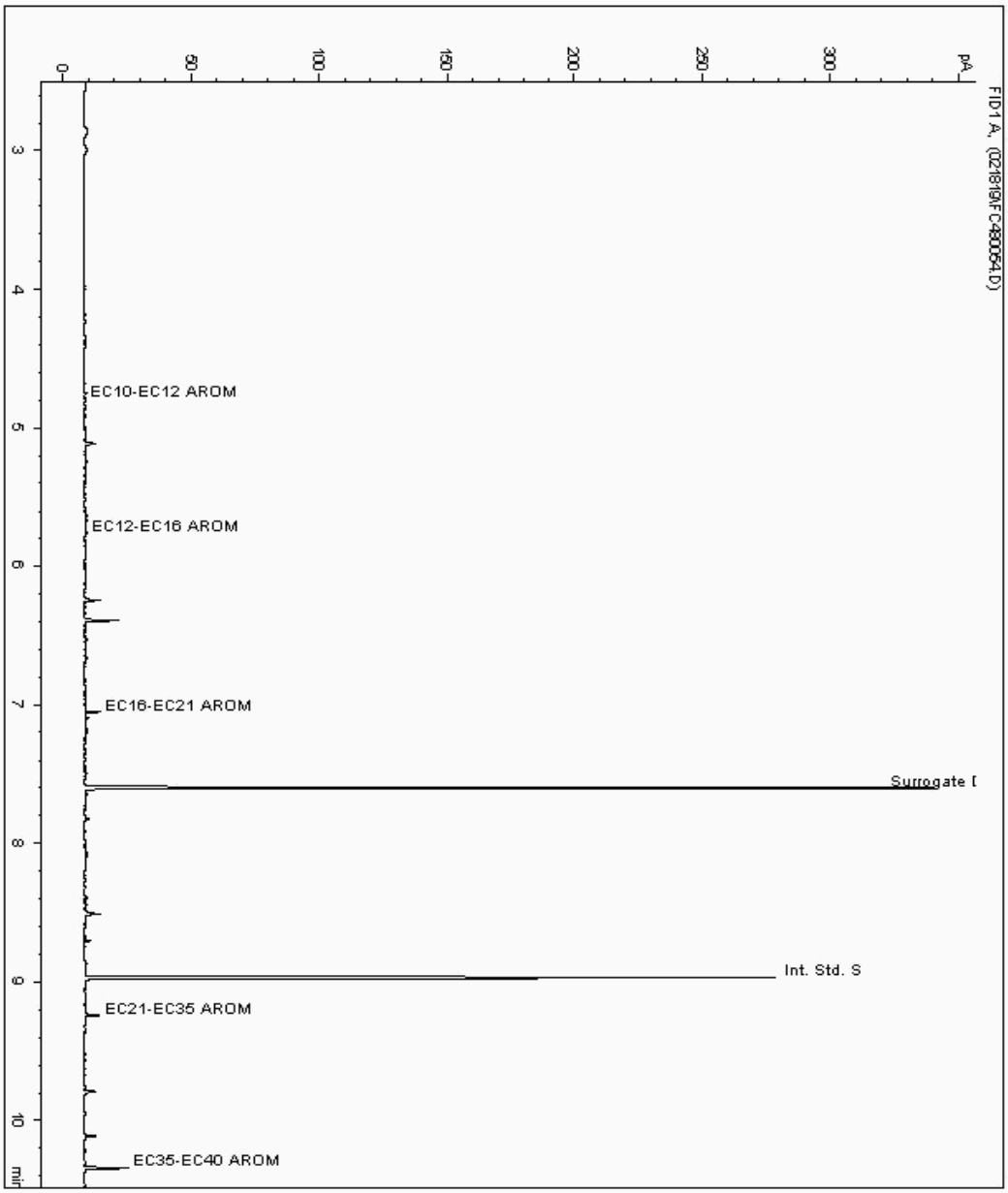
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19356171 **Depth :** 0.20
Sample ID : WS 23

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18179718-
Date Acquired : 19/02/2019 10:48:24 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.033



CERTIFICATE OF ANALYSIS

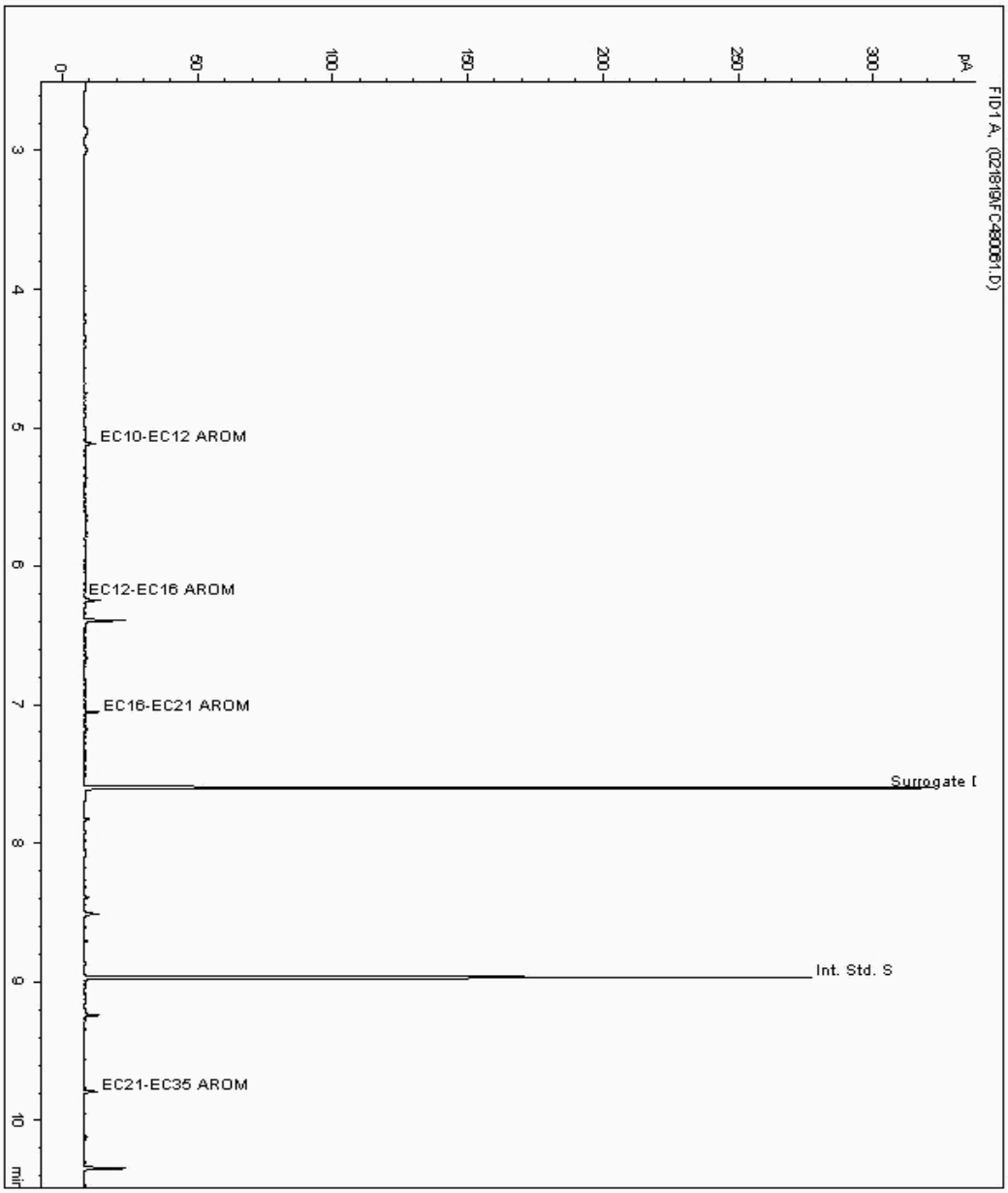
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19356193 **Depth :** 1.20
Sample ID : WS 16

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18179655-
Date Acquired : 19/02/2019 13:18:51 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.033



CERTIFICATE OF ANALYSIS

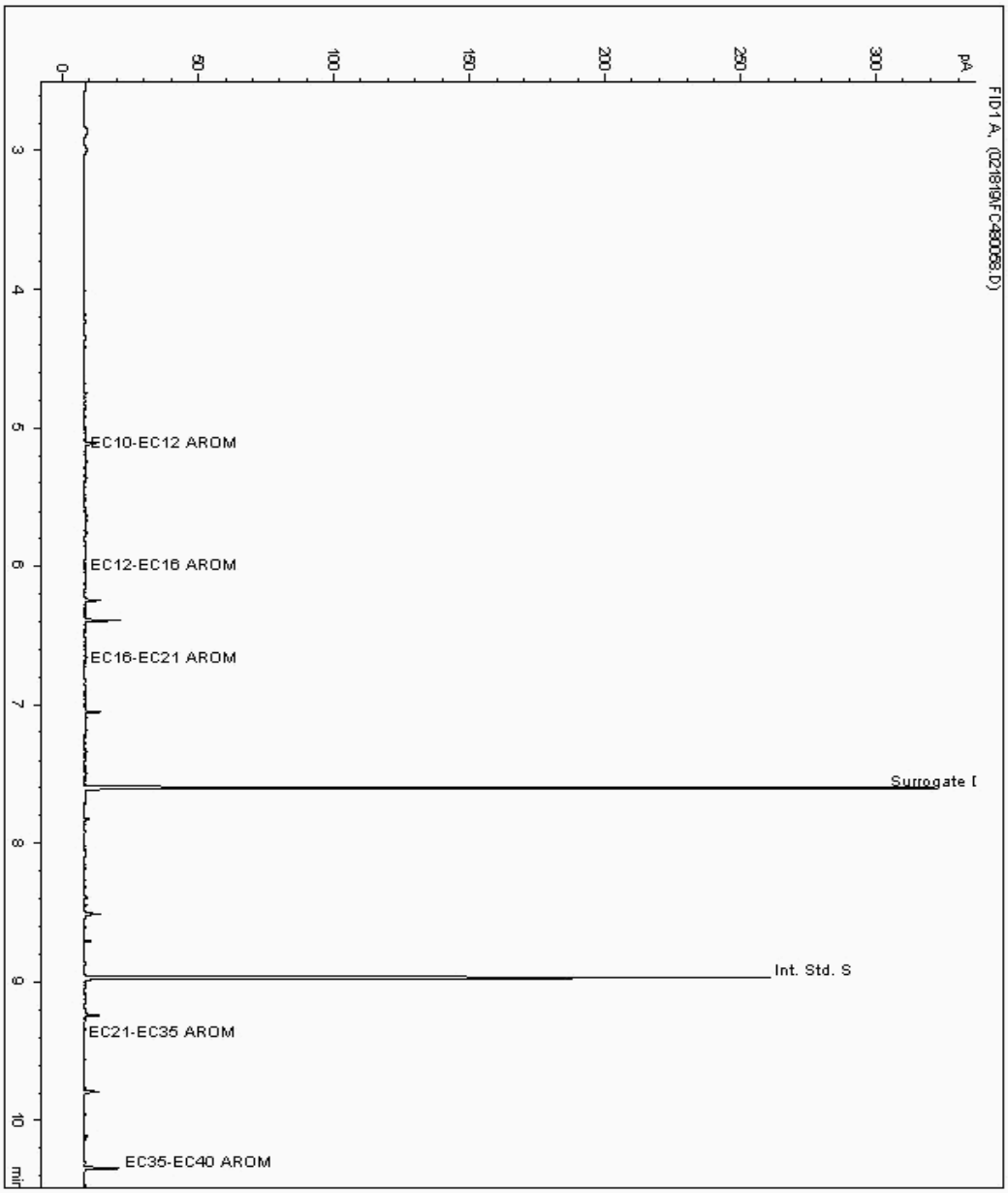
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19356230 **Depth :** 0.30
Sample ID : WS 25A

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18179748-
Date Acquired : 19/02/2019 12:14:32 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.033



CERTIFICATE OF ANALYSIS

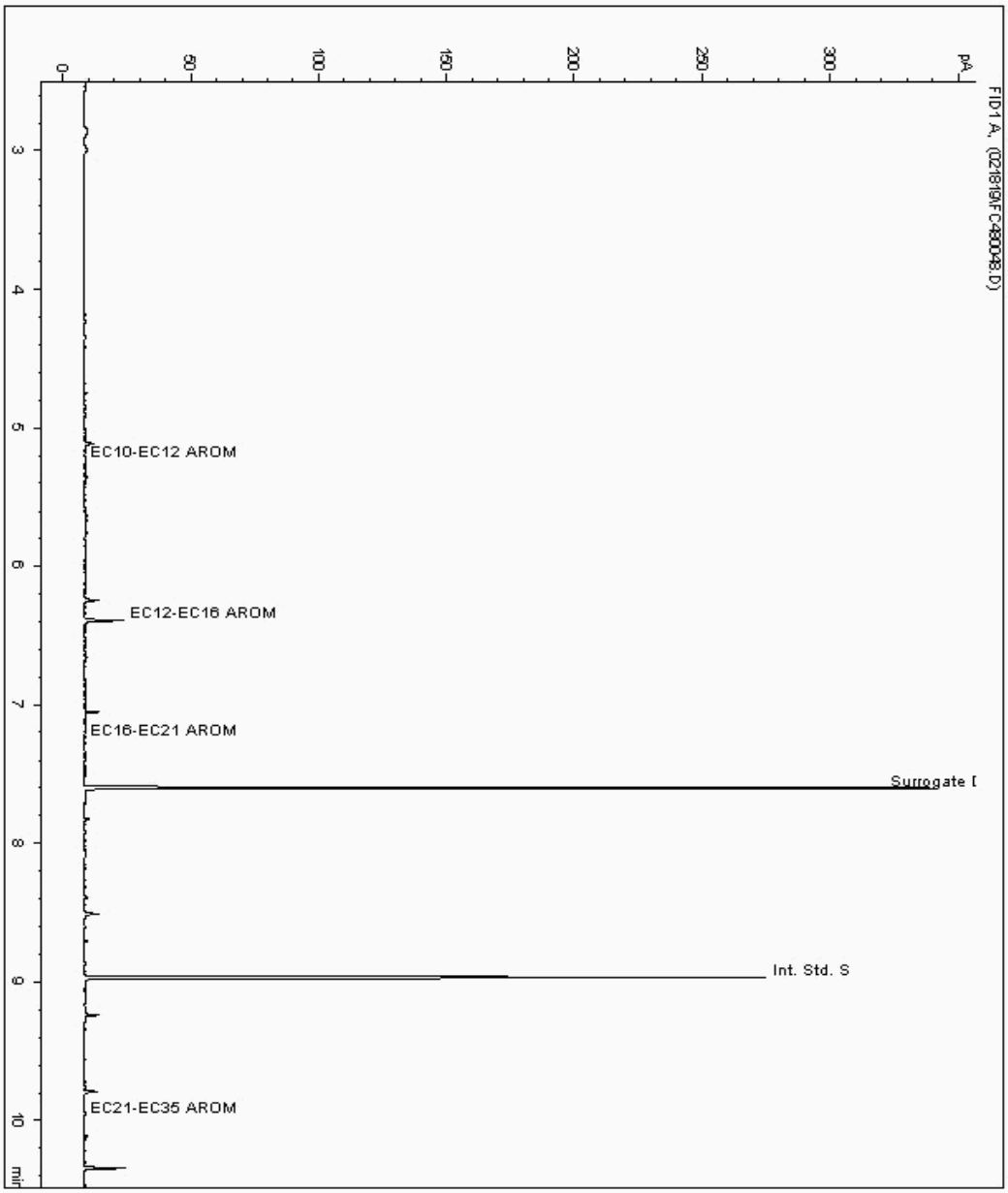
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19367579 **Depth :** 1.00
Sample ID : WS58

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180070-
Date Acquired : 19/02/2019 08:39:57 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

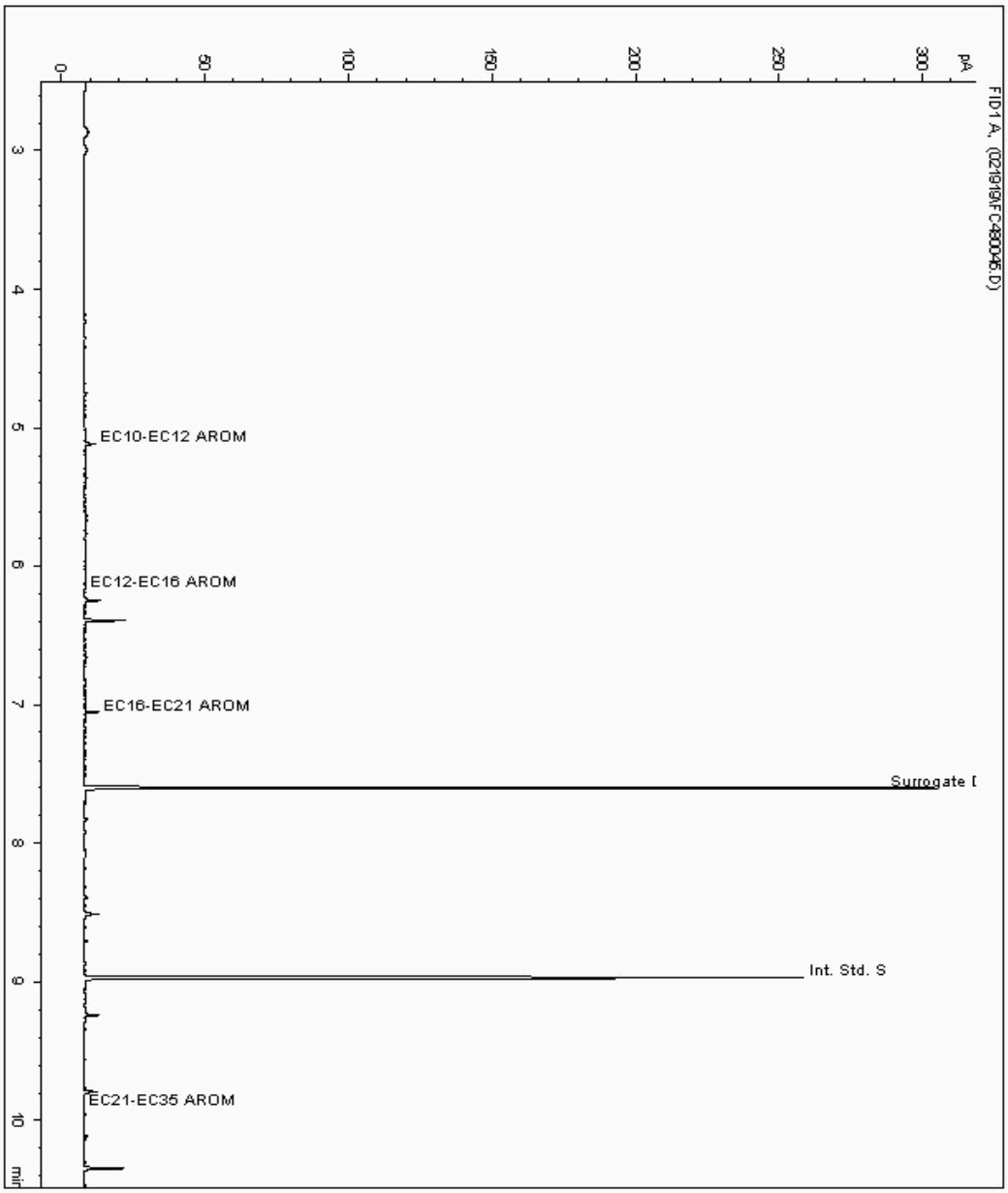
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19388237 **Depth :** 0.50
Sample ID : WS53

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18221550-
Date Acquired : 20/02/2019 13:24:46 PM
Units : ppb
Dilution : WS53 [0.50] CEN 10 1 ->
CF : 1
Multiplier : 0.057



CERTIFICATE OF ANALYSIS

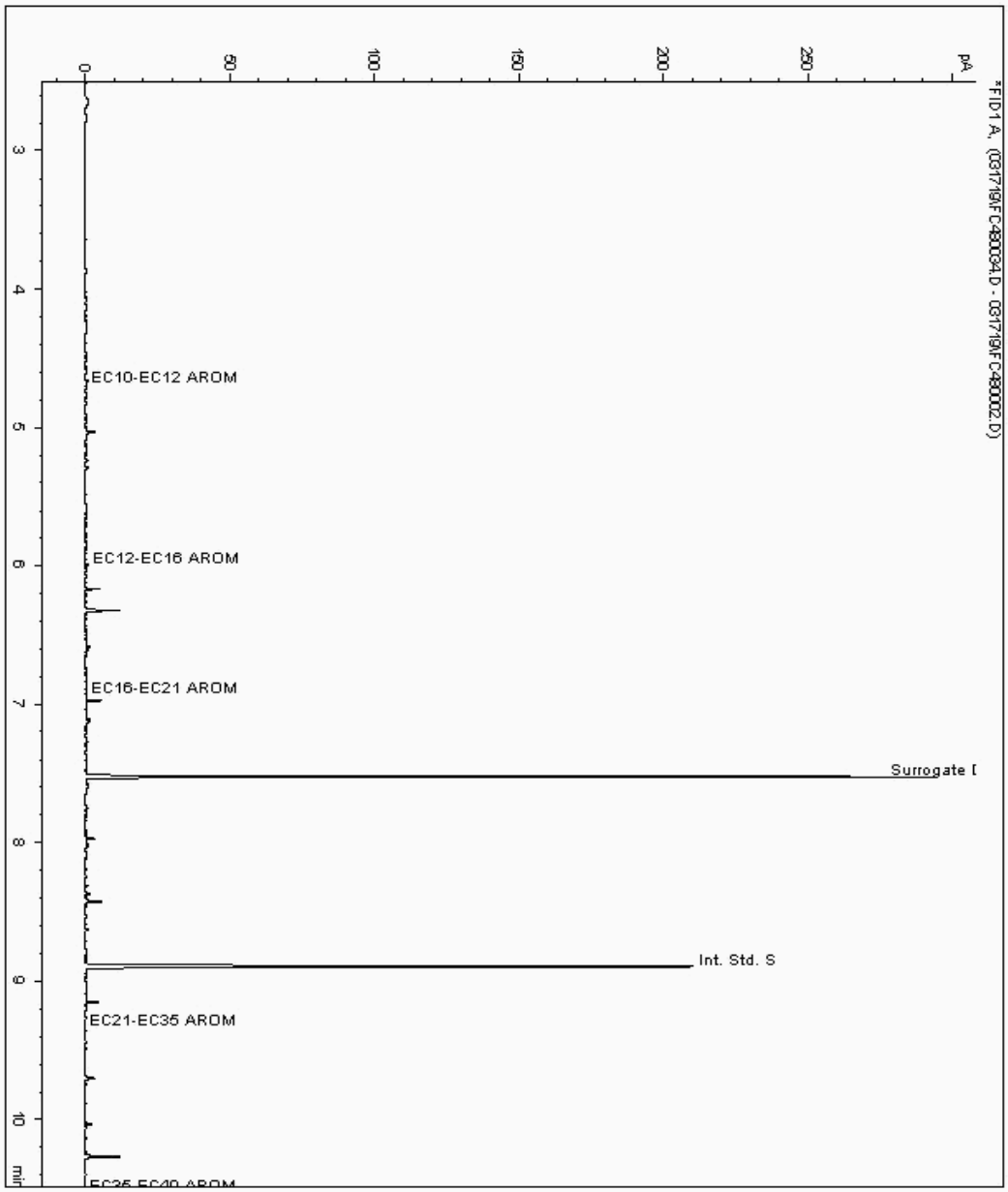
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19554433 **Depth :** 0.30 - 0.30
Sample ID : WS 07

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18361541-
Date Acquired : 18/03/2019 01:54:00 PM
Units : ppb
Dilution : WS 07 [0.30 - 0.30] CEN 10->
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

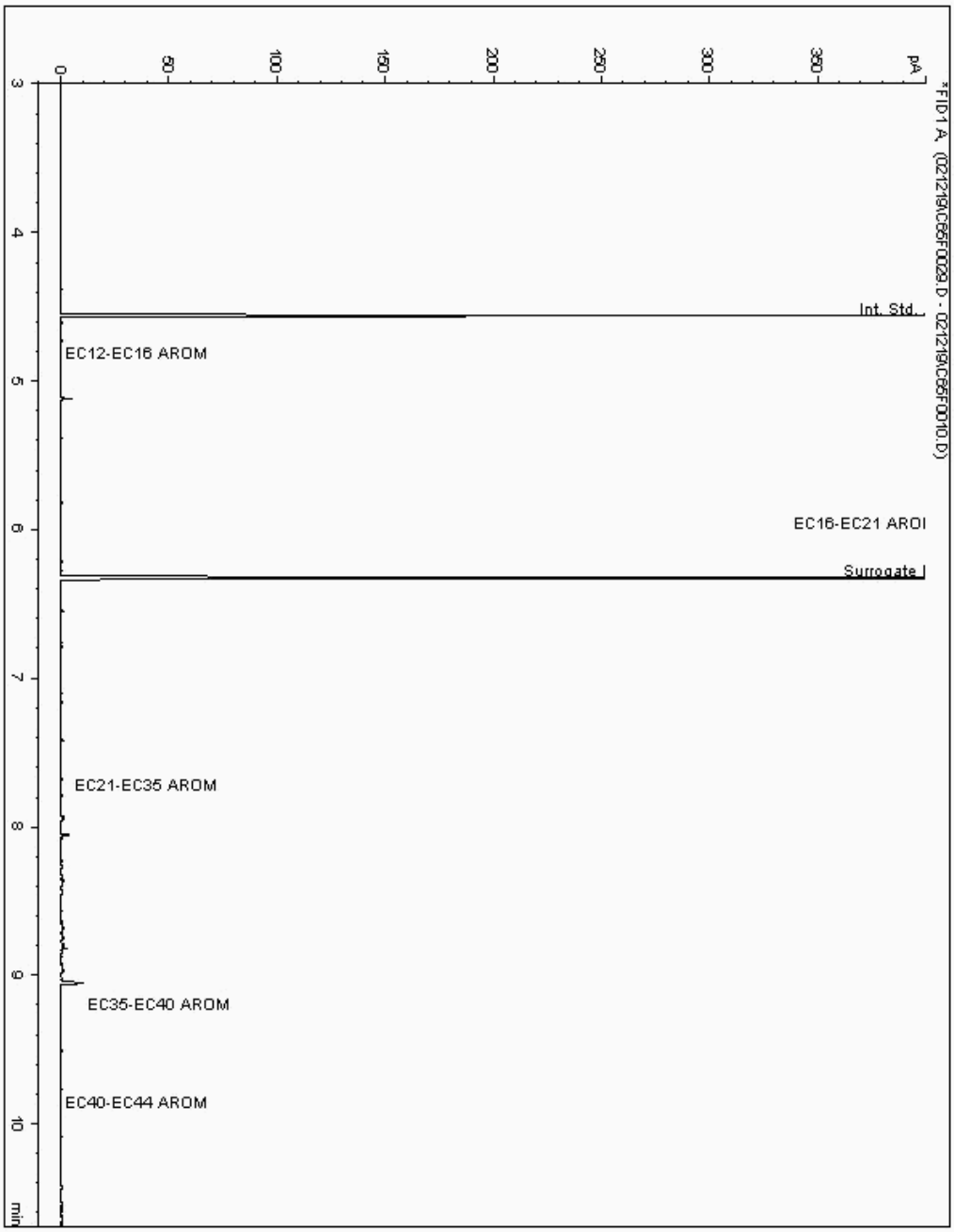
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19309043 **Depth :** 0.10
Sample ID : WS 42

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18119754-
Date Acquired : 12/02/2019 21:46:44 PM
Units : ppb
Dilution: WS 42[0.10] ->



CERTIFICATE OF ANALYSIS

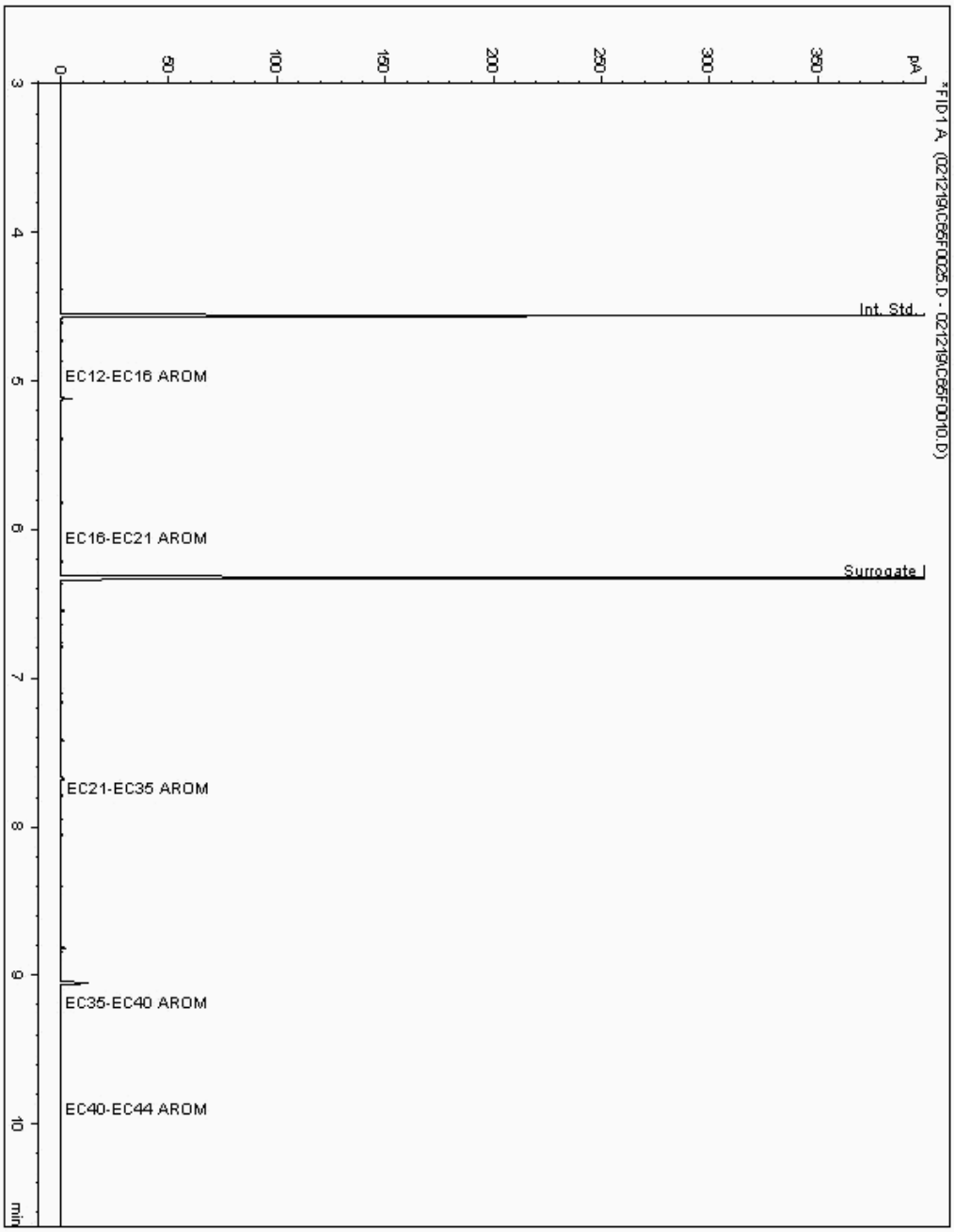
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19309202 **Depth :** 1.00
Sample ID : WS 25A

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18121001-
Date Acquired : 12/02/2019 20:33:04 PM
Units : ppb
Dilution: WS 25A[1.00] ->



CERTIFICATE OF ANALYSIS

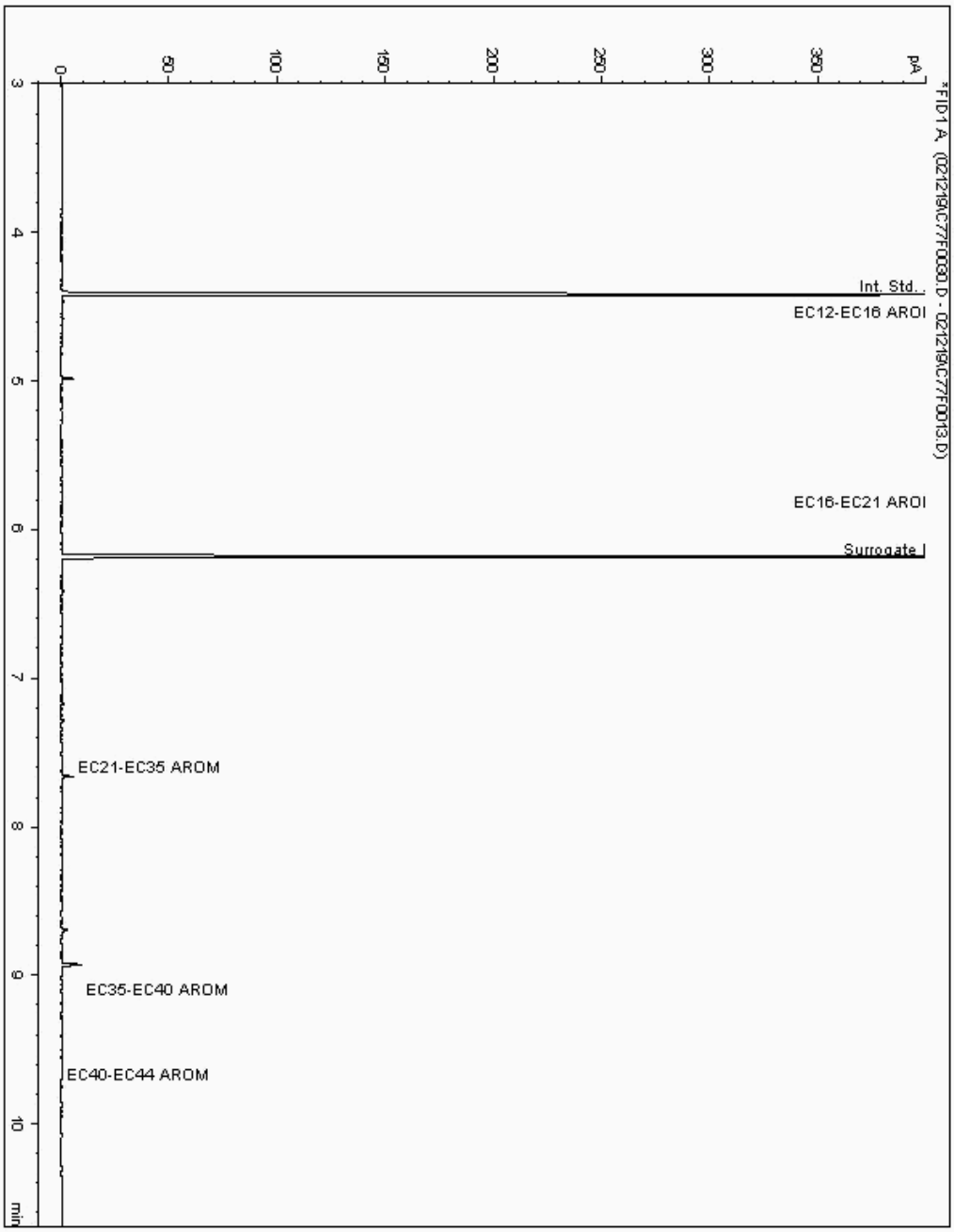
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19309309 **Depth :** 0.20
Sample ID : WS 10

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18121889-
Date Acquired : 12/02/2019 21:53:23 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

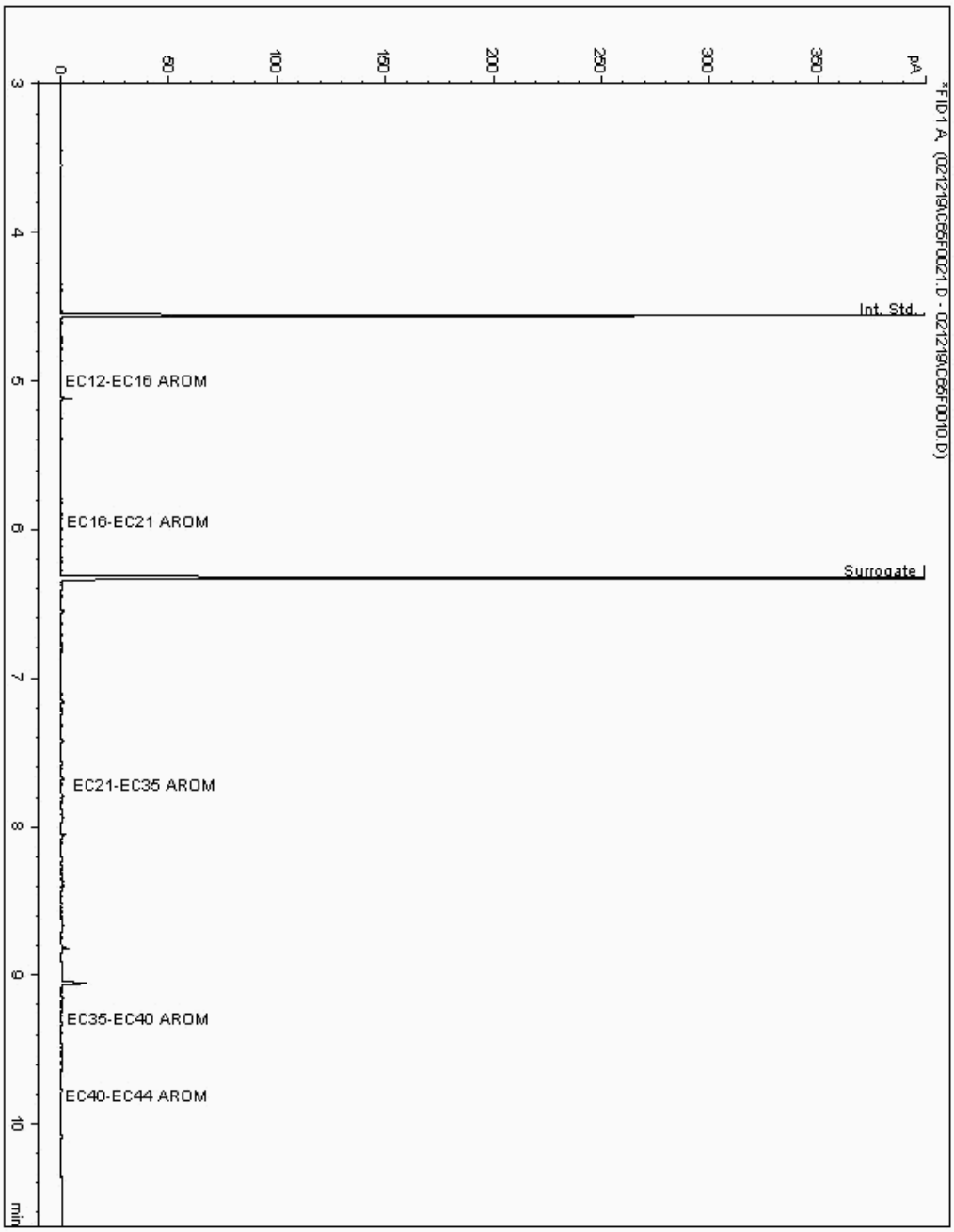
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19309400 **Depth :** 1.50
Sample ID : WS 20

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18120891-
Date Acquired : 12/02/2019 19:19:41 PM
Units : ppb
Dilution: WS 20[1.50] ->



CERTIFICATE OF ANALYSIS

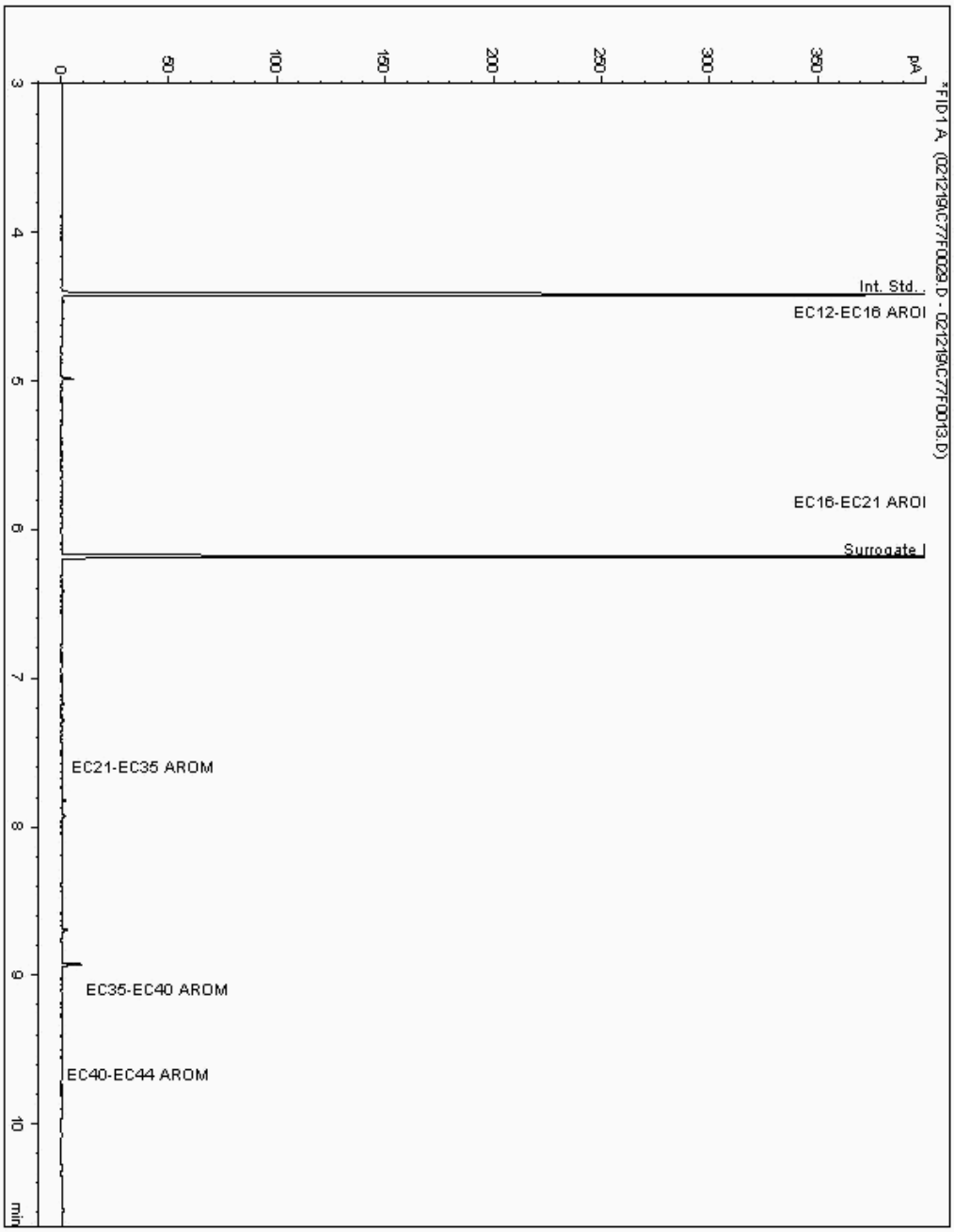
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19309567 **Depth :** 0.50
Sample ID : WS 10

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18121912-
Date Acquired : 12/02/2019 21:33:06 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

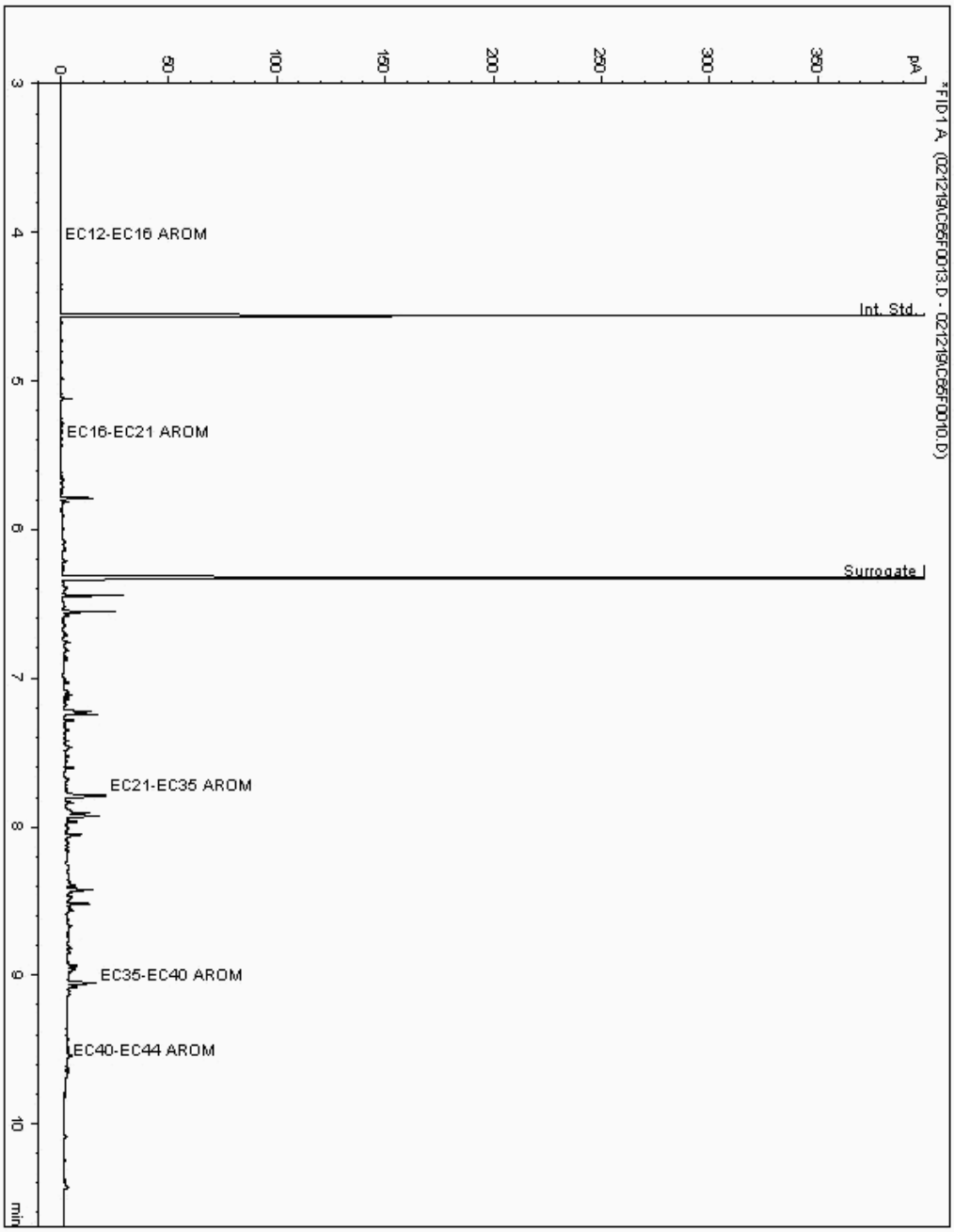
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19309997 **Depth :** 0.30
Sample ID : WS 25A

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18120968-
Date Acquired : 12/02/2019 17:09:41 PM
Units : ppb
Dilution: WS 25A[0.30] ->



CERTIFICATE OF ANALYSIS

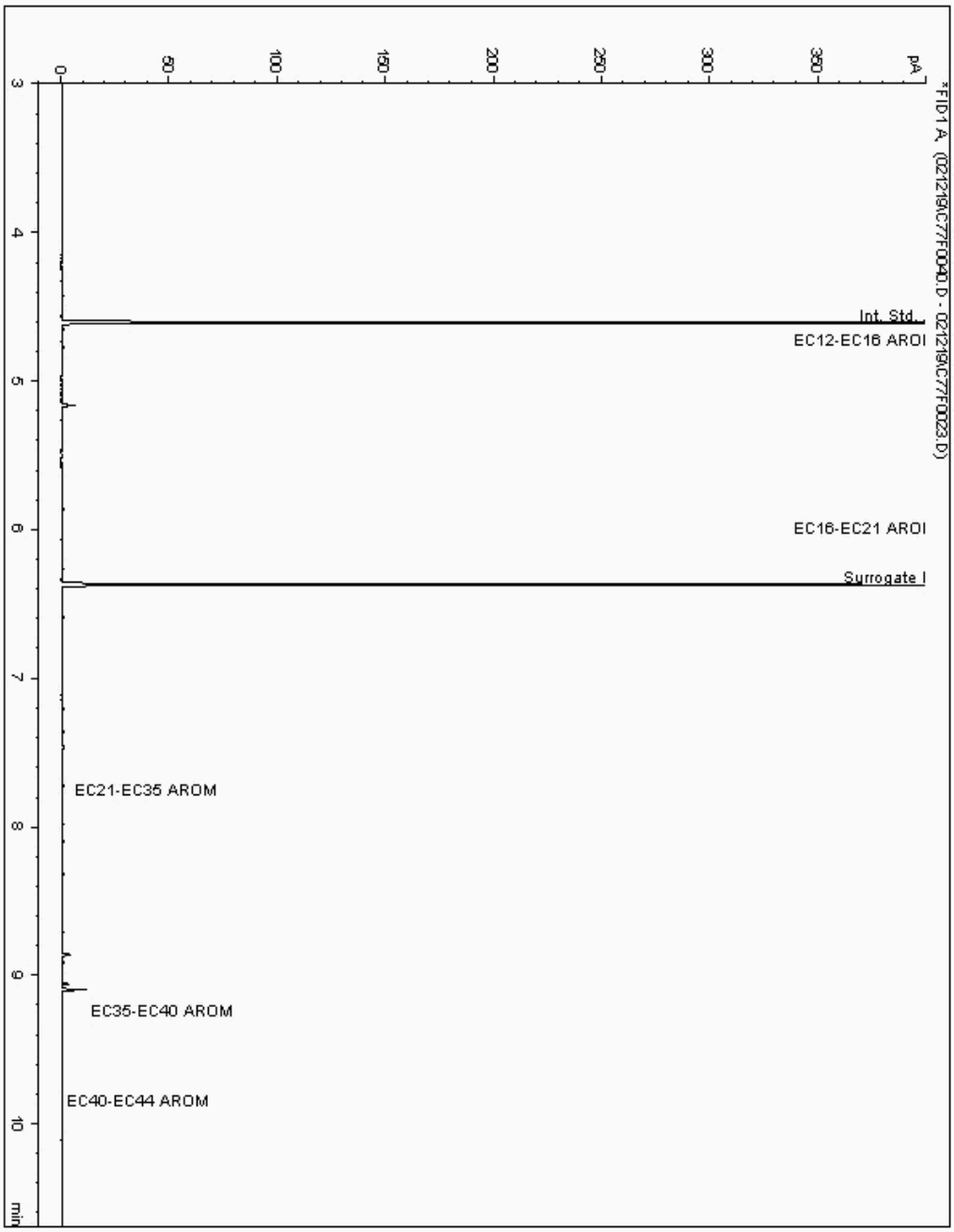
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19310021 **Depth :** 0.30
Sample ID : WS57

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18122199-
Date Acquired : 2/13/2019 12:03:52 AM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

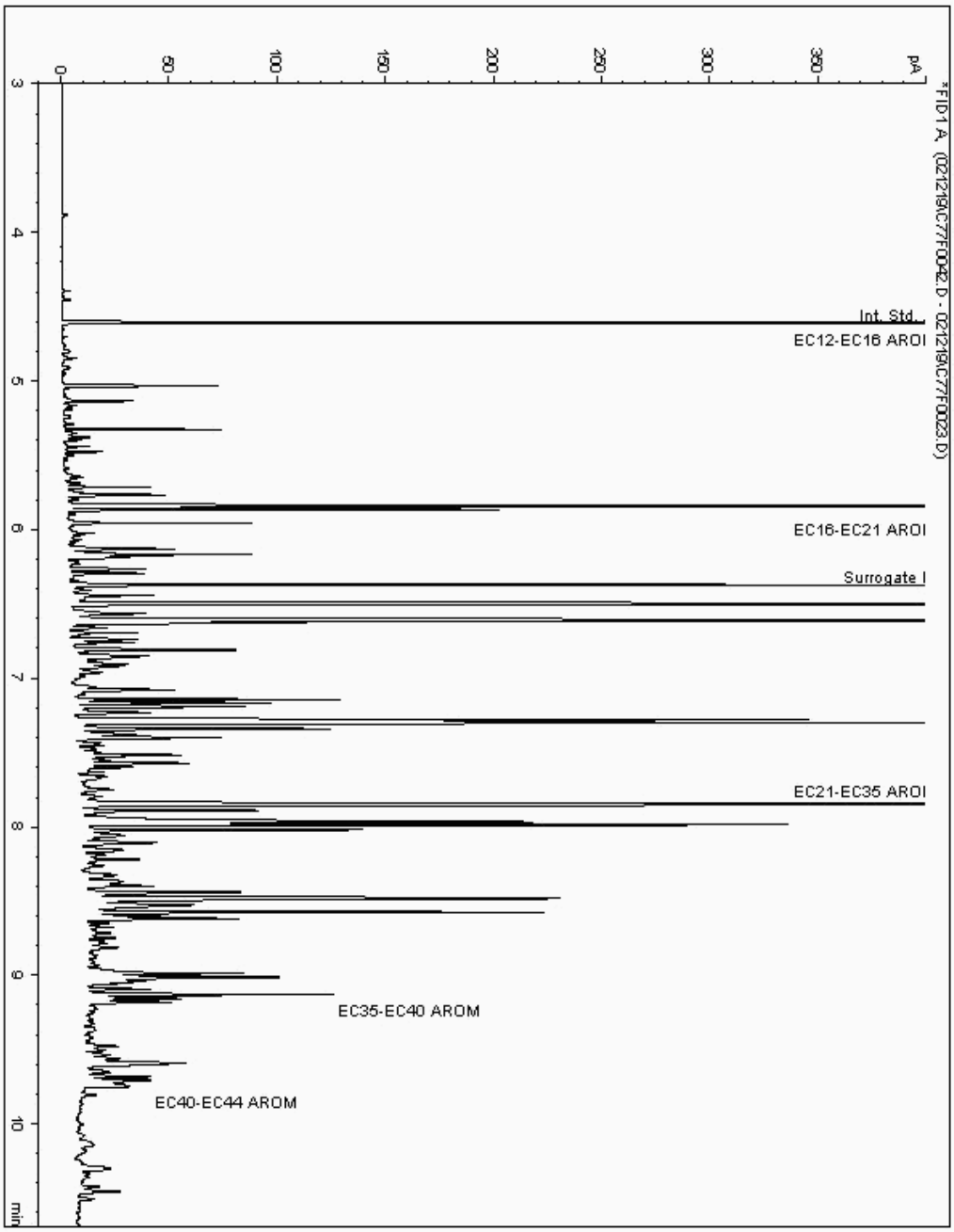
Analysis: EPH CWG (Aromatic) GC (S)

Sample No : 19310122
Sample ID : WS 28

Depth : 0.30

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18121937-
Date Acquired : 2/13/2019 12:43:44 AM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

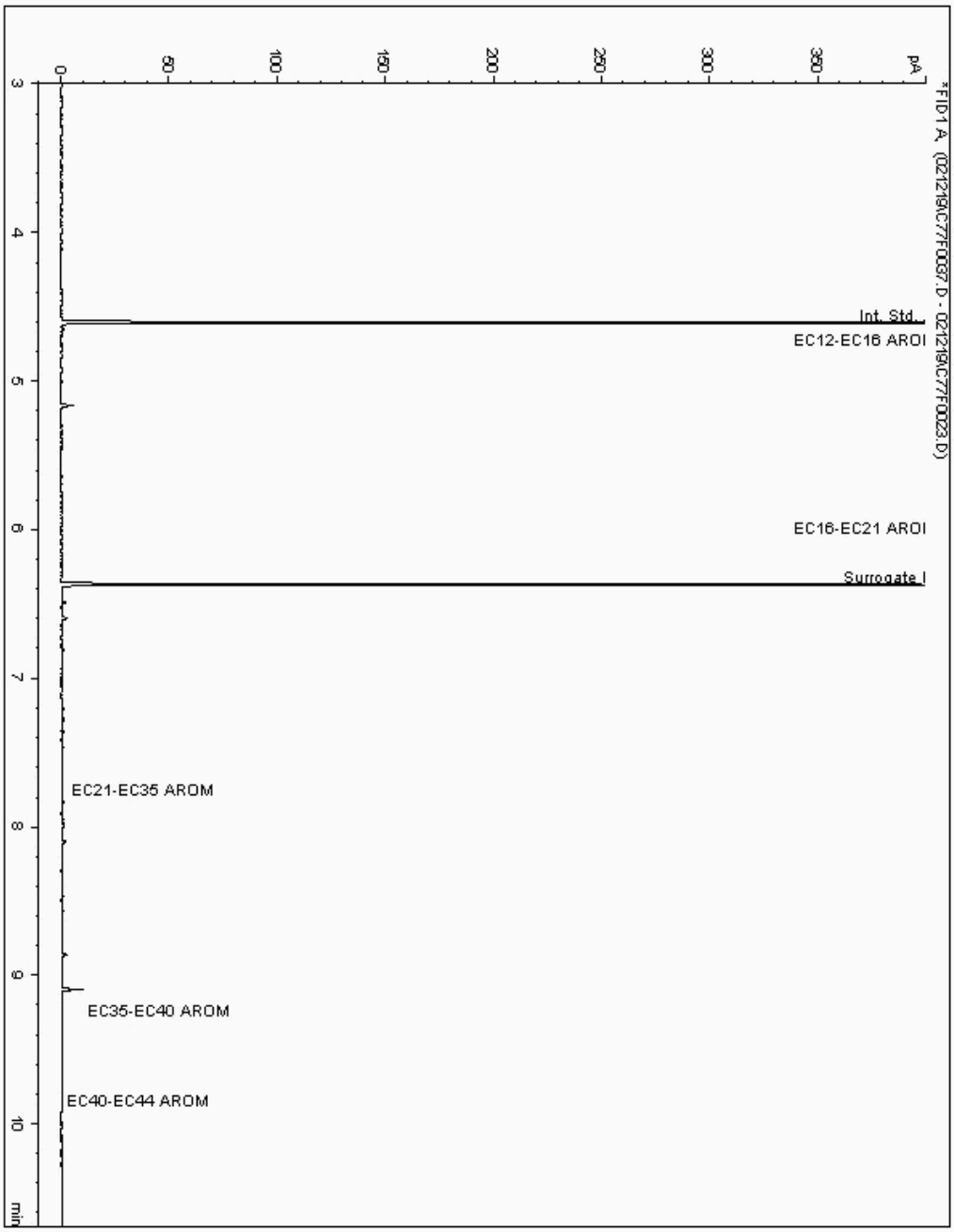
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19310167 **Depth :** 0.70
Sample ID : WS38

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18119125-
Date Acquired : 2/12/2019 11:03:52 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

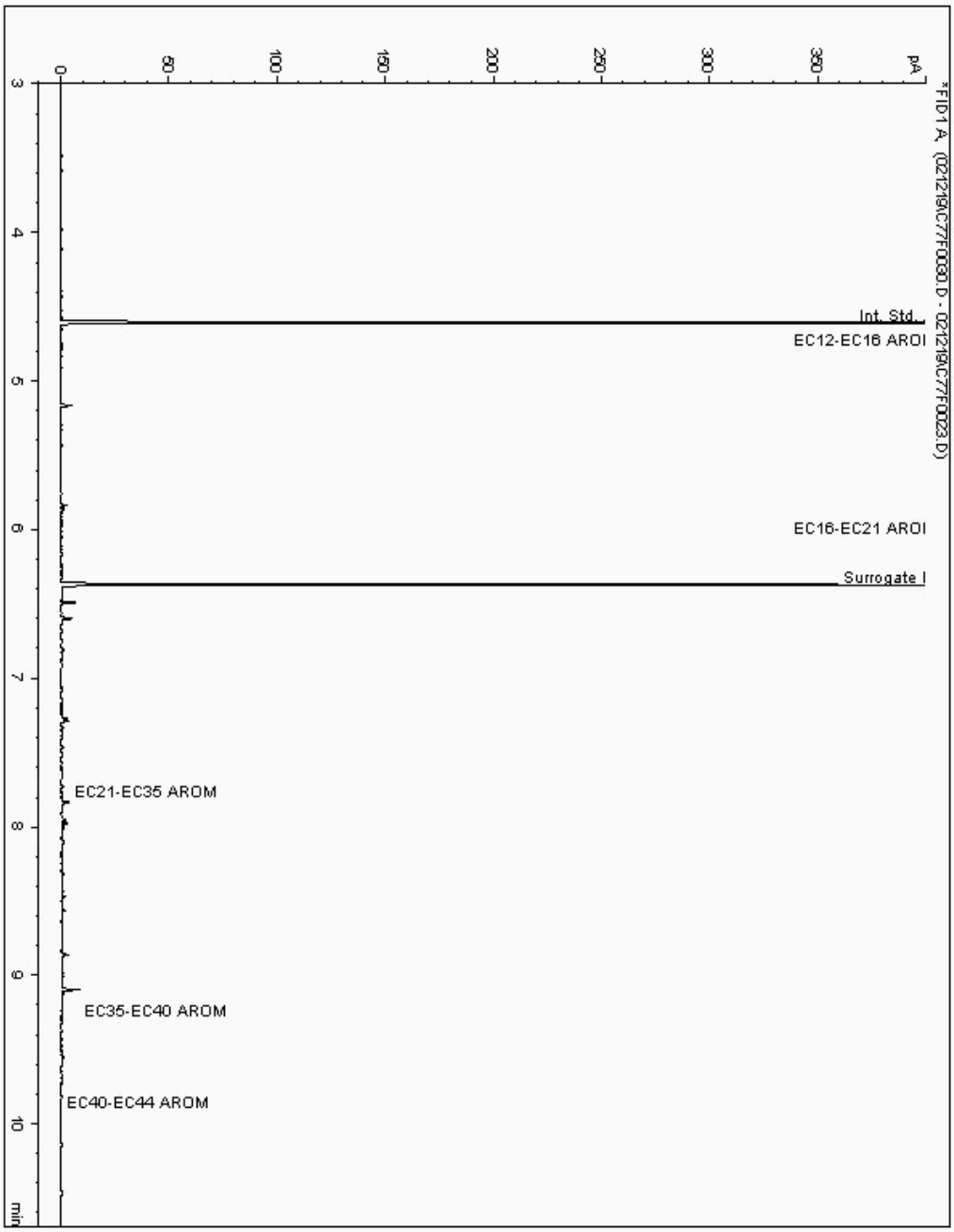
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19310274 **Depth :** 1.00
Sample ID : WS 28

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18121959-
Date Acquired : 2/12/2019 9:00:36 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

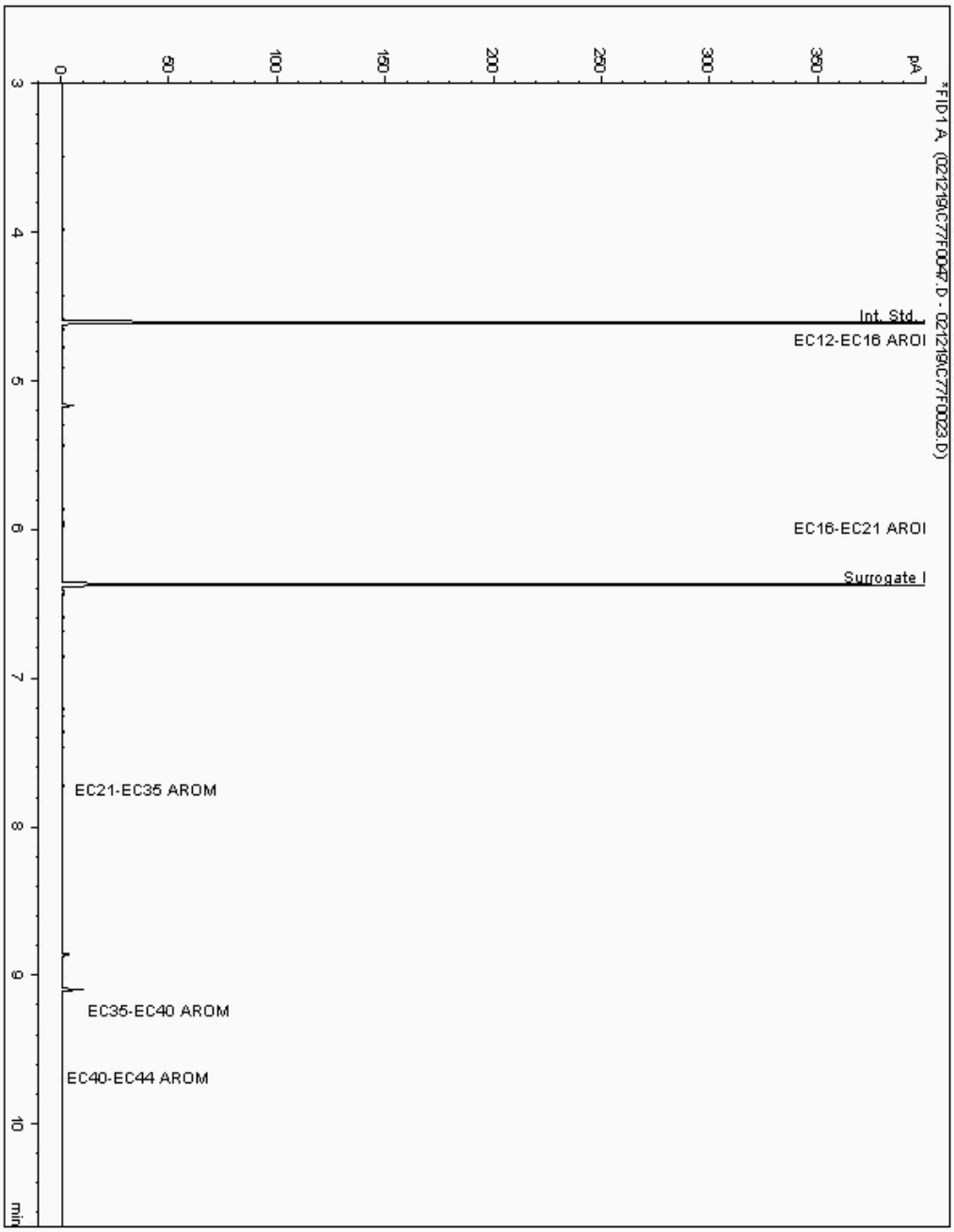
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19310334 **Depth :** 1.00
Sample ID : WS52

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18122149-
Date Acquired : 2/13/2019 2:07:31 AM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

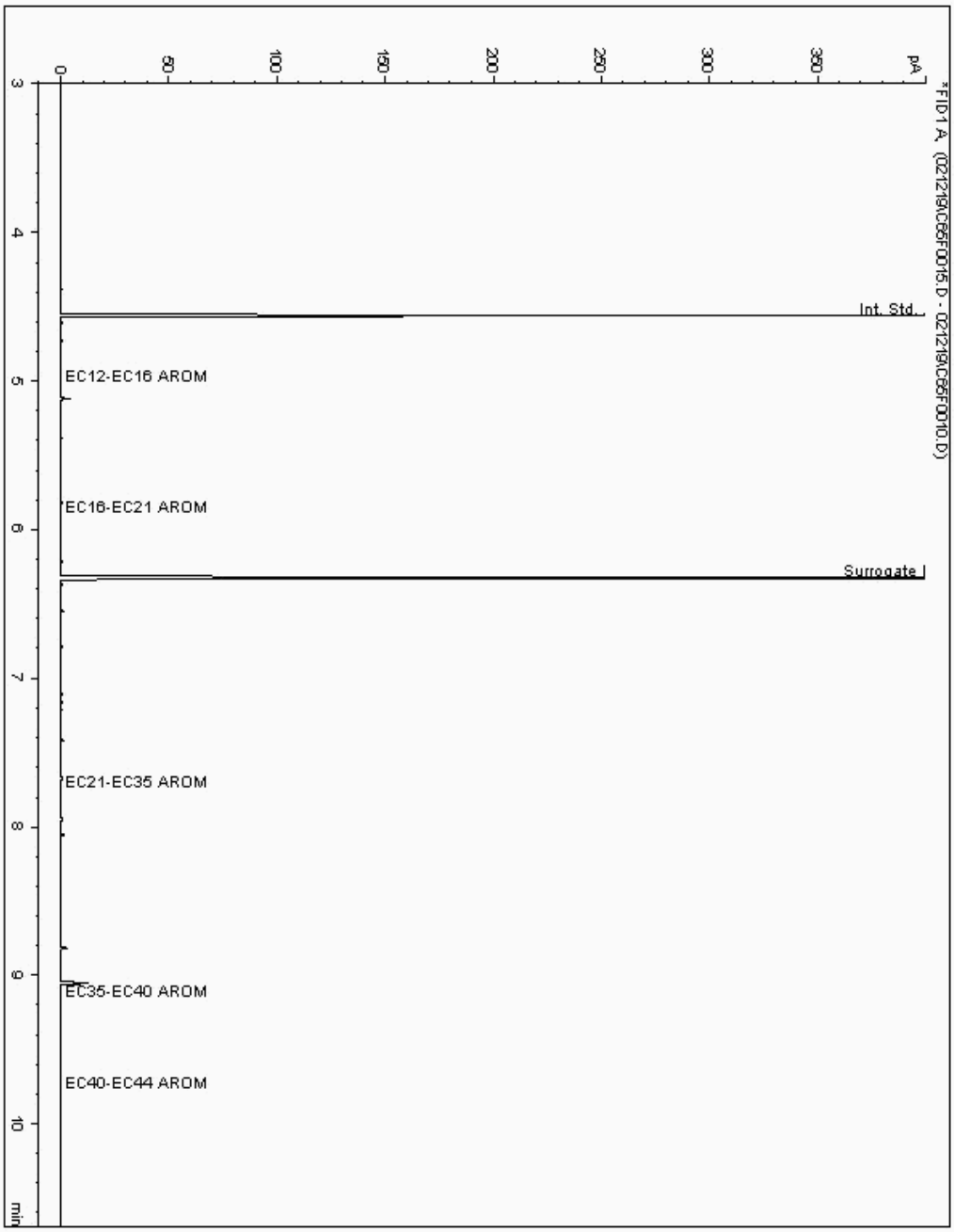
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19310402 **Depth :** 0.10
Sample ID : WS 34

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18121033-
Date Acquired : 12/02/2019 17:42:21 PM
Units : ppb
Dilution: WS 34[0.10] ->



CERTIFICATE OF ANALYSIS

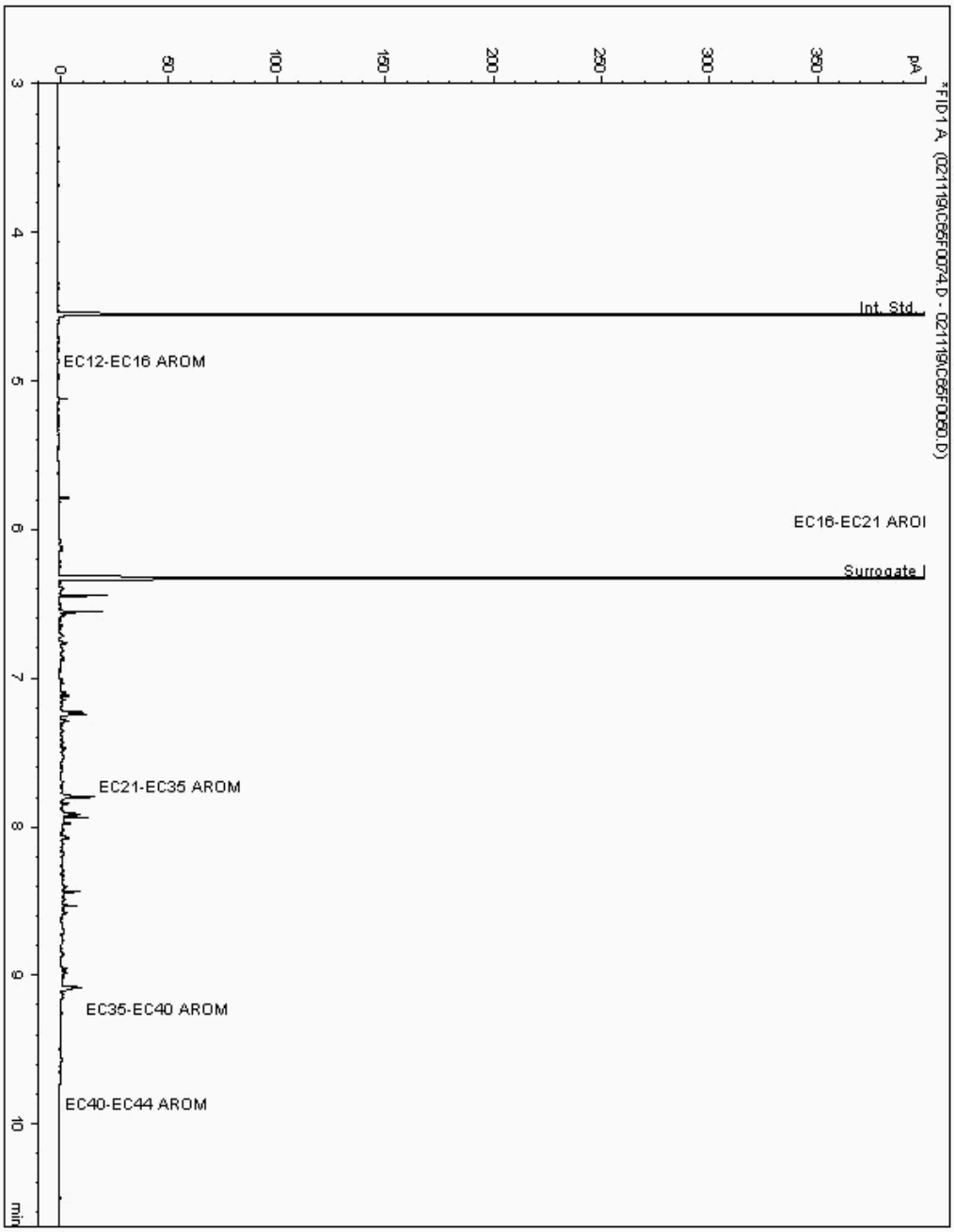
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19310428 **Depth :** 1.00
Sample ID : WS 40

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18121983-
Date Acquired : 12/02/2019 15:47:22 PM
Units : ppb
Dilution: WS 40[1.00] ->



CERTIFICATE OF ANALYSIS

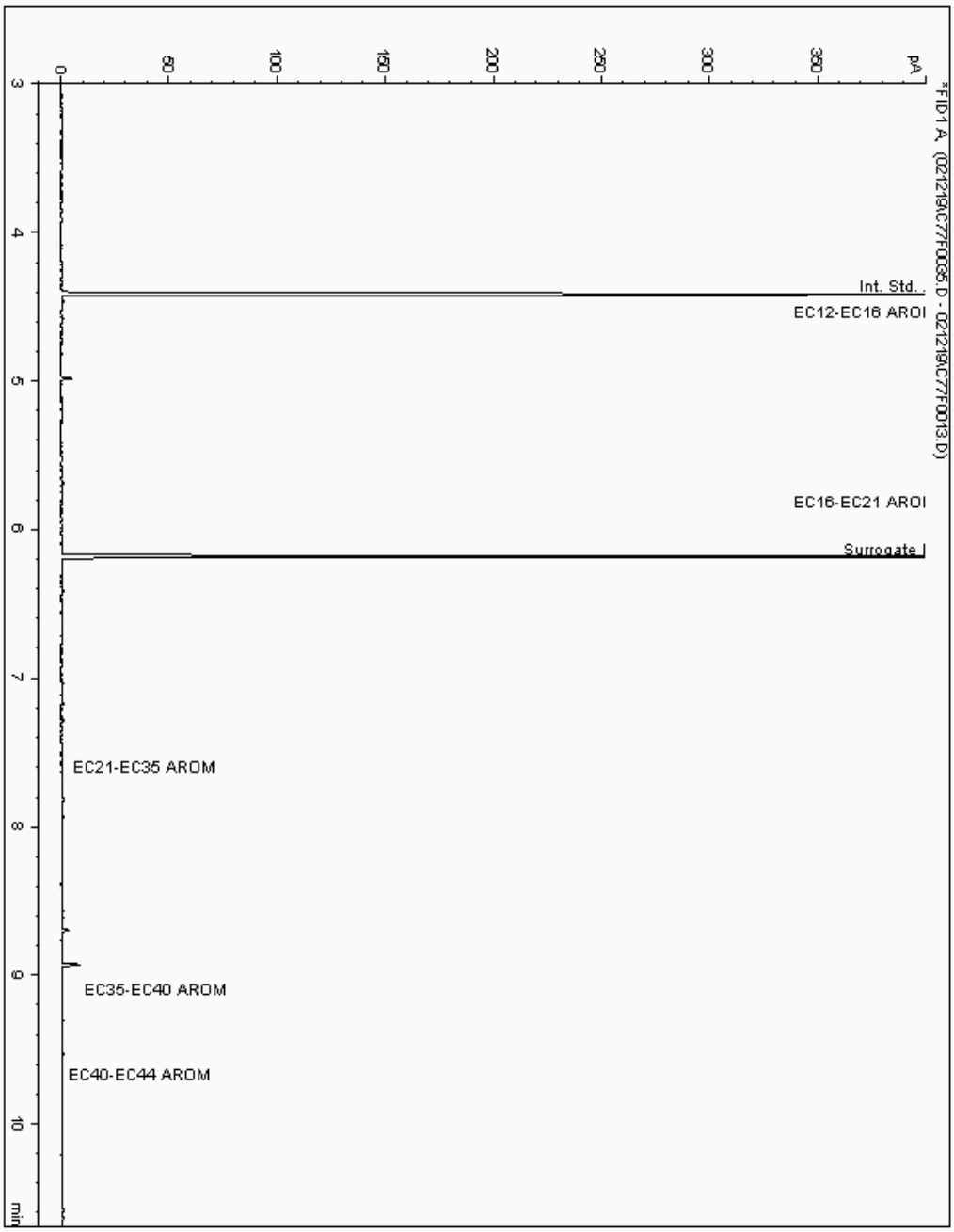
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19310484 **Depth :** 0.10 - 0.20
Sample ID : WS22

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18119300-
Date Acquired : 12/02/2019 23:25:40 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

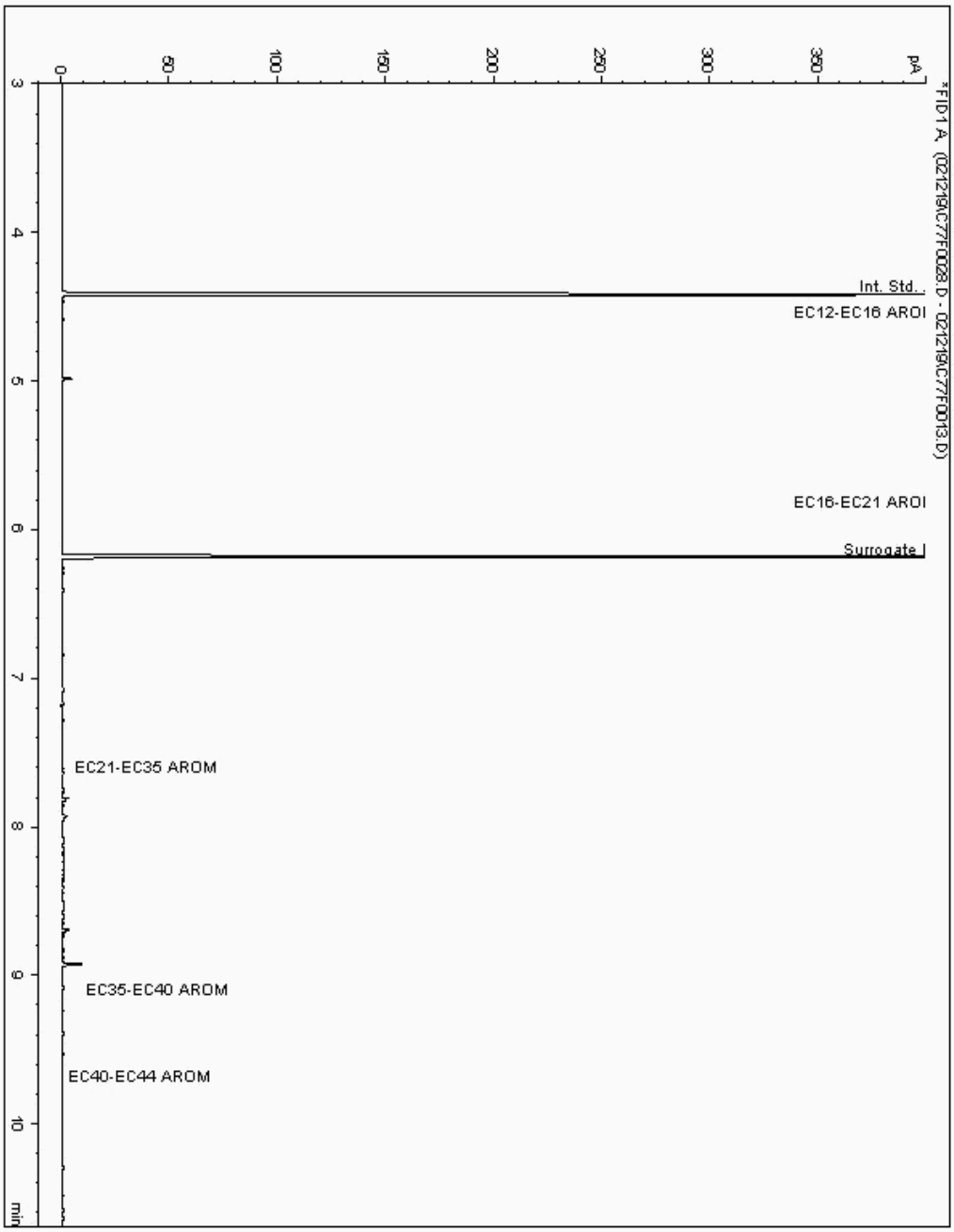
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19310494 **Depth :** 1.00
Sample ID : WS 34

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18121057-
Date Acquired : 12/02/2019 21:12:59 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

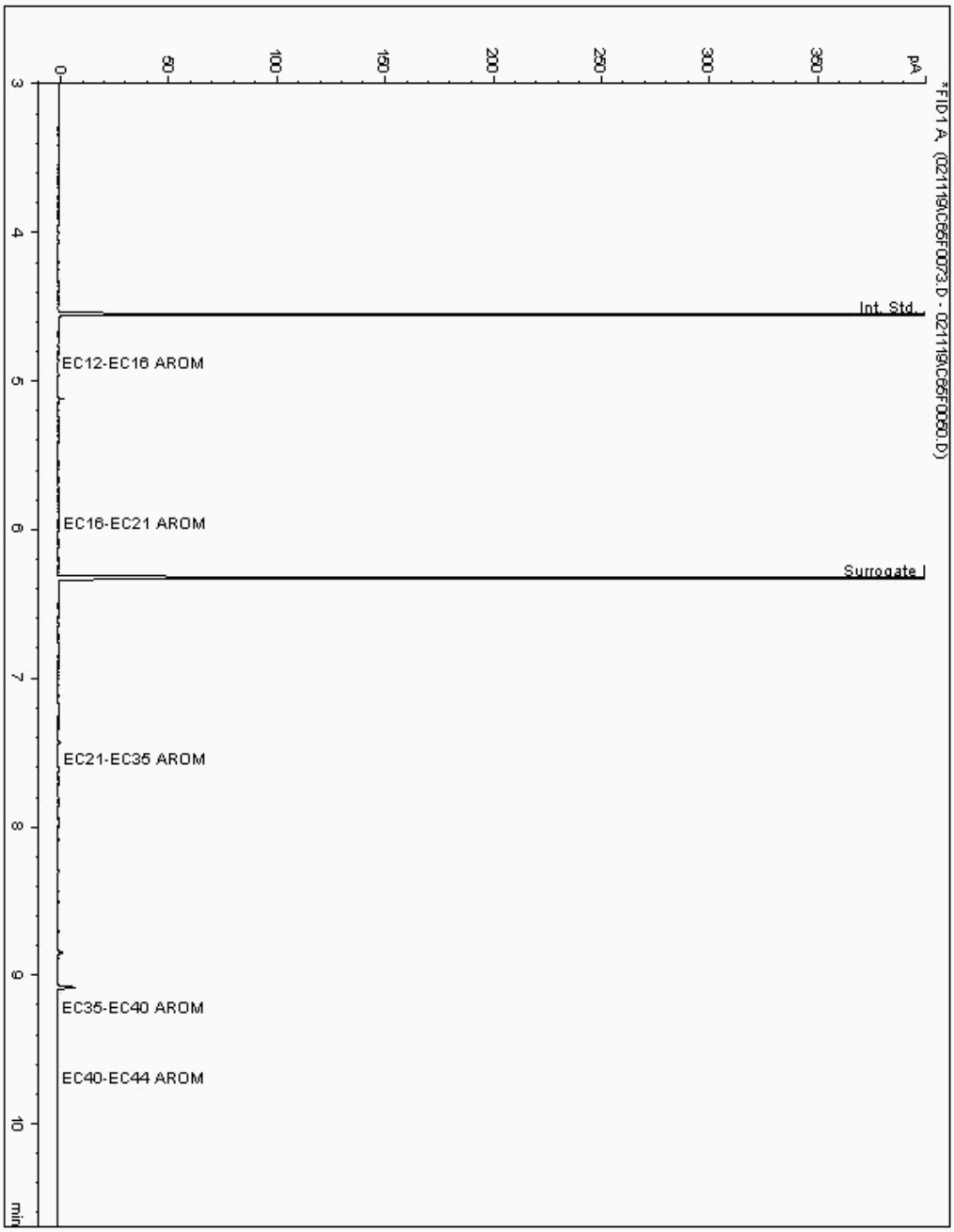
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19310586 **Depth :** 1.50
Sample ID : WS 40

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18122006-
Date Acquired : 12/02/2019 15:02:11 PM
Units : ppb
Dilution: WS 40[1.50] ->



CERTIFICATE OF ANALYSIS

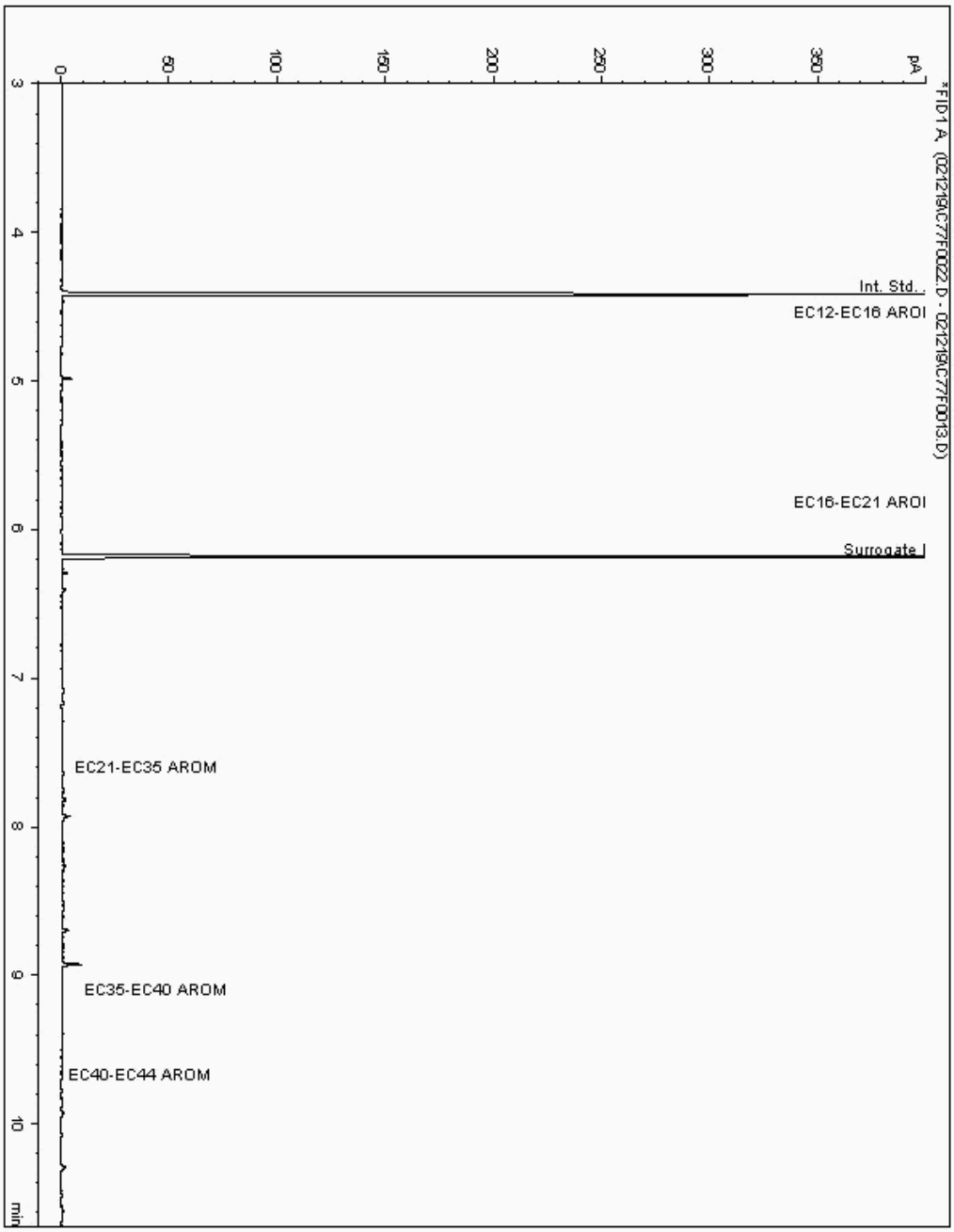
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19310602 **Depth :** 0.50
Sample ID : WS 36

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18121867-
Date Acquired : 12/02/2019 19:37:12 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

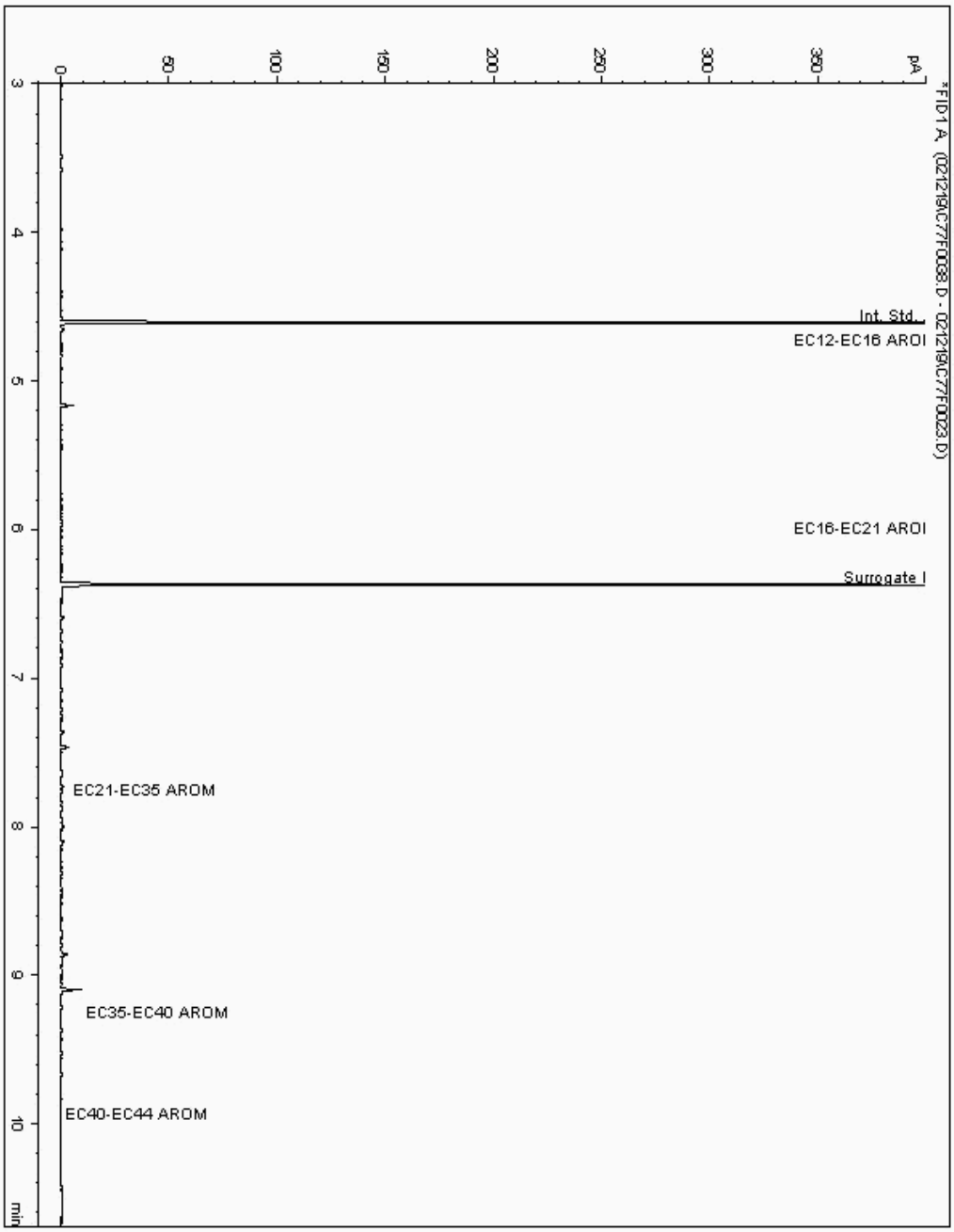
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19310628 **Depth :** 1.00
Sample ID : WS 41

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18118377-
Date Acquired : 2/12/2019 11:23:52 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

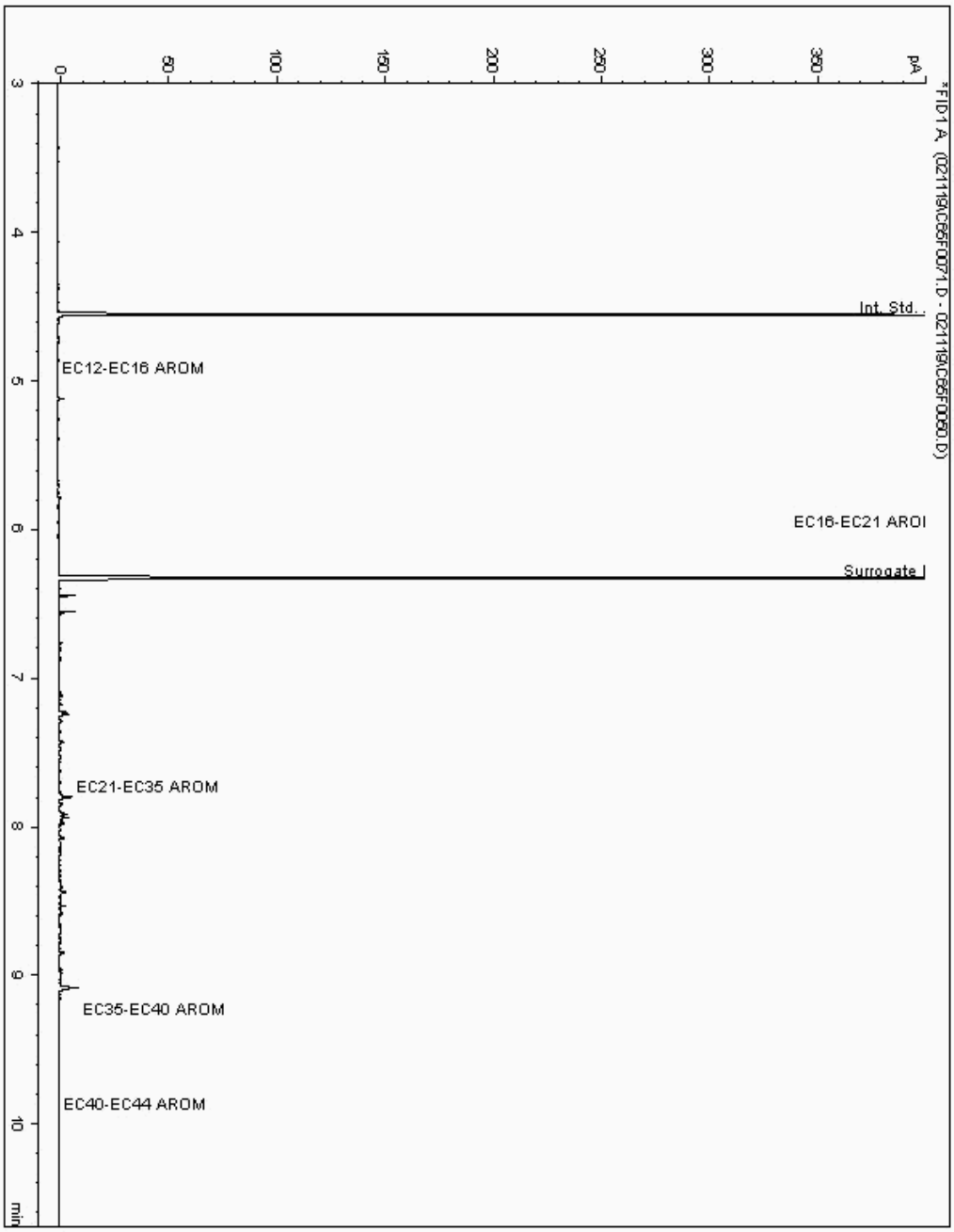
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19310694 **Depth :** 0.30
Sample ID : WS 45

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18120254-
Date Acquired : 12/02/2019 14:29:34 PM
Units : ppb
Dilution: WS 45[0.30] ->



CERTIFICATE OF ANALYSIS

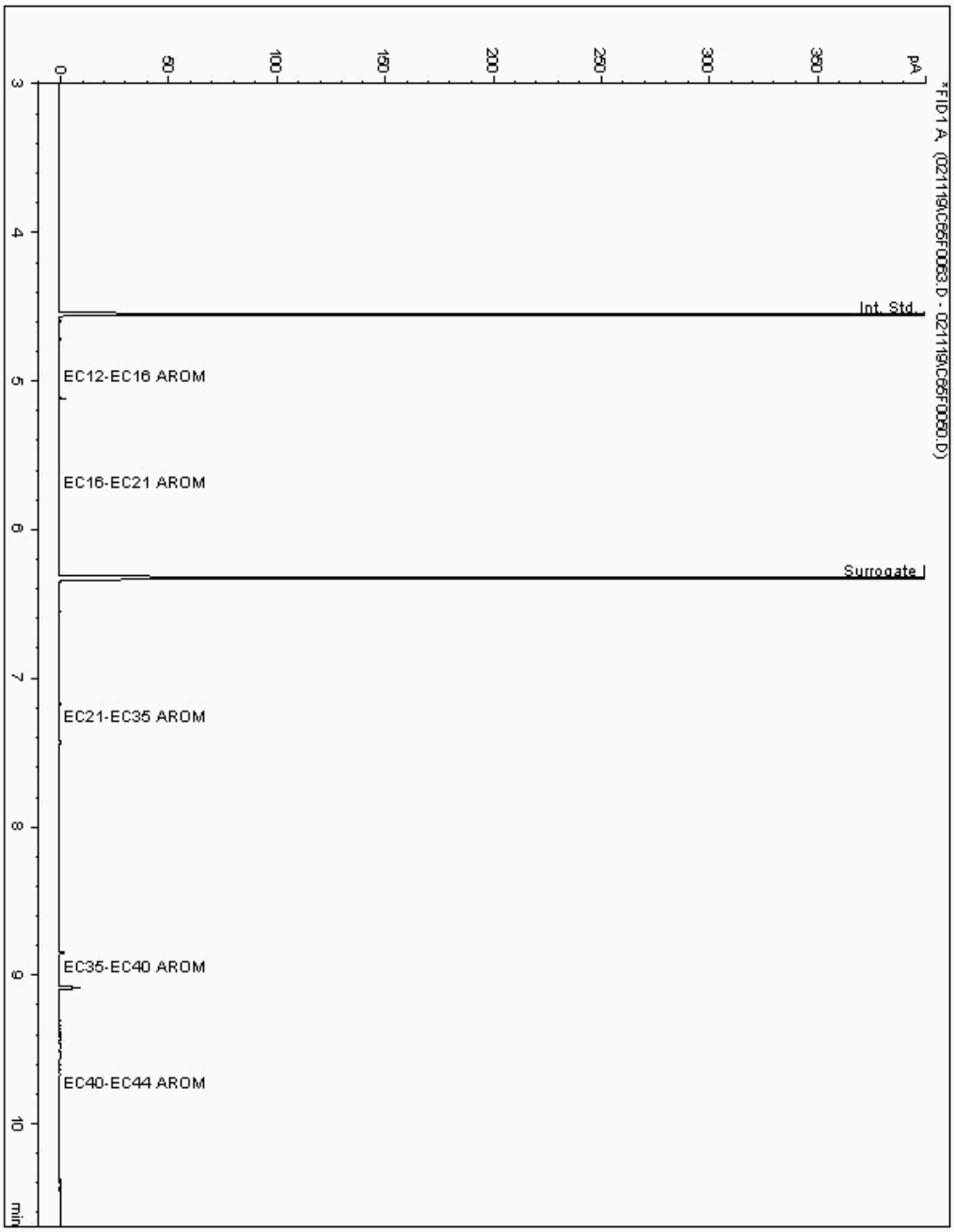
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19310699 **Depth :** 0.50
Sample ID : WS 30

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18122054-
Date Acquired : 12/02/2019 07:32:05 PM
Units : ppb
Dilution: WS 30[0.50] ->



CERTIFICATE OF ANALYSIS

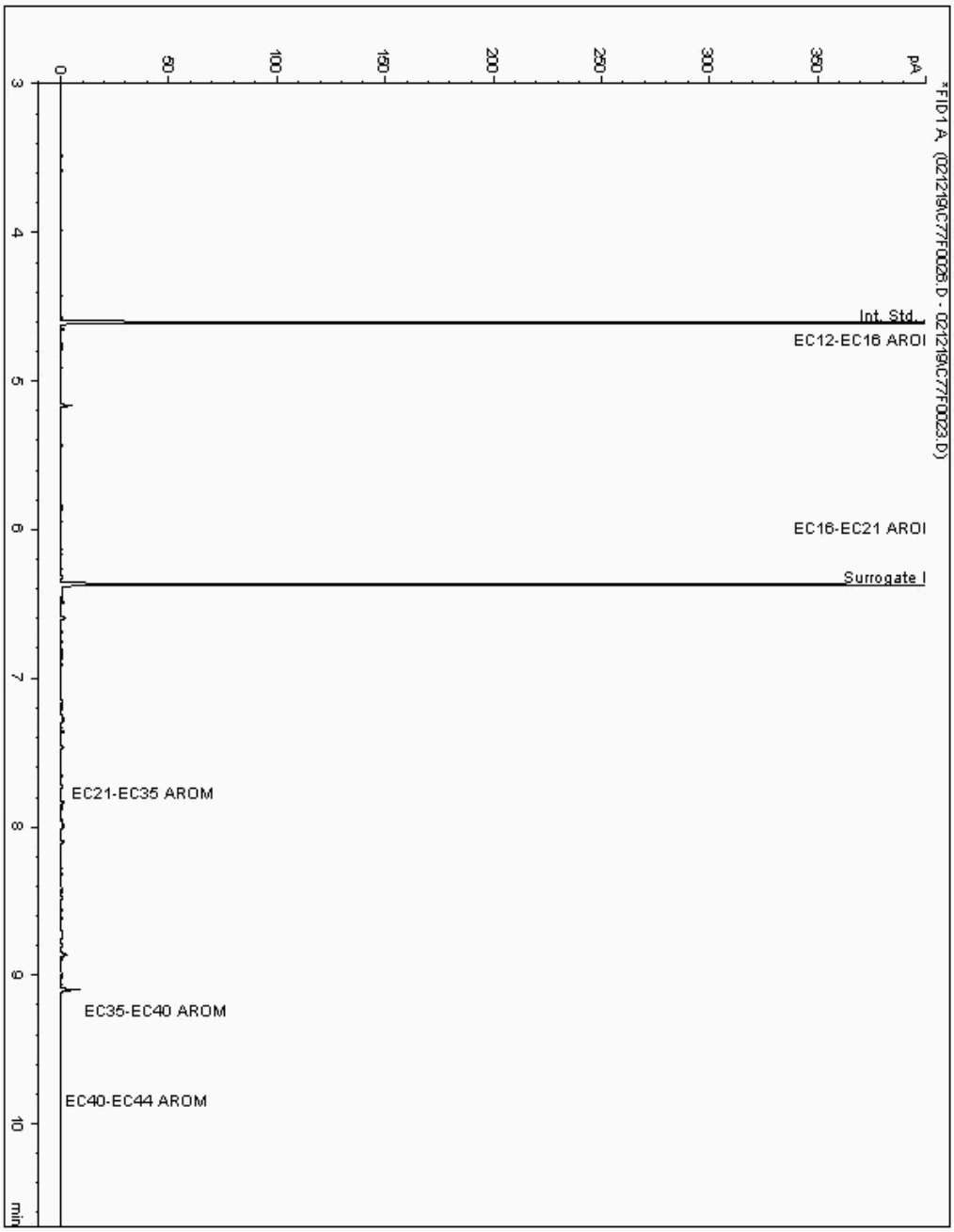
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19310838 **Depth :** 0.50
Sample ID : WS 41

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18118189-
Date Acquired : 2/12/2019 7:40:50 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

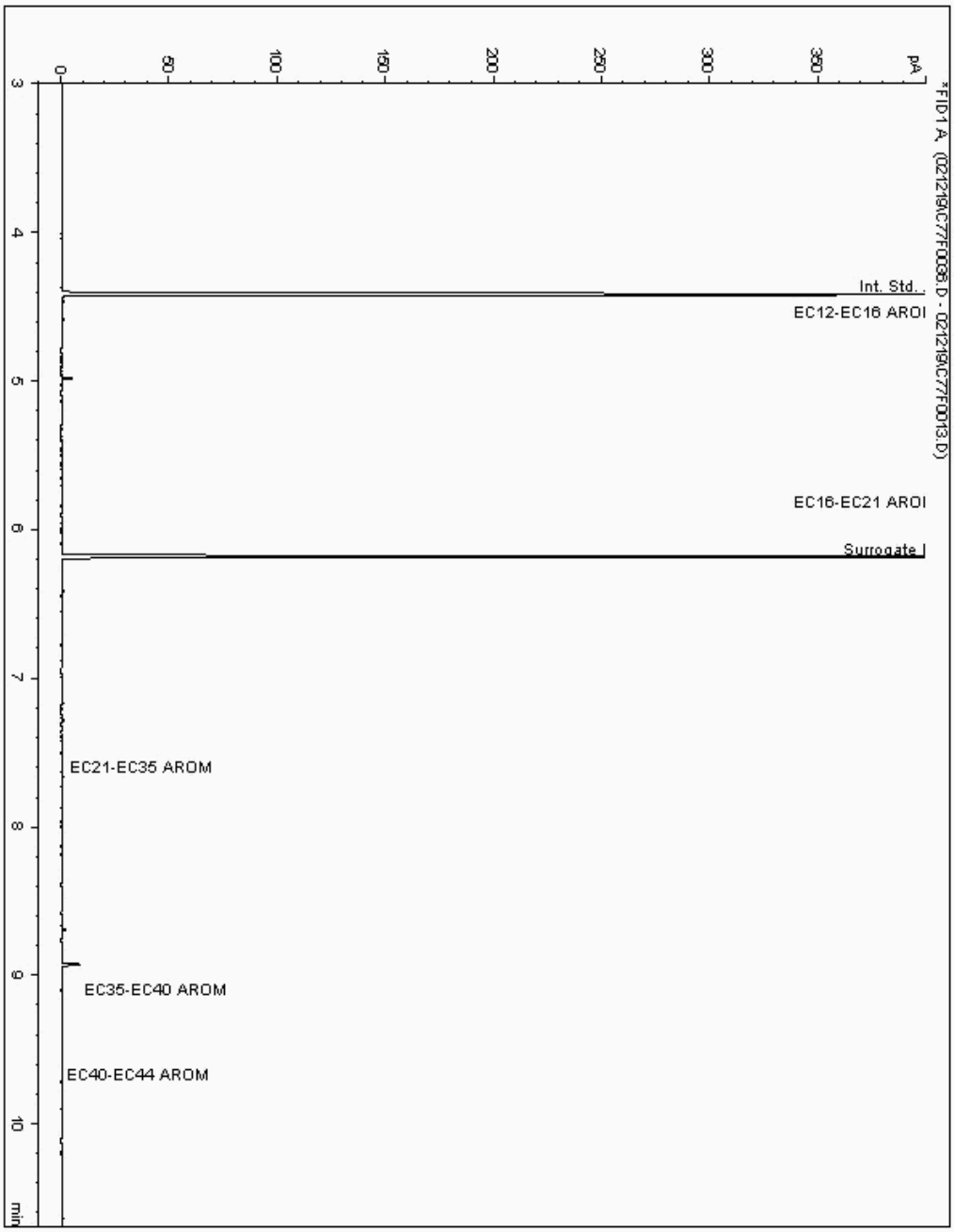
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19310848 **Depth :** 1.00
Sample ID : WS58

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18122318-
Date Acquired : 12/02/2019 23:45:43 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

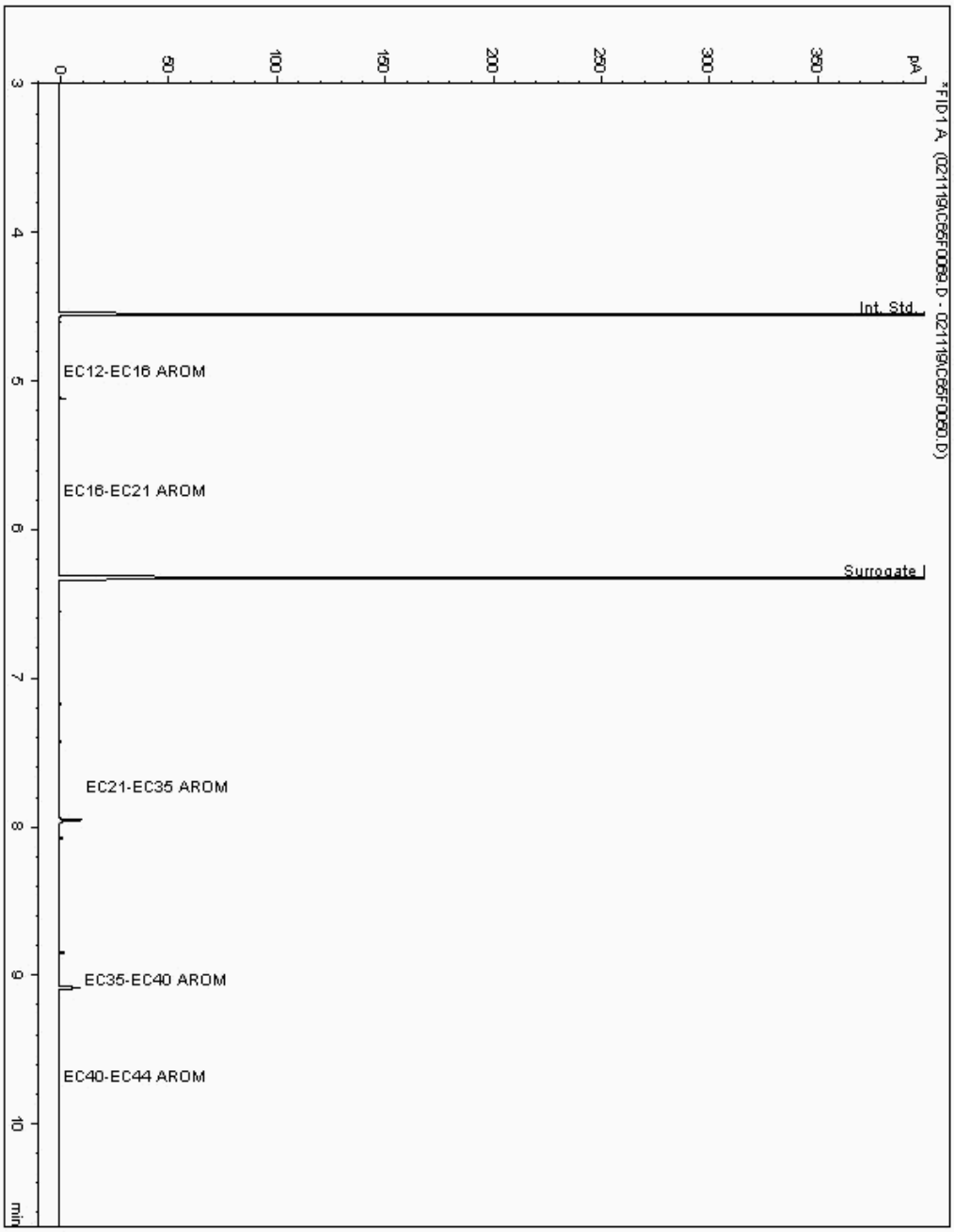
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19310859 **Depth :** 0.20
Sample ID : WS 37

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18119846-
Date Acquired : 12/02/2019 09:24:29 PM
Units : ppb
Dilution: WS 37[0.20] ->



CERTIFICATE OF ANALYSIS

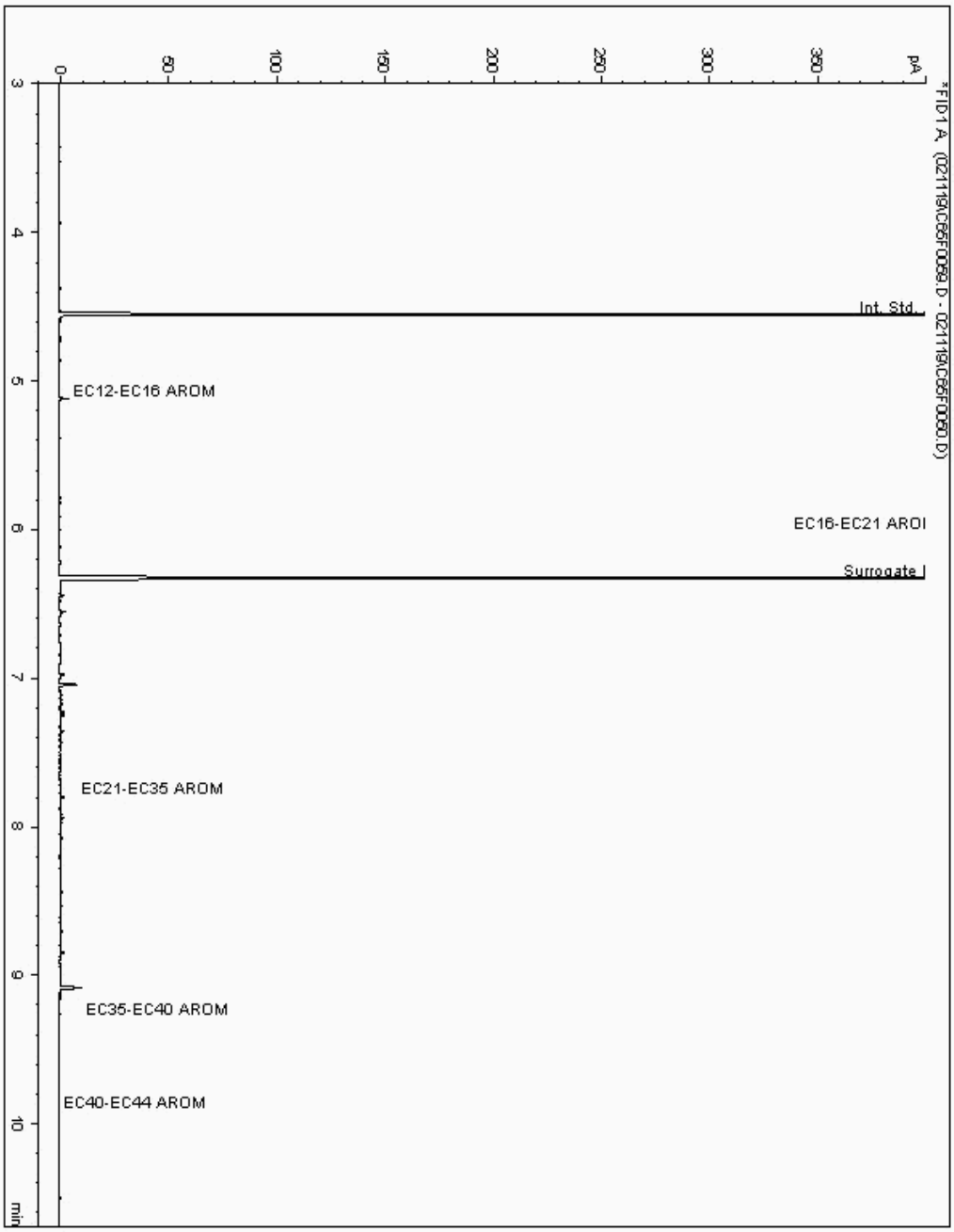
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19310865 **Depth :** 1.00
Sample ID : WS 45

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18120378-
Date Acquired : 12/02/2019 06:19:44 PM
Units : ppb
Dilution: WS 45[1.00] ->



CERTIFICATE OF ANALYSIS

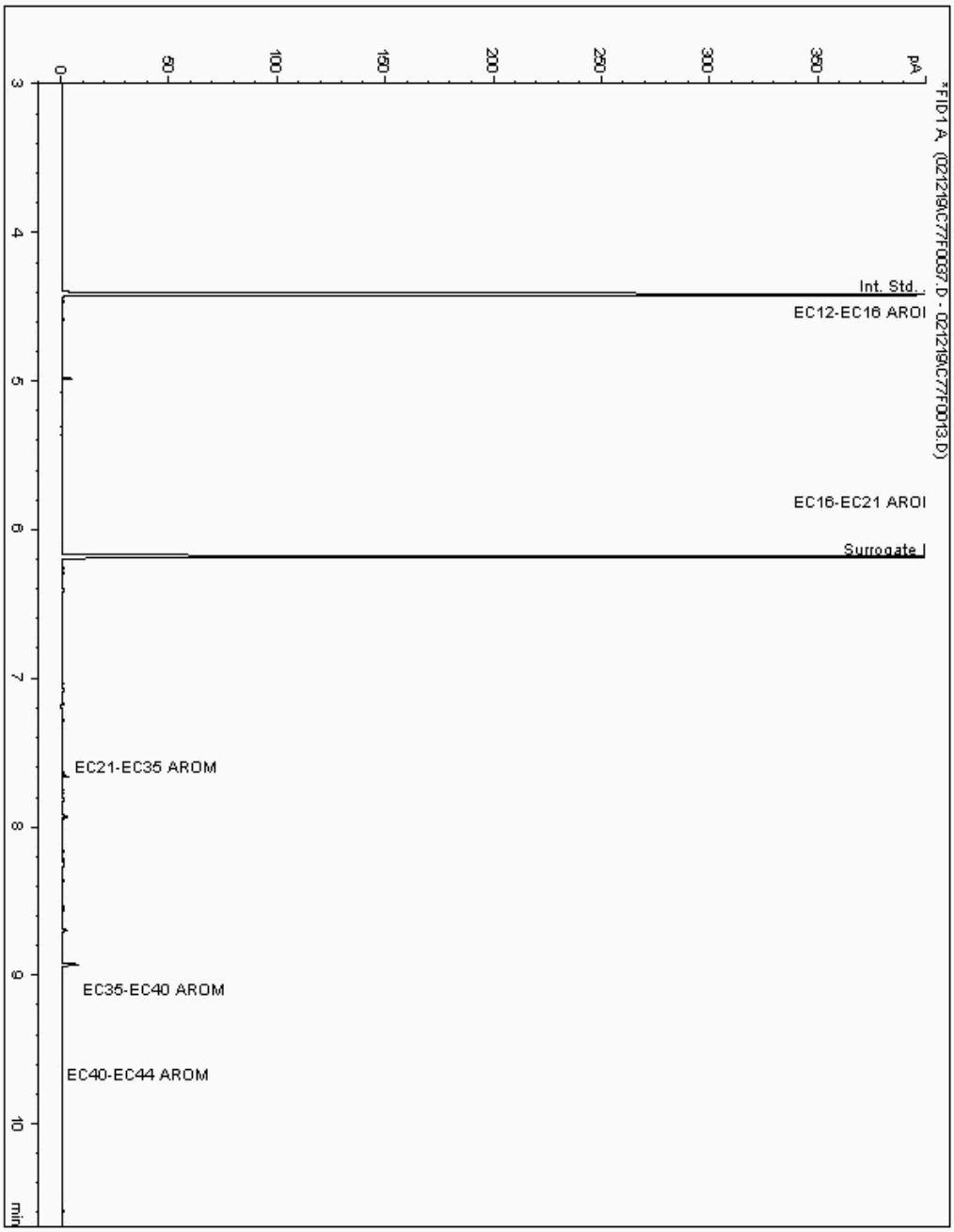
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19310965 **Depth :** 0.10
Sample ID : WS 33

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18118230-
Date Acquired : 13/02/2019 00:06:01 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

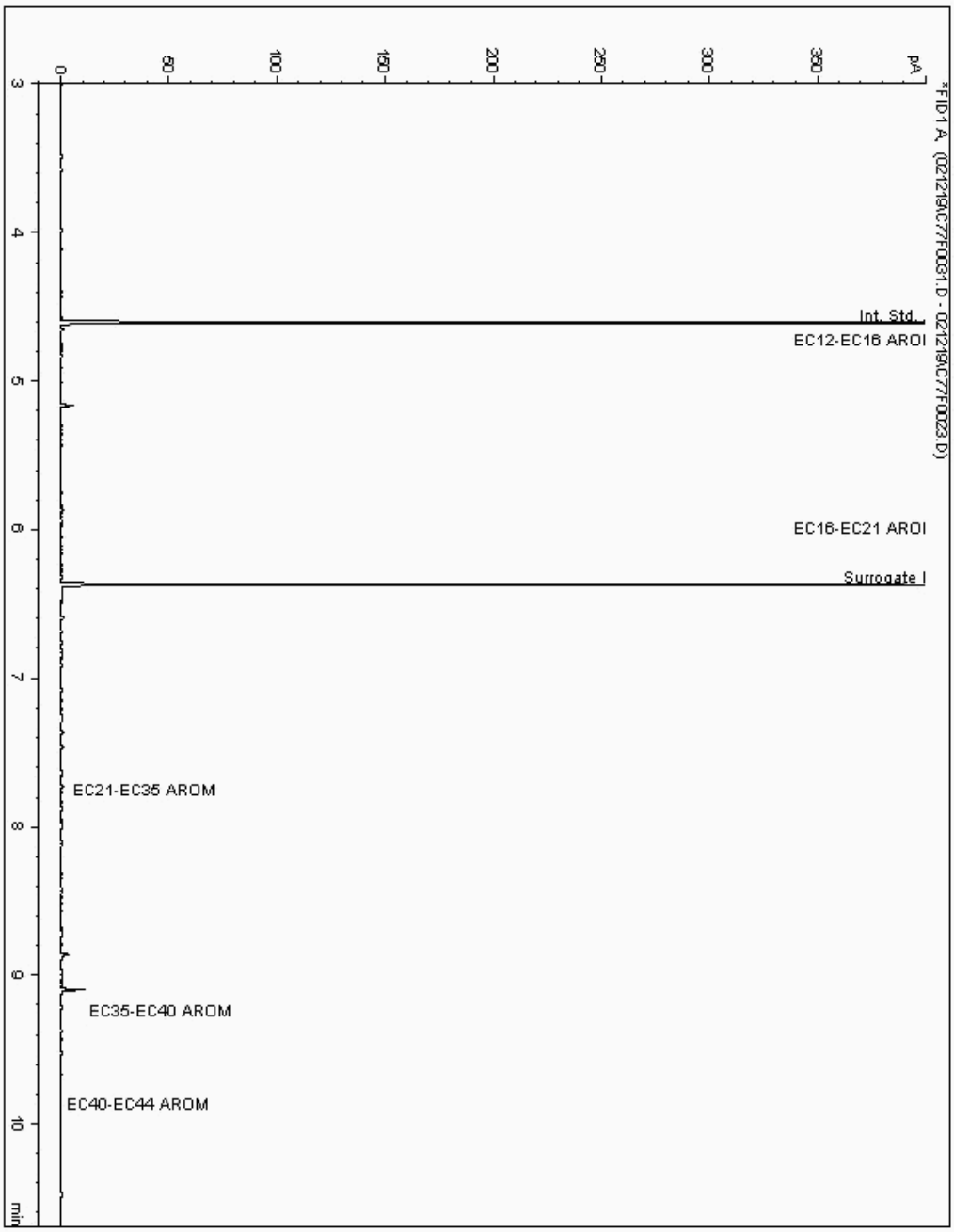
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19311002 **Depth :** 0.70
Sample ID : WS 46

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18120566-
Date Acquired : 2/12/2019 9:20:30 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

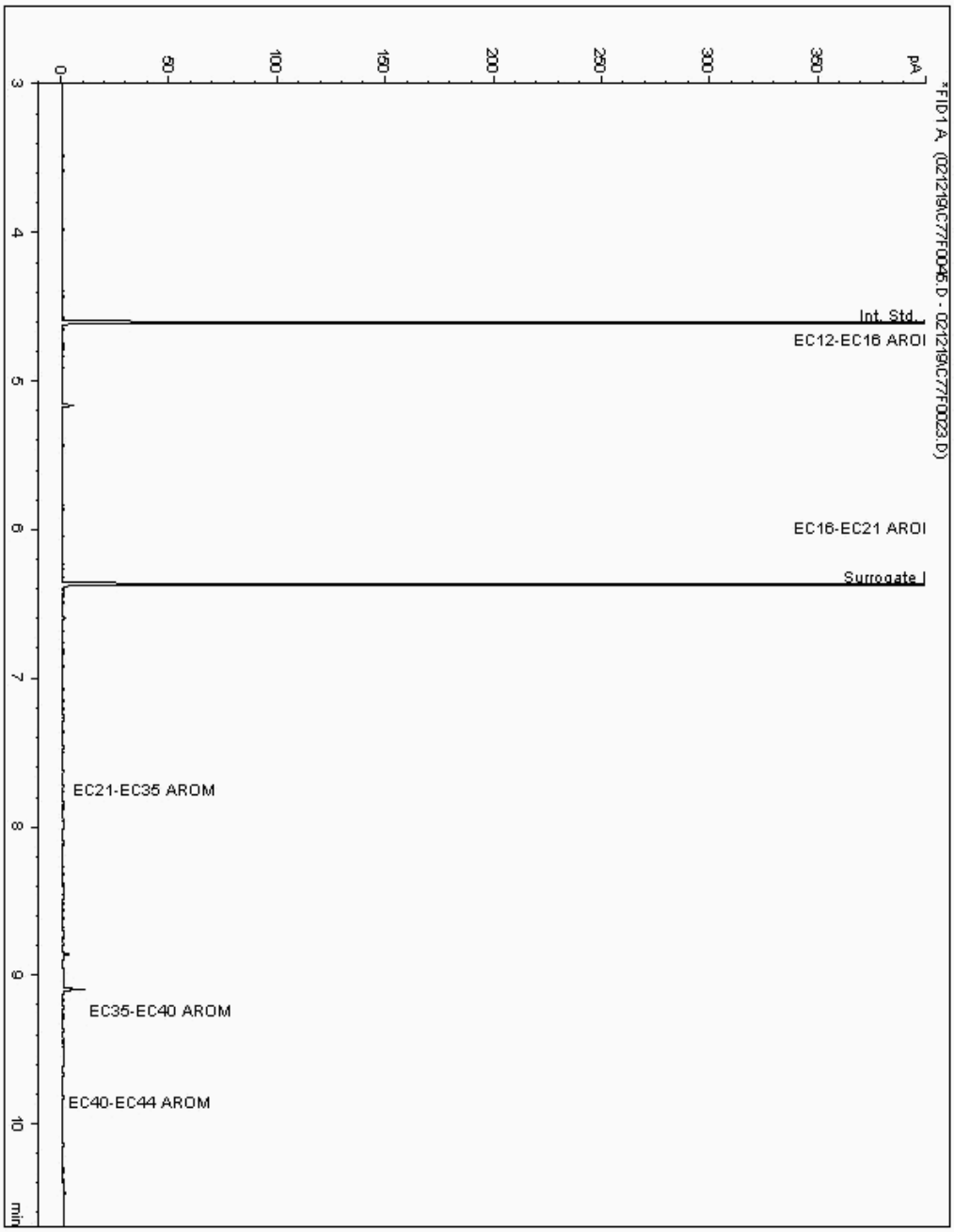
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19311038 **Depth :** 0.30
Sample ID : WS58

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18122289-
Date Acquired : 2/13/2019 1:27:19 AM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

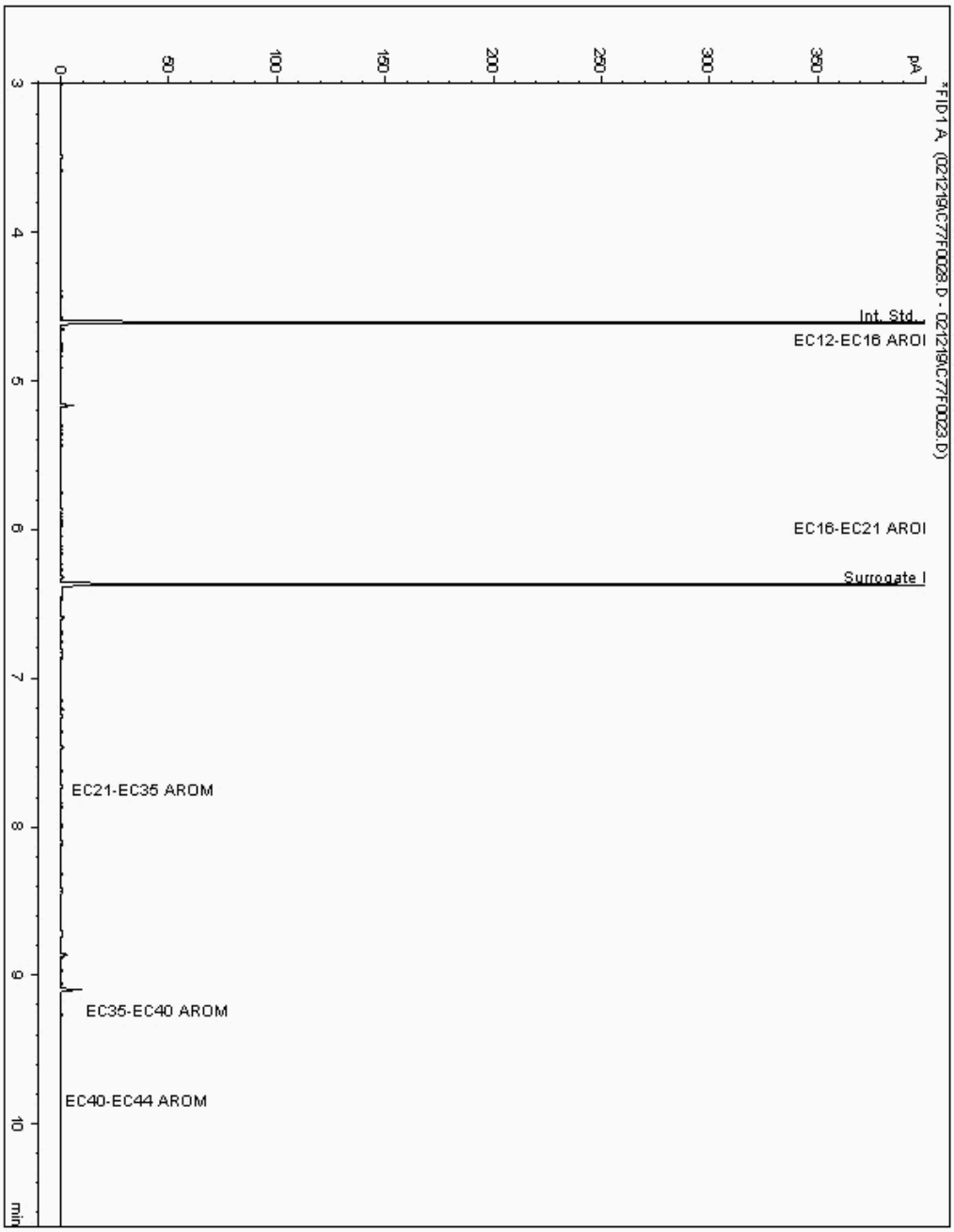
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19311137 **Depth :** 1.20
Sample ID : WS 16

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18118404-
Date Acquired : 2/12/2019 8:20:41 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

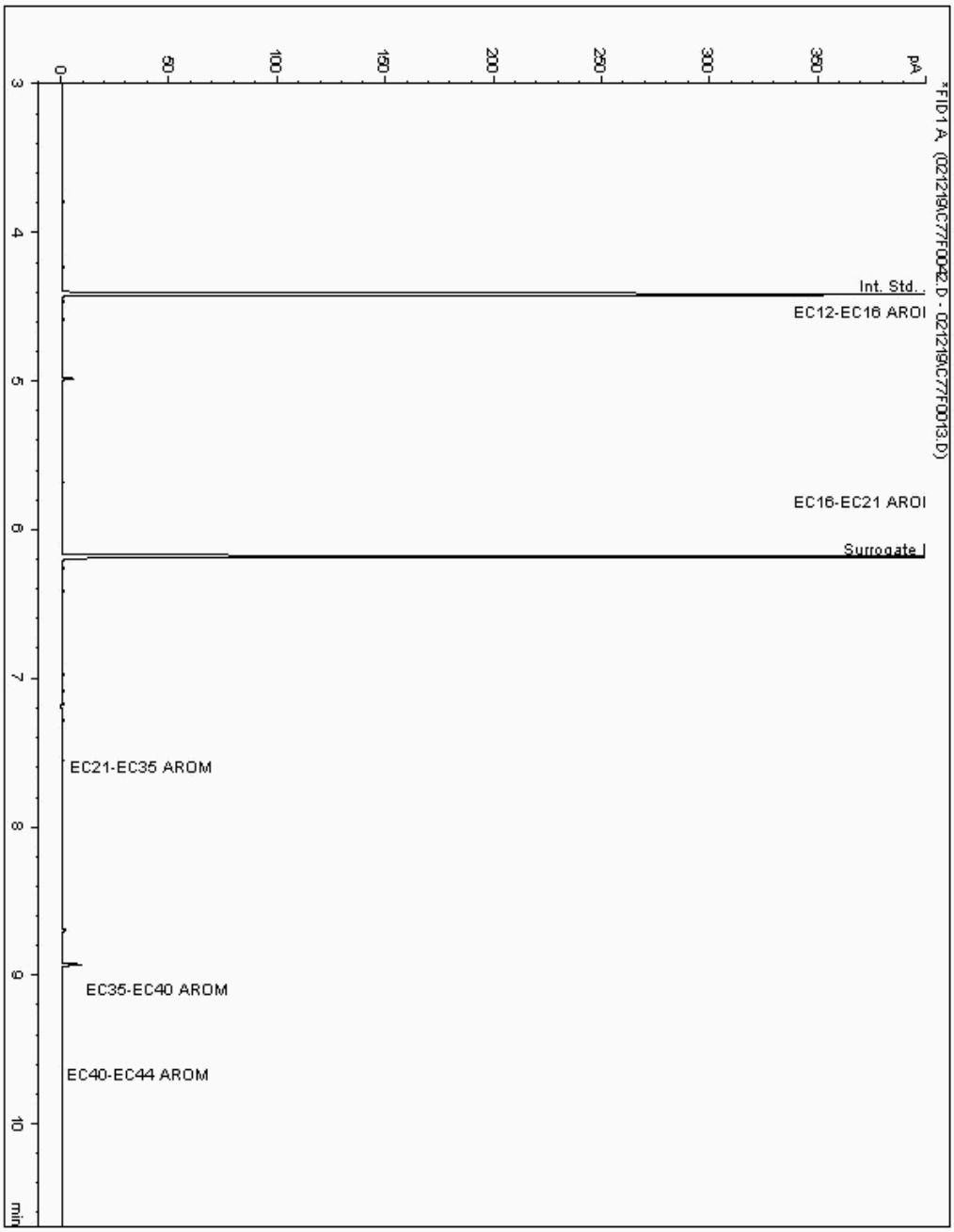
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19311140 **Depth :** 0.50
Sample ID : WS 33

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18118252-
Date Acquired : 13/02/2019 01:29:59 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

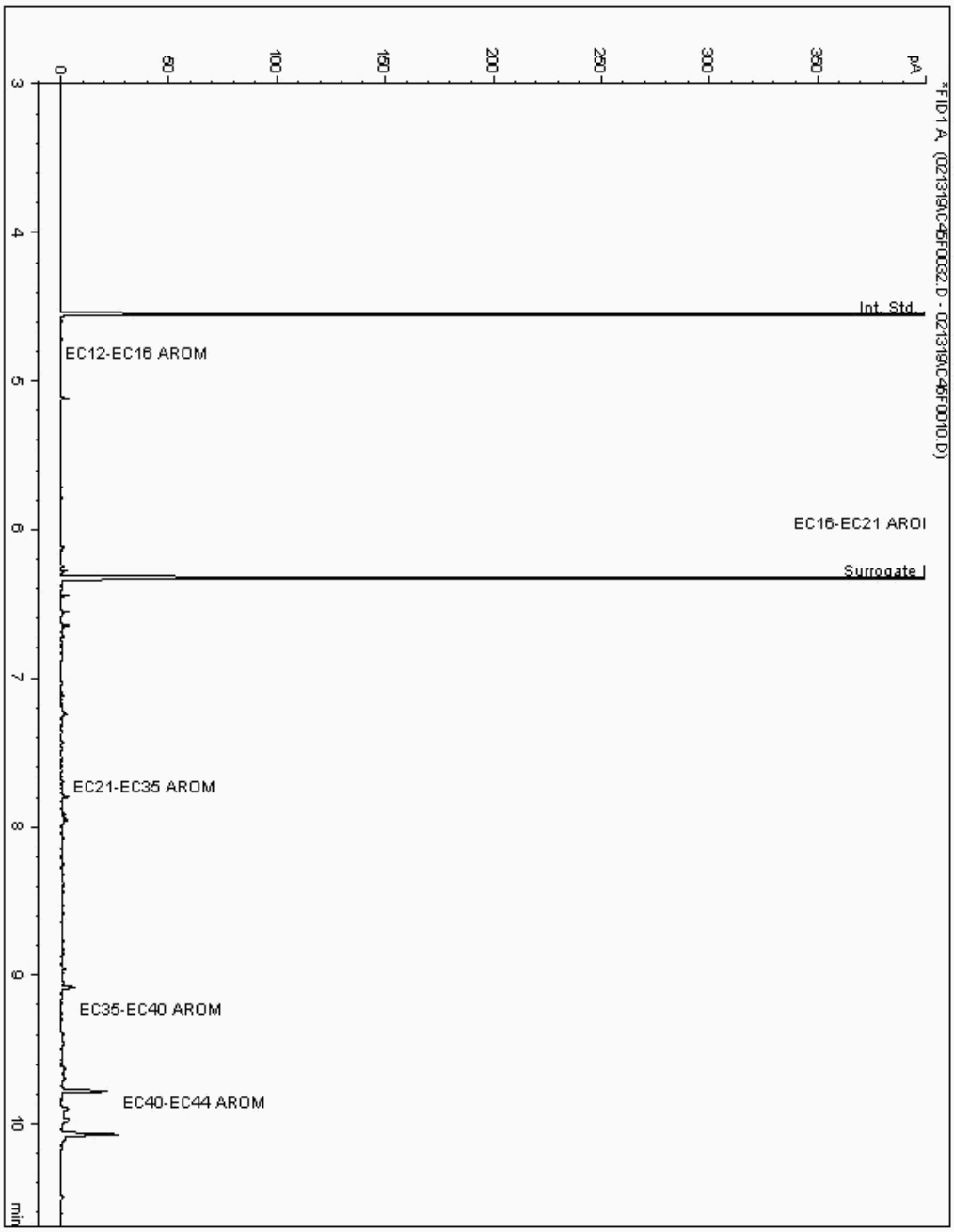
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19311357 **Depth :** 0.10
Sample ID : WS54

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18122236-
Date Acquired : 13/02/2019 19:37:37 PM
Units : ppb
Dilution: WS54[0.10] ->



CERTIFICATE OF ANALYSIS

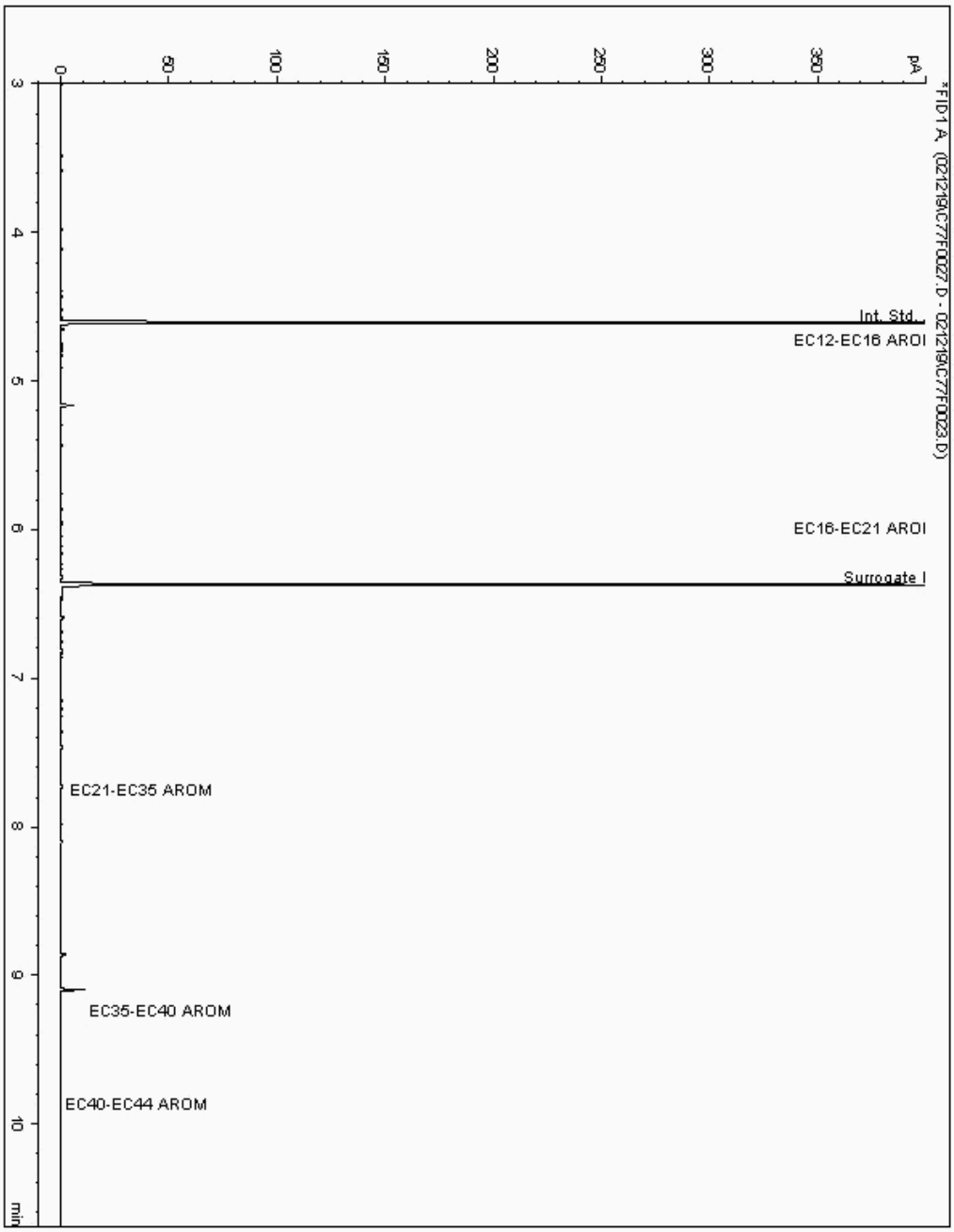
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19311372 **Depth :** 0.70
Sample ID : WS 26

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18118274-
Date Acquired : 2/12/2019 8:00:45 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

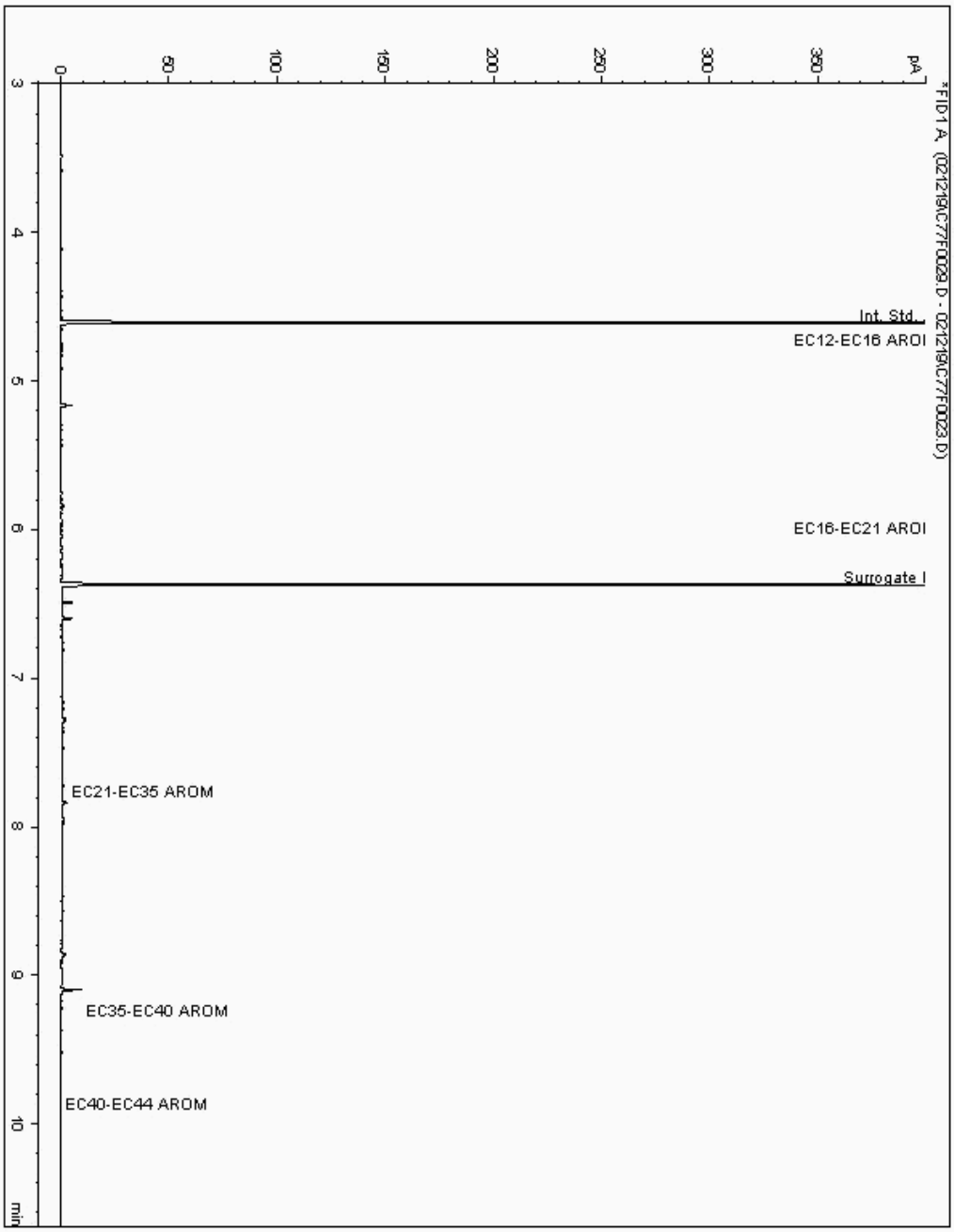
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19311412 **Depth :** 0.20
Sample ID : WS 23

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18118464-
Date Acquired : 2/12/2019 8:40:38 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

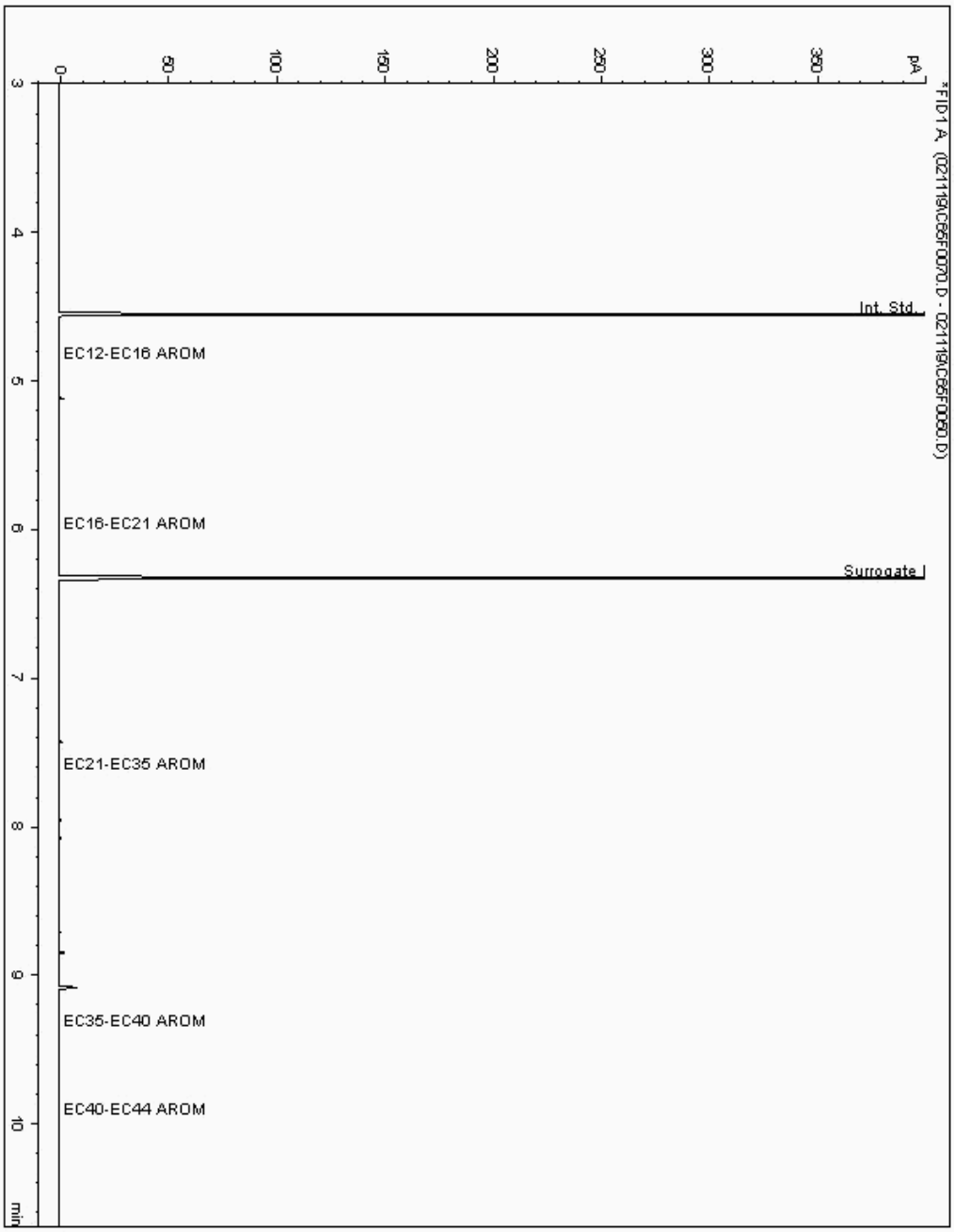
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19311486 **Depth :** 0.40
Sample ID : WS35

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18119198-
Date Acquired : 12/02/2019 09:44:35 PM
Units : ppb
Dilution: WS35[0.40] ->



CERTIFICATE OF ANALYSIS

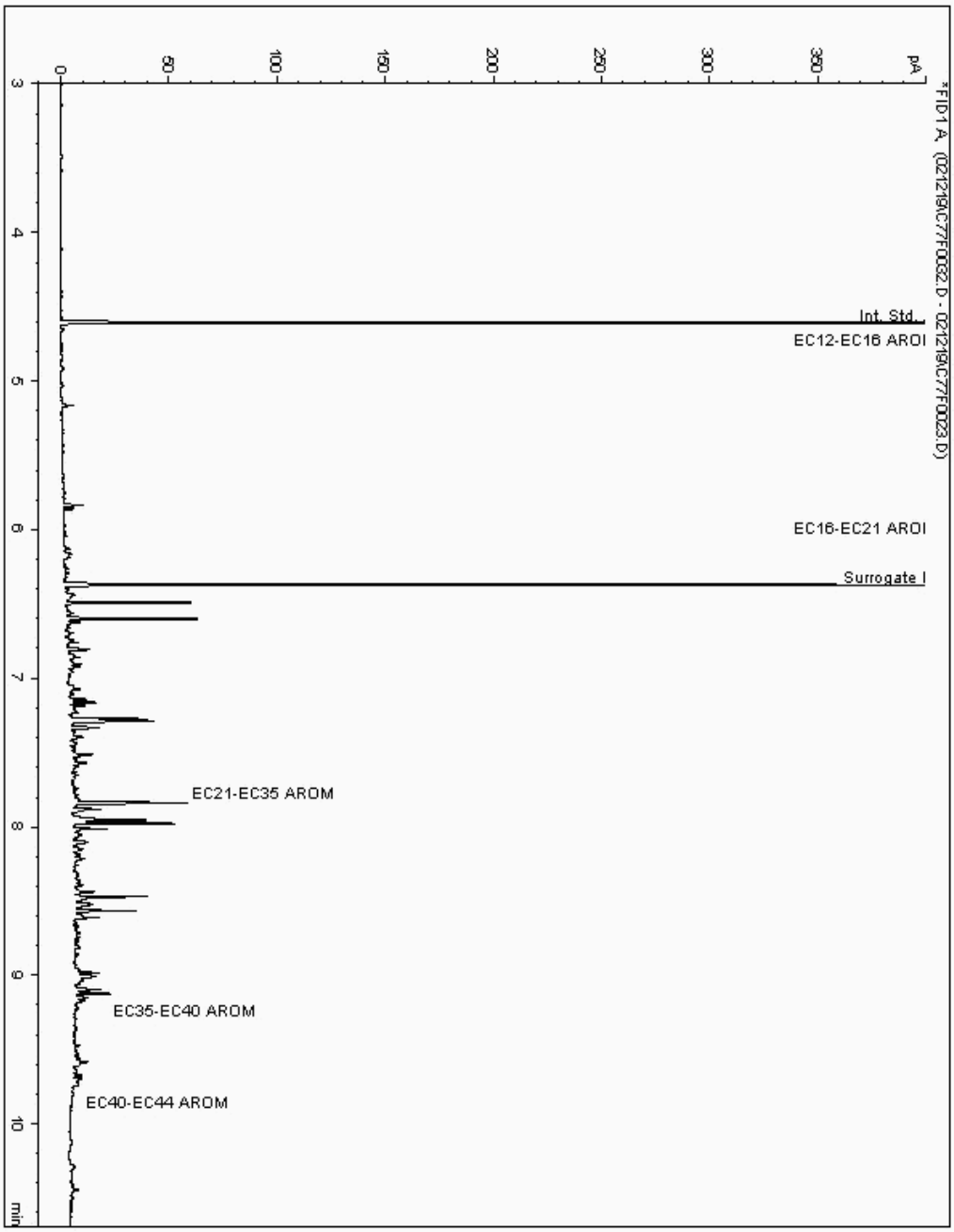
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19311505 **Depth :** 0.20
Sample ID : WS 43

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18119953-
Date Acquired : 2/12/2019 9:40:23 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

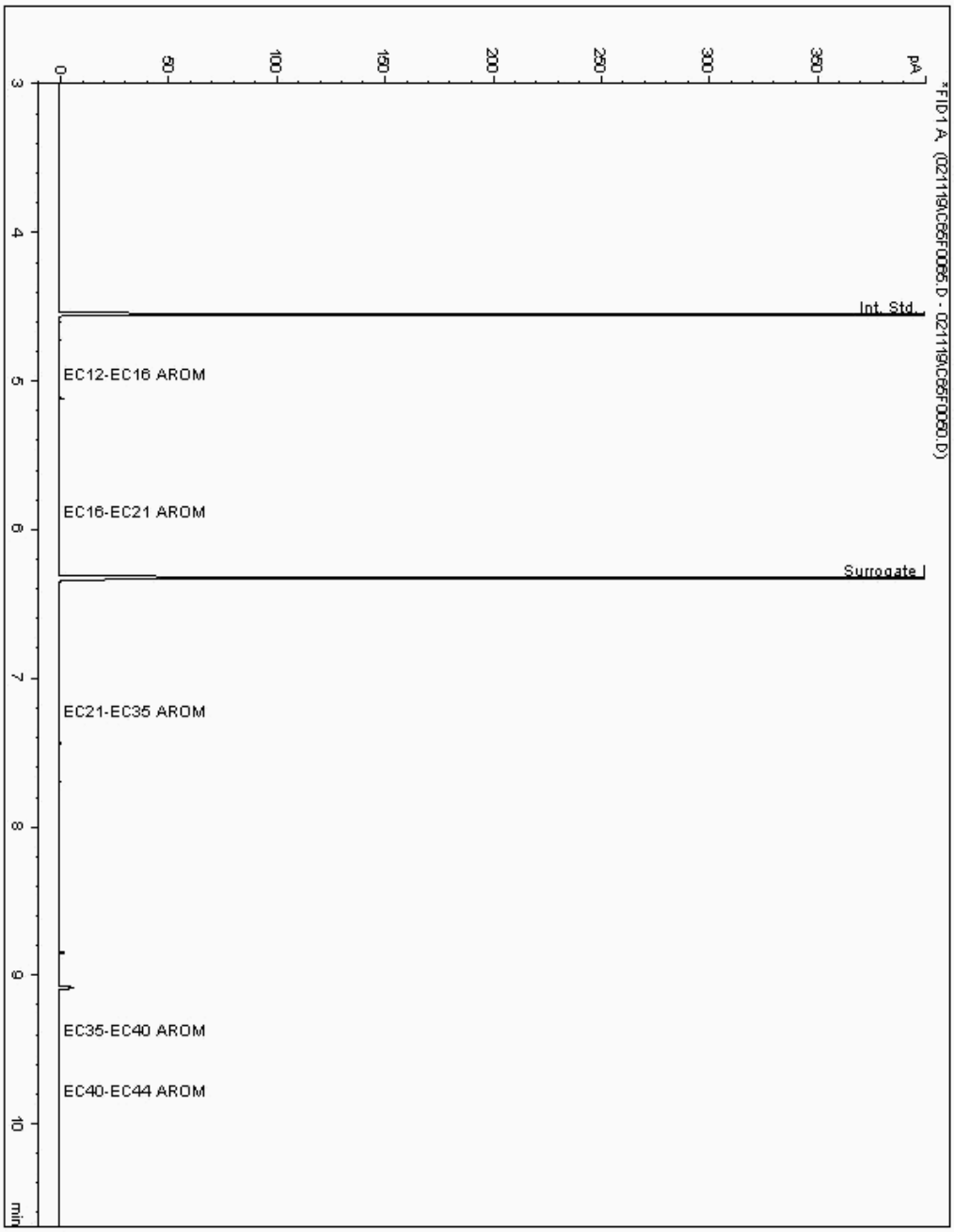
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19311519 **Depth :** 0.30 - 0.50
Sample ID : WS 23

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18118341-
Date Acquired : 12/02/2019 08:12:14 PM
Units : ppb
Dilution: WS 23[0.30 - 0.50] ->



CERTIFICATE OF ANALYSIS

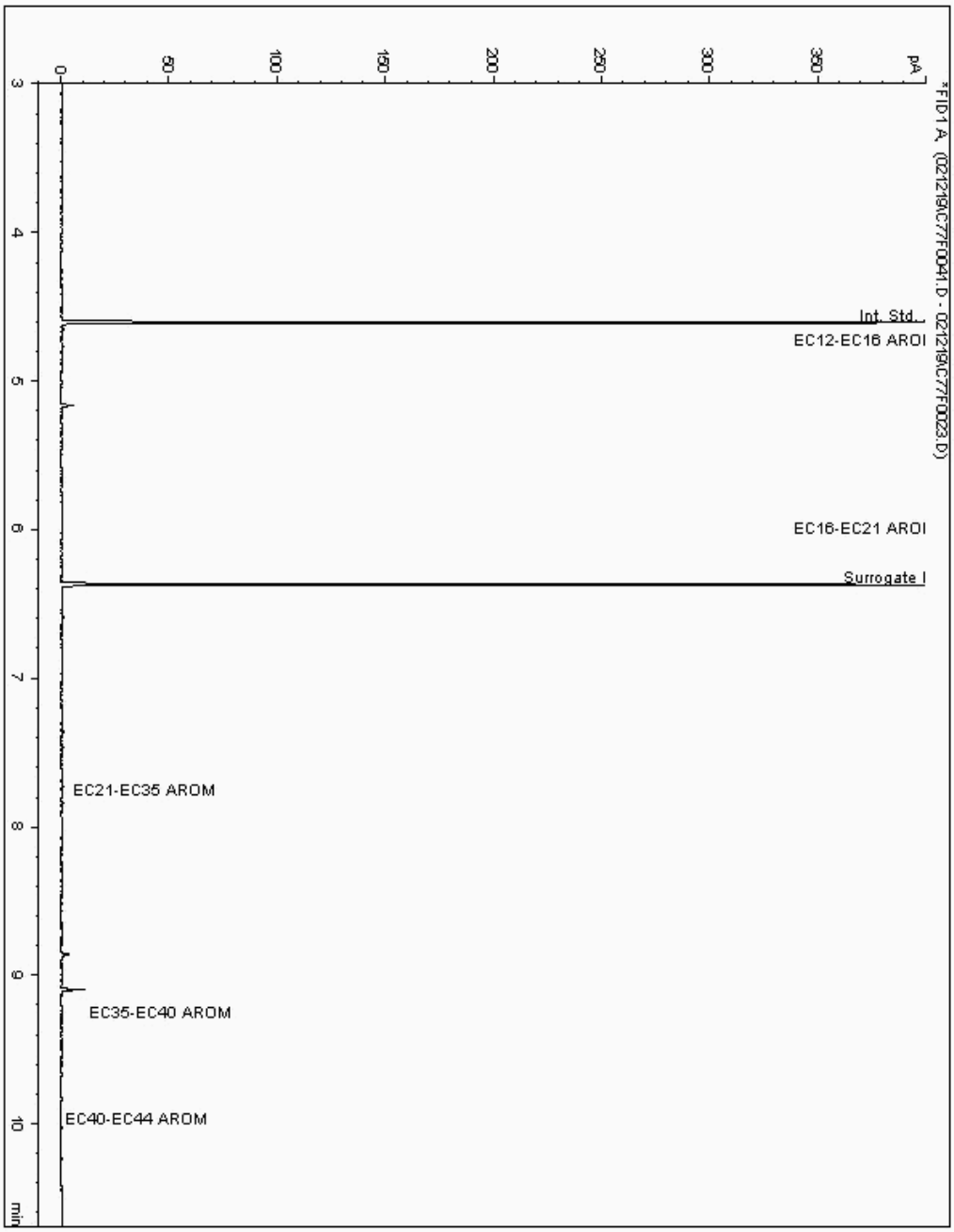
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19311677 **Depth :** 0.50
Sample ID : WS54

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18122266-
Date Acquired : 2/13/2019 12:23:47 AM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

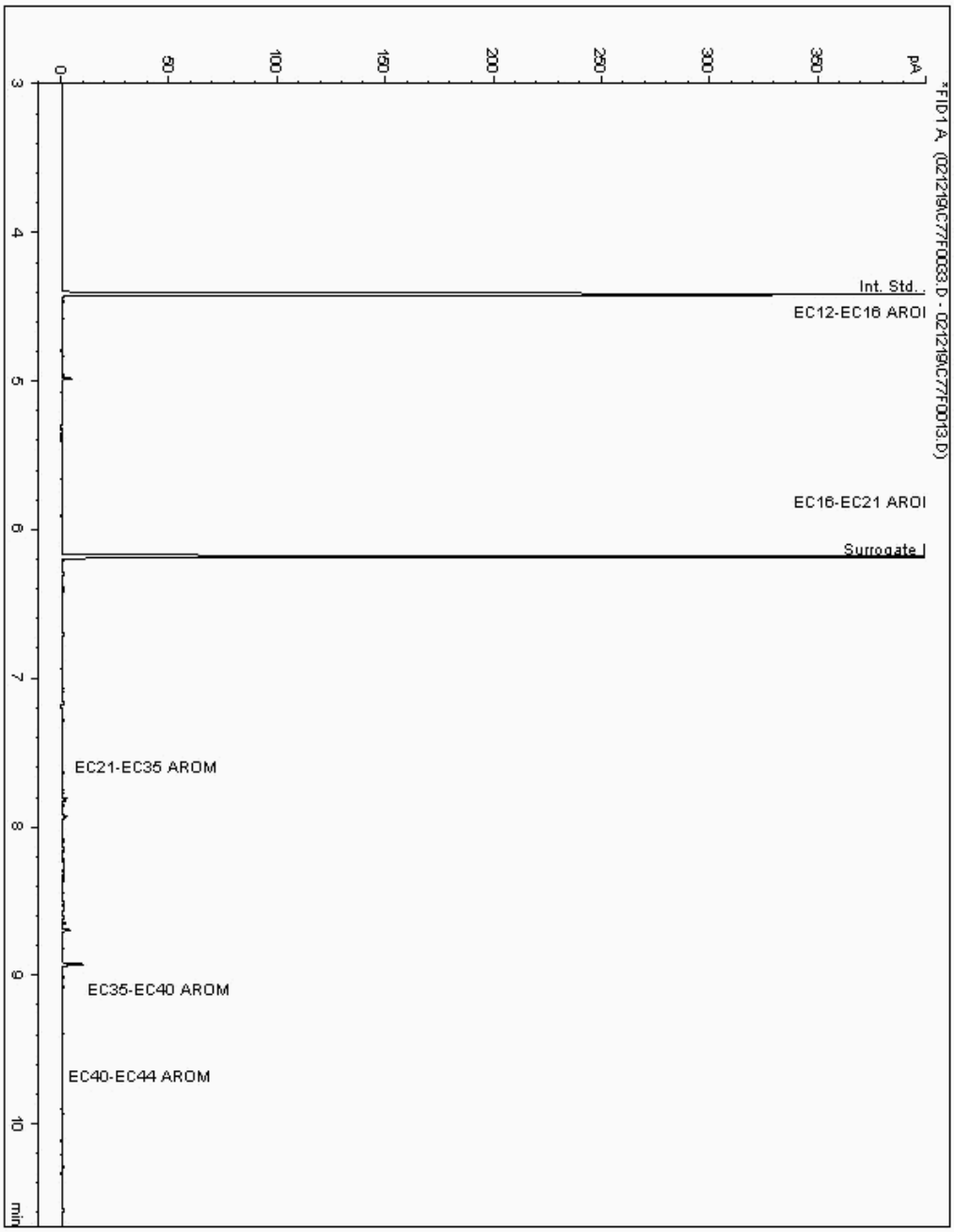
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19311745 **Depth :** 0.40
Sample ID : WS29

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18119248-
Date Acquired : 12/02/2019 22:45:18 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

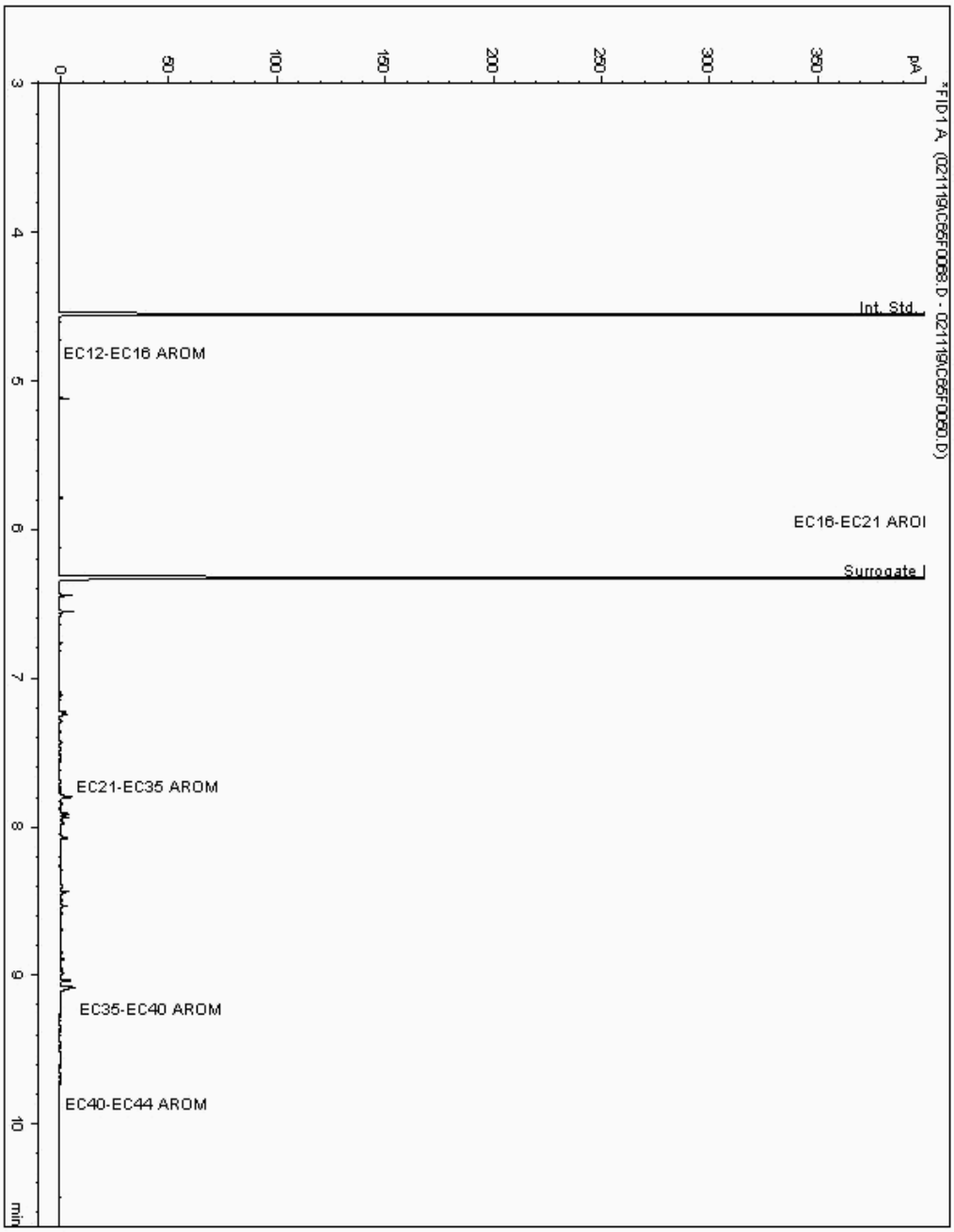
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19311753 **Depth :** 0.50
Sample ID : WS53

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18122031-
Date Acquired : 12/02/2019 09:04:20 PM
Units : ppb
Dilution: WS53[0.50] ->



CERTIFICATE OF ANALYSIS

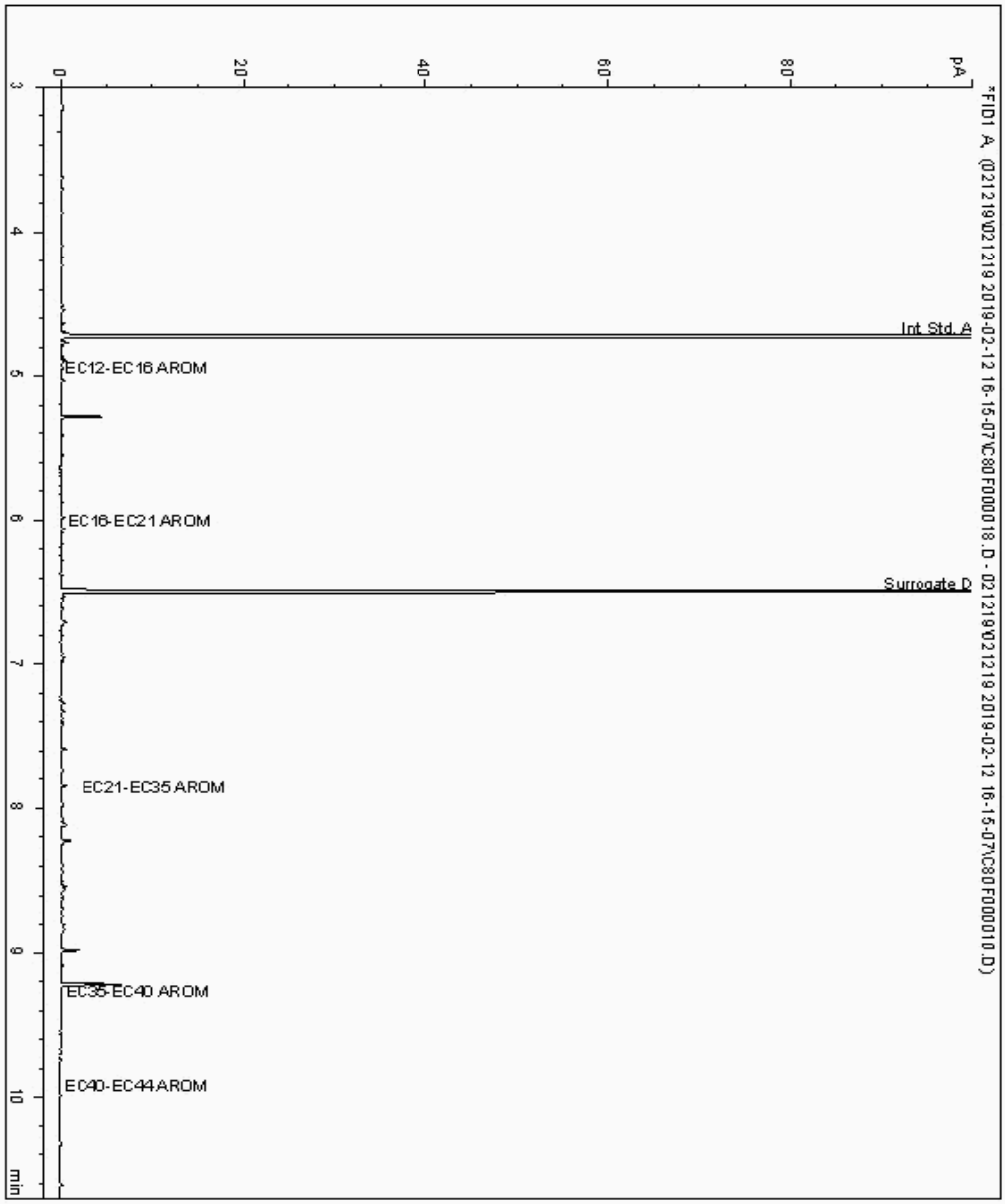
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19311891 **Depth :** 0.70 - 0.90
Sample ID : WS39

Speciated TPH - AROMS (C12 - C44)

Sample Identity: 18119174-
Date Acquired : 12/02/19 21:58:21
Units : ppb
Dilution :
CF : 1
Multiplier : 0.990



CERTIFICATE OF ANALYSIS

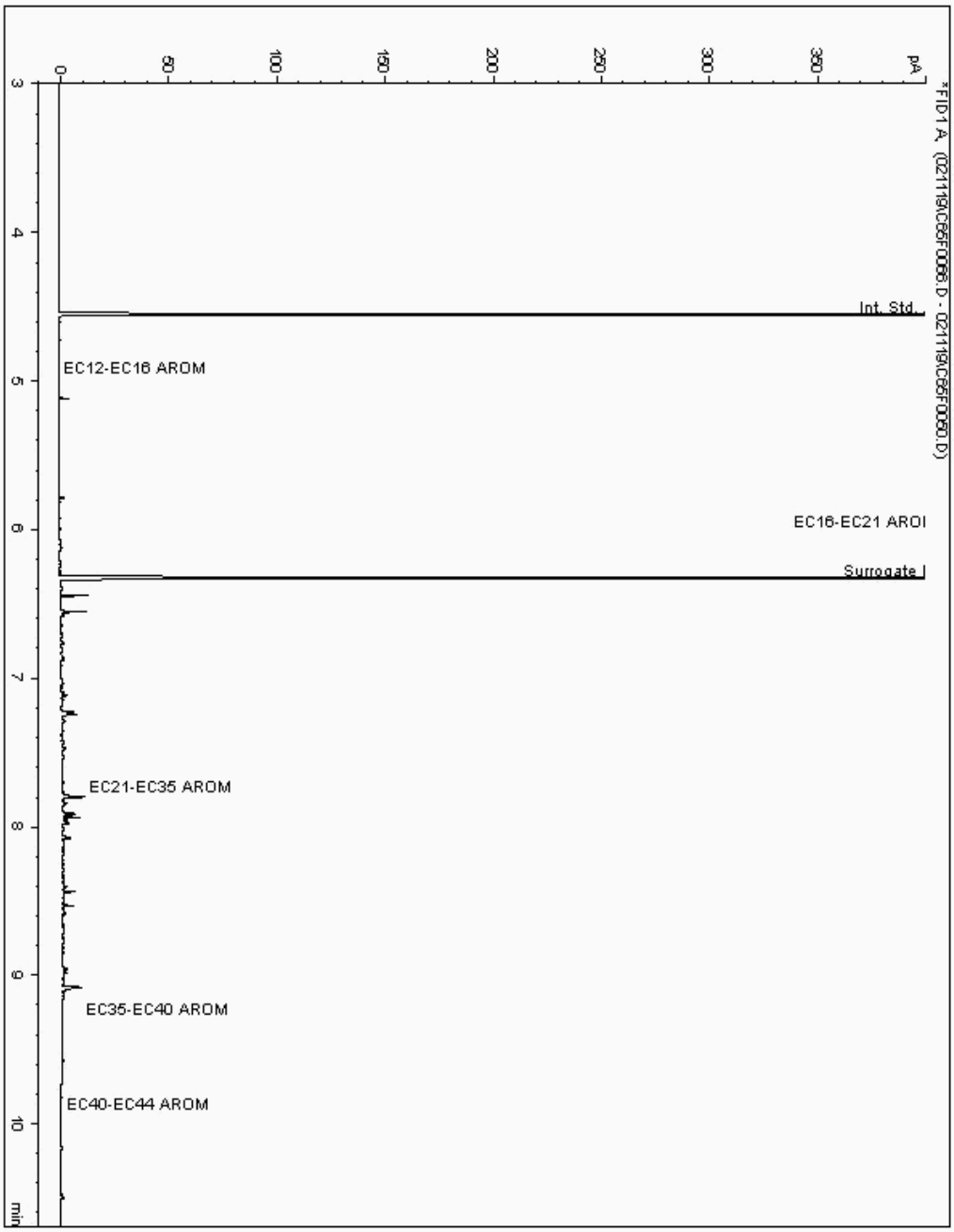
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19312057 **Depth :** 0.20
Sample ID : WS39

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18119150-
Date Acquired : 12/02/2019 08:32:21 PM
Units : ppb
Dilution: WS39[0.20] ->



CERTIFICATE OF ANALYSIS

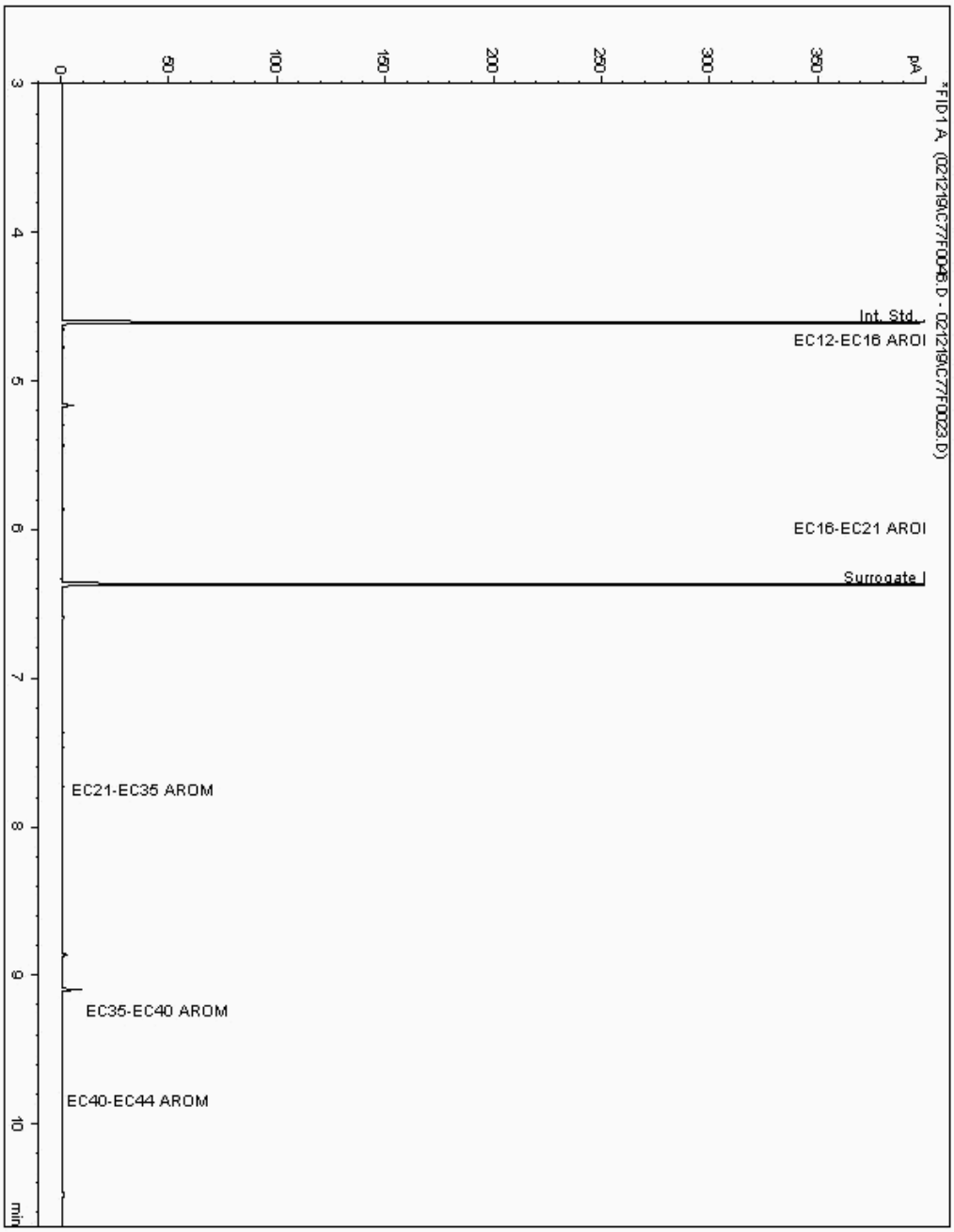
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19312246 **Depth :** 0.50
Sample ID : WS 43

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18120086-
Date Acquired : 2/13/2019 1:47:27 AM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

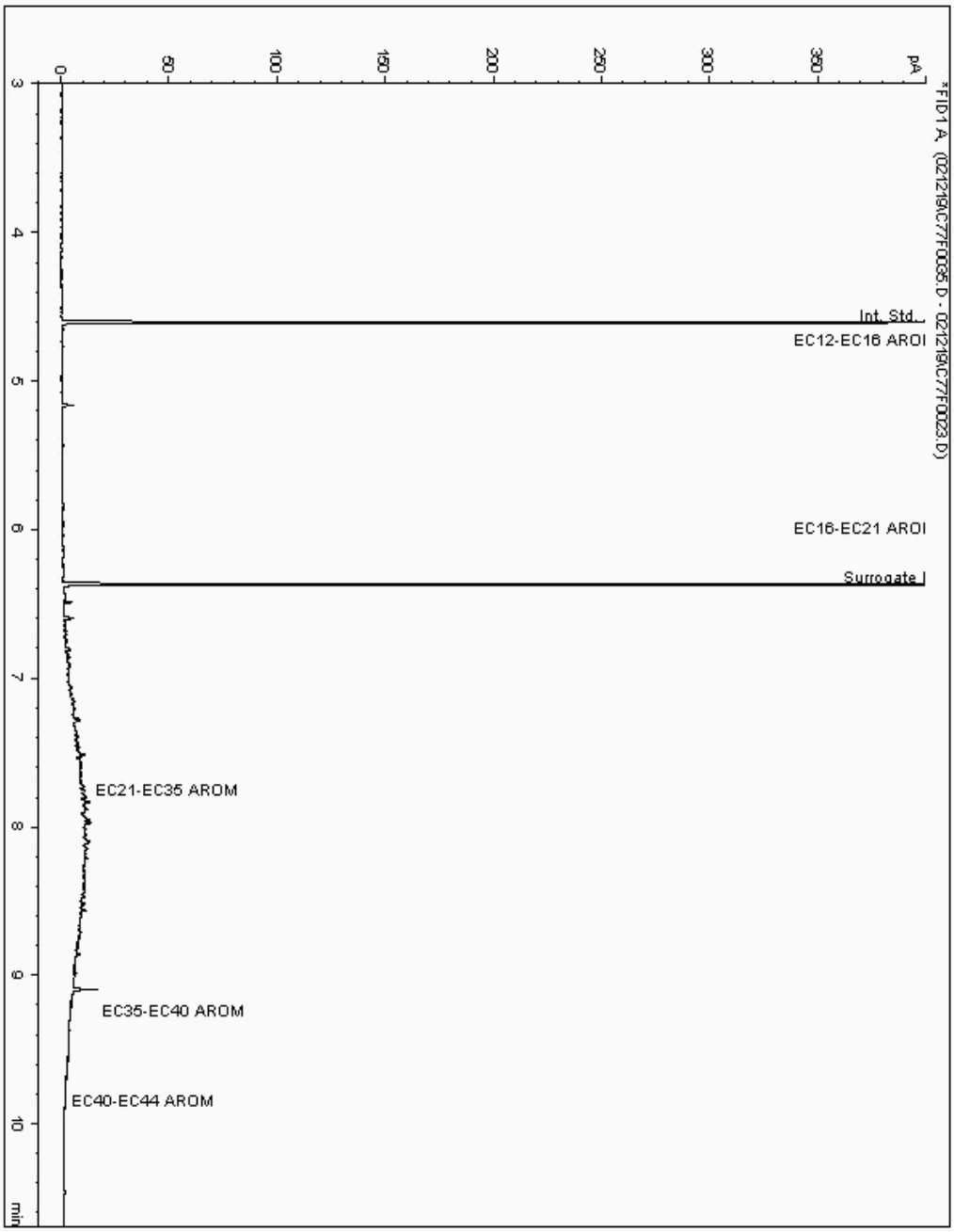
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19312451 **Depth :** 0.30
Sample ID : WS 46

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18120457-
Date Acquired : 2/12/2019 10:23:55 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

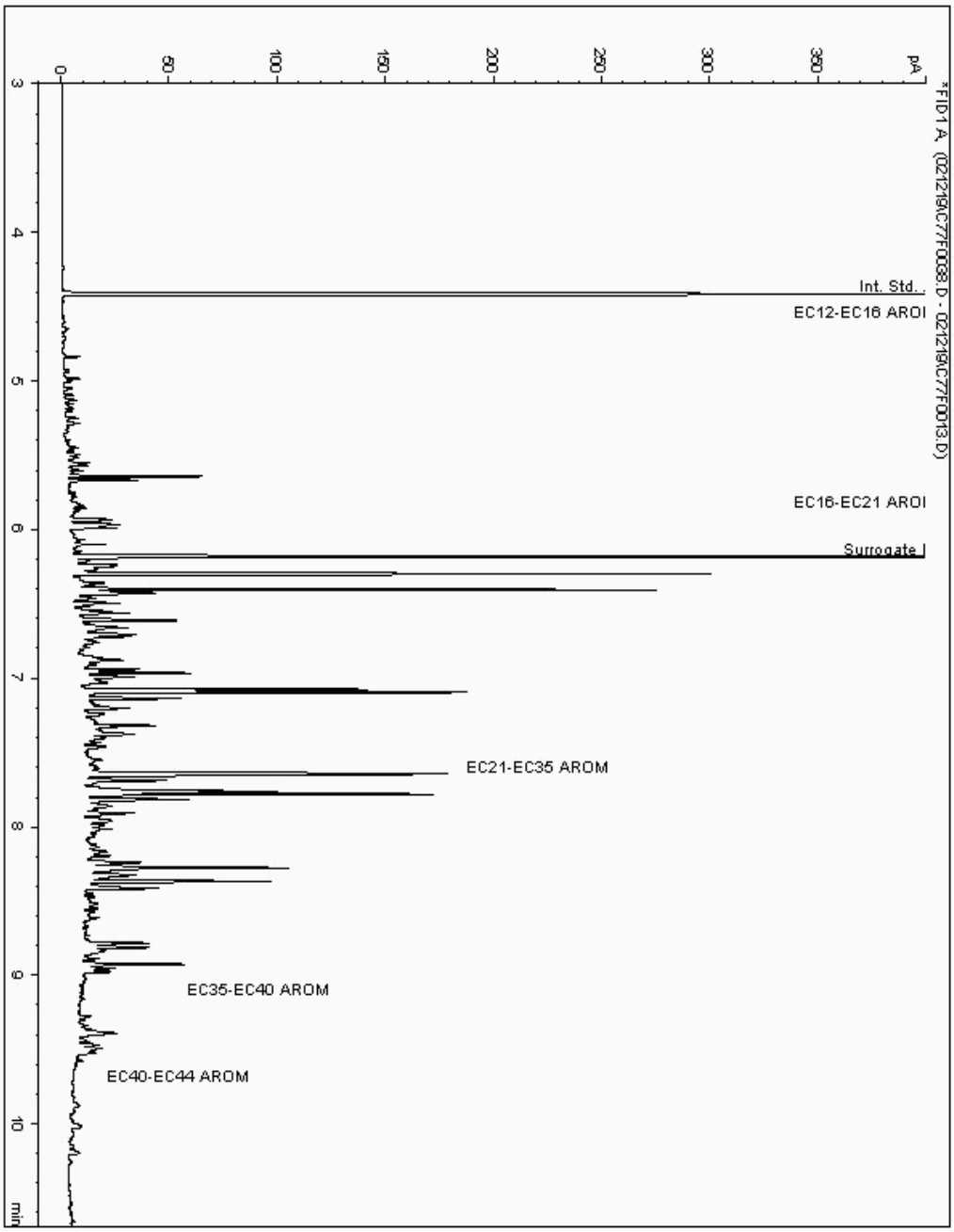
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19312828 **Depth :** 0.20
Sample ID : WS38

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18119097-
Date Acquired : 13/02/2019 00:26:04 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

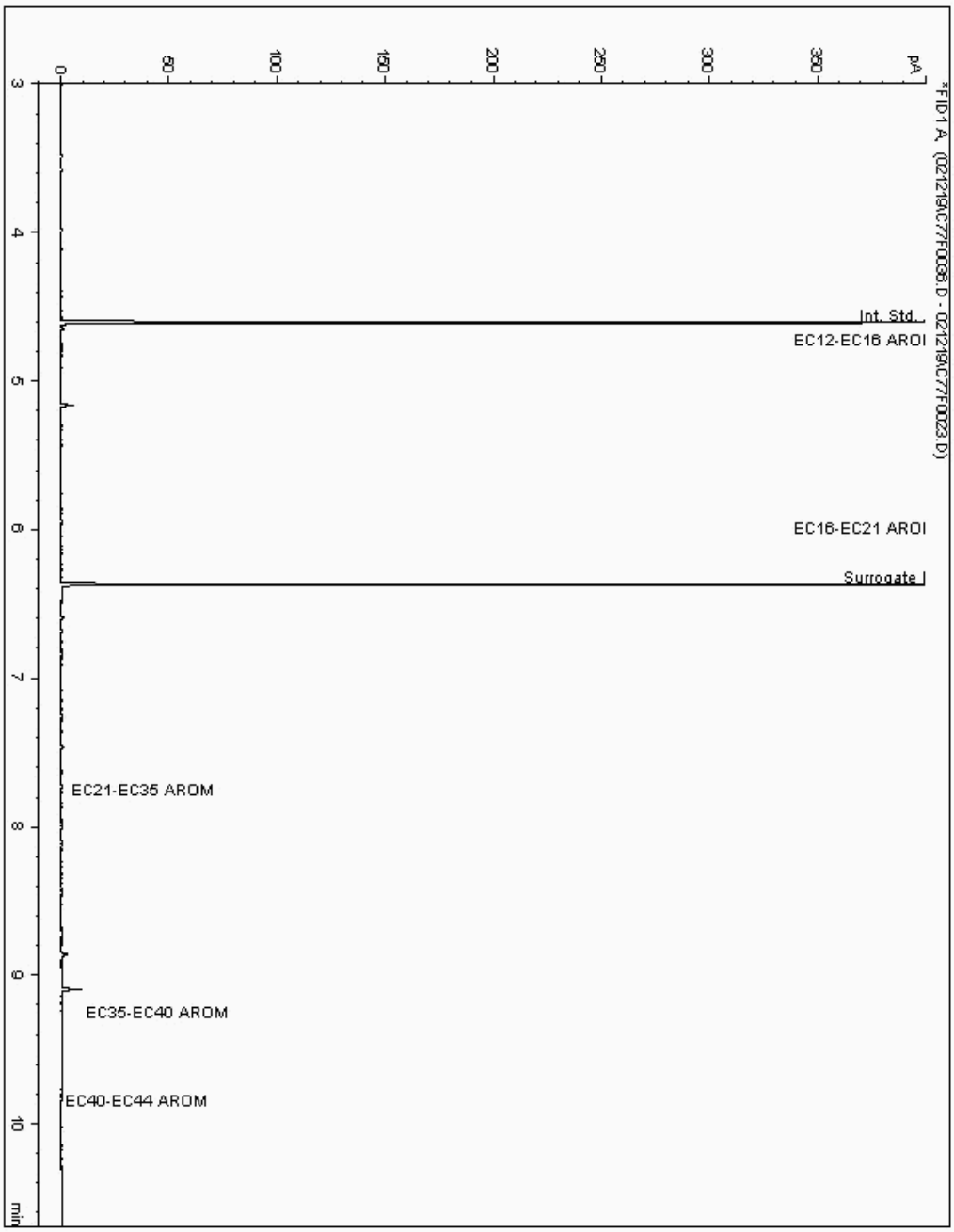
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19312838 **Depth :** 0.60
Sample ID : WS 16

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18118297-
Date Acquired : 2/12/2019 10:43:54 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

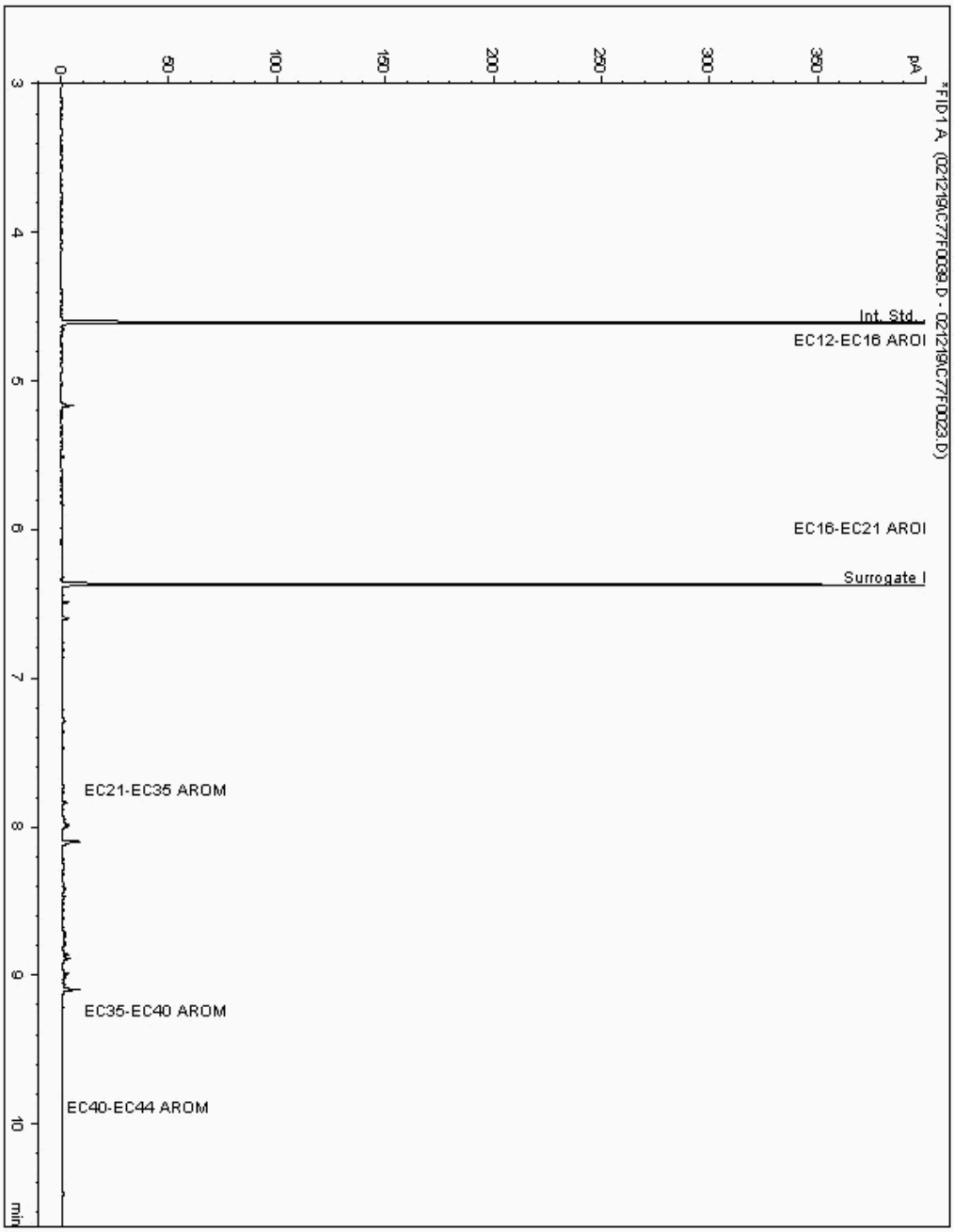
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19313030 **Depth :** 0.10
Sample ID : WS52

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18122114-
Date Acquired : 2/12/2019 11:43:54 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

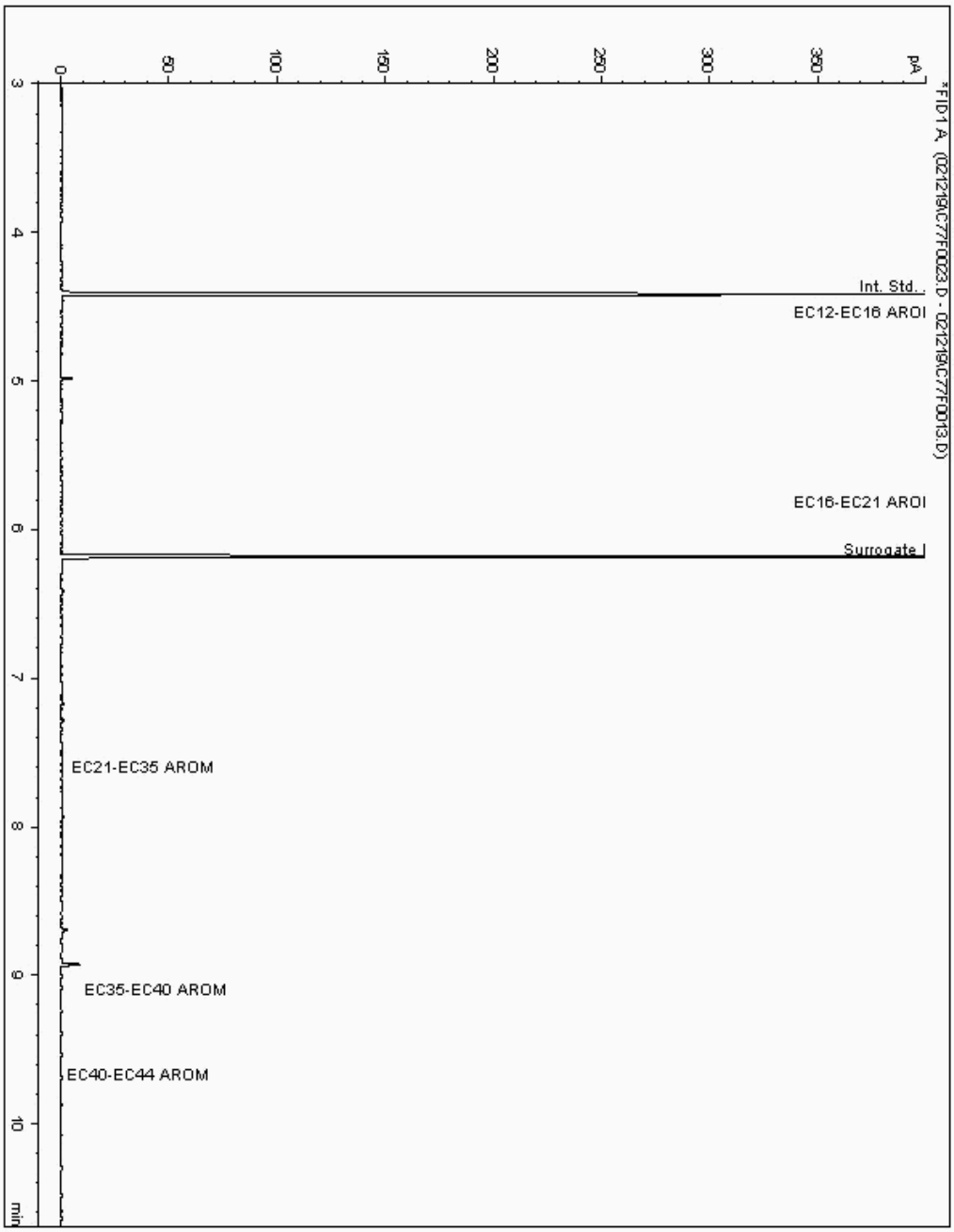
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19314017 **Depth :** 2.00
Sample ID : WS 20

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18120934-
Date Acquired : 12/02/2019 19:57:16 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

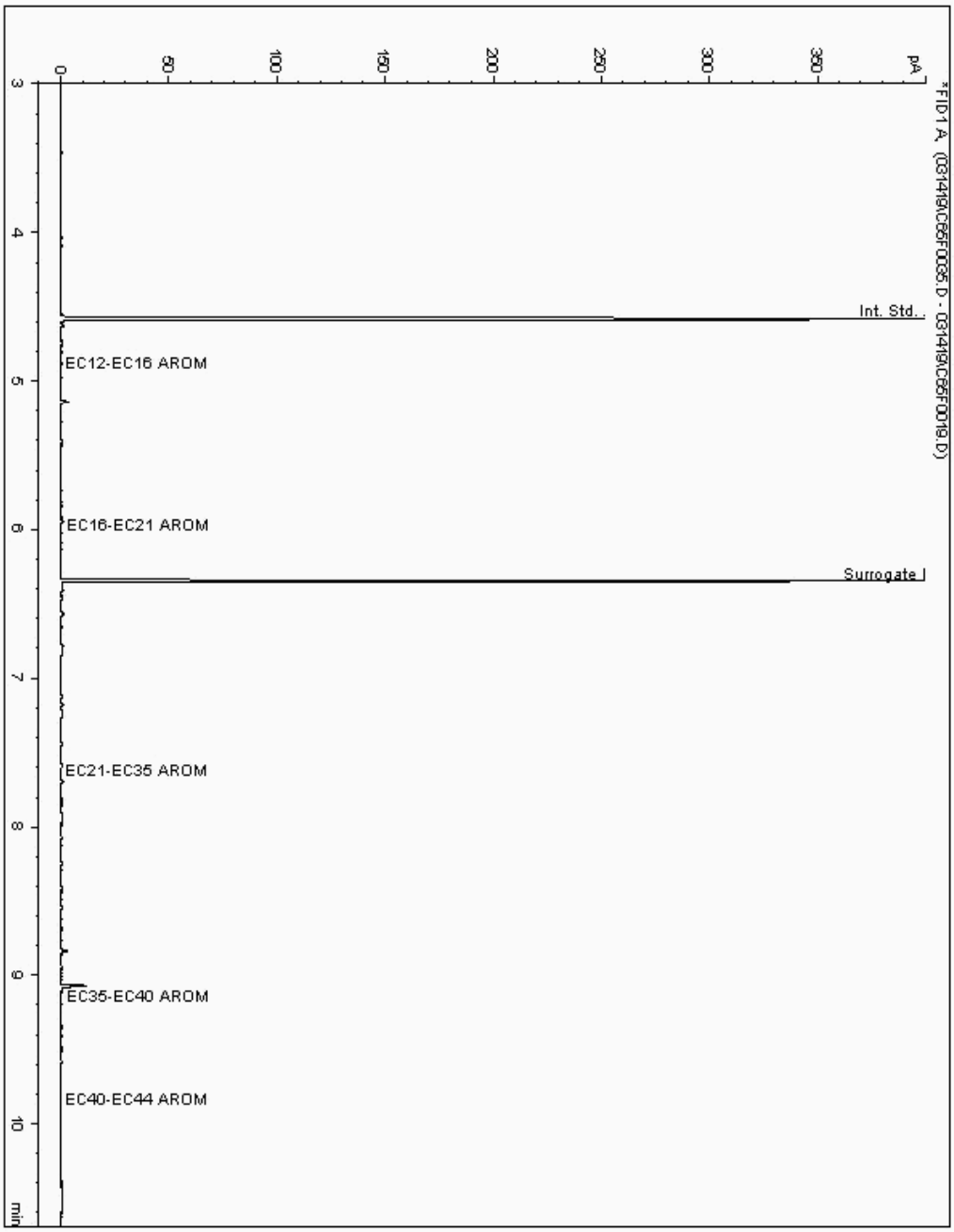
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19525524 **Depth :** 0.30 - 0.30
Sample ID : WS 07

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18345465-
Date Acquired : 14/03/2019 20:40:52 PM
Units : ppb
Dilution: WS 07[0.30 - 0.30] ->



CERTIFICATE OF ANALYSIS

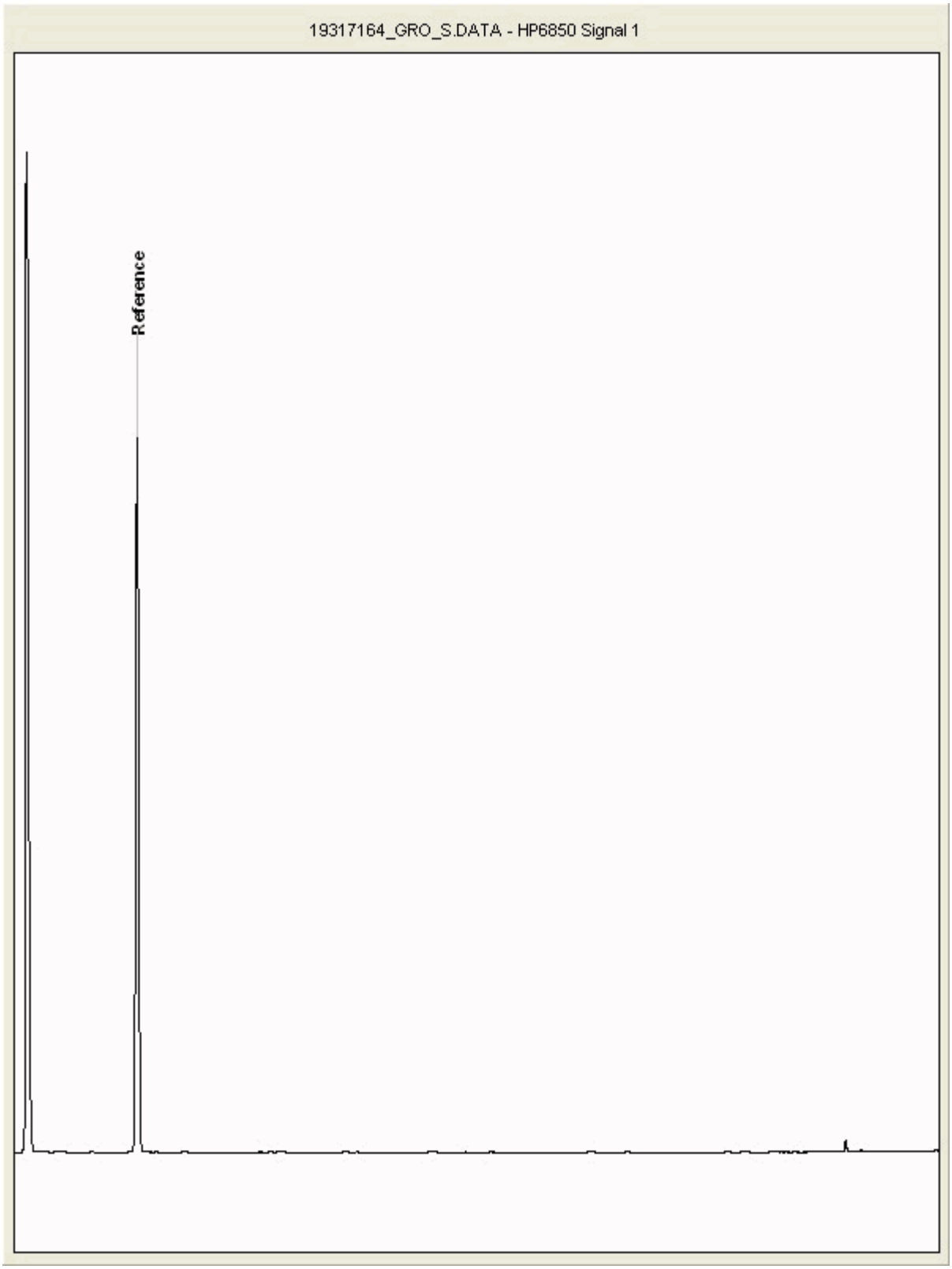
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19317164
Sample ID : WS 41

Depth : 0.50



CERTIFICATE OF ANALYSIS

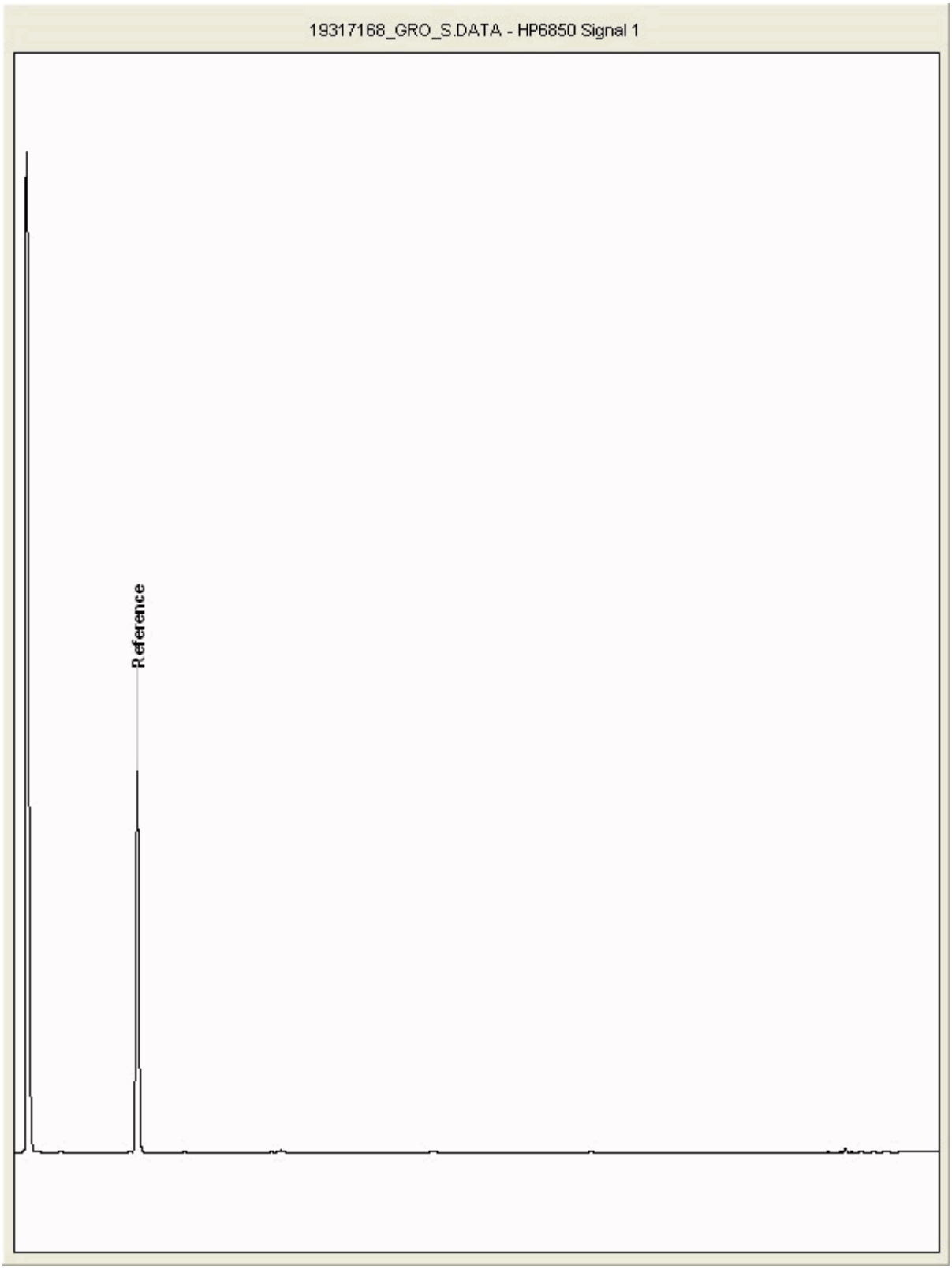
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19317168
Sample ID : WS 33

Depth : 0.10



CERTIFICATE OF ANALYSIS

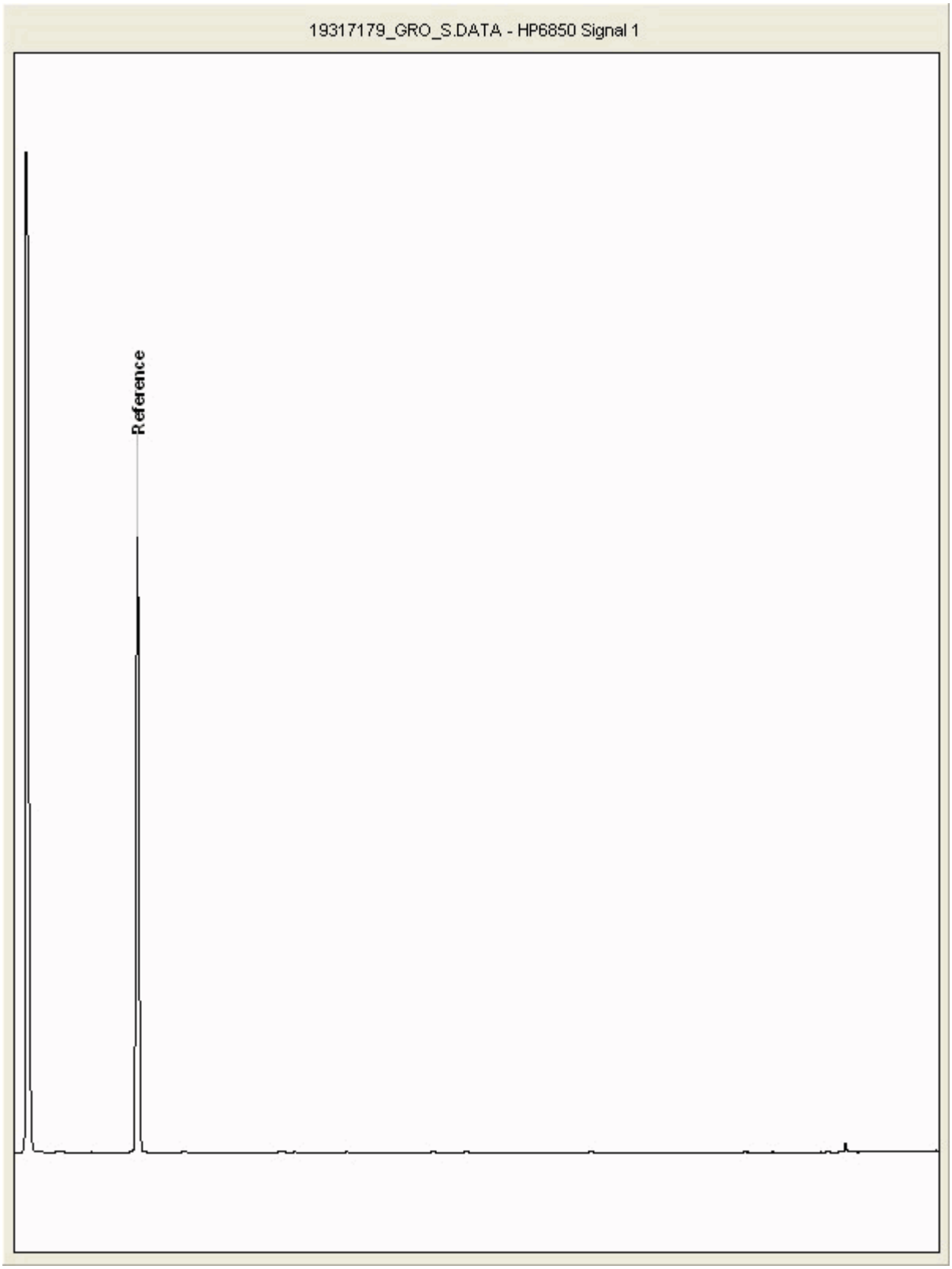
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19317179
Sample ID : WS 33

Depth : 0.50



CERTIFICATE OF ANALYSIS

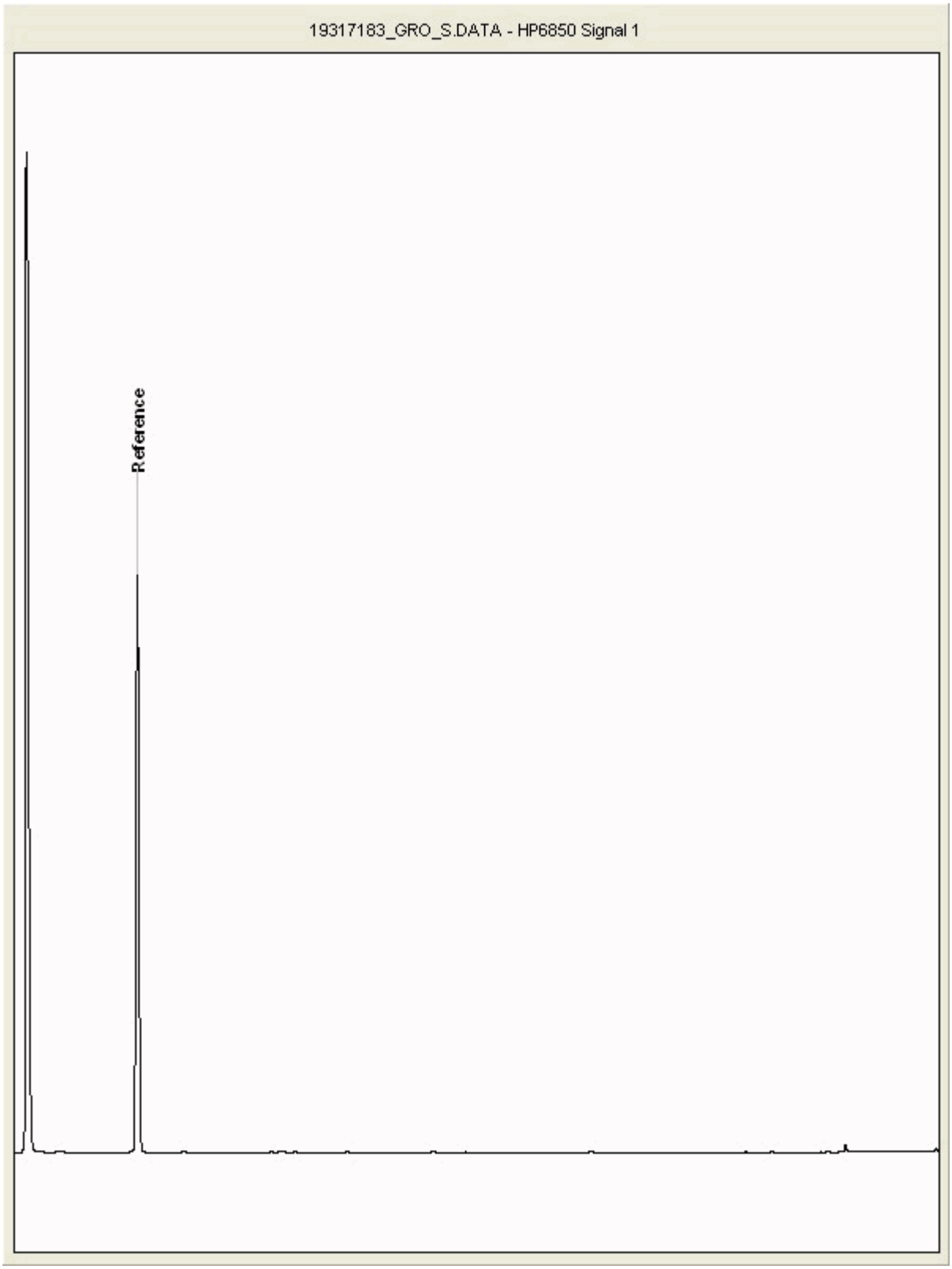
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19317183
Sample ID : WS 26

Depth : 0.70



CERTIFICATE OF ANALYSIS

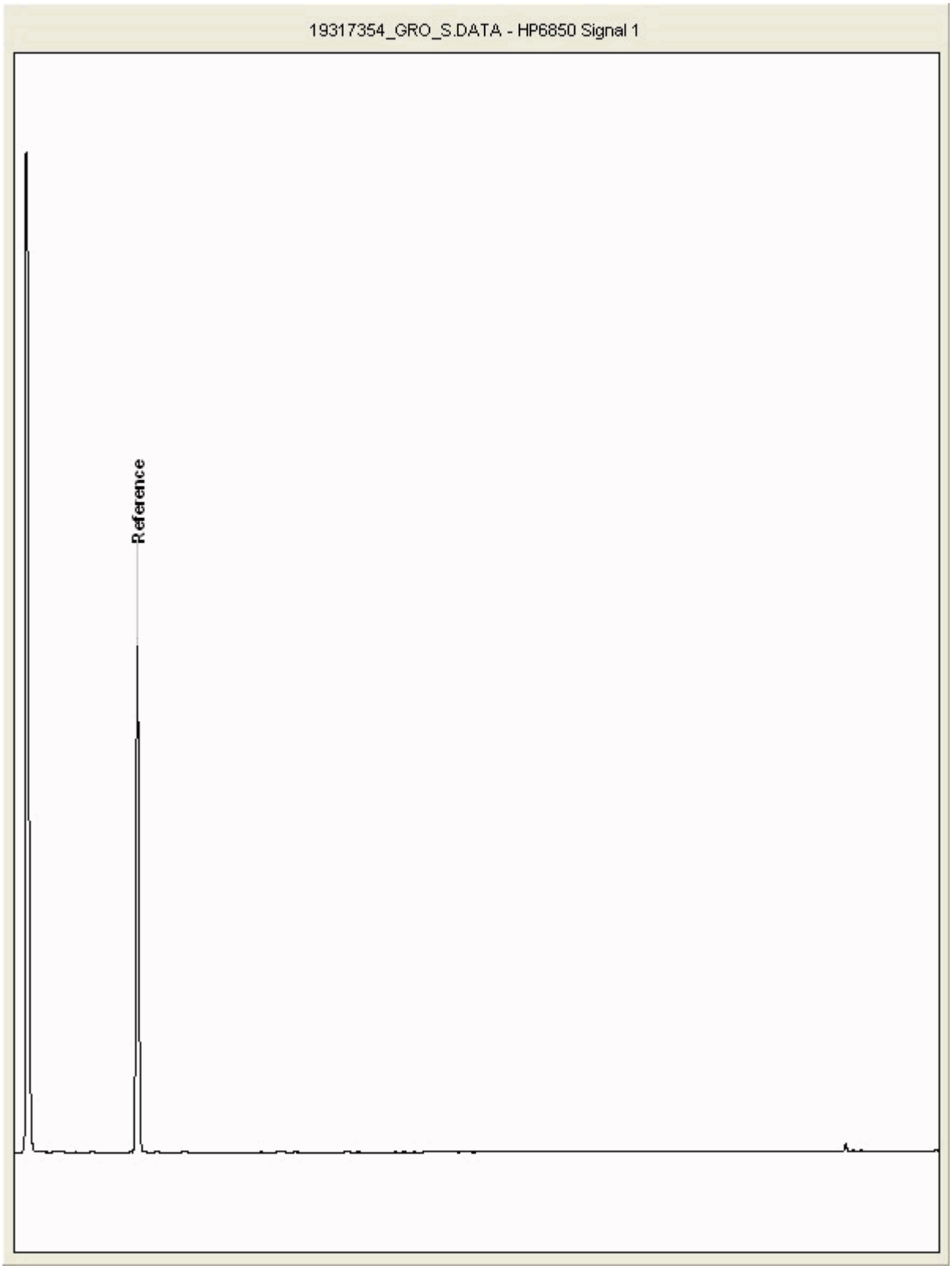
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19317354
Sample ID : WS38

Depth : 0.20



CERTIFICATE OF ANALYSIS

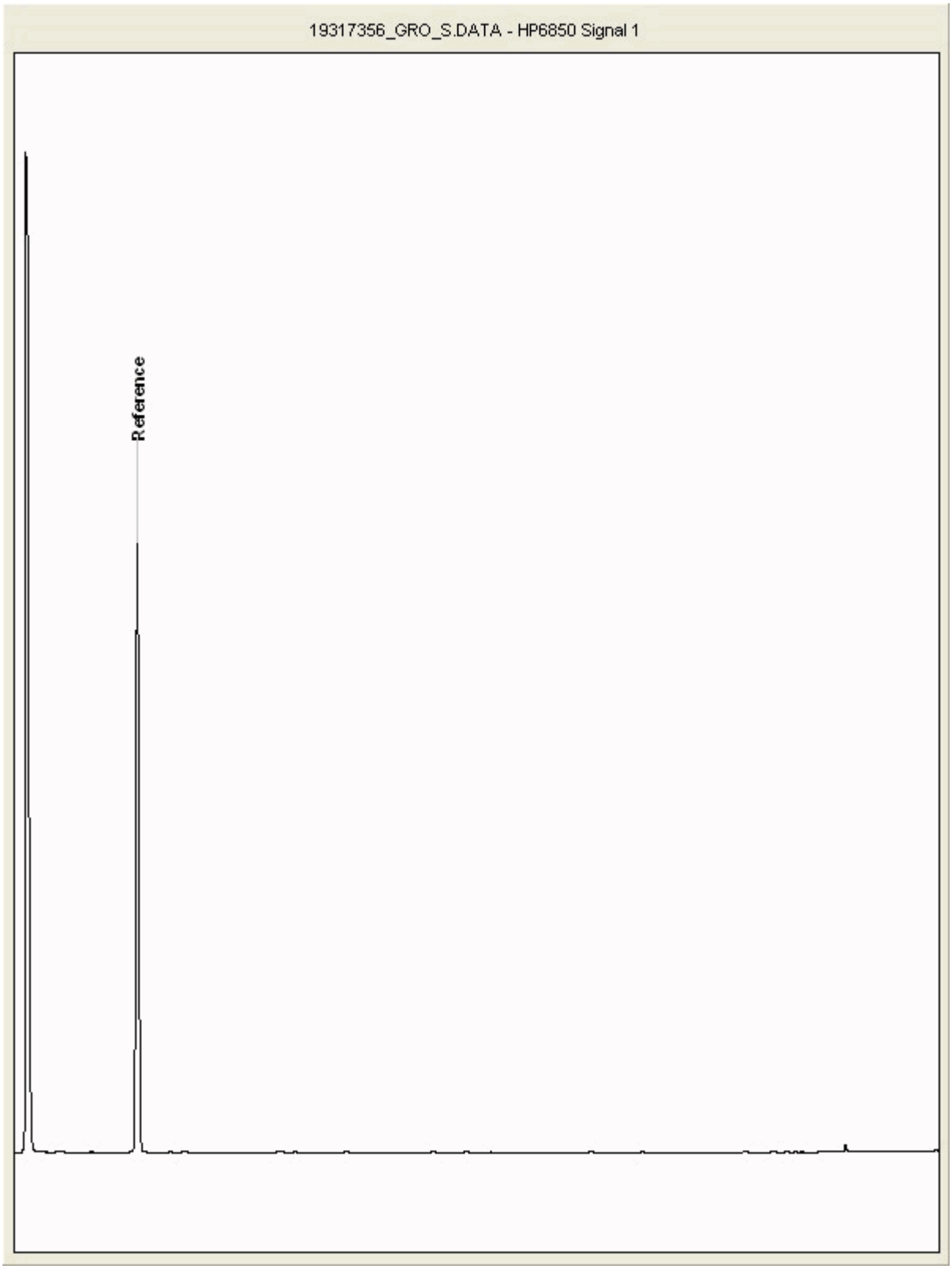
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19317356
Sample ID : WS38

Depth : 0.70



CERTIFICATE OF ANALYSIS

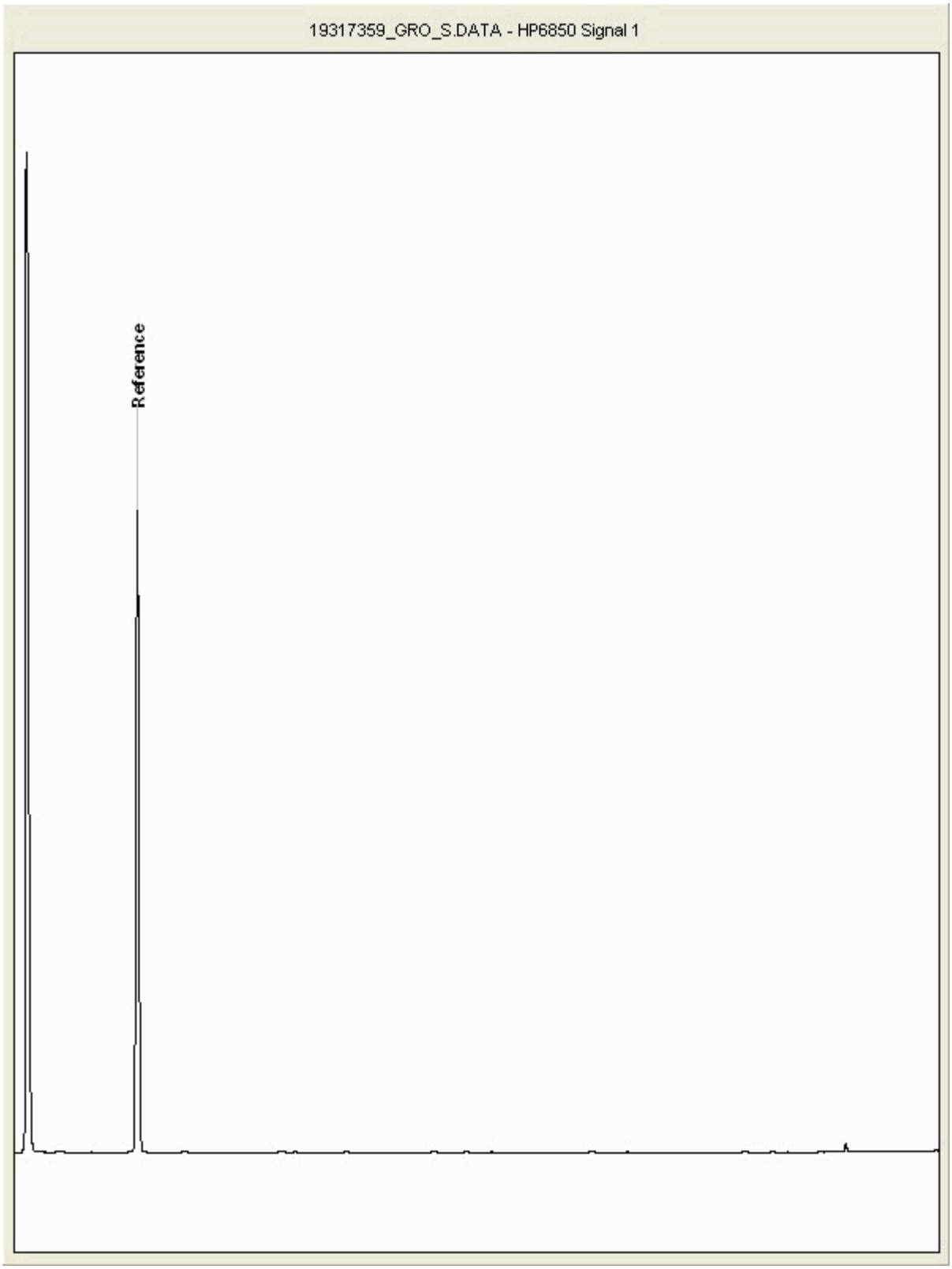
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19317359
Sample ID : WS57

Depth : 0.30



CERTIFICATE OF ANALYSIS

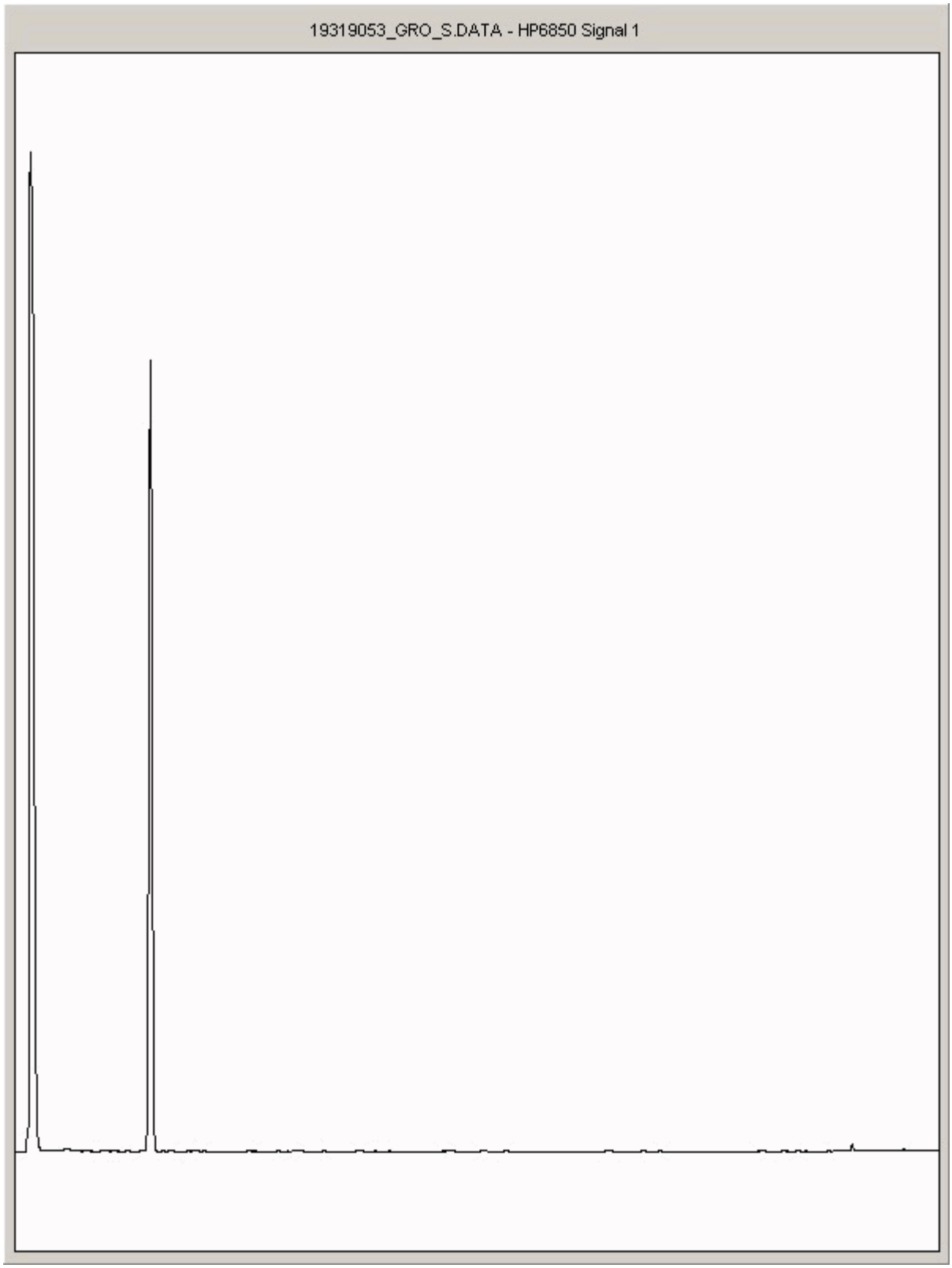
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19319053
Sample ID : WS 10

Depth : 0.20



CERTIFICATE OF ANALYSIS

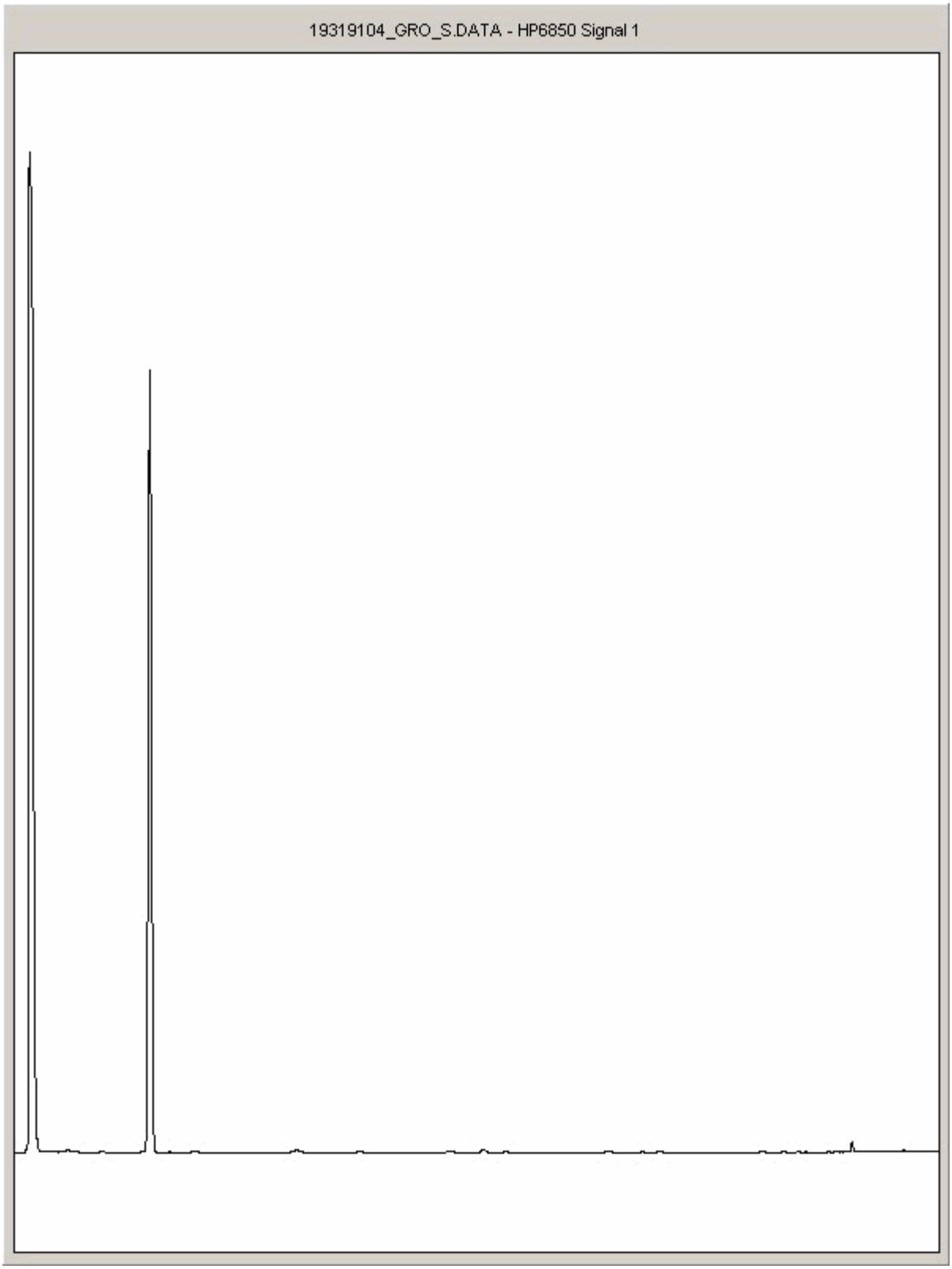
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19319104
Sample ID : WS 10

Depth : 0.50



CERTIFICATE OF ANALYSIS

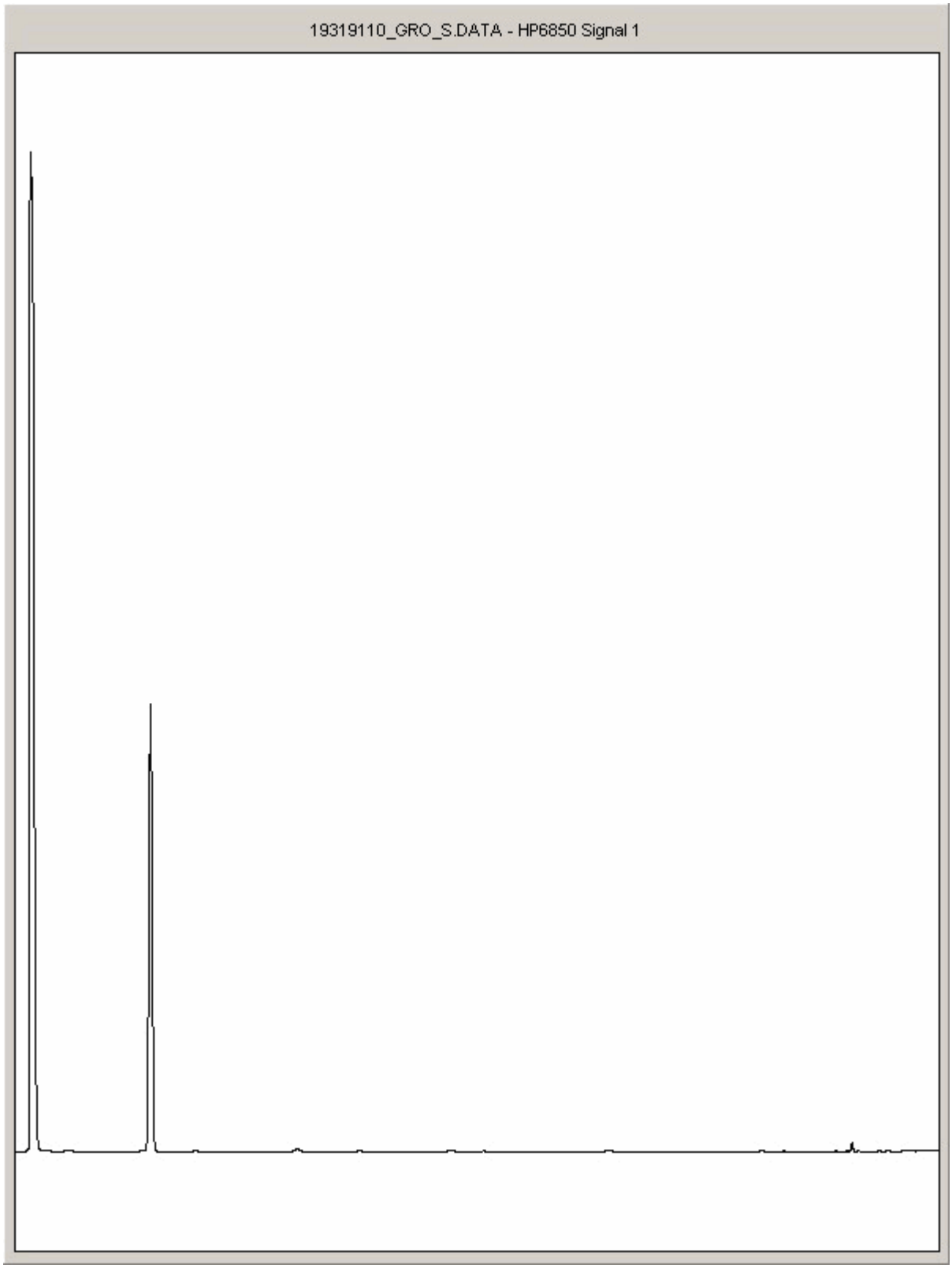
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19319110
Sample ID : WS 37

Depth : 0.20



CERTIFICATE OF ANALYSIS

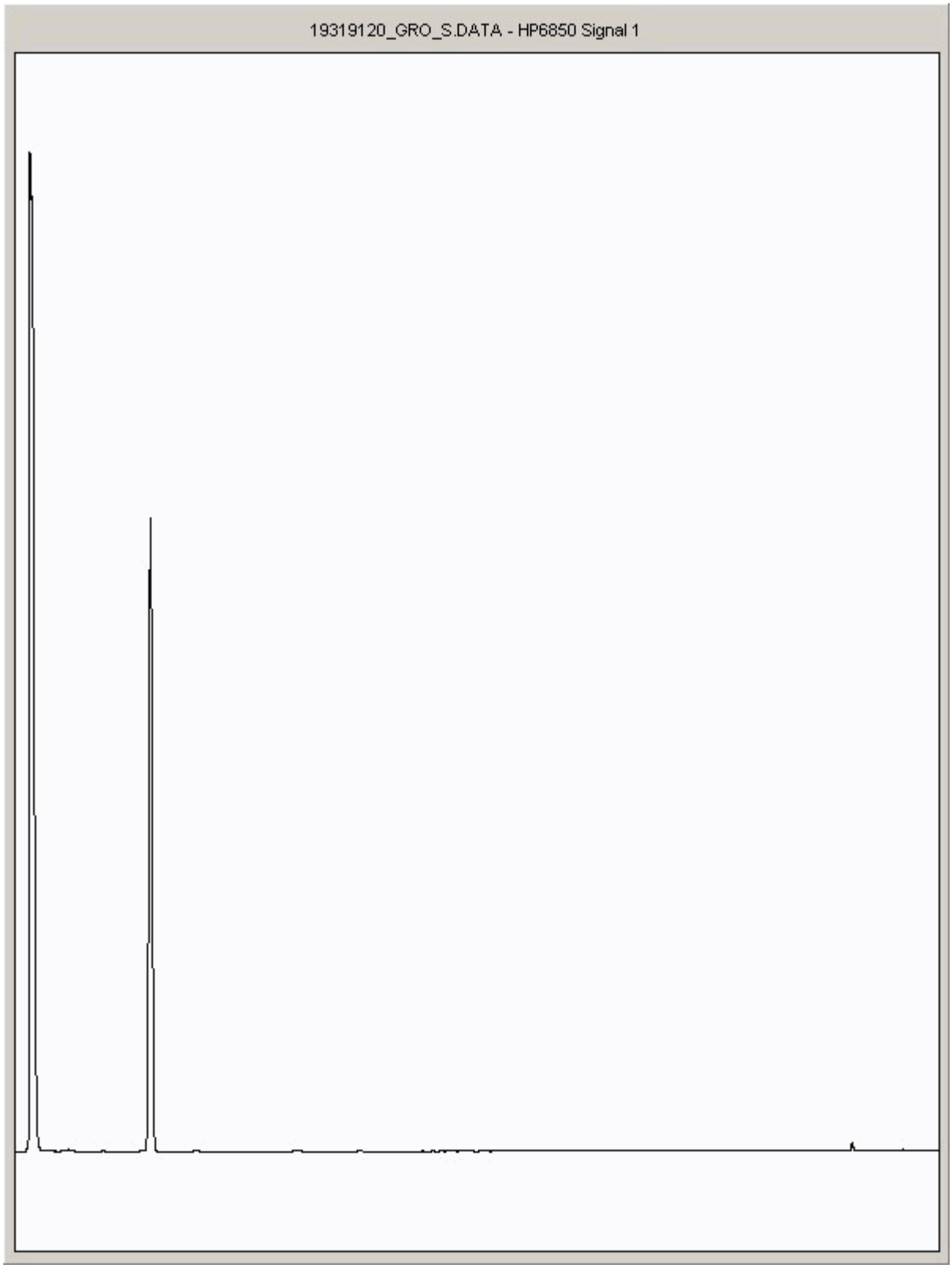
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19319120
Sample ID : WS 20

Depth : 2.00



CERTIFICATE OF ANALYSIS

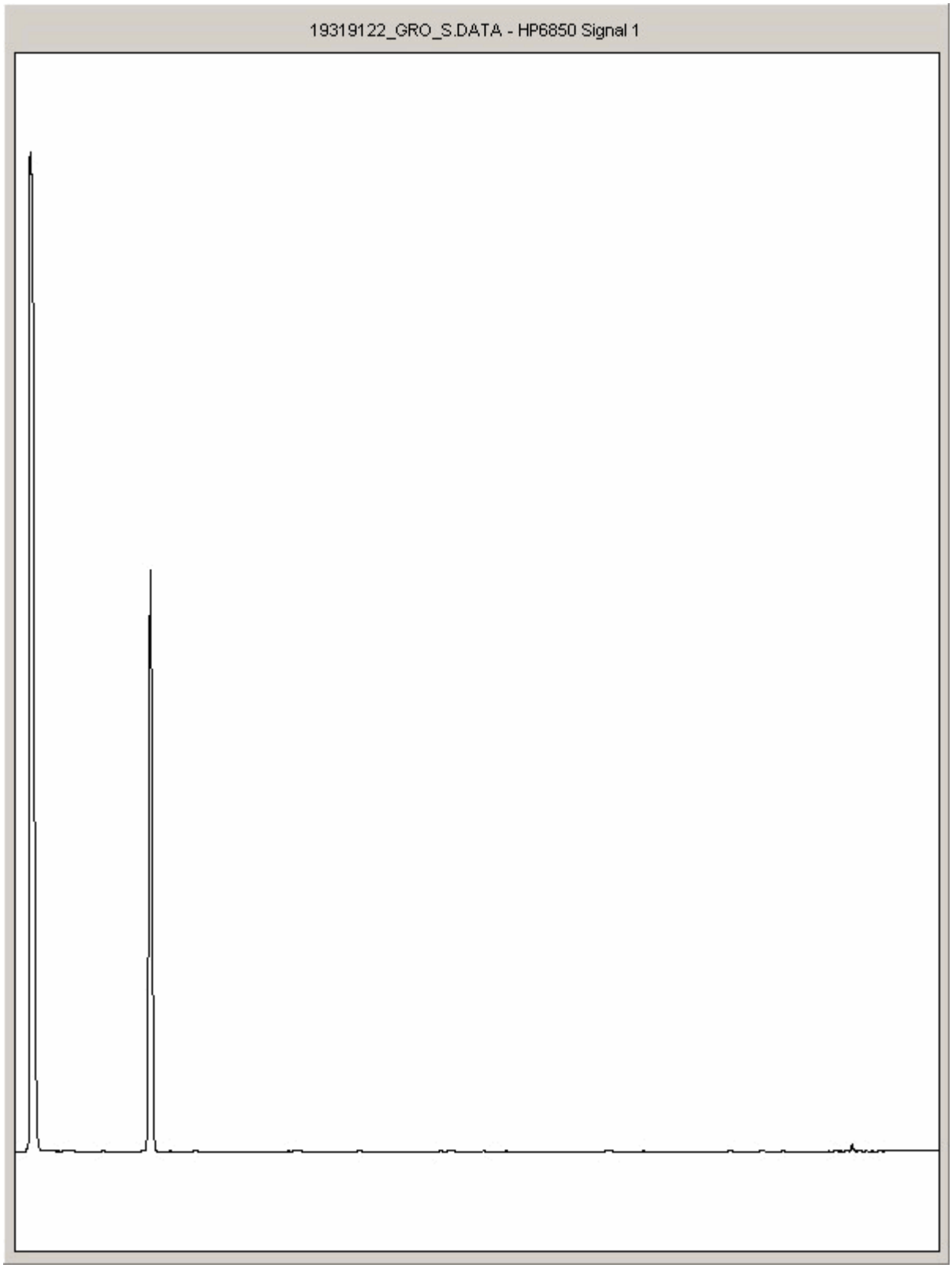
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19319122
Sample ID : WS 25A

Depth : 0.30



CERTIFICATE OF ANALYSIS

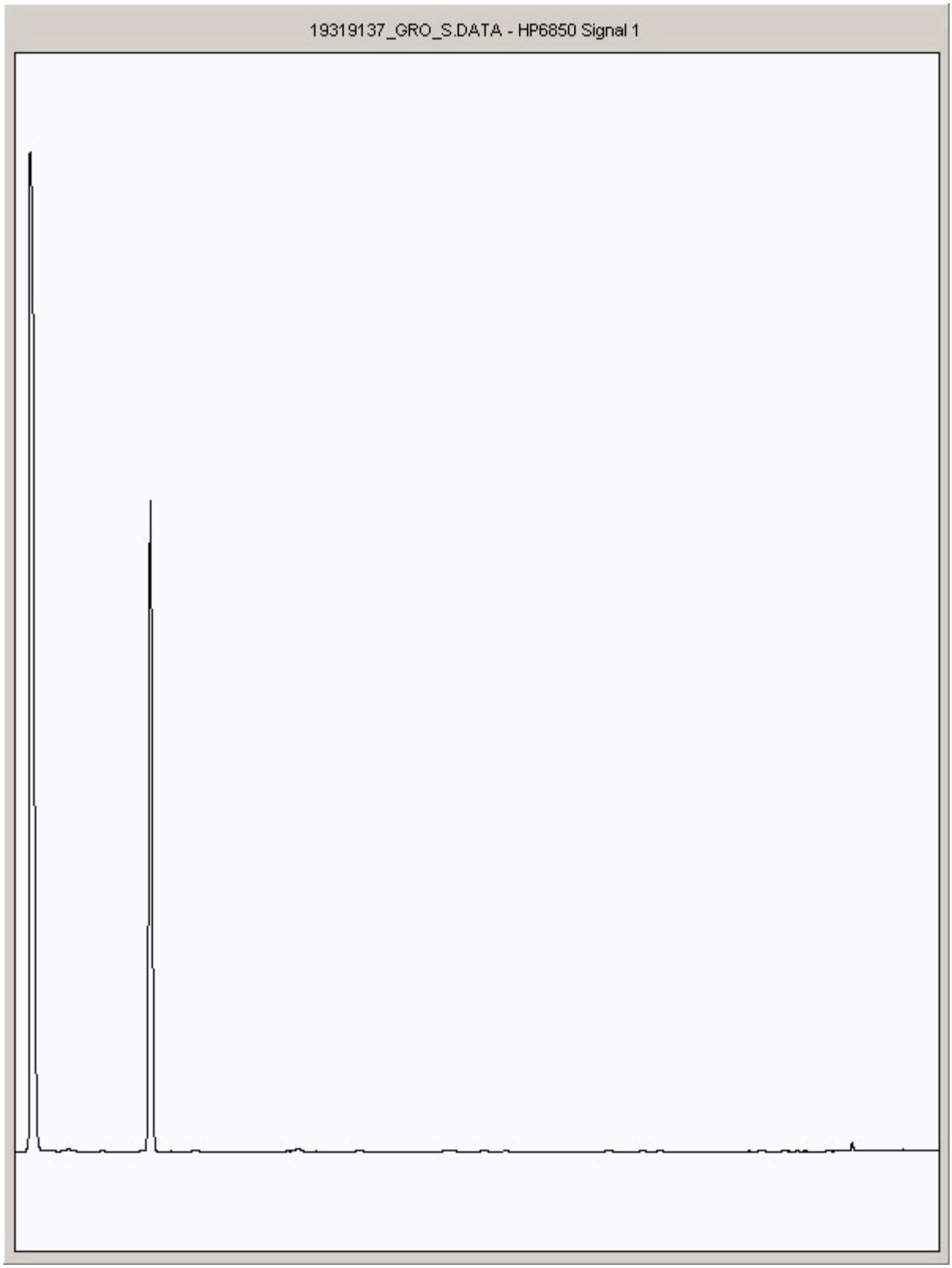
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19319137
Sample ID : WS 34

Depth : 0.10



CERTIFICATE OF ANALYSIS

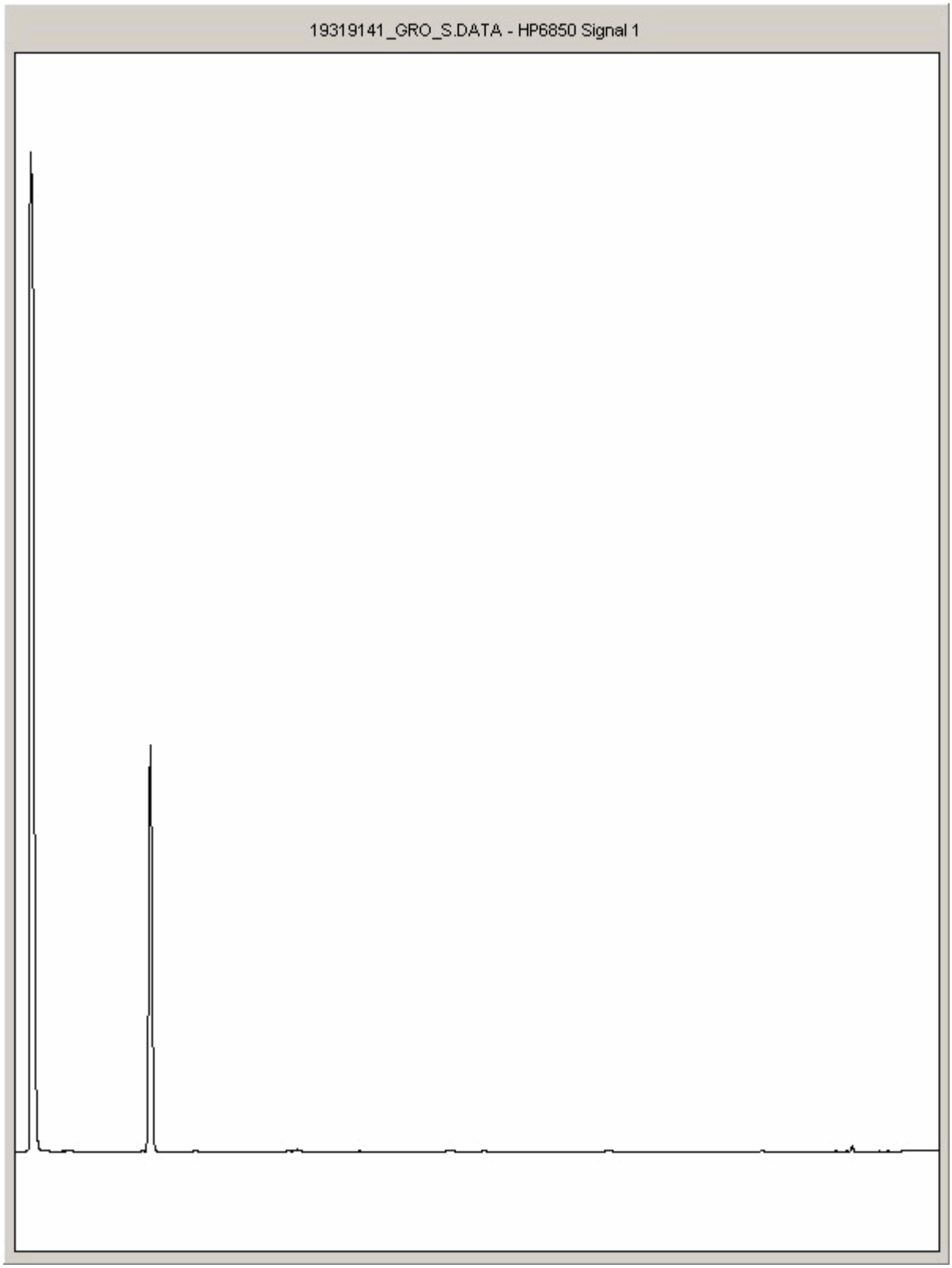
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19319141
Sample ID : WS 25A

Depth : 1.00



CERTIFICATE OF ANALYSIS

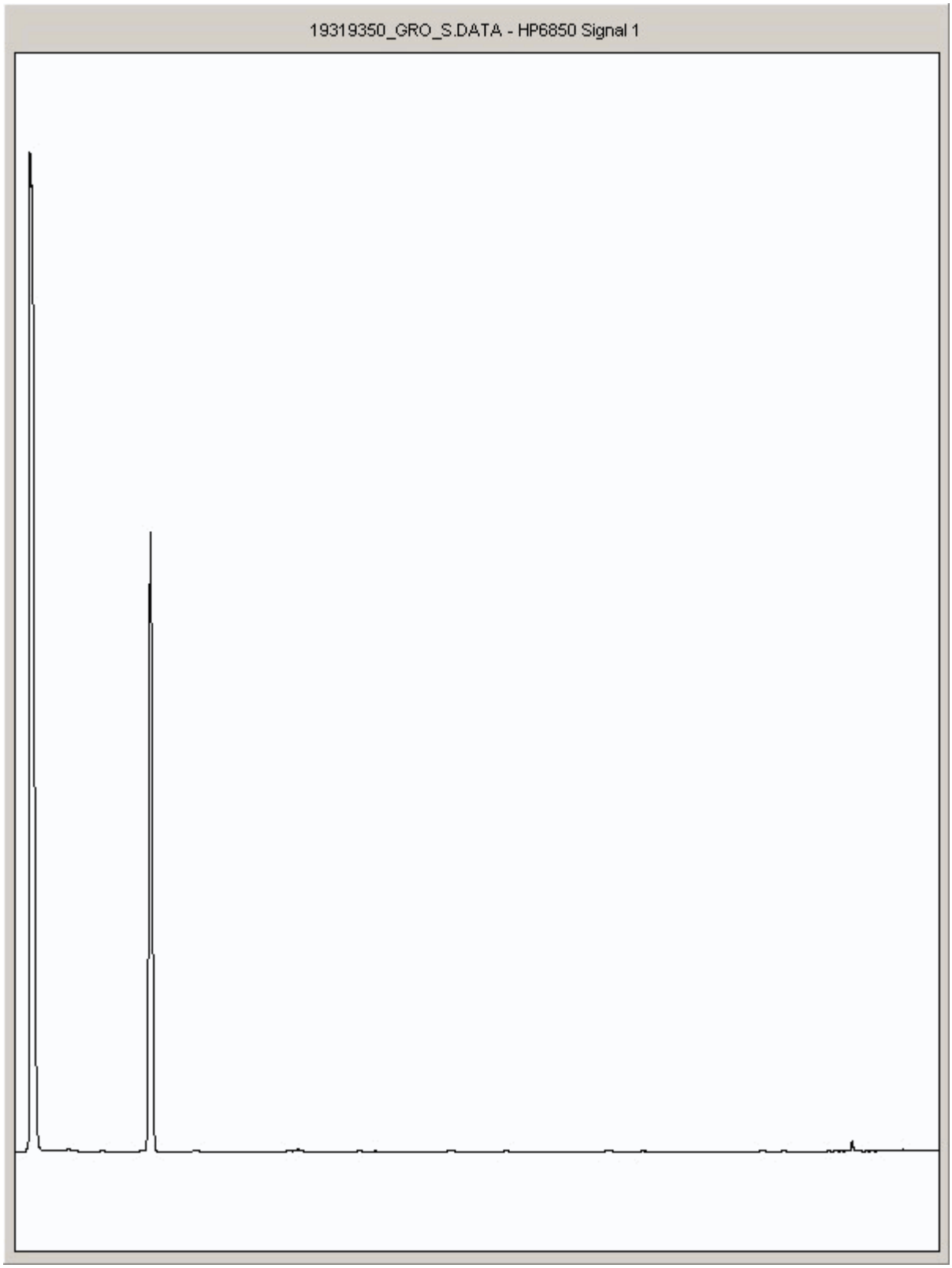
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19319350
Sample ID : WS 34

Depth : 1.00



CERTIFICATE OF ANALYSIS

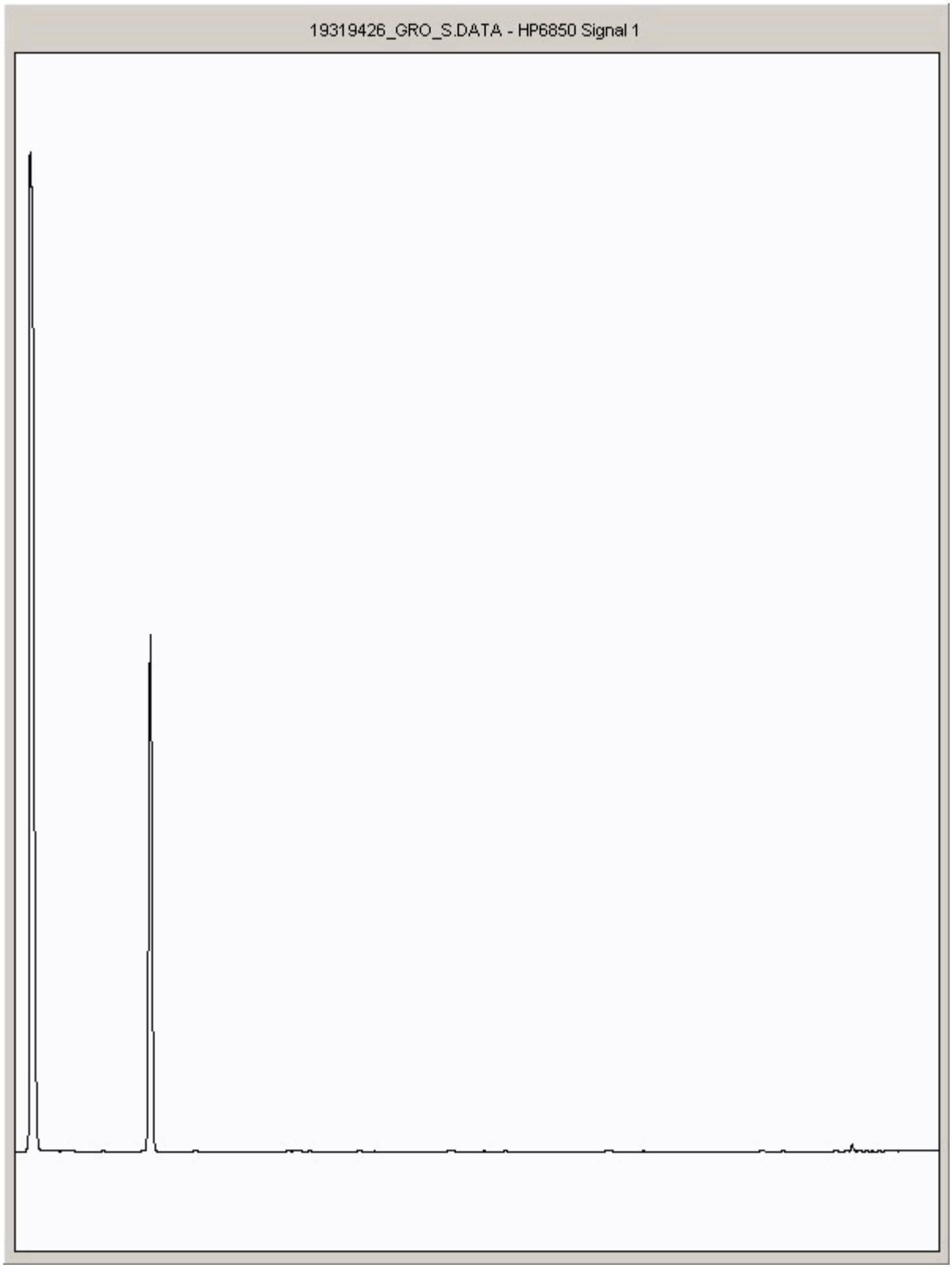
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19319426
Sample ID : WS 40

Depth : 1.00



CERTIFICATE OF ANALYSIS

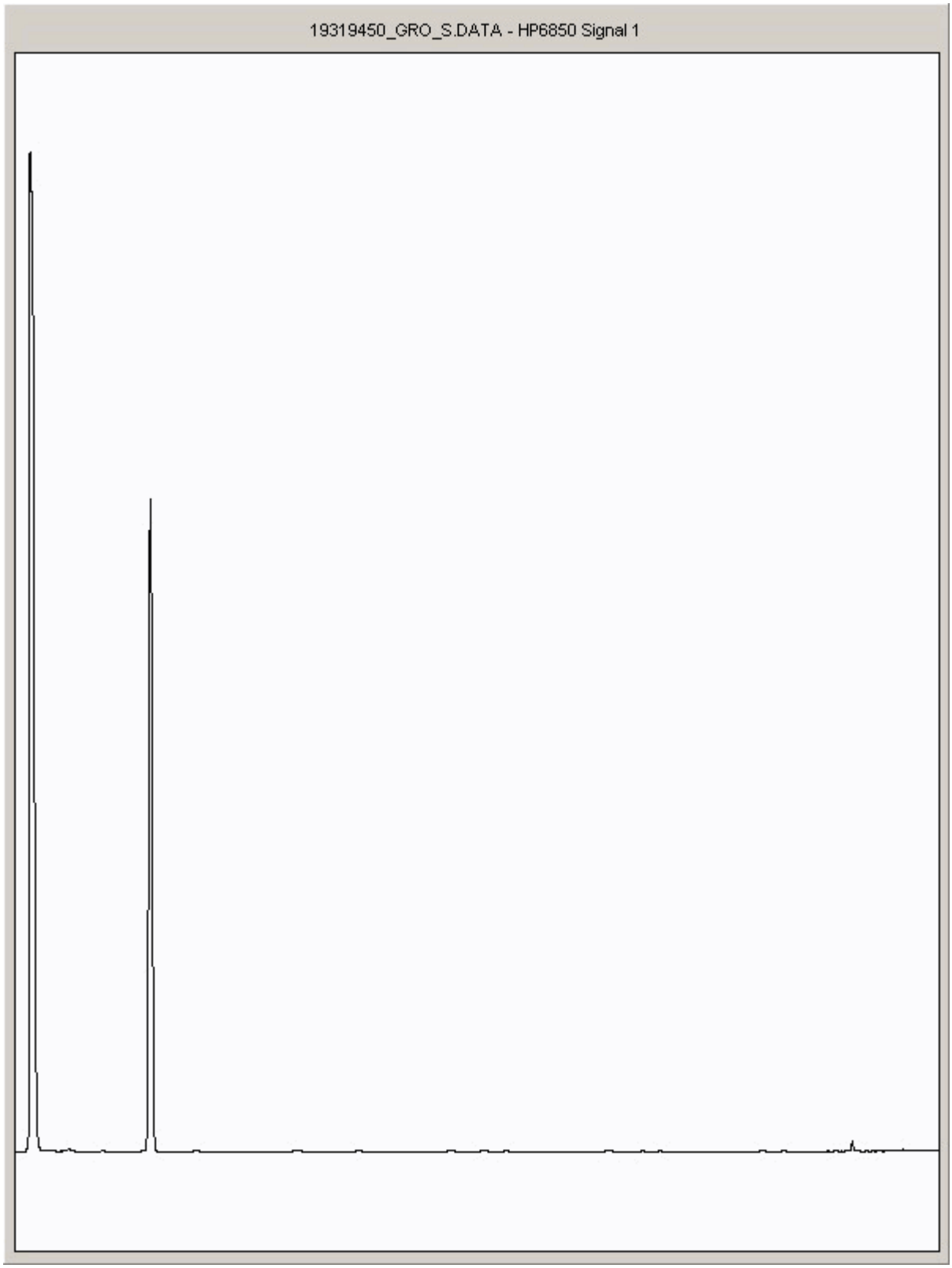
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19319450
Sample ID : WS 40

Depth : 1.50



CERTIFICATE OF ANALYSIS

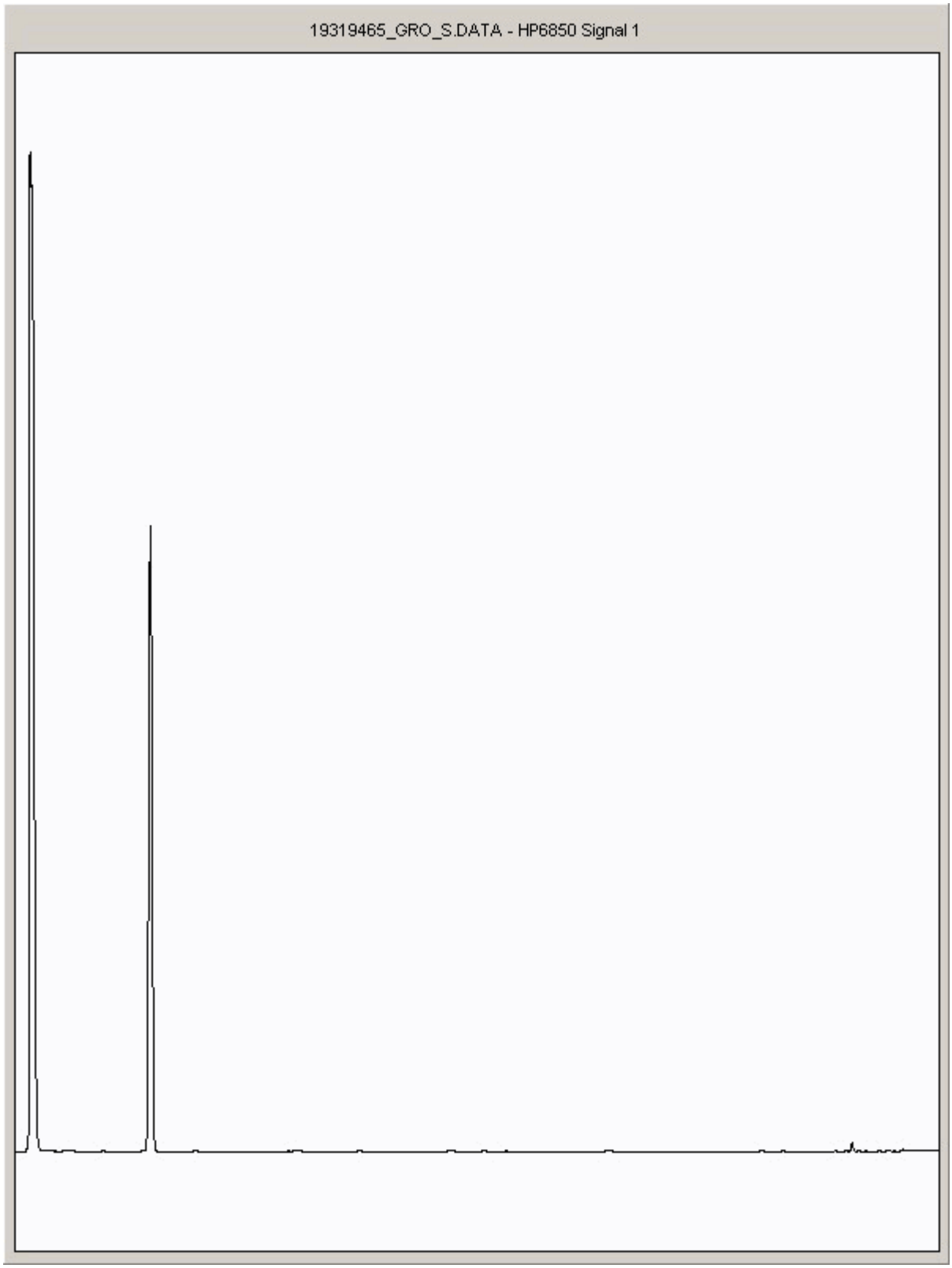
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19319465
Sample ID : WS 41

Depth : 1.00



CERTIFICATE OF ANALYSIS

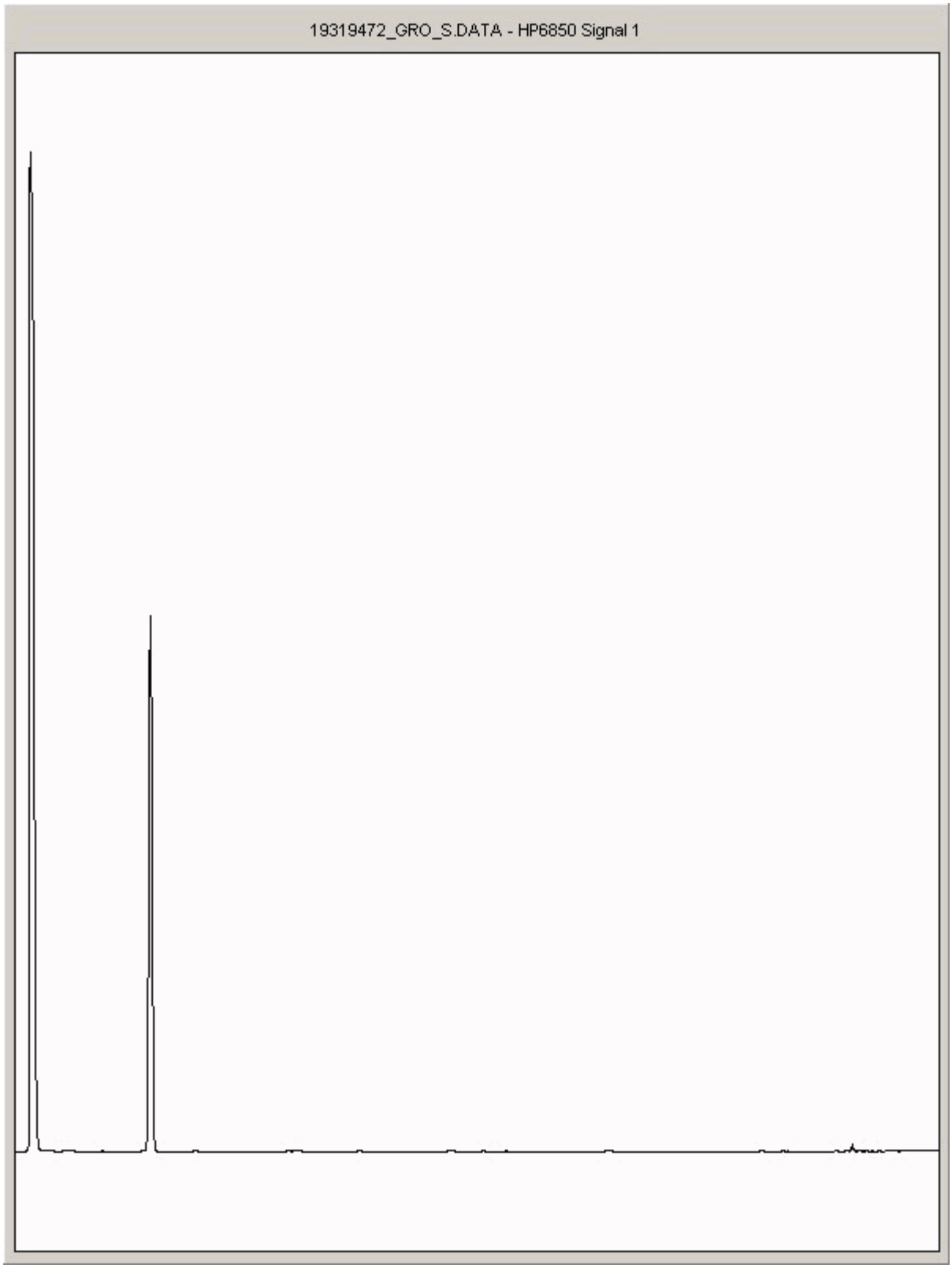
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19319472
Sample ID : WS 28

Depth : 1.00



CERTIFICATE OF ANALYSIS

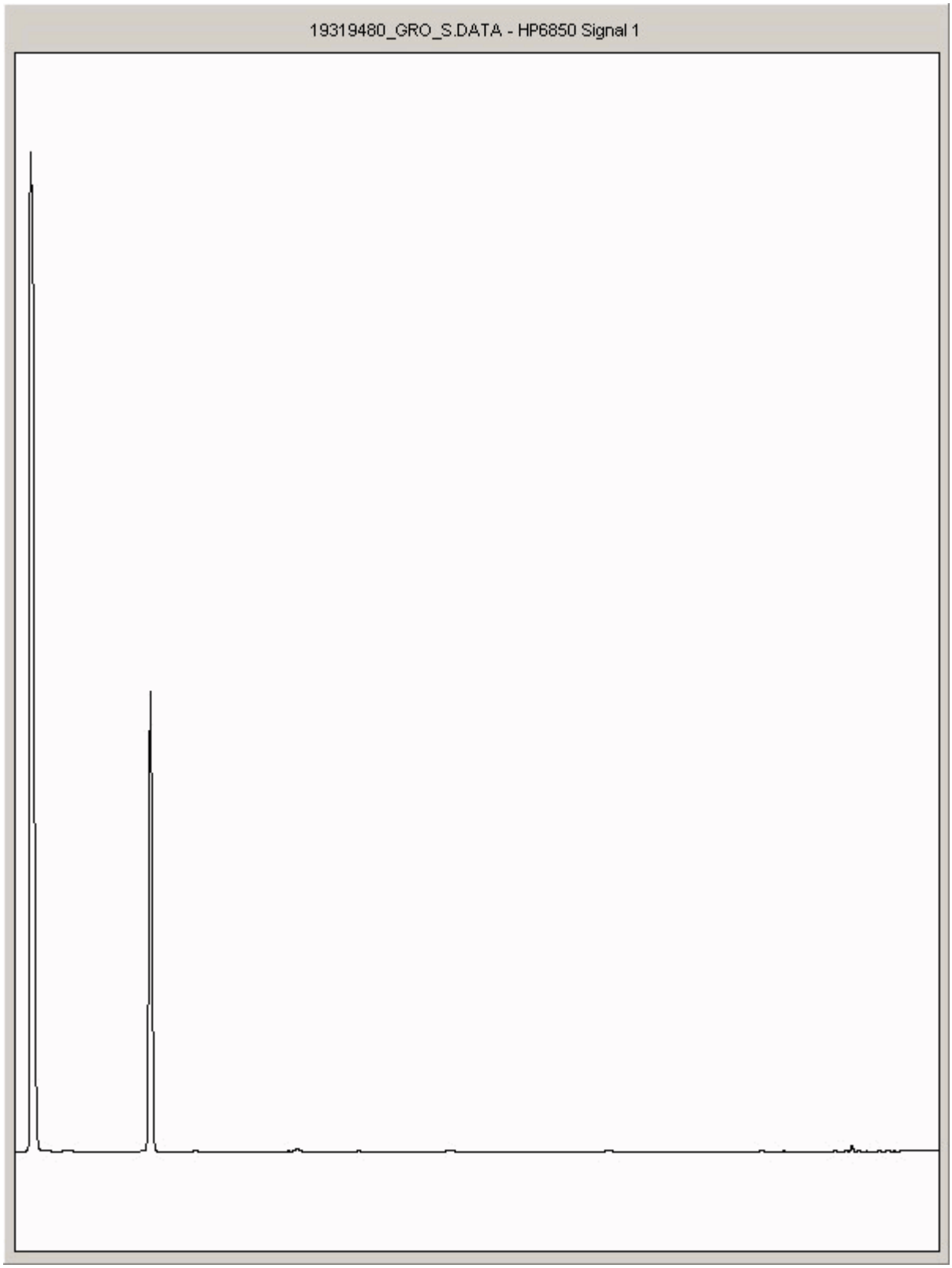
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19319480
Sample ID : WS 42

Depth : 0.10



CERTIFICATE OF ANALYSIS

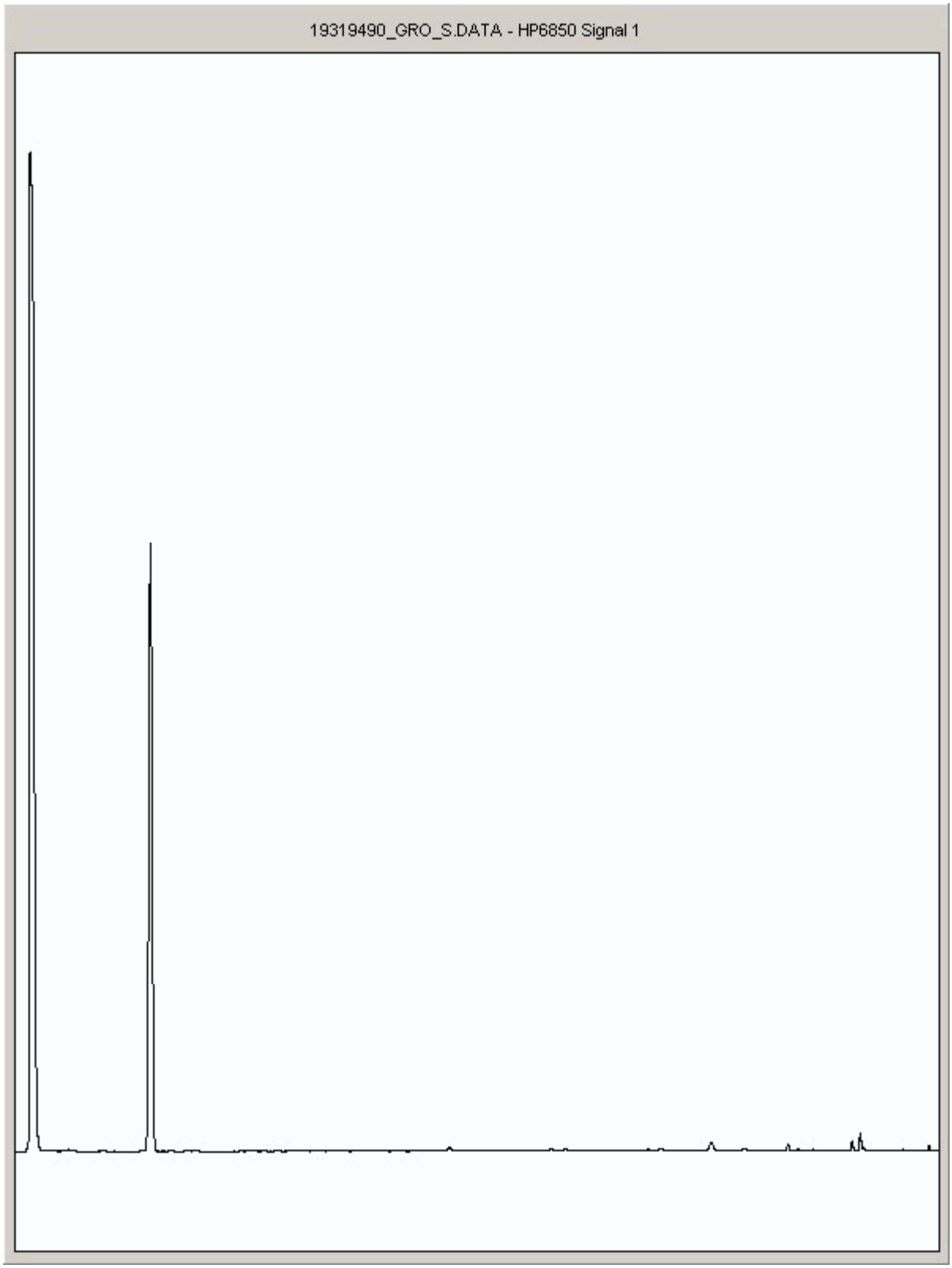
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19319490
Sample ID : WS 28

Depth : 0.30



CERTIFICATE OF ANALYSIS

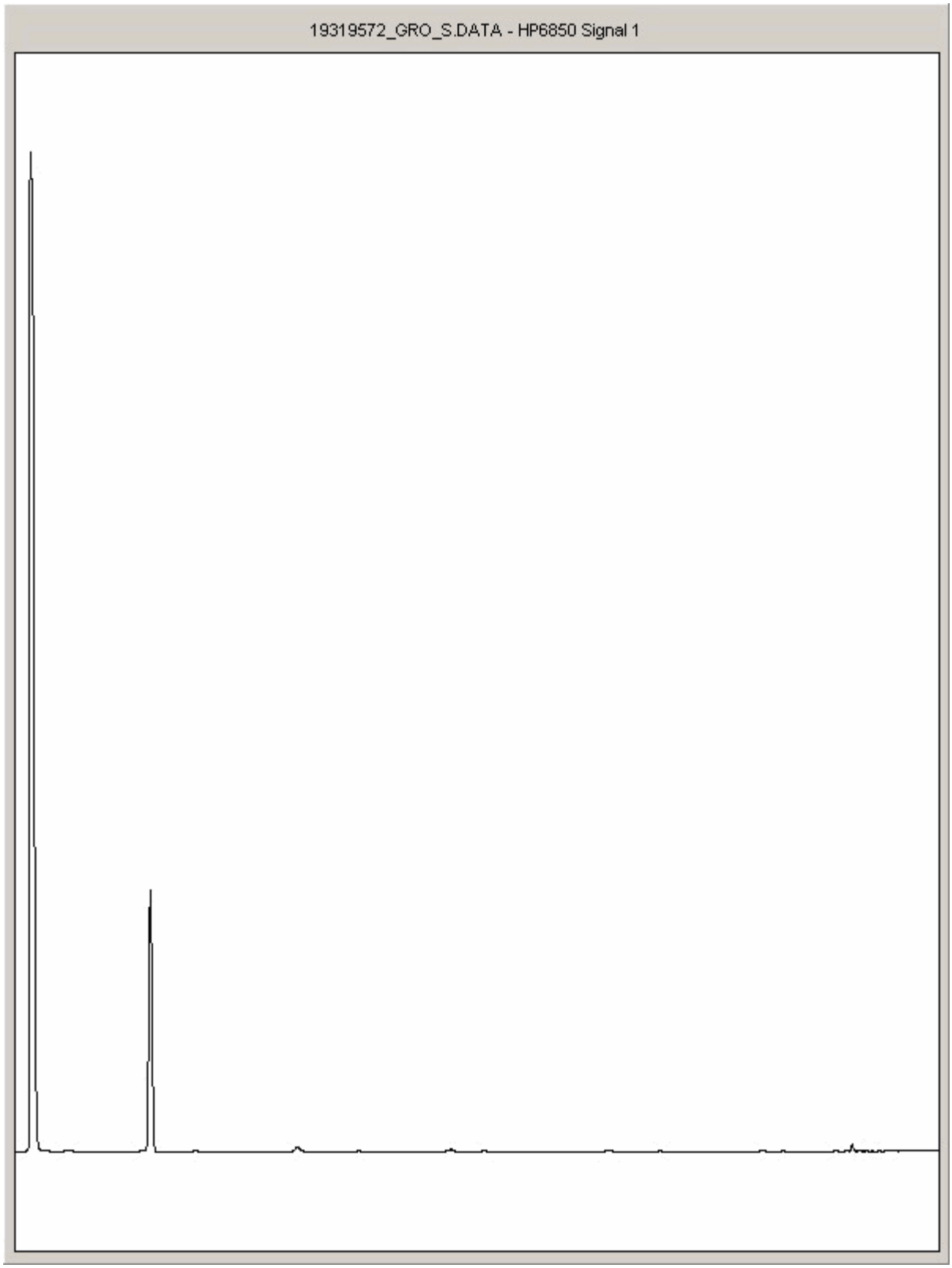
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19319572
Sample ID : WS 46

Depth : 0.70



CERTIFICATE OF ANALYSIS

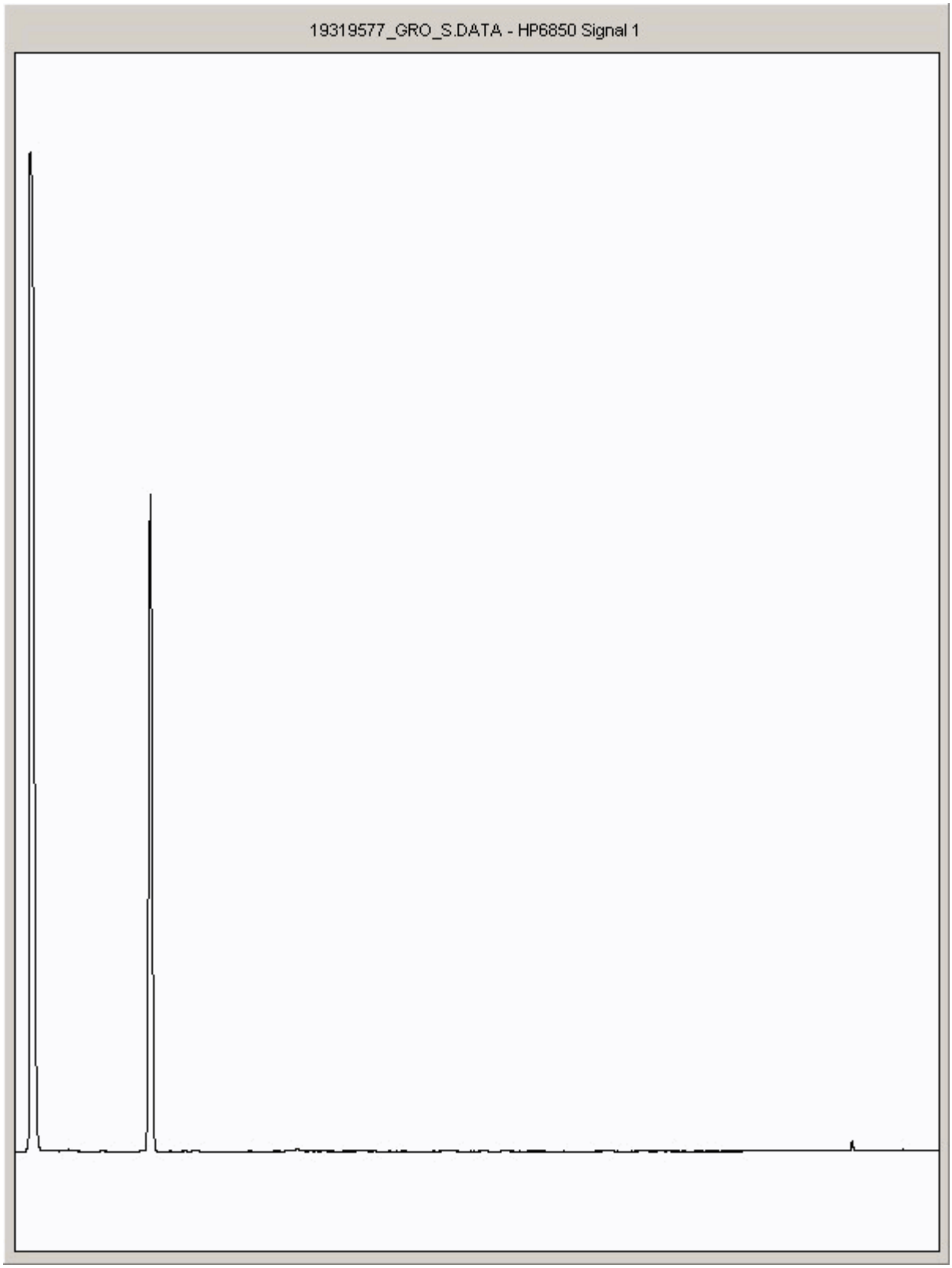
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19319577
Sample ID : WS 45

Depth : 1.00



CERTIFICATE OF ANALYSIS

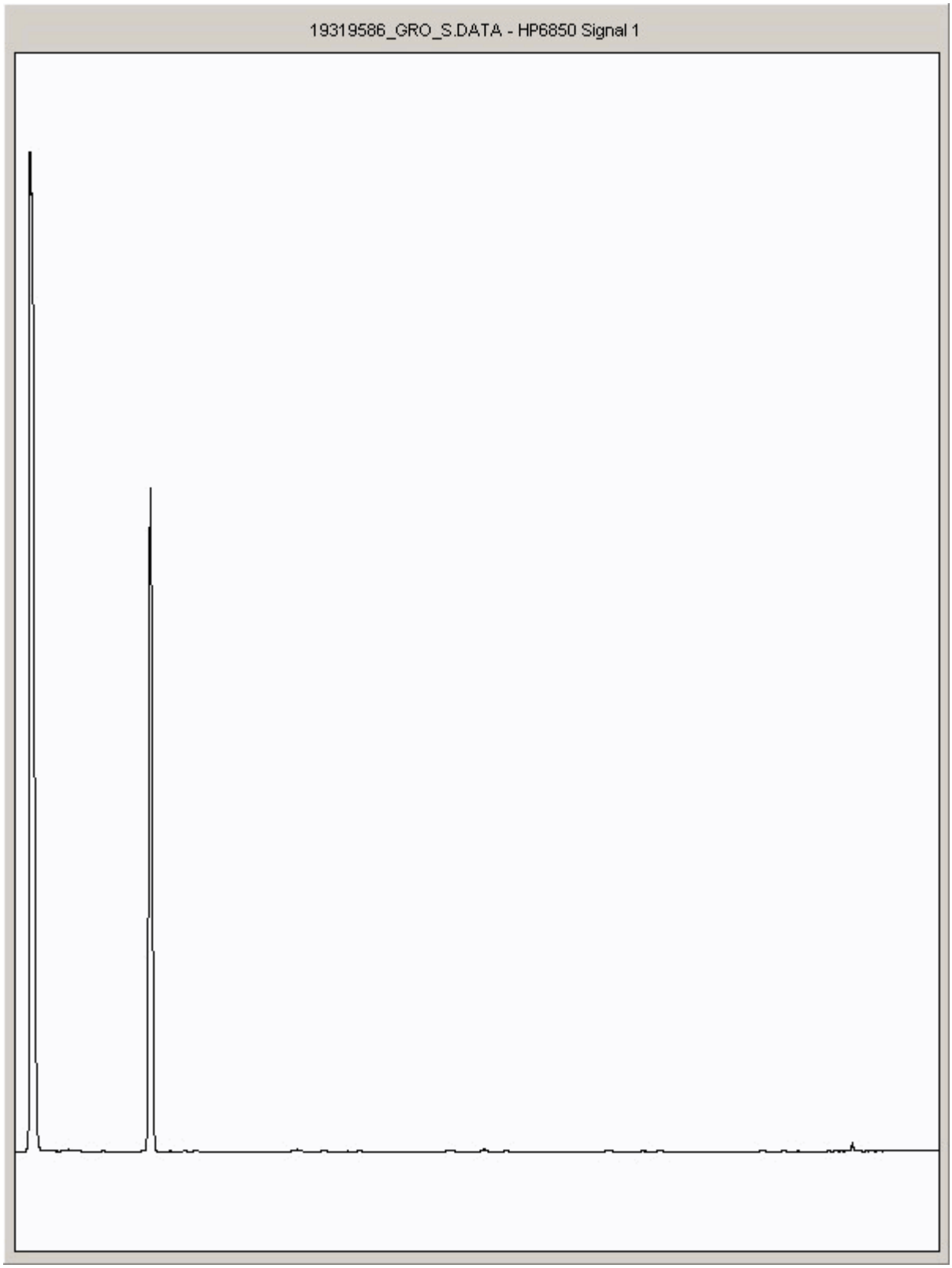
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19319586
Sample ID : WS 43

Depth : 0.50



CERTIFICATE OF ANALYSIS

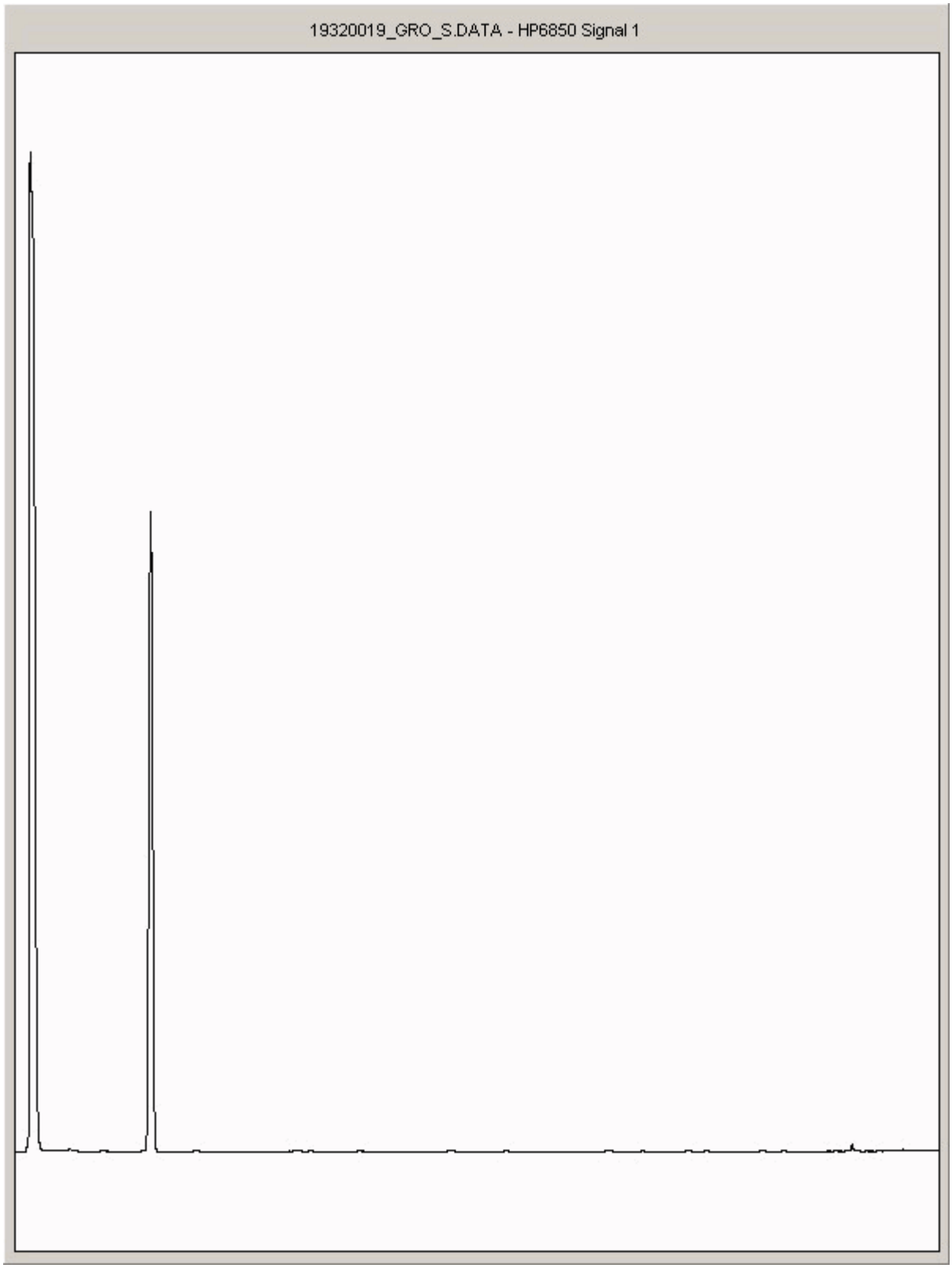
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19320019
Sample ID : WS29

Depth : 0.40



CERTIFICATE OF ANALYSIS

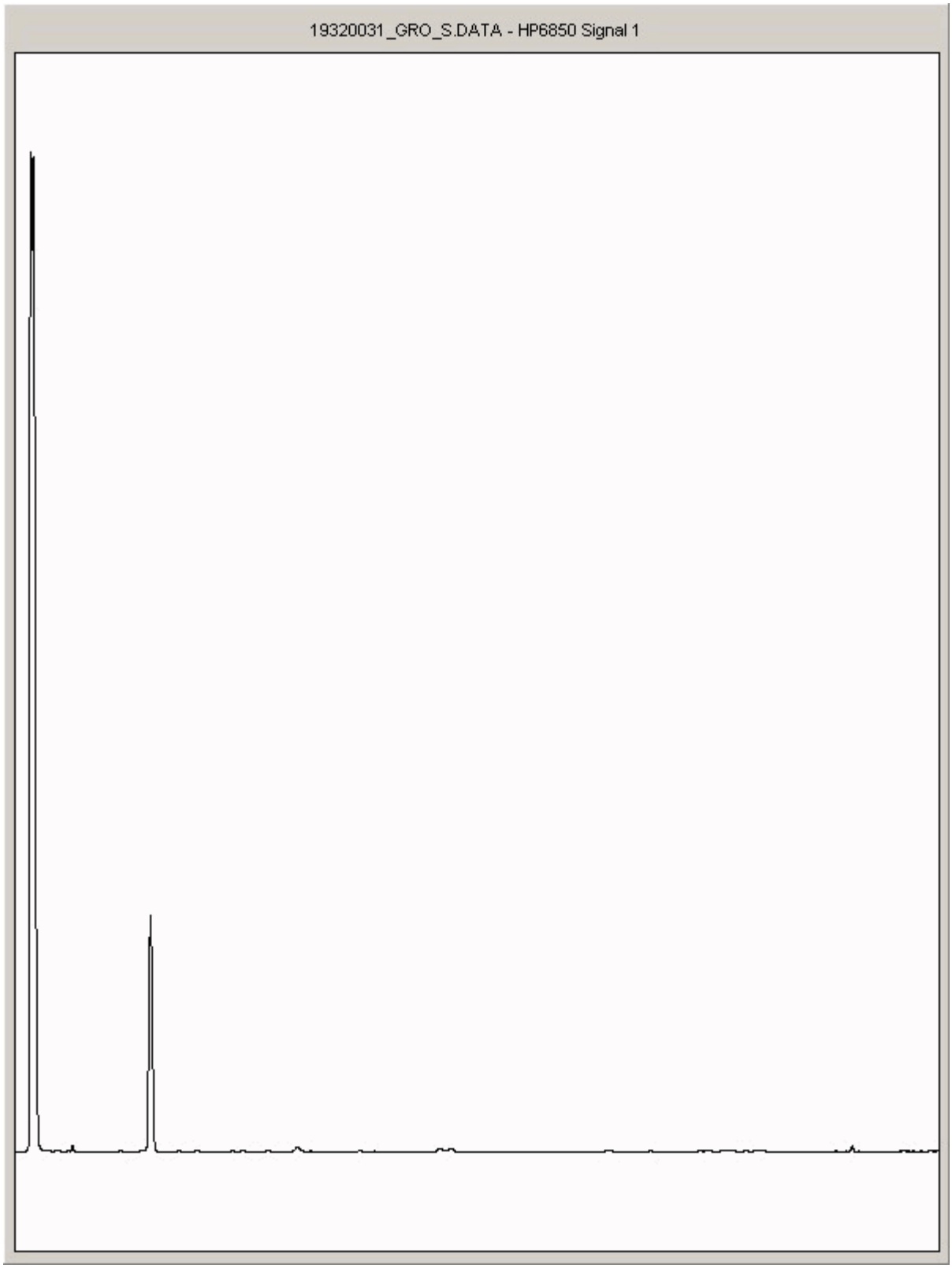
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19320031
Sample ID : WS52

Depth : 0.10



CERTIFICATE OF ANALYSIS

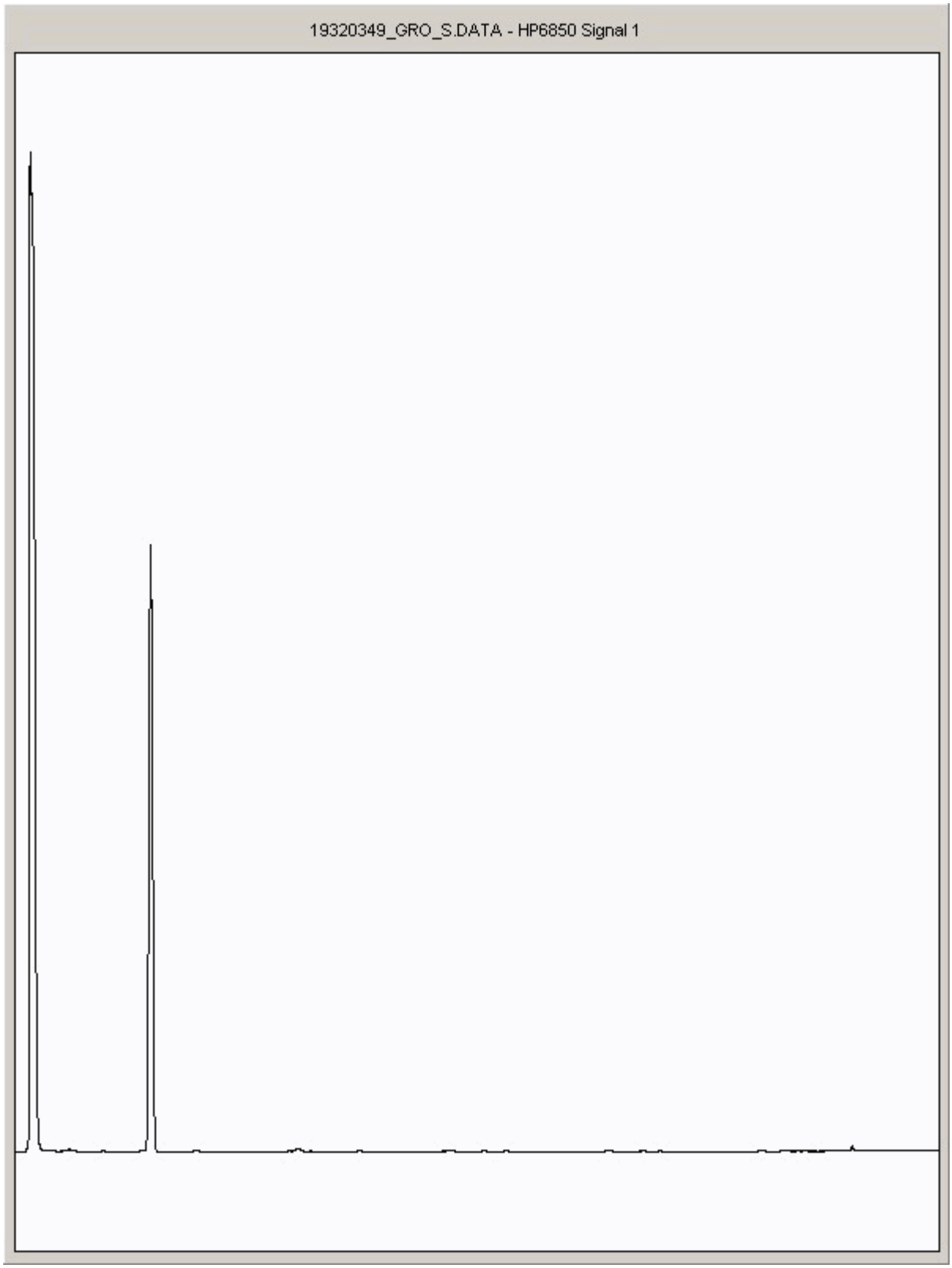
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19320349
Sample ID : WS 30

Depth : 0.50



CERTIFICATE OF ANALYSIS

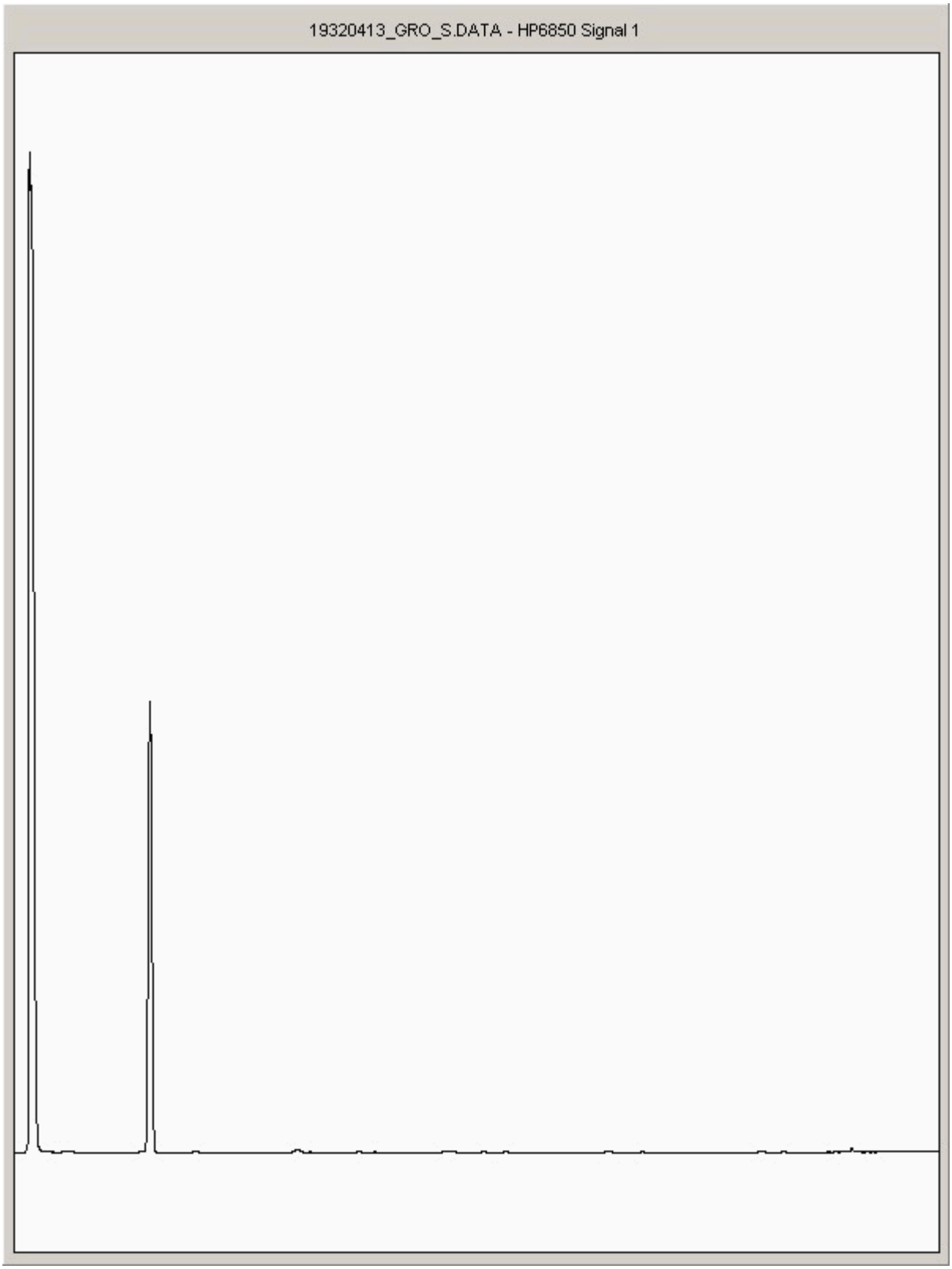
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19320413
Sample ID : WS53

Depth : 0.50



CERTIFICATE OF ANALYSIS

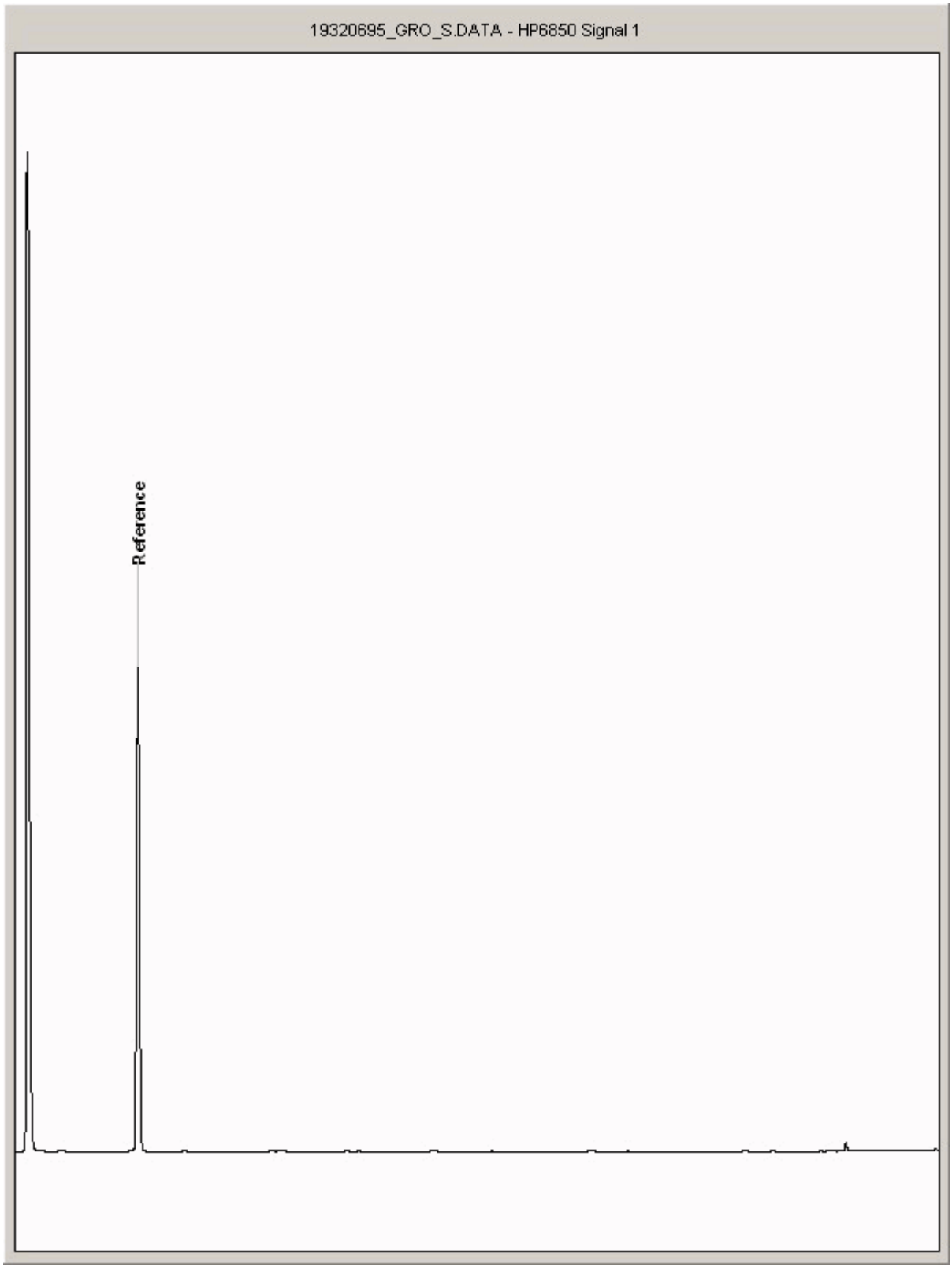
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19320695
Sample ID : WS39

Depth : 0.20



CERTIFICATE OF ANALYSIS

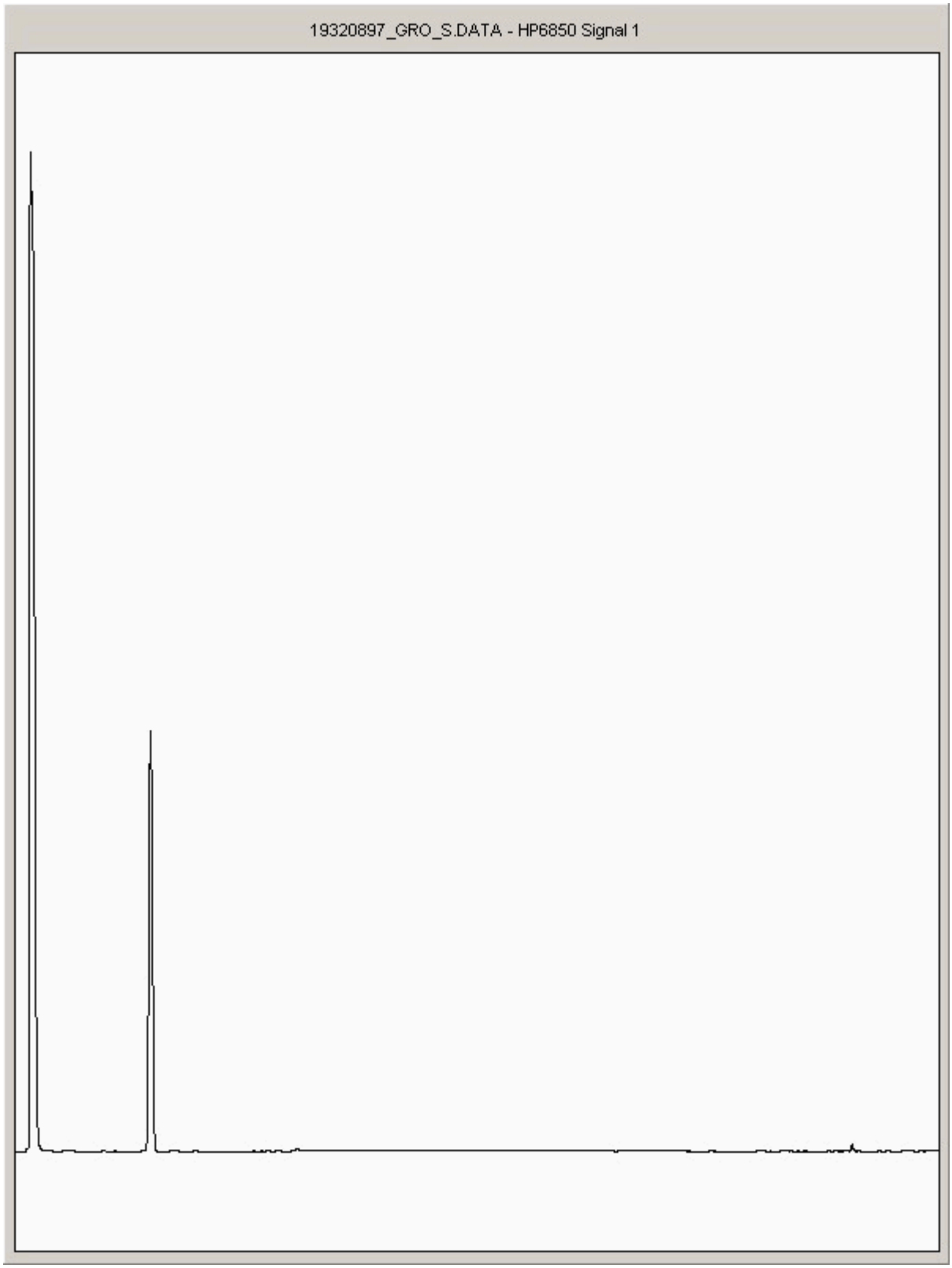
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19320897
Sample ID : WS 46

Depth : 0.30



CERTIFICATE OF ANALYSIS

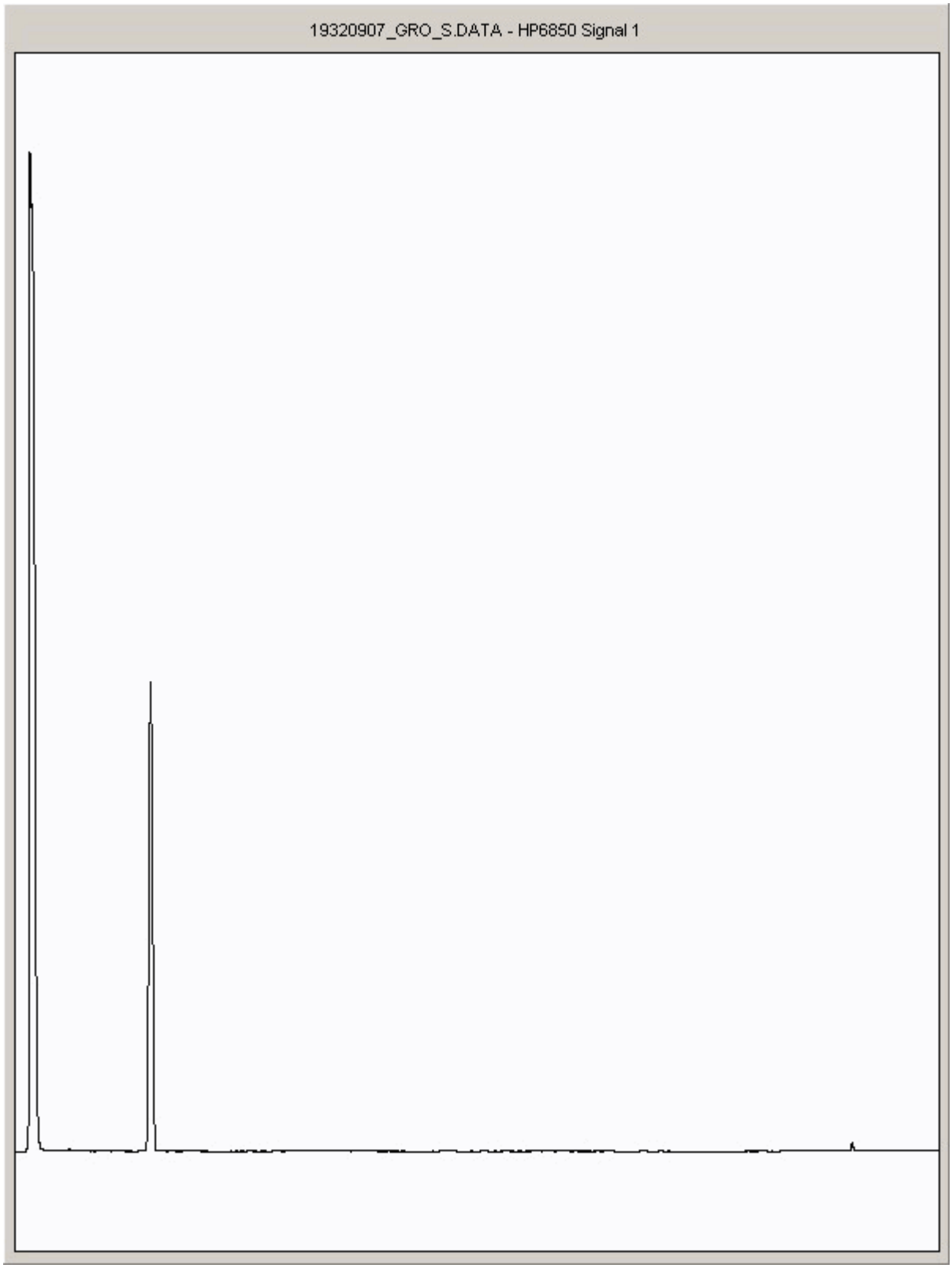
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19320907
Sample ID : WS 23

Depth : 0.20



CERTIFICATE OF ANALYSIS

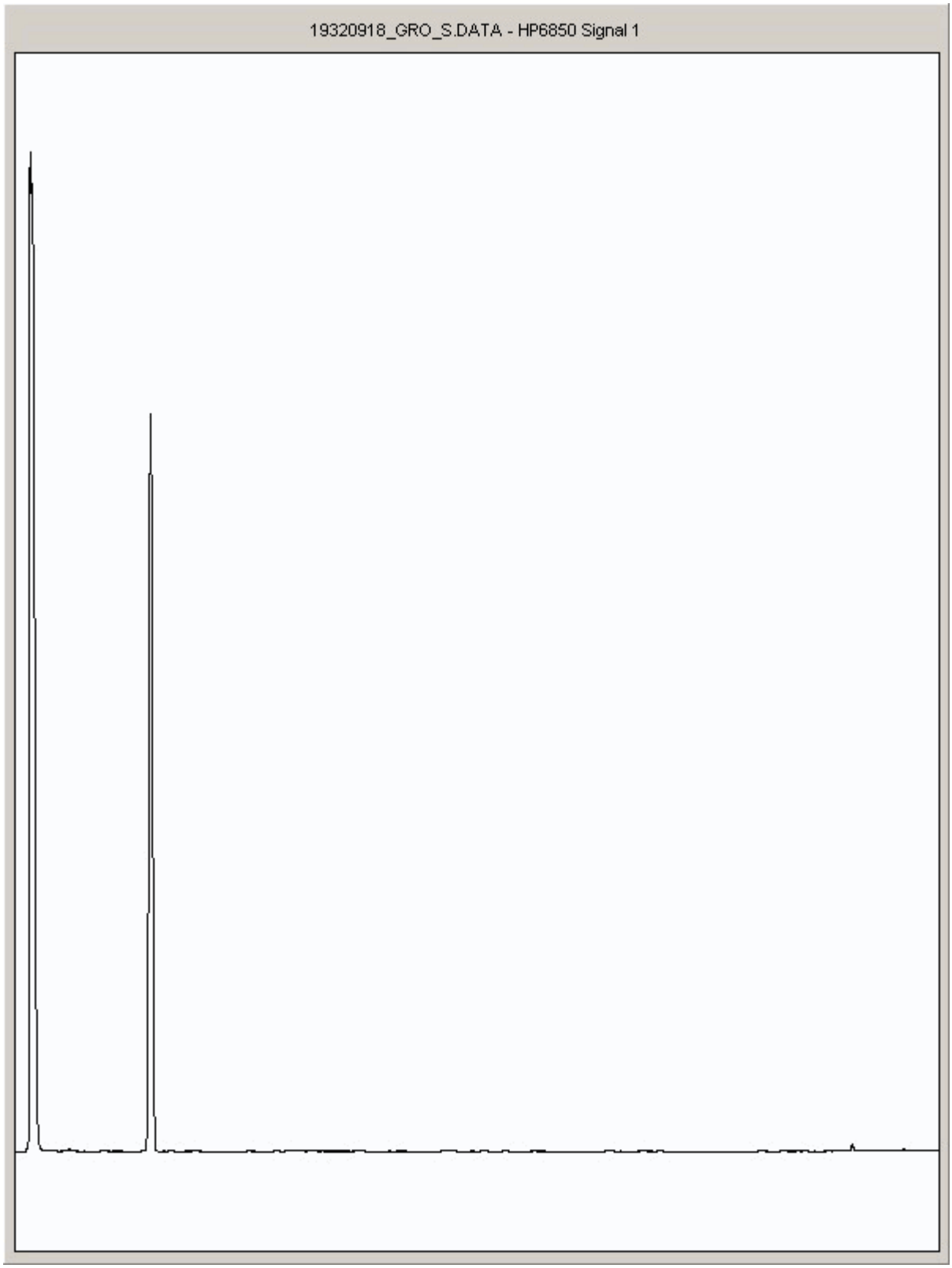
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19320918
Sample ID : WS 16

Depth : 1.20



CERTIFICATE OF ANALYSIS

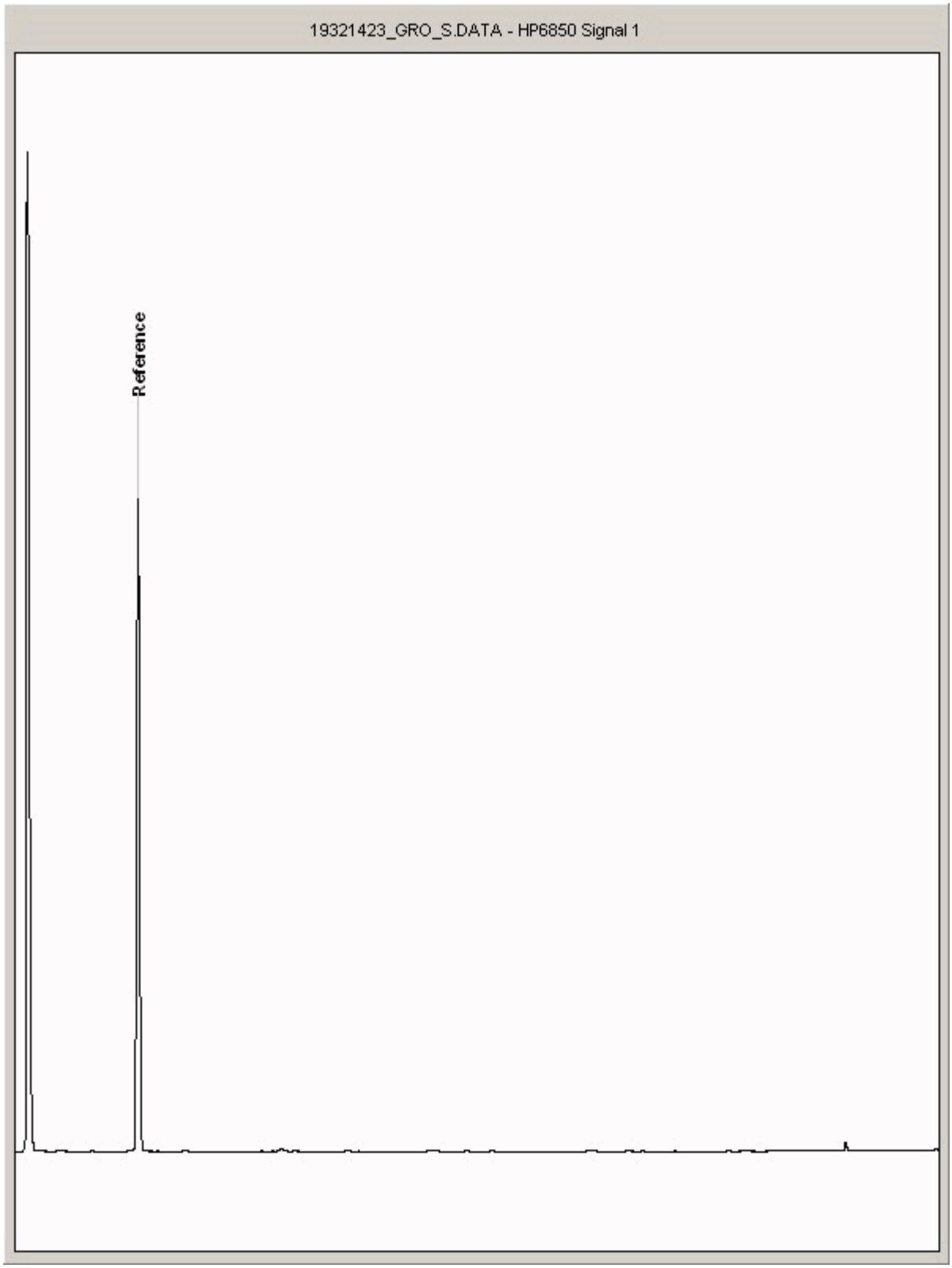
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19321423
Sample ID : WS58

Depth : 1.00



CERTIFICATE OF ANALYSIS

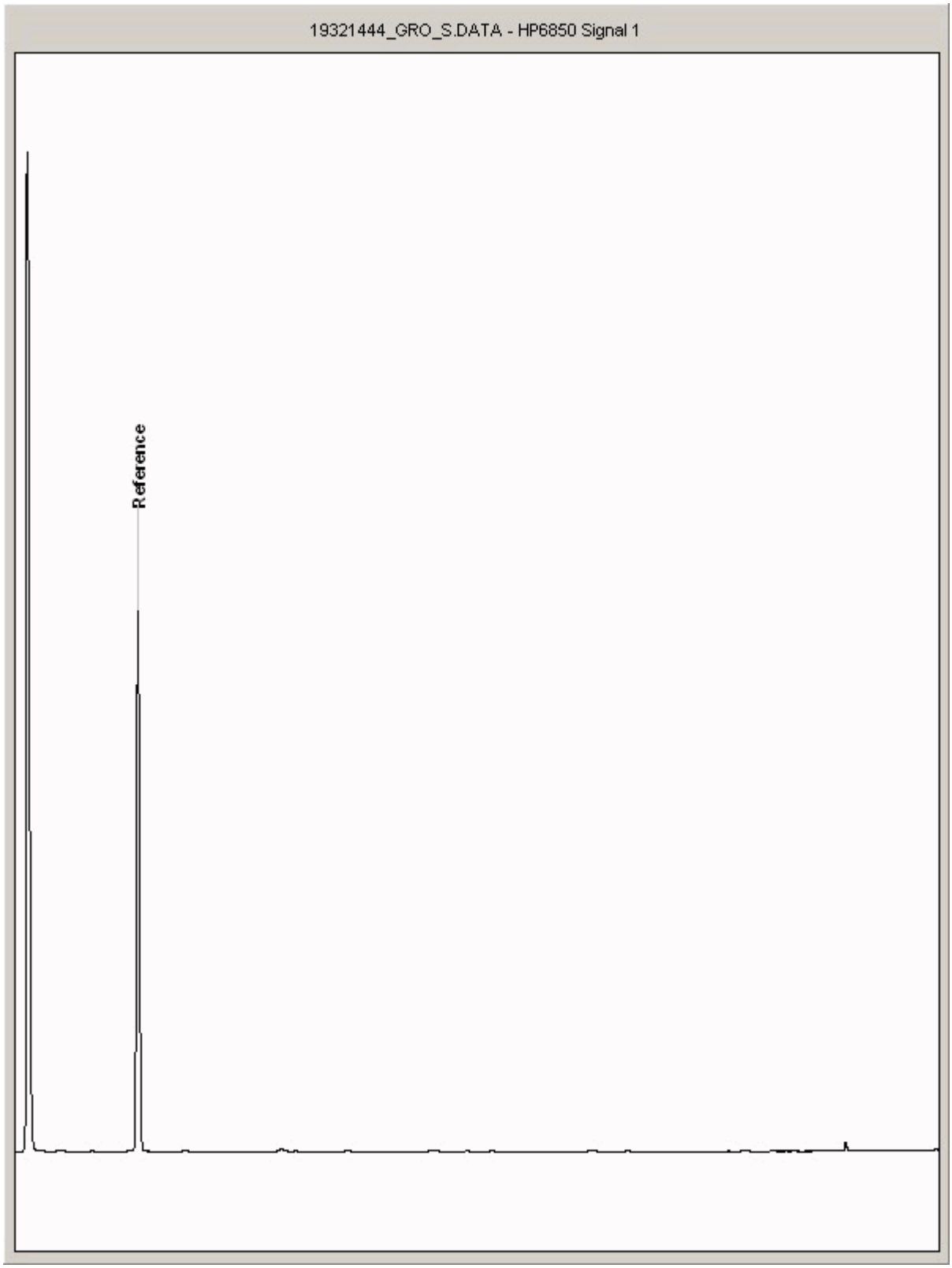
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19321444
Sample ID : WS58

Depth : 0.30



CERTIFICATE OF ANALYSIS

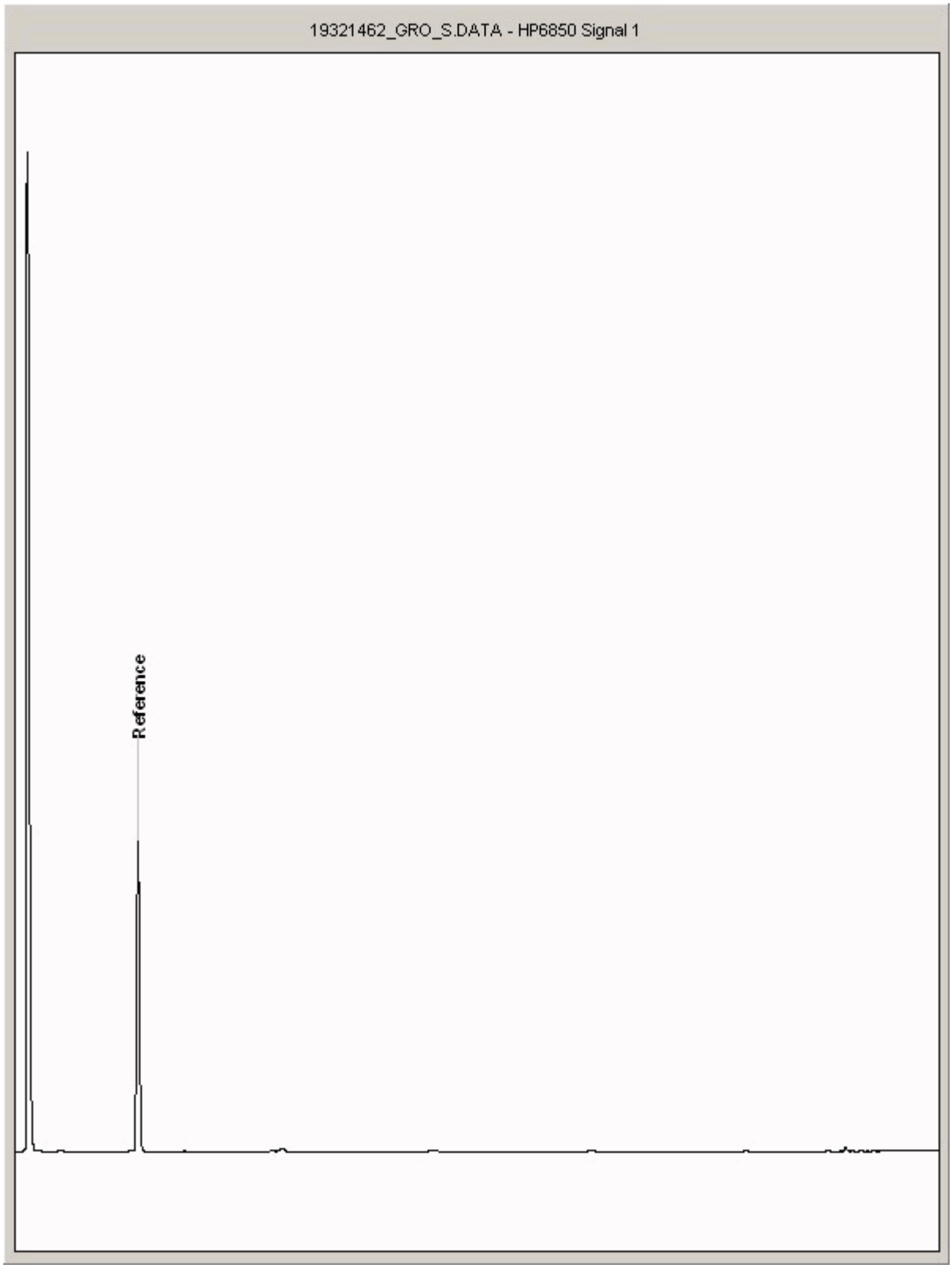
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19321462
Sample ID : WS22

Depth : 0.10 - 0.20



CERTIFICATE OF ANALYSIS

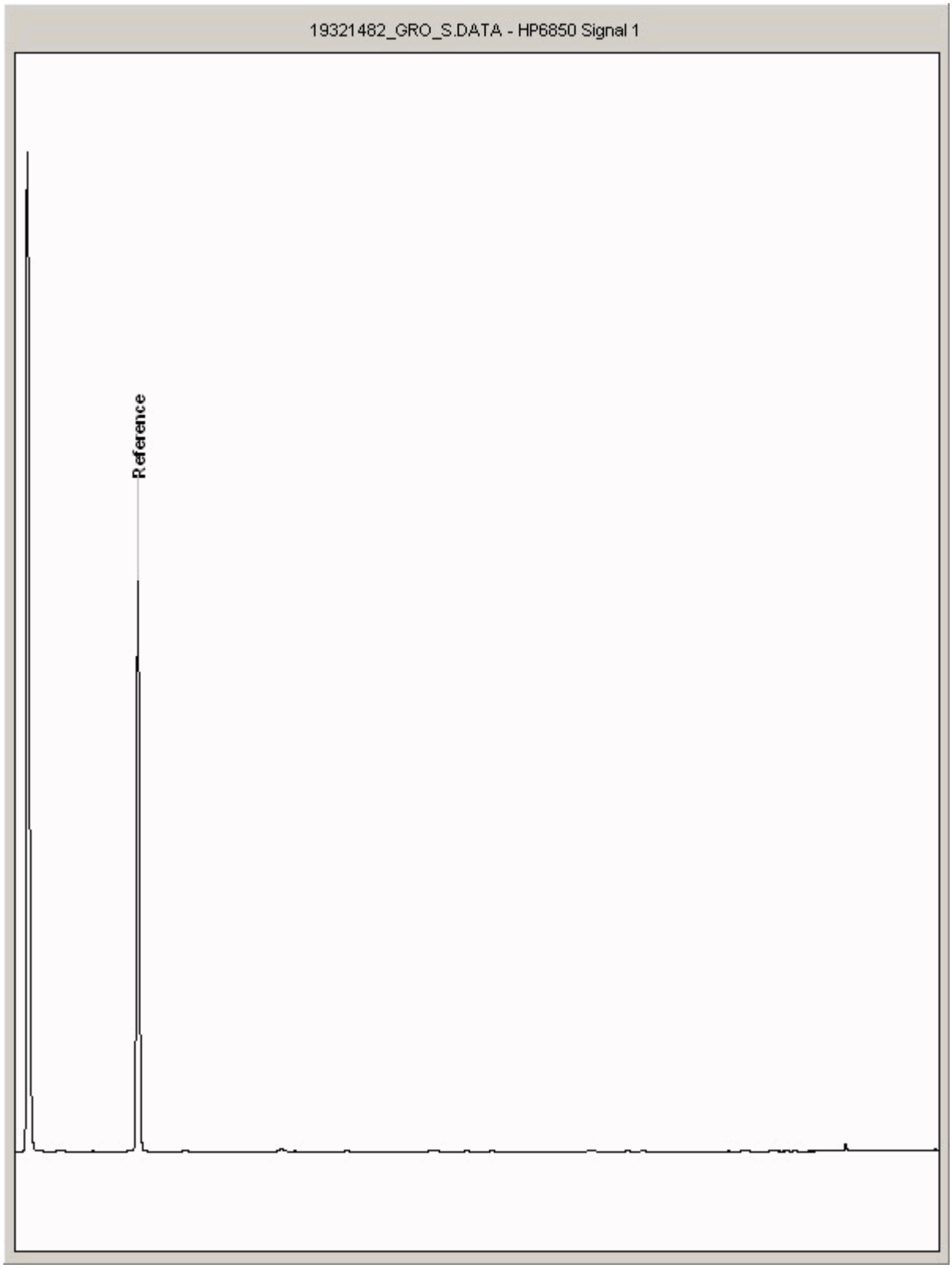
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19321482
Sample ID : WS54

Depth : 0.50



CERTIFICATE OF ANALYSIS

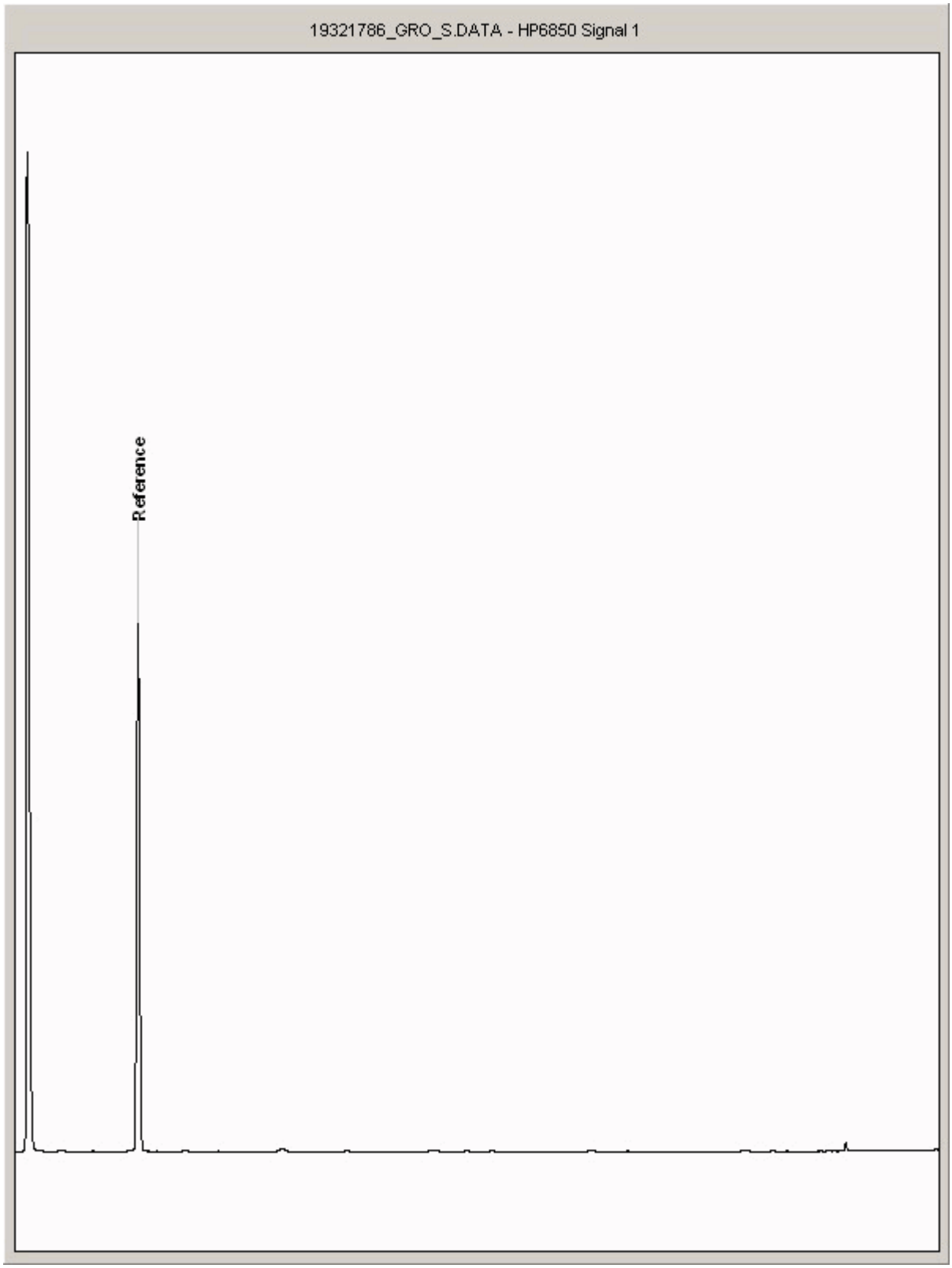
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19321786
Sample ID : WS52

Depth : 1.00



CERTIFICATE OF ANALYSIS

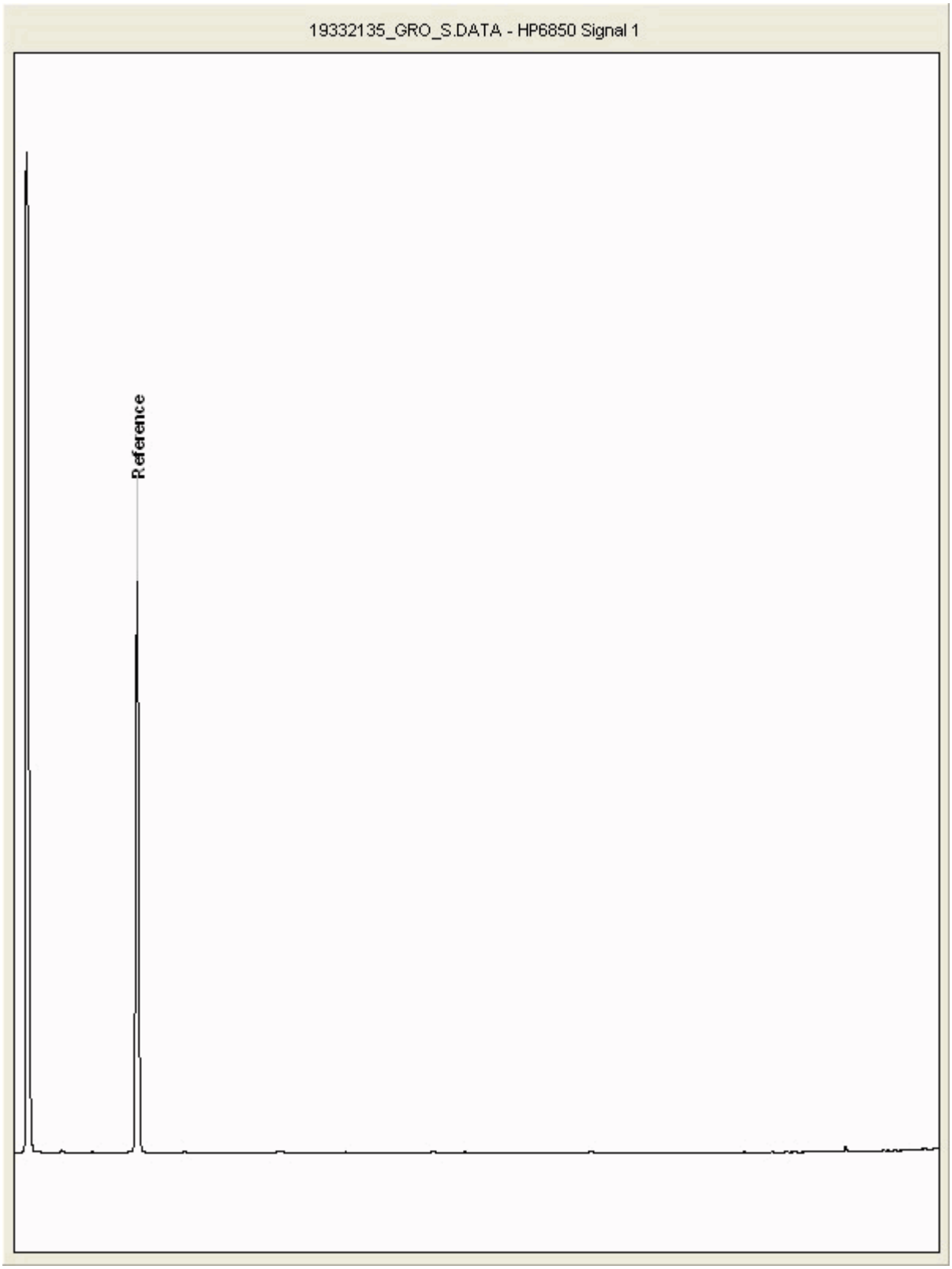
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19332135
Sample ID : WS 16

Depth : 0.60



CERTIFICATE OF ANALYSIS

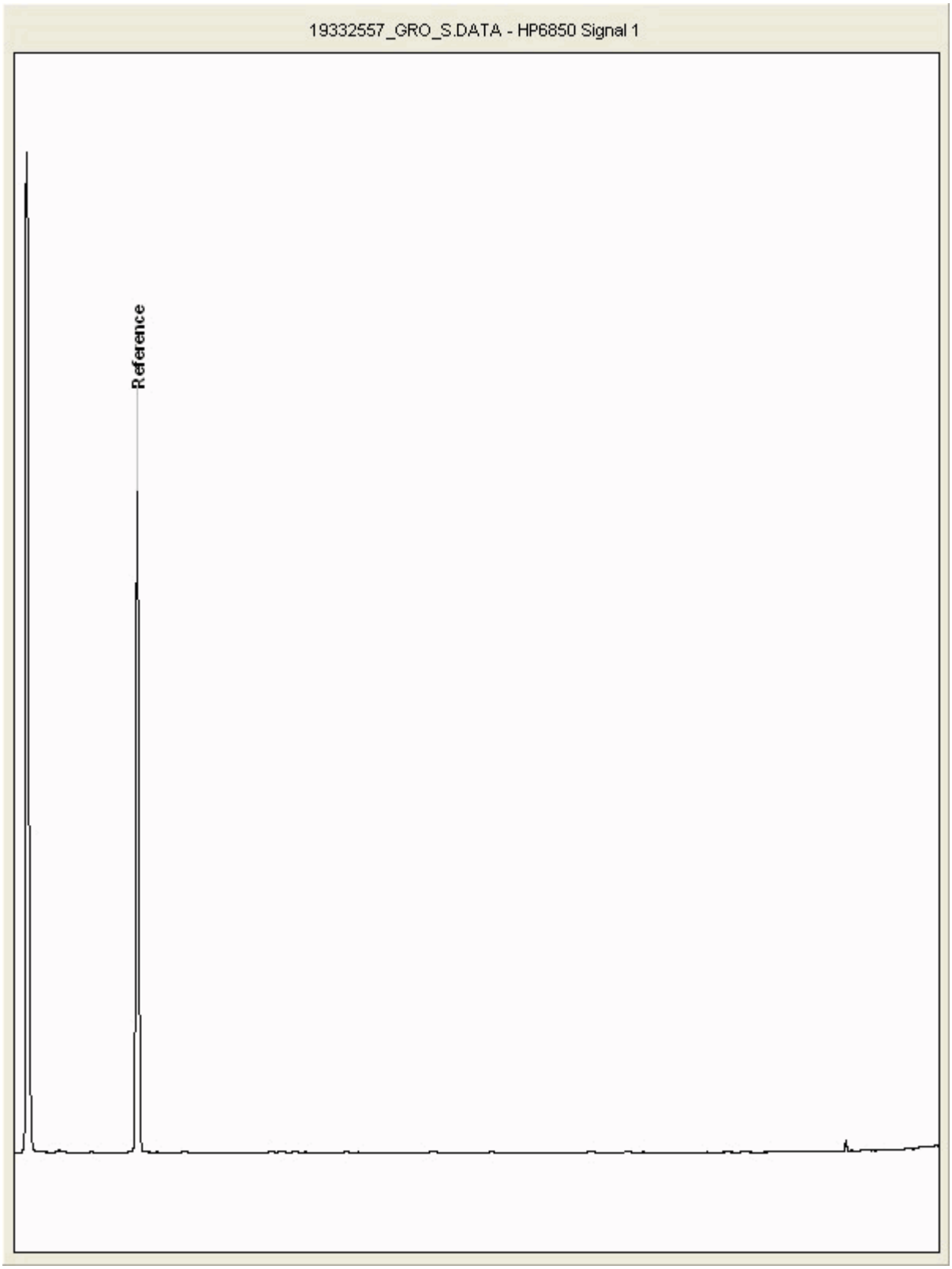
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19332557
Sample ID : WS 20

Depth : 1.50



CERTIFICATE OF ANALYSIS

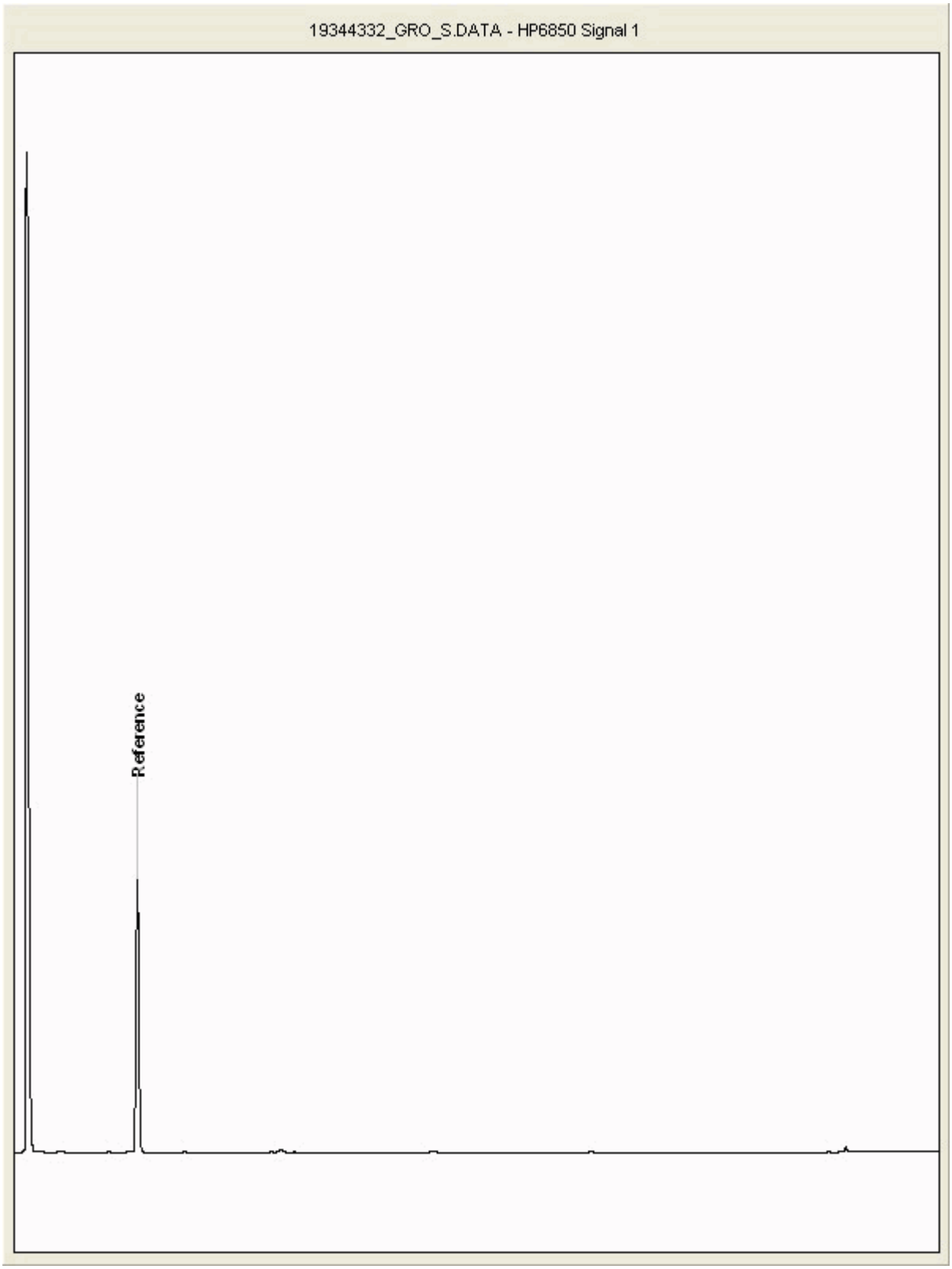
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19344332
Sample ID : WS 36

Depth : 0.50



CERTIFICATE OF ANALYSIS

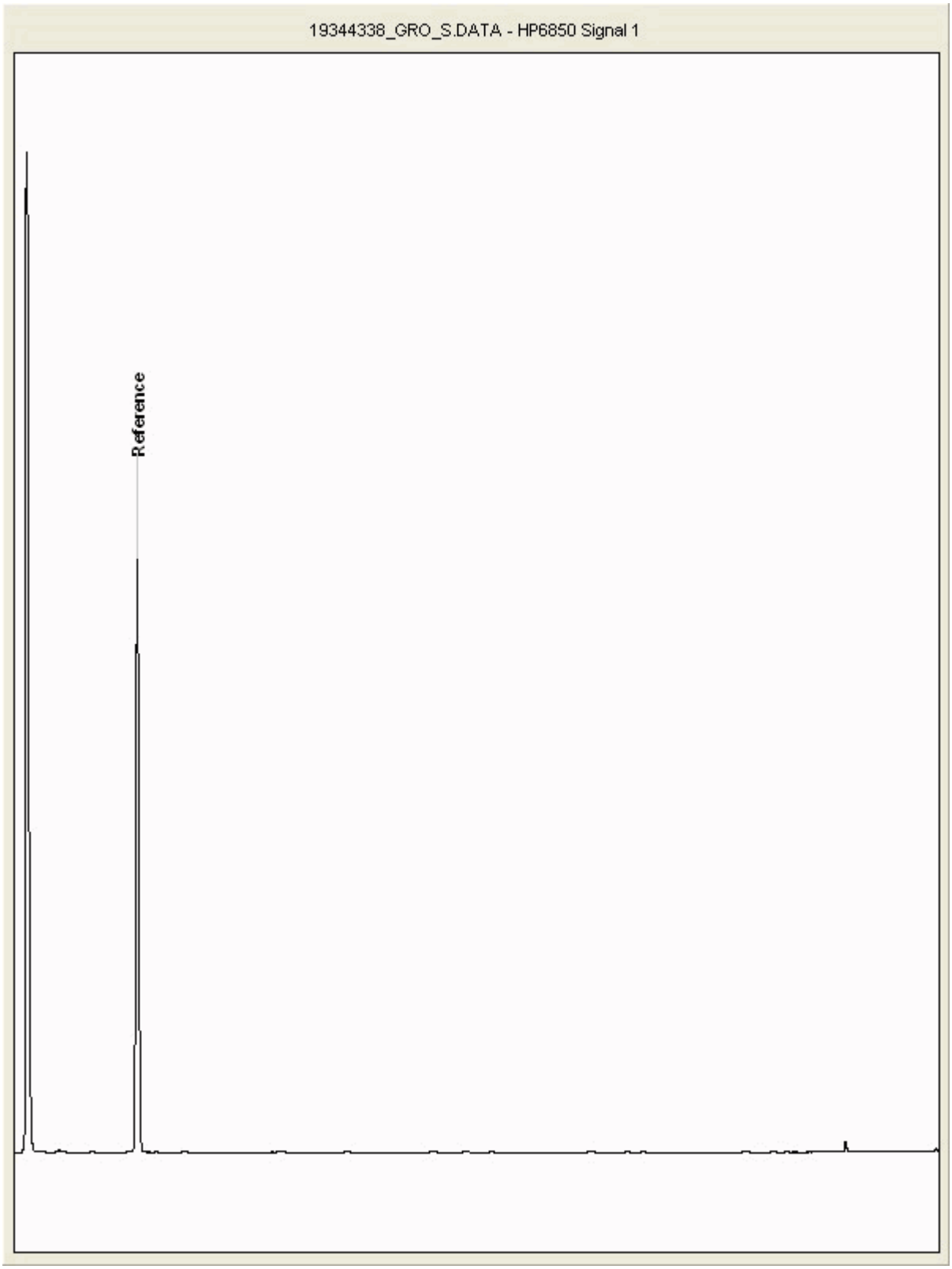
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19344338
Sample ID : WS 23

Depth : 0.30 - 0.50



CERTIFICATE OF ANALYSIS

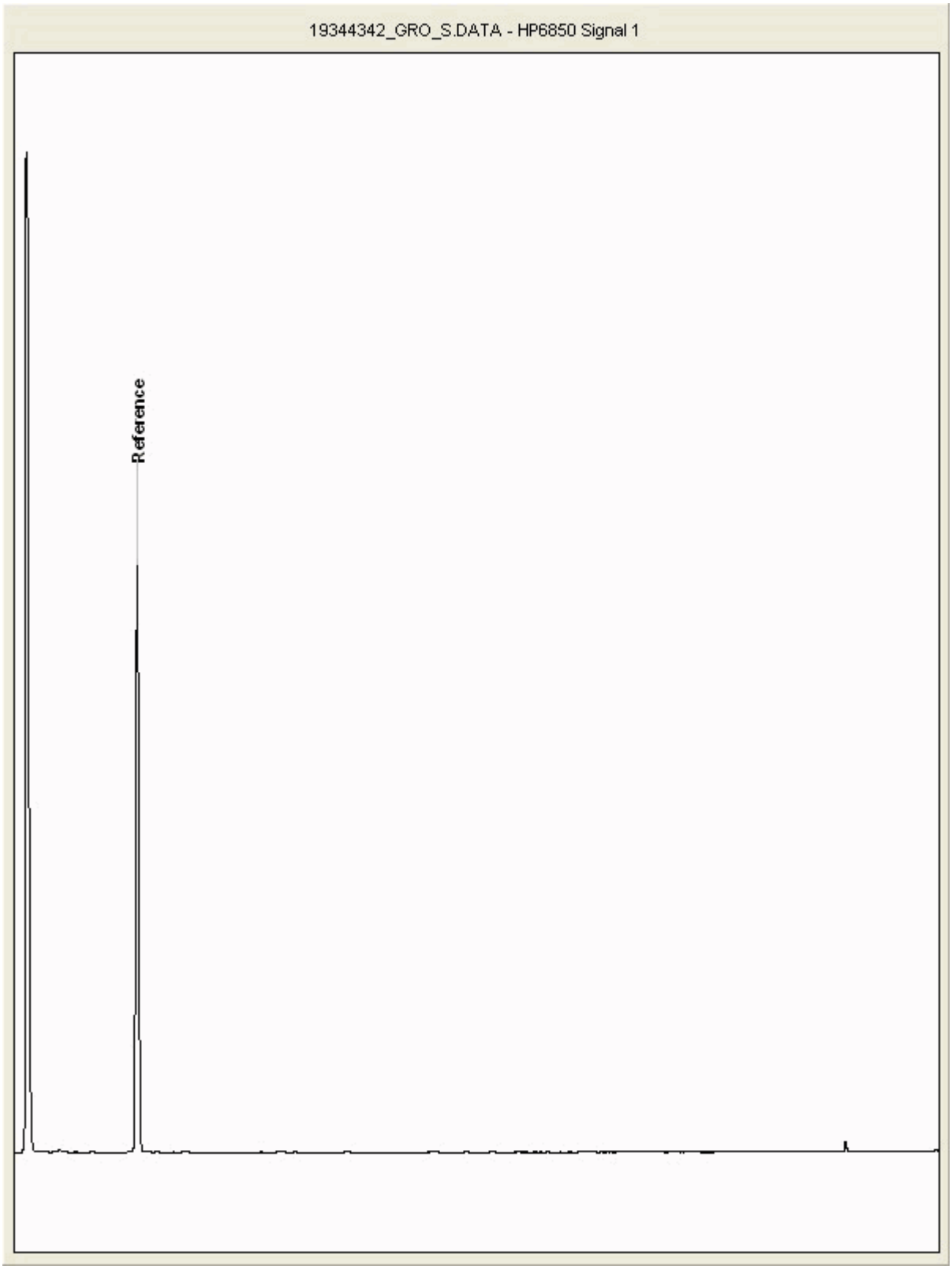
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19344342
Sample ID : WS 43

Depth : 0.20



CERTIFICATE OF ANALYSIS

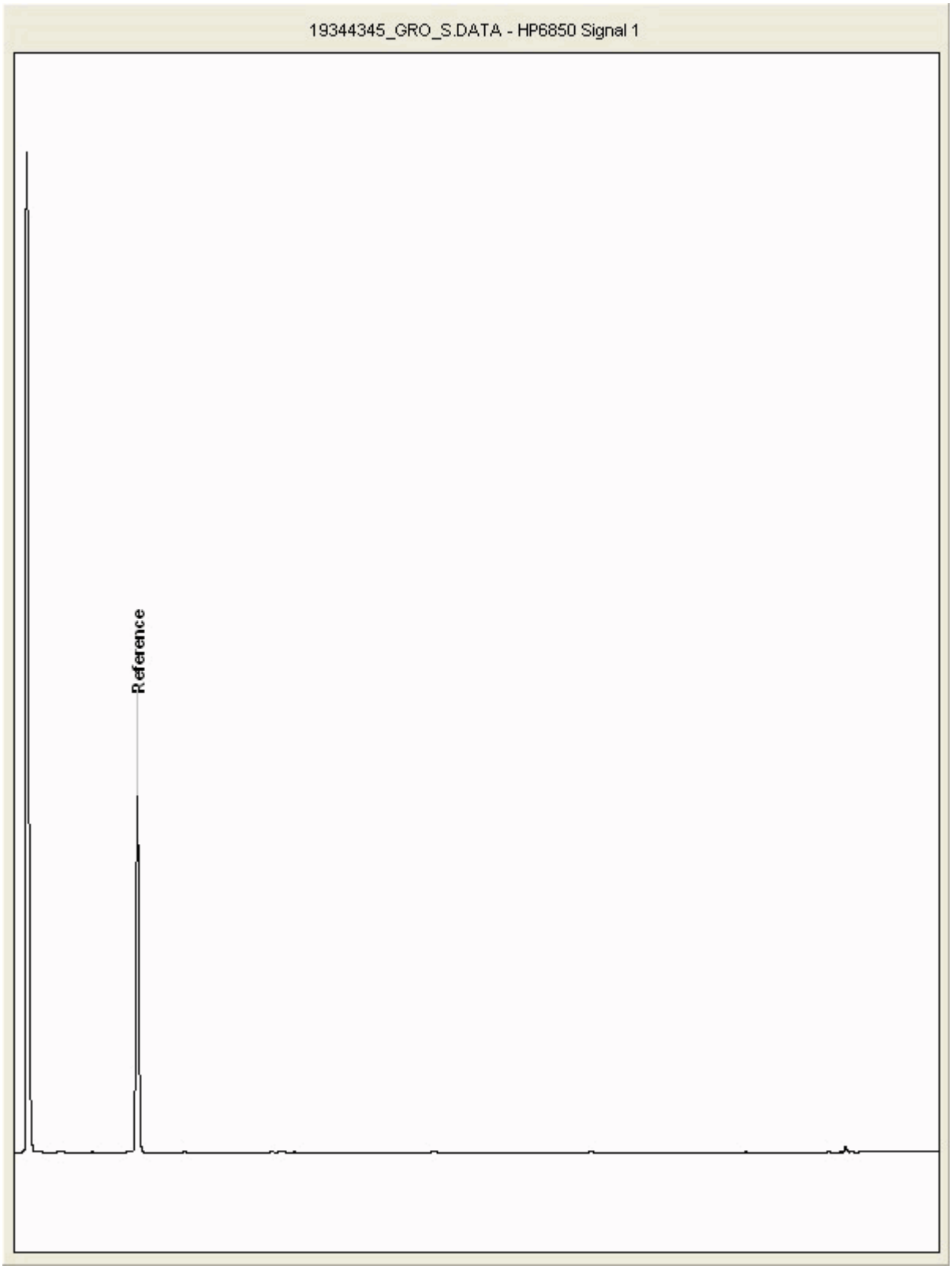
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19344345
Sample ID : WS 45

Depth : 0.30



CERTIFICATE OF ANALYSIS

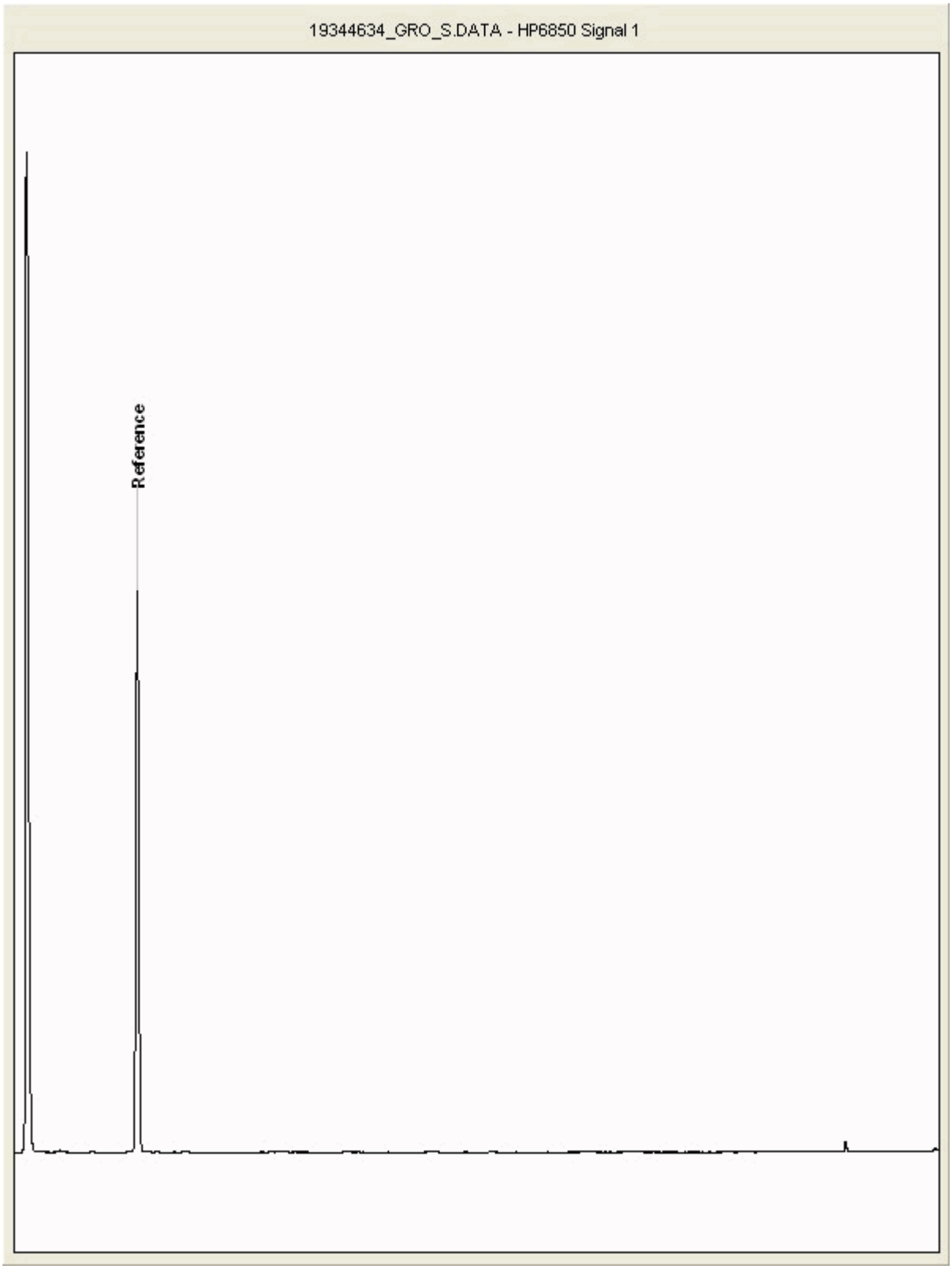
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19344634
Sample ID : WS35

Depth : 0.40



CERTIFICATE OF ANALYSIS

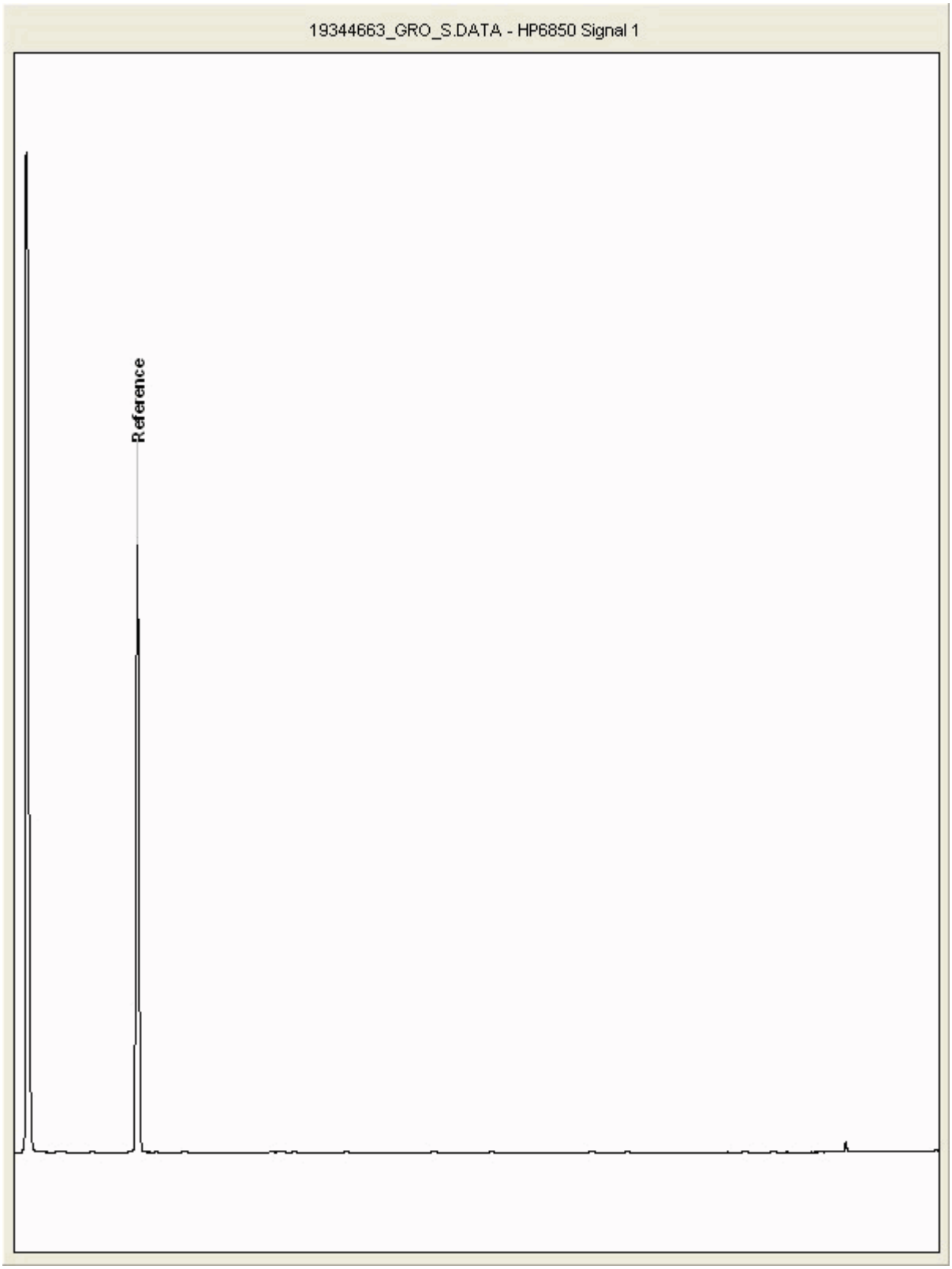
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19344663
Sample ID : WS39

Depth : 0.70 - 0.90



CERTIFICATE OF ANALYSIS

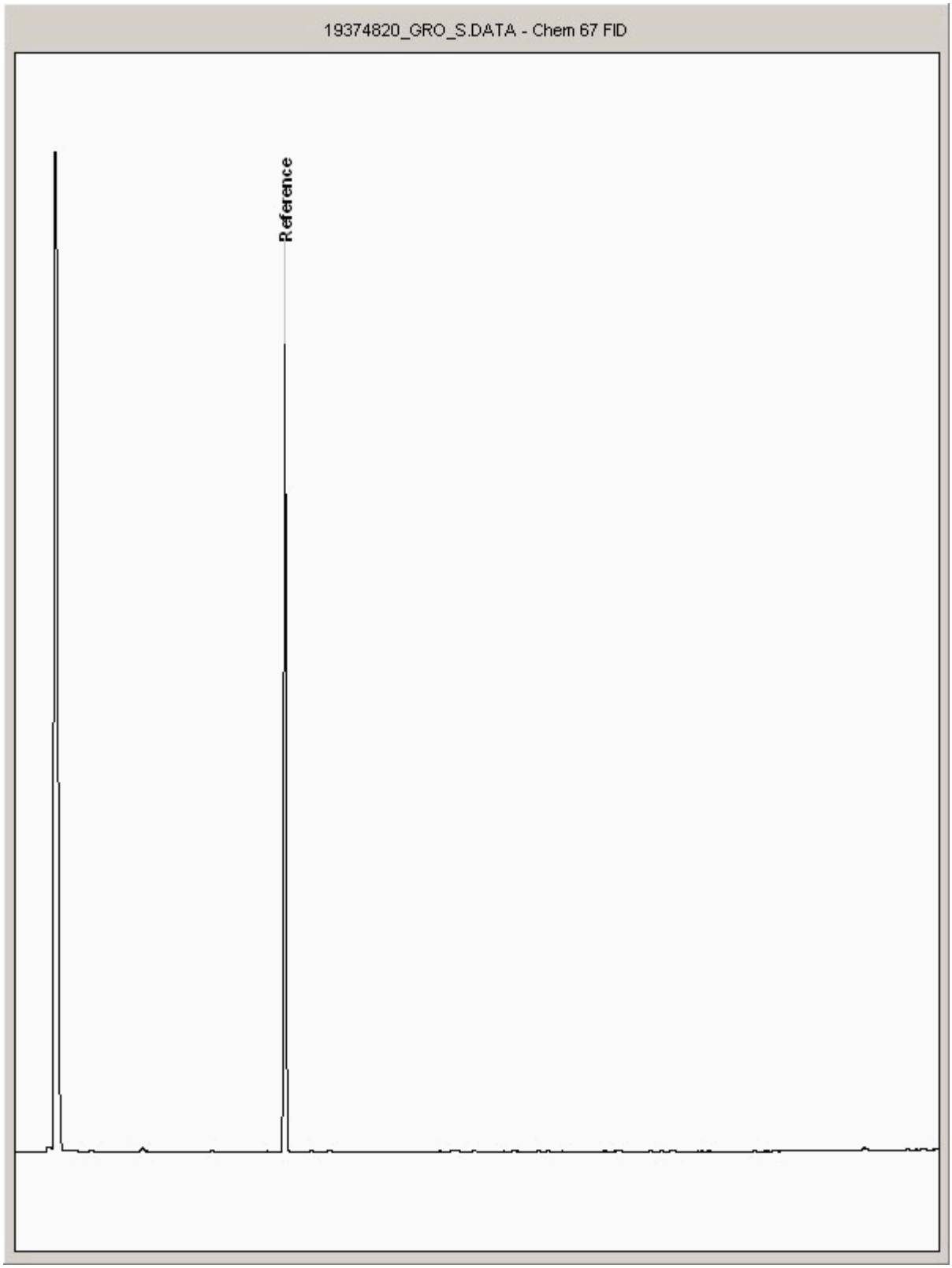
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19374820
Sample ID : WS54

Depth : 0.10



CERTIFICATE OF ANALYSIS

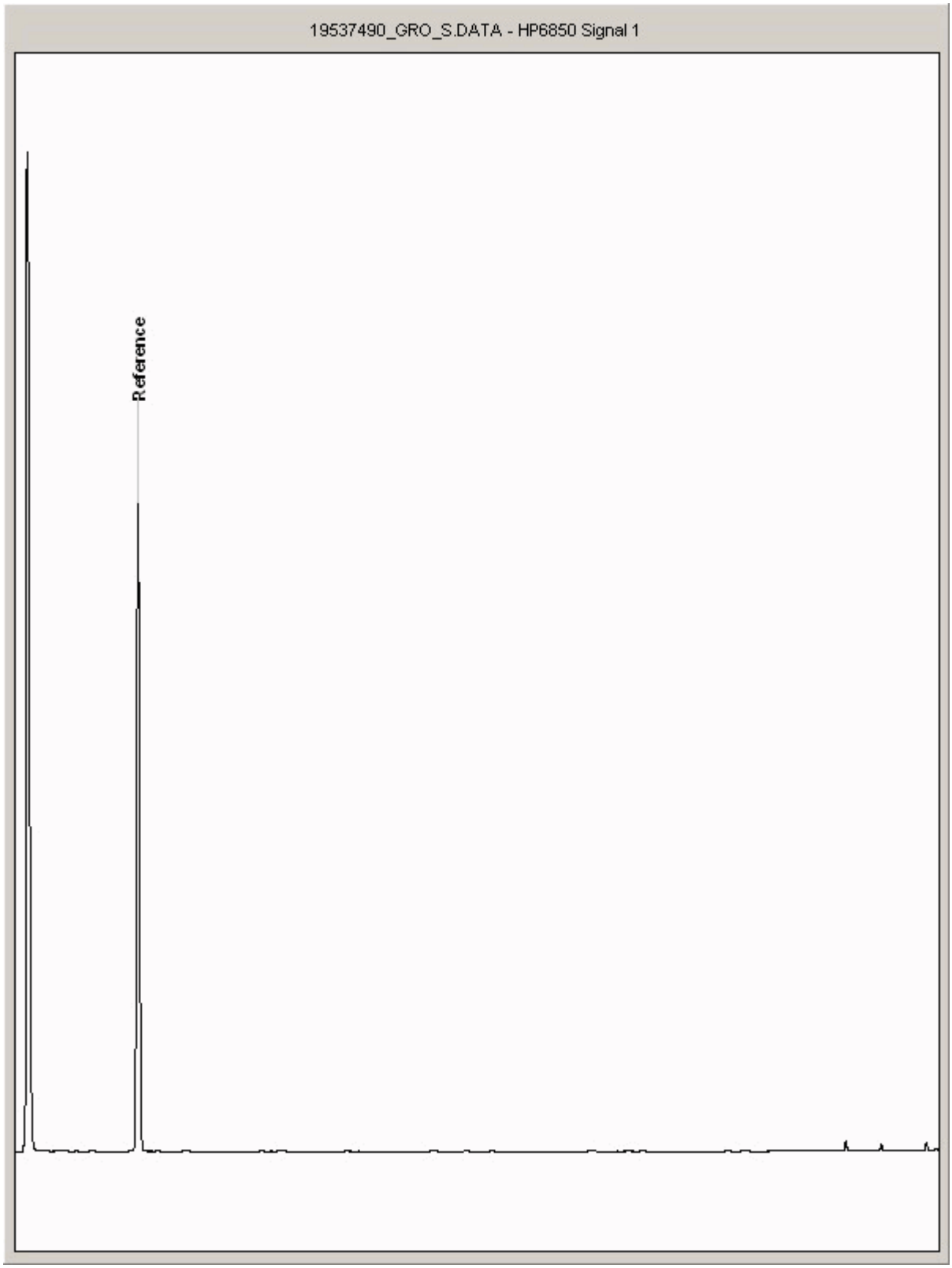
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19537490
Sample ID : WS 07

Depth : 0.30 - 0.30



CERTIFICATE OF ANALYSIS

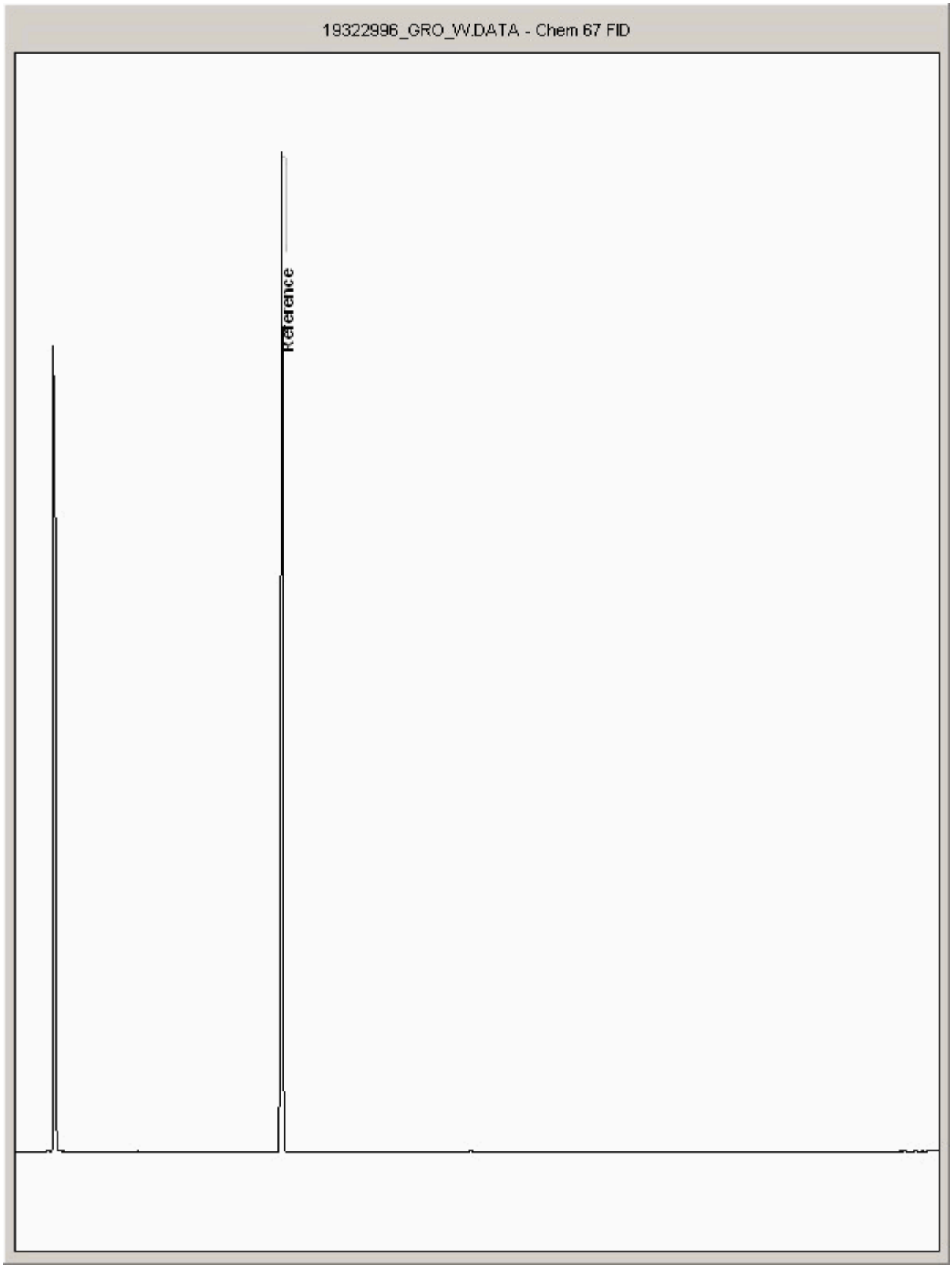
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19322996
Sample ID : WS22

Depth : 0.10 - 0.20



CERTIFICATE OF ANALYSIS

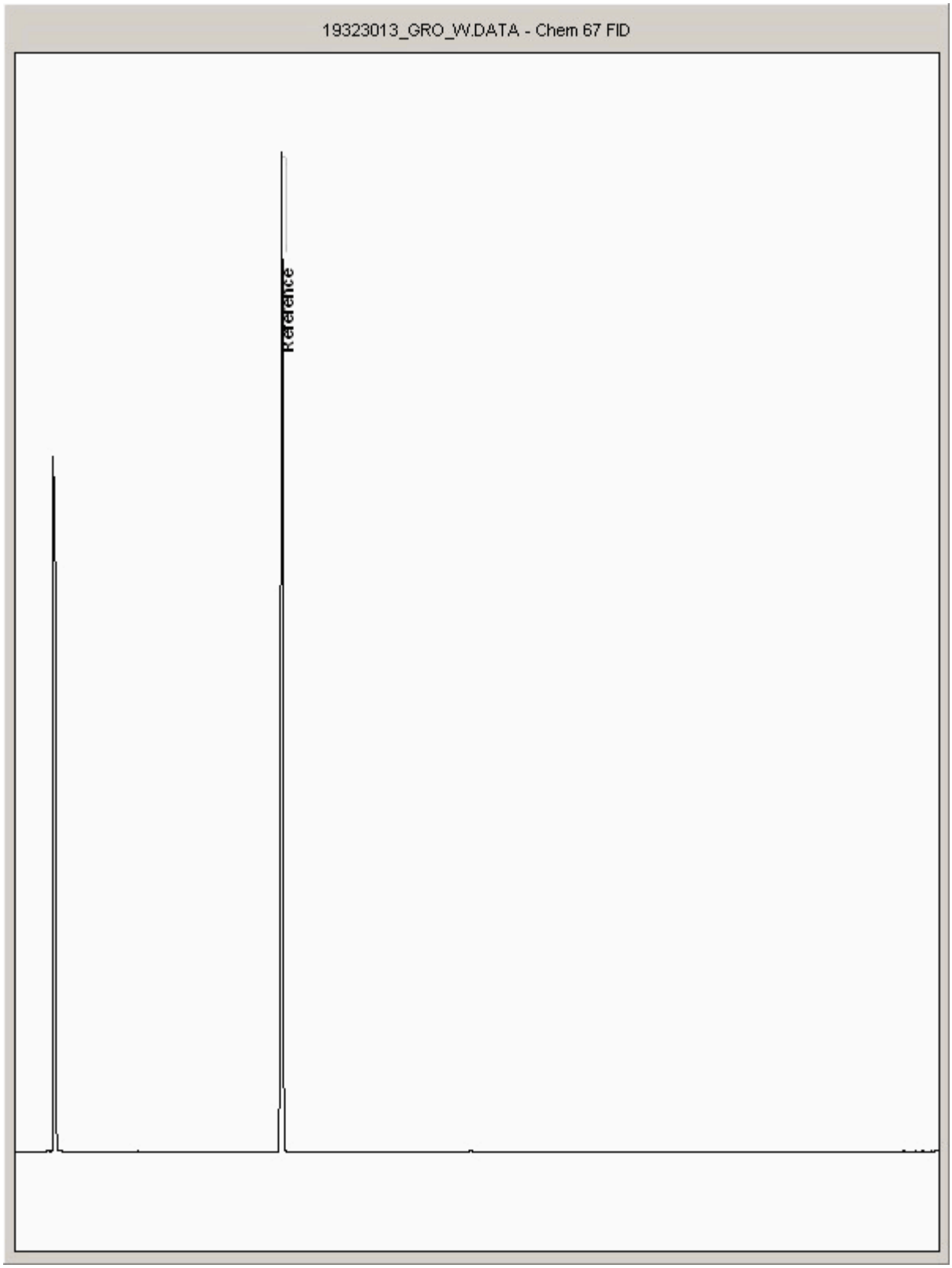
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19323013
Sample ID : WS 45

Depth : 0.30



CERTIFICATE OF ANALYSIS

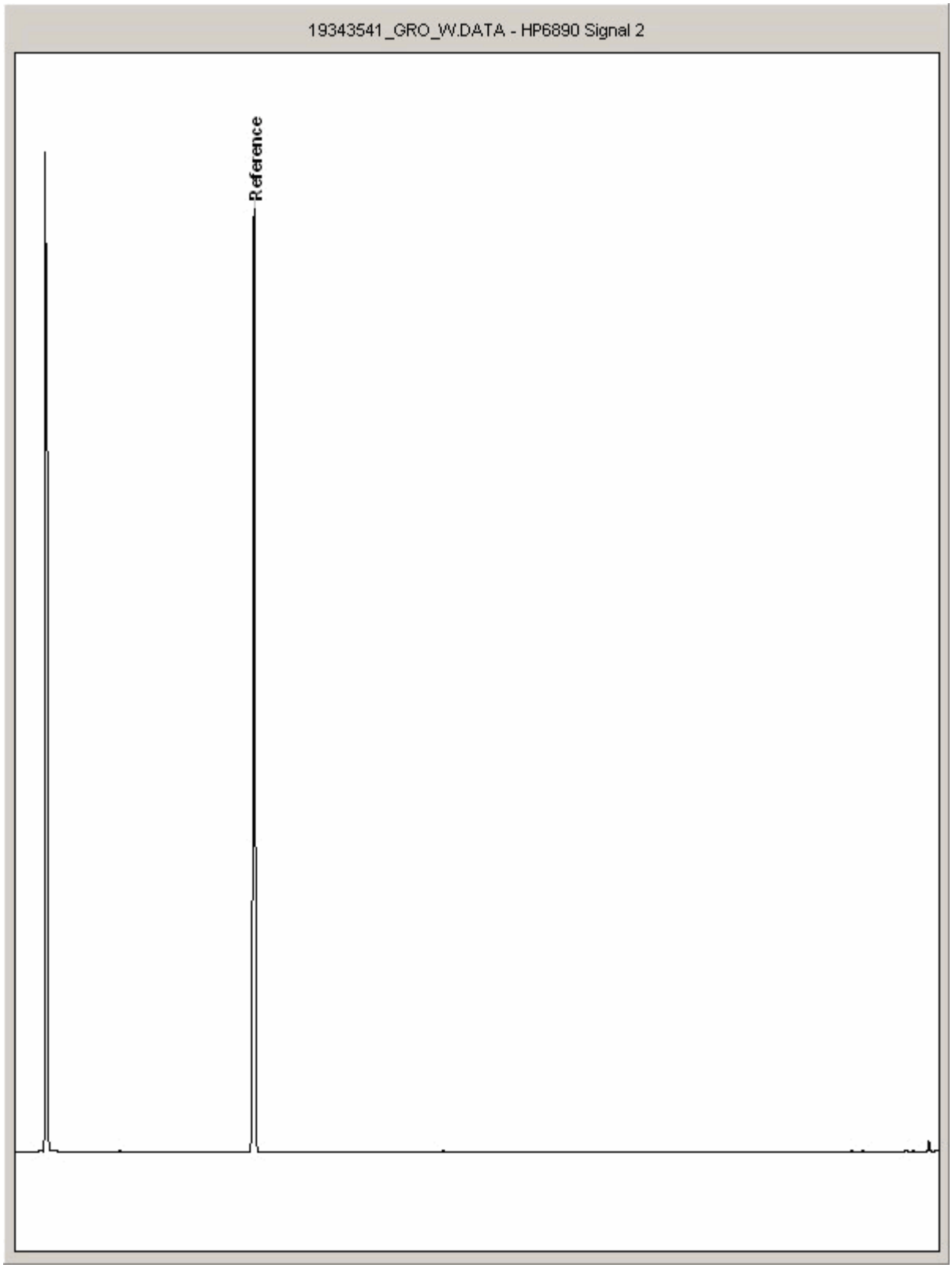
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19343541
Sample ID : WS35

Depth : 0.40



Validated

CERTIFICATE OF ANALYSIS

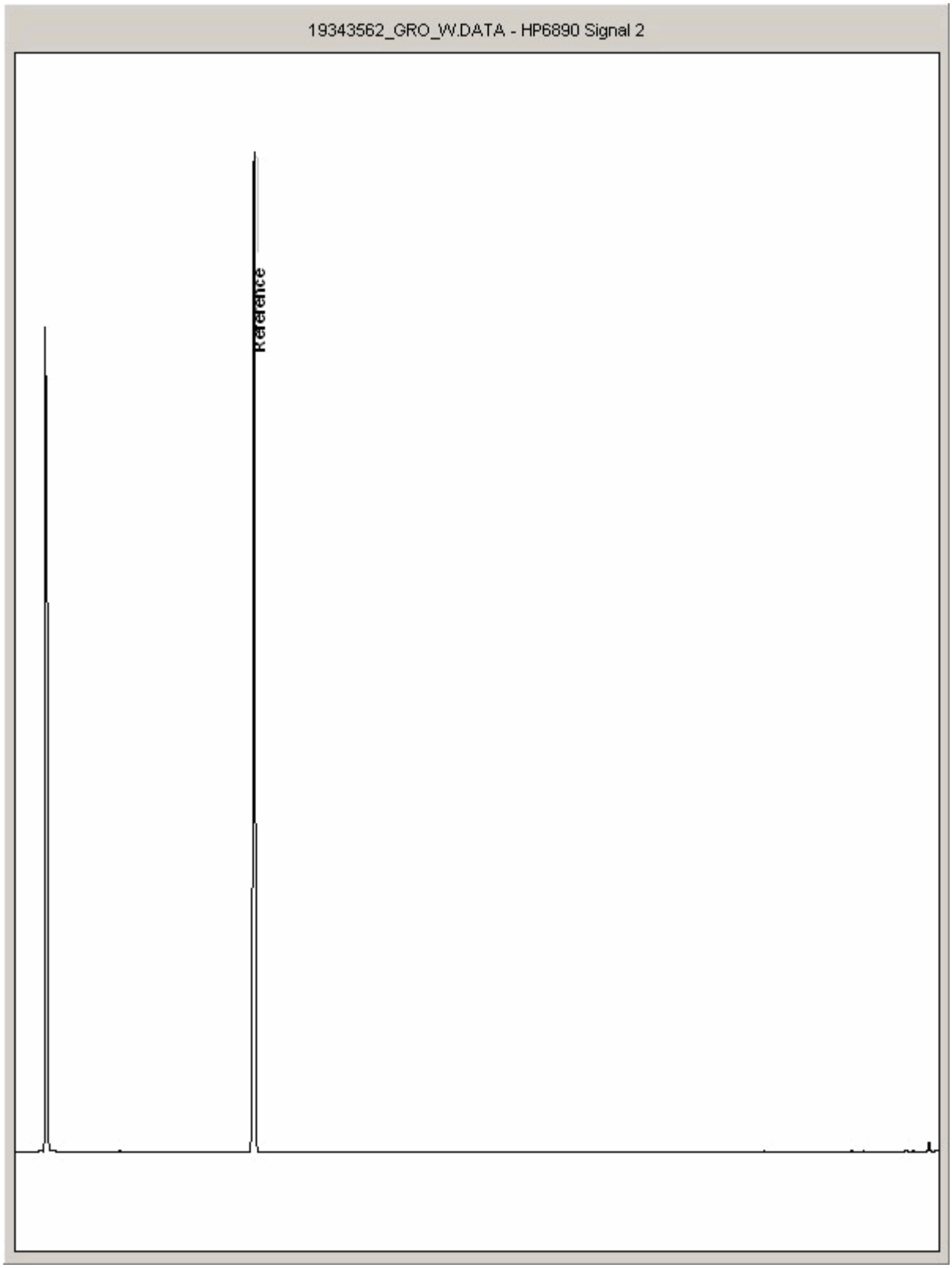
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19343562
Sample ID : WS 43

Depth : 0.20



CERTIFICATE OF ANALYSIS

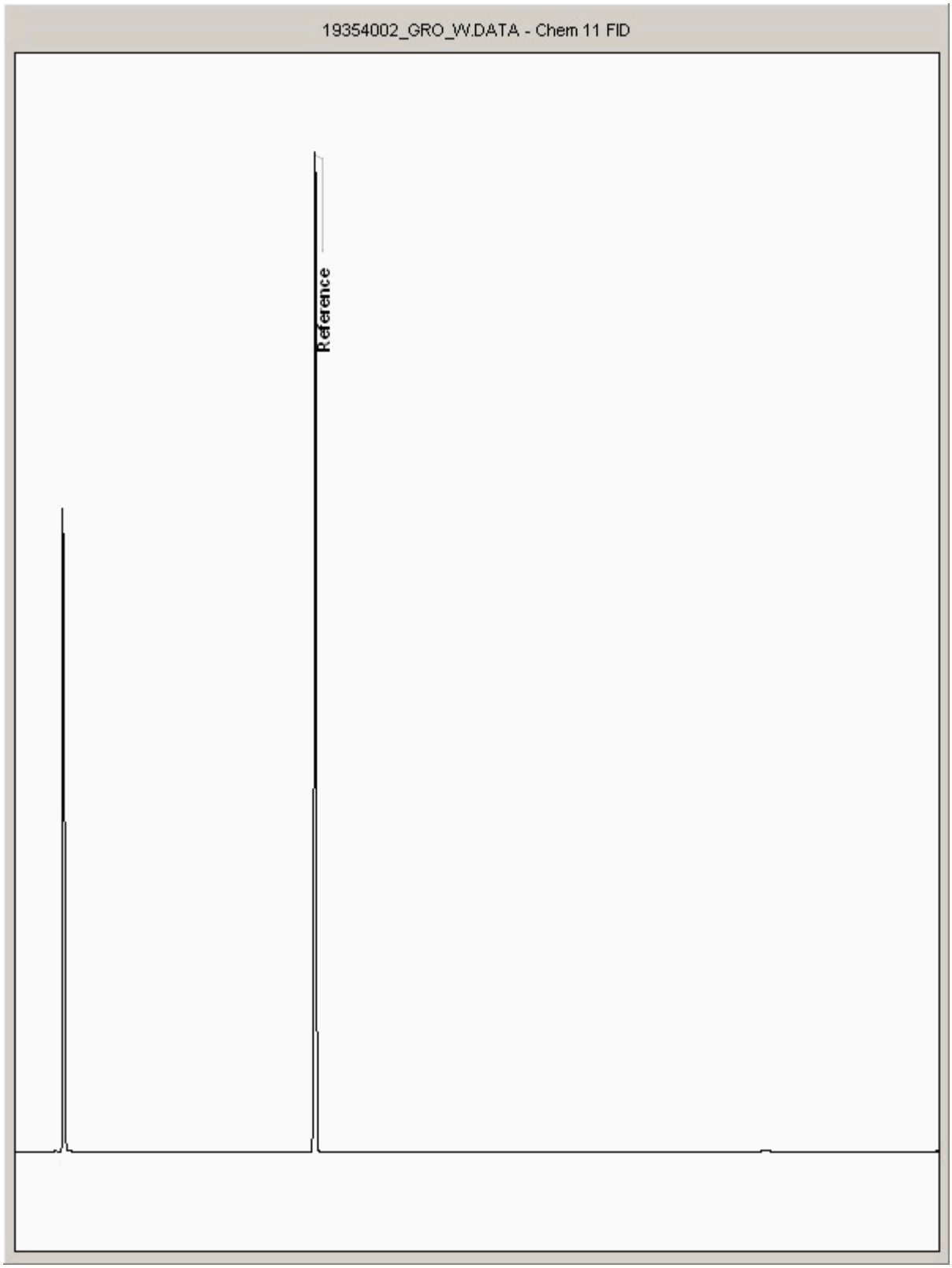
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19354002
Sample ID : WS 40

Depth : 1.00



CERTIFICATE OF ANALYSIS

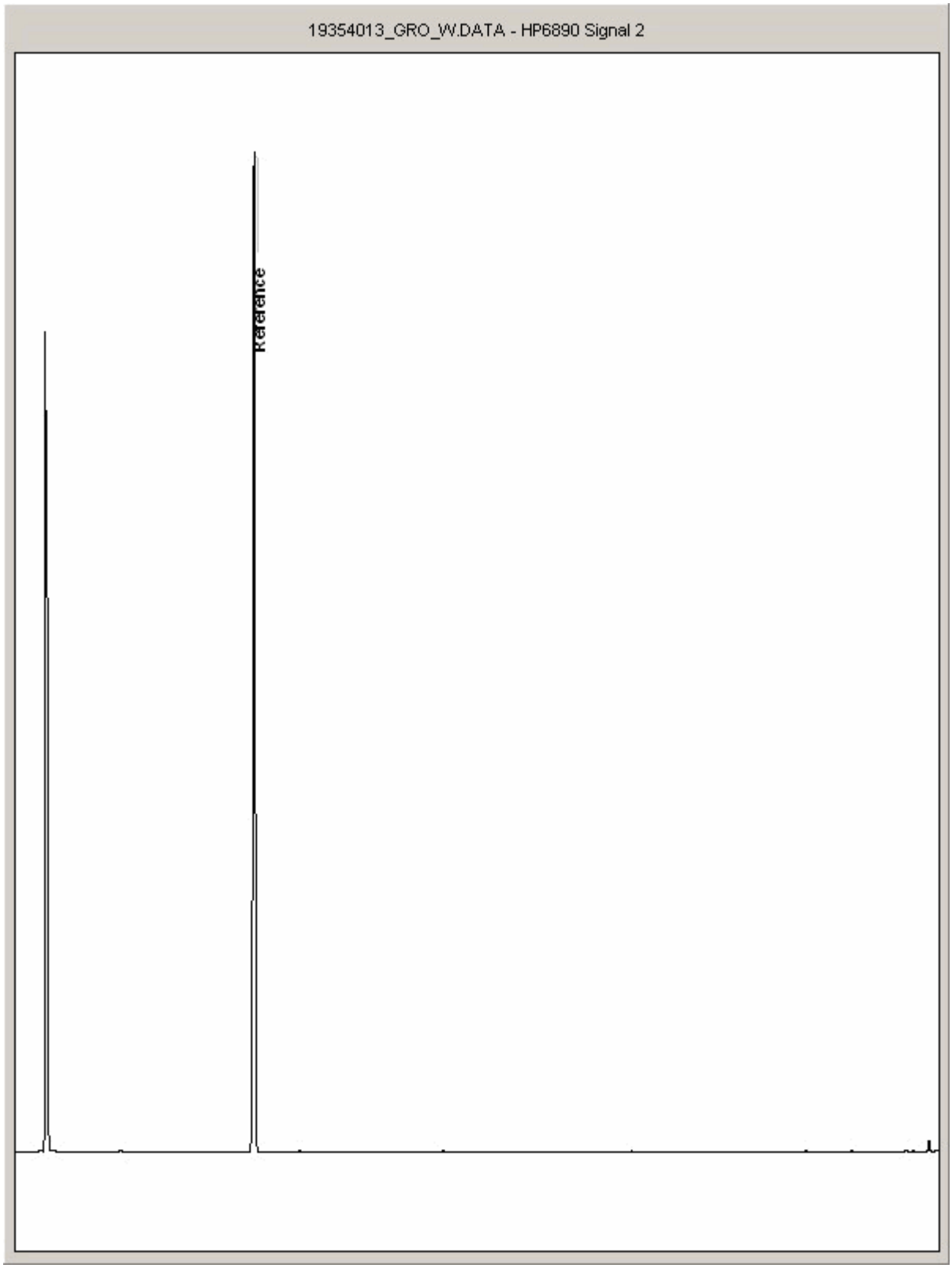
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19354013
Sample ID : WS38

Depth : 0.70



CERTIFICATE OF ANALYSIS

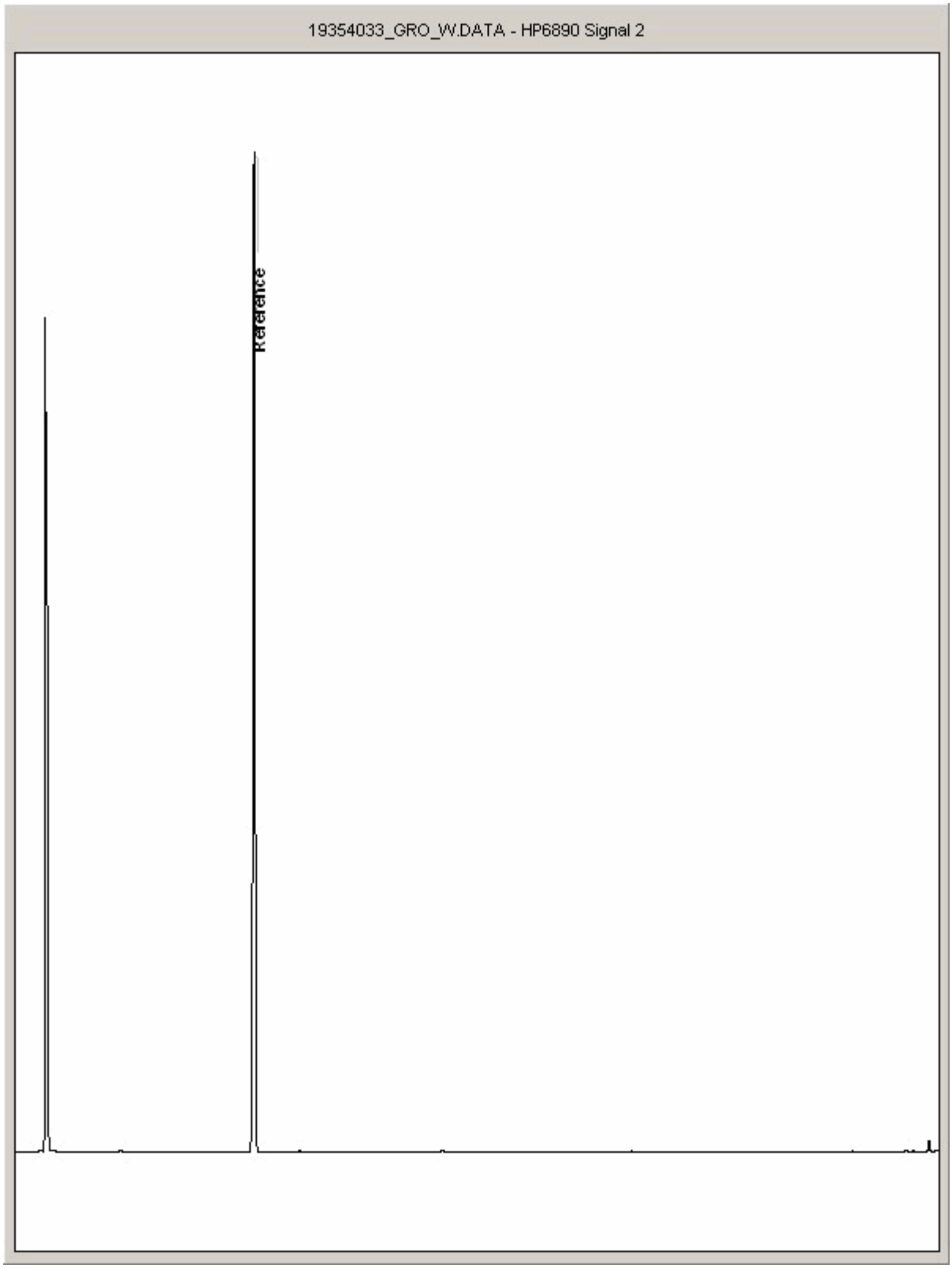
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19354033
Sample ID : WS53

Depth : 0.50



CERTIFICATE OF ANALYSIS

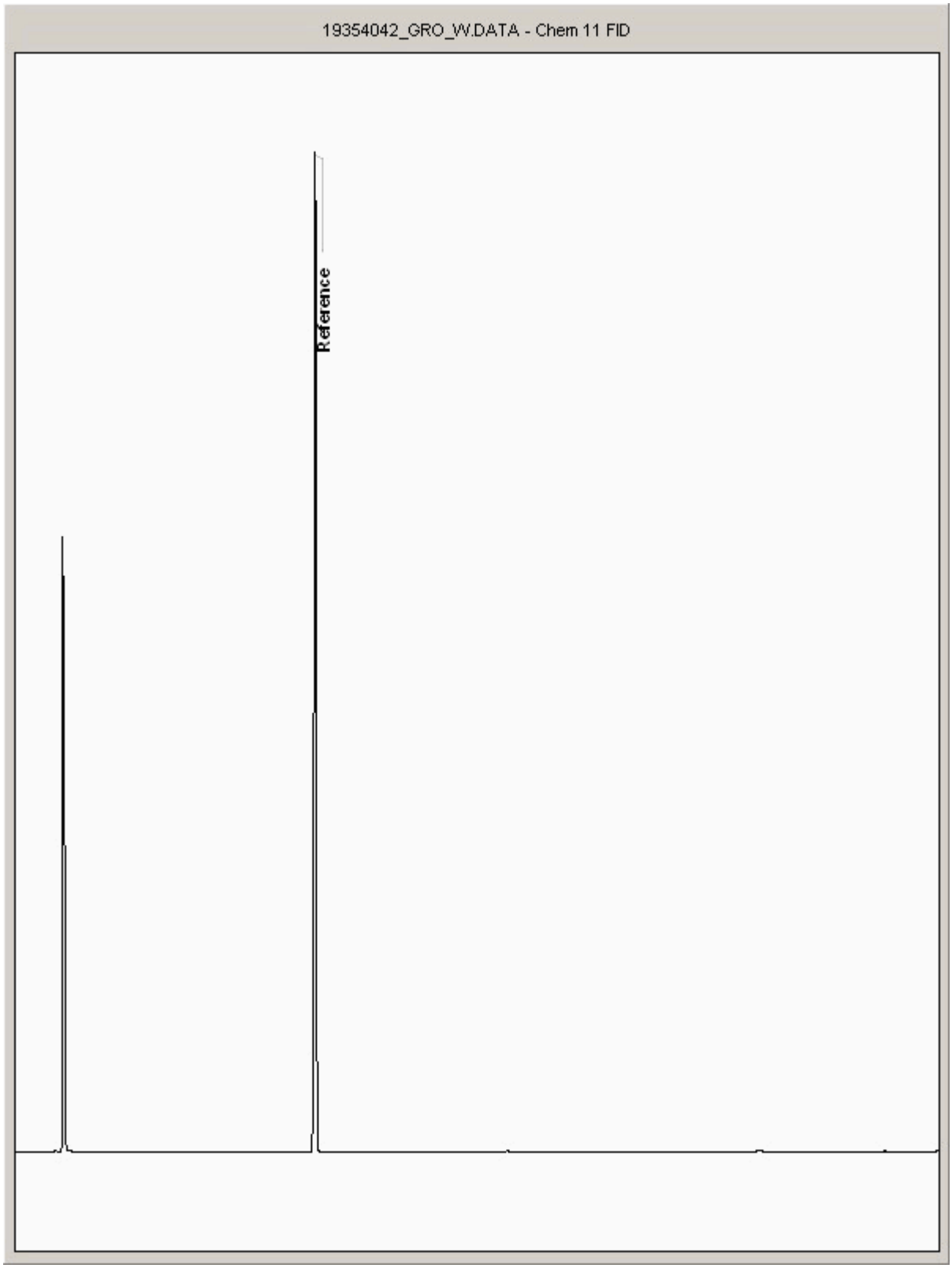
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19354042
Sample ID : WS39

Depth : 0.20



CERTIFICATE OF ANALYSIS

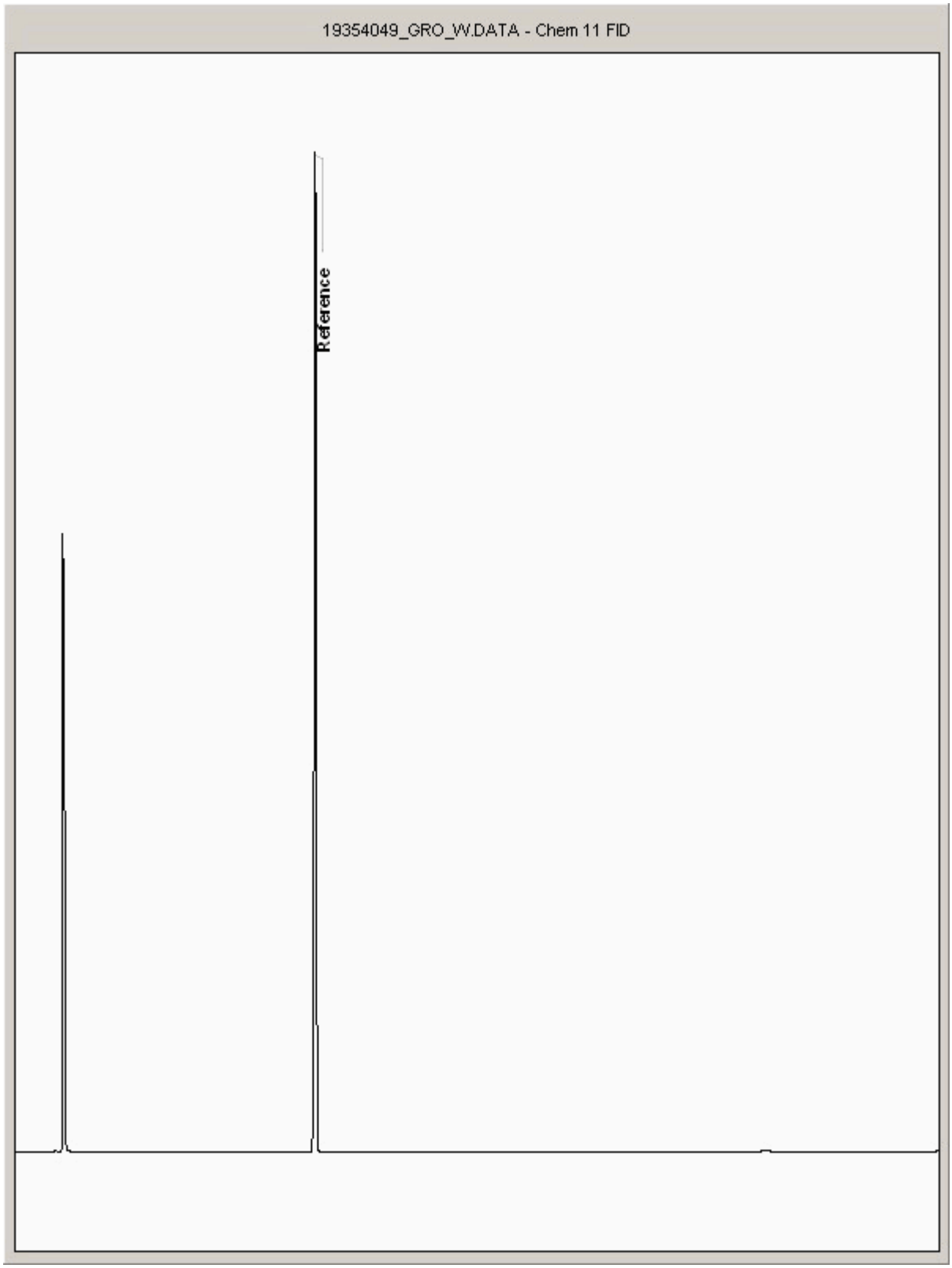
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19354049
Sample ID : WS 16

Depth : 1.20



CERTIFICATE OF ANALYSIS

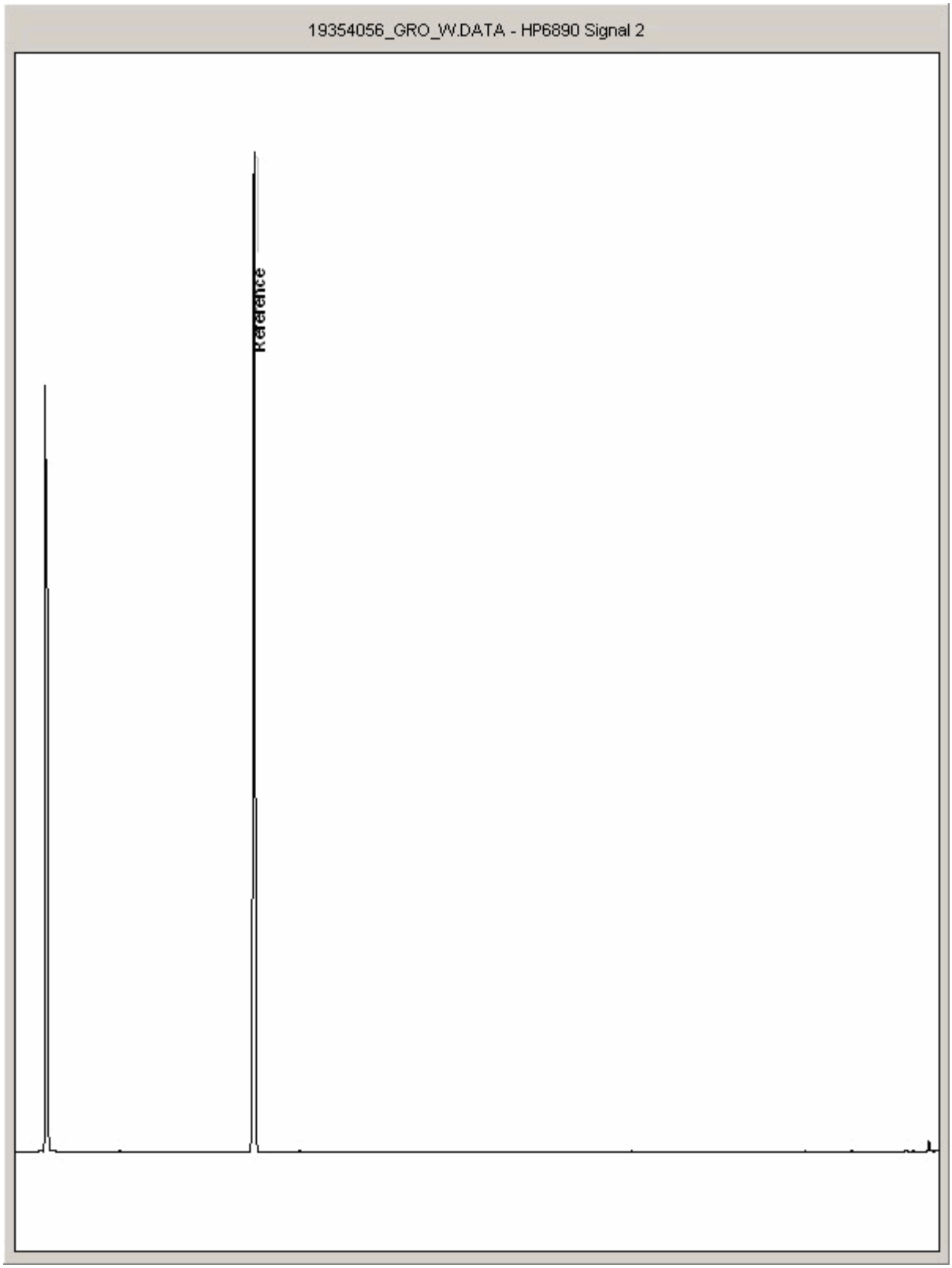
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19354056
Sample ID : WS 43

Depth : 0.50



CERTIFICATE OF ANALYSIS

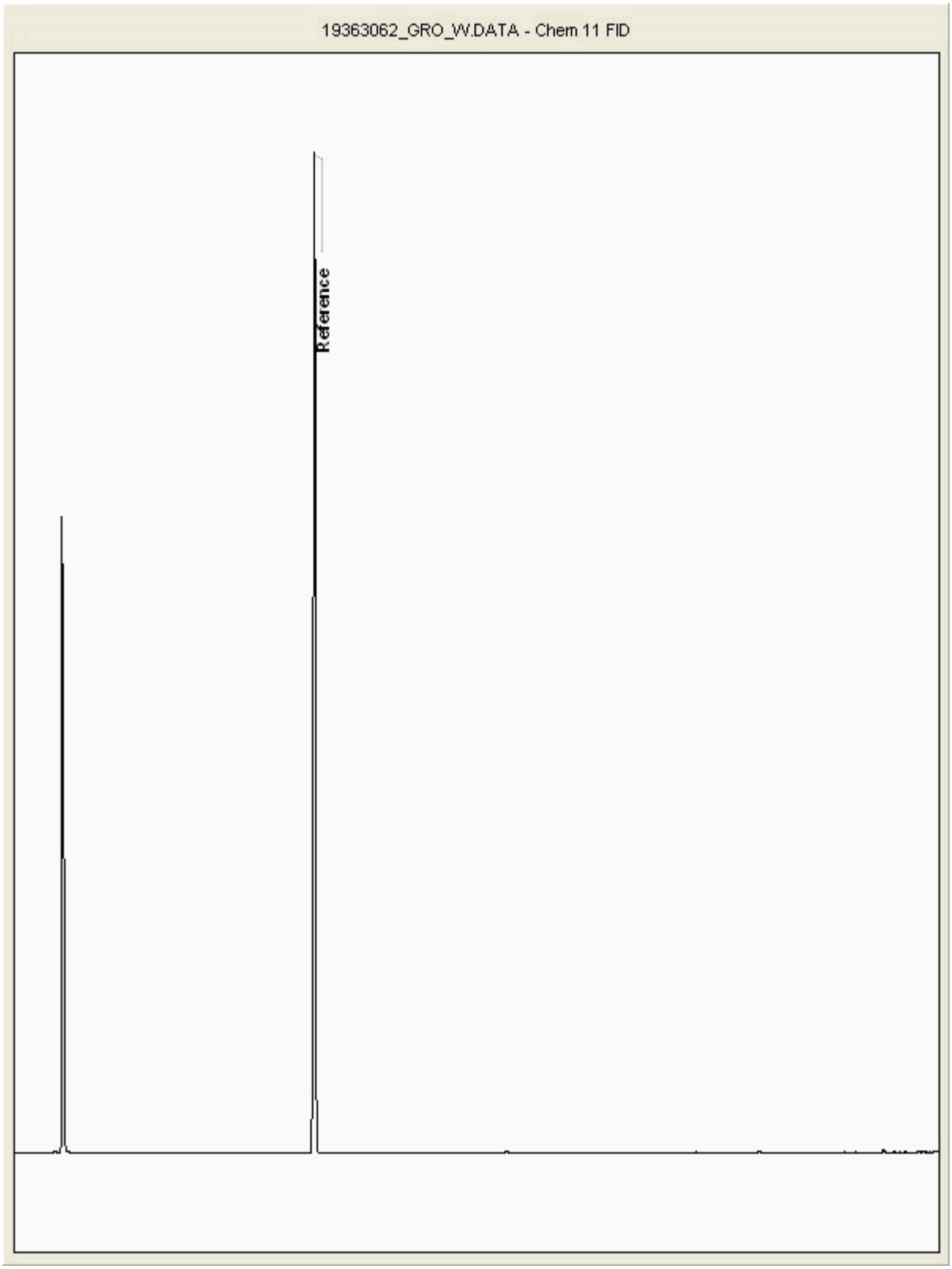
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19363062
Sample ID : WS 28

Depth : 0.30



CERTIFICATE OF ANALYSIS

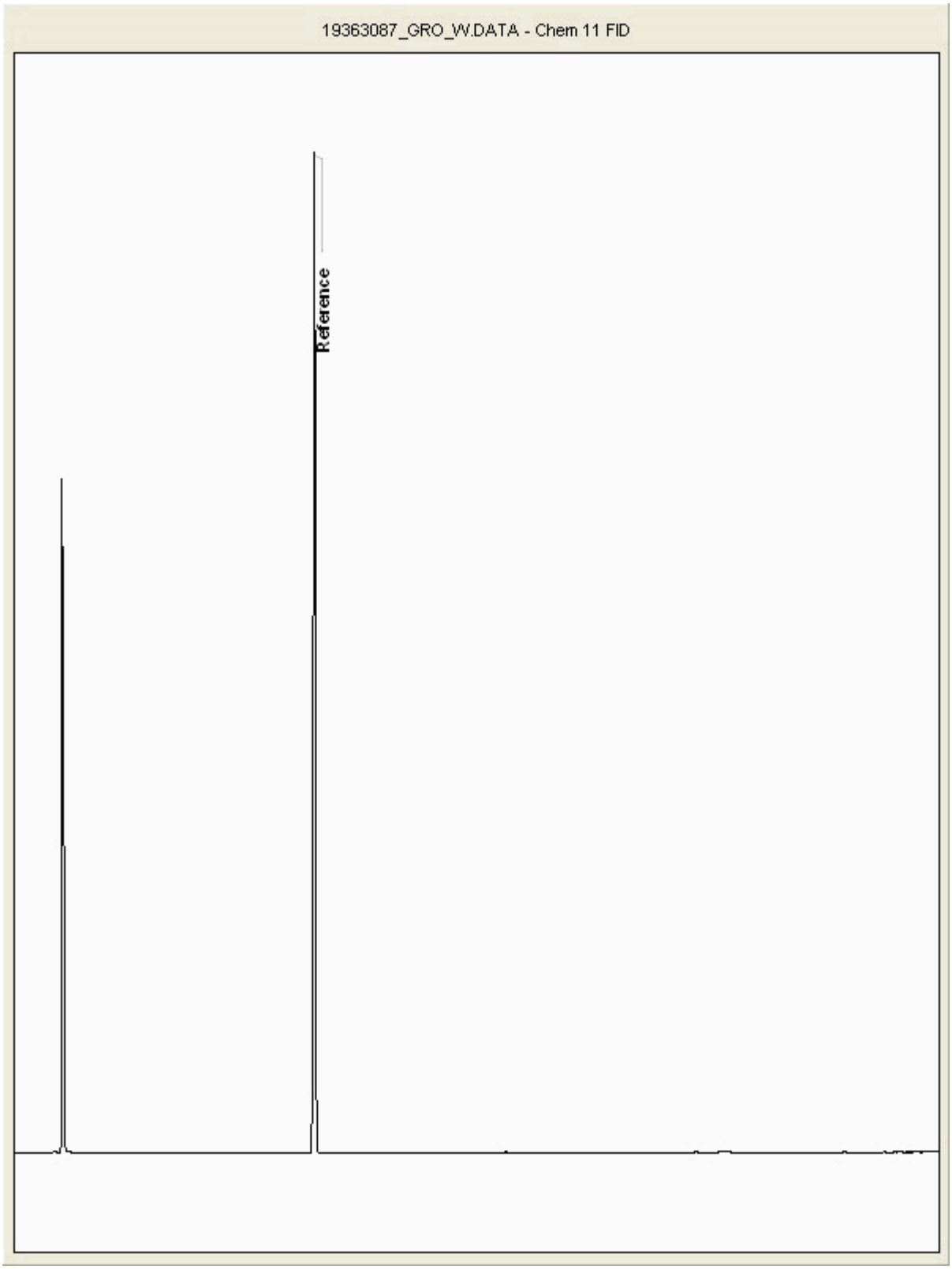
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19363087
Sample ID : WS57

Depth : 0.30



CERTIFICATE OF ANALYSIS

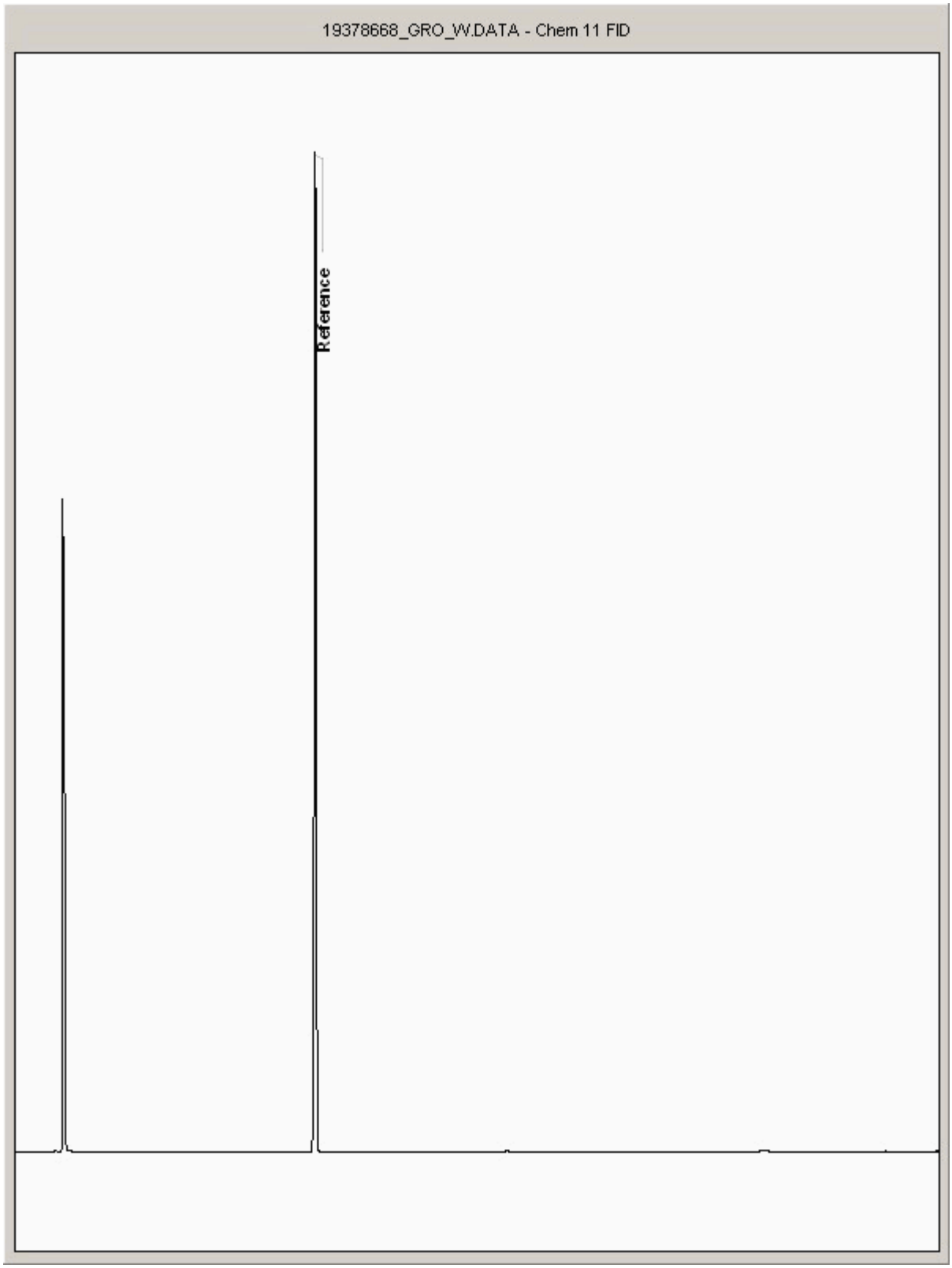
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19378668
Sample ID : WS 41

Depth : 1.00



CERTIFICATE OF ANALYSIS

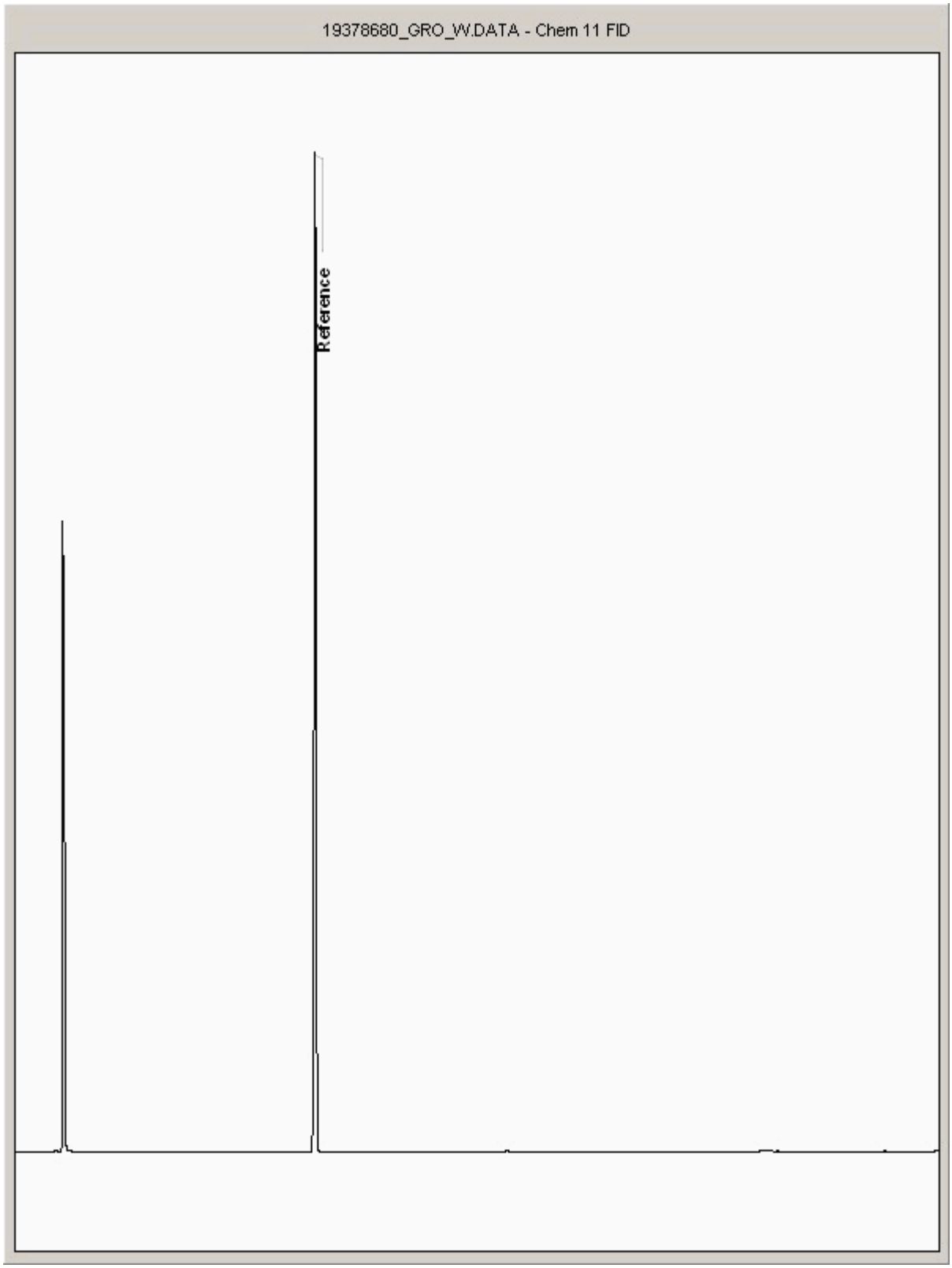
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19378680
Sample ID : WS29

Depth : 0.40



CERTIFICATE OF ANALYSIS

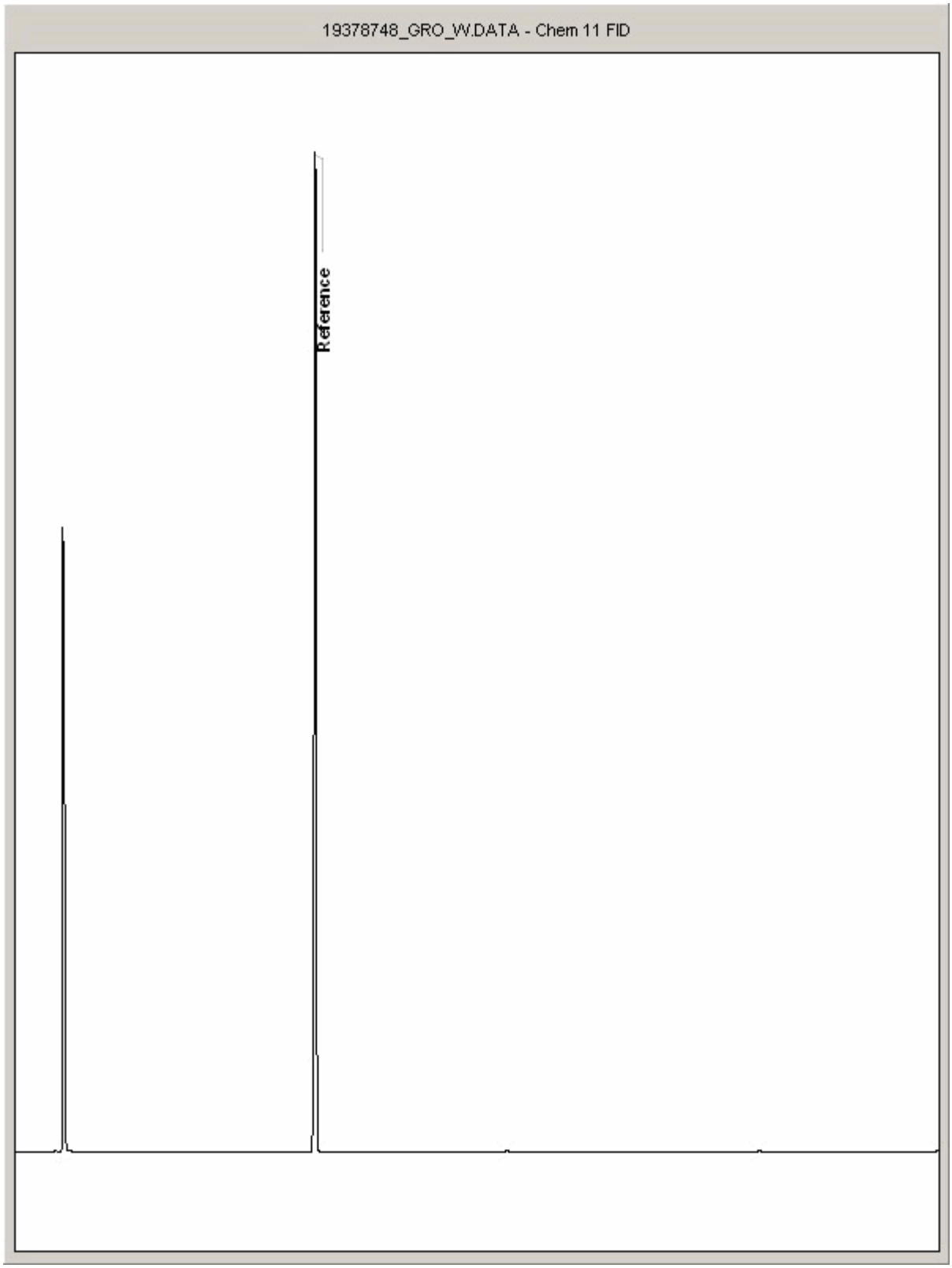
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19378748
Sample ID : WS 46

Depth : 0.30



Validated

CERTIFICATE OF ANALYSIS

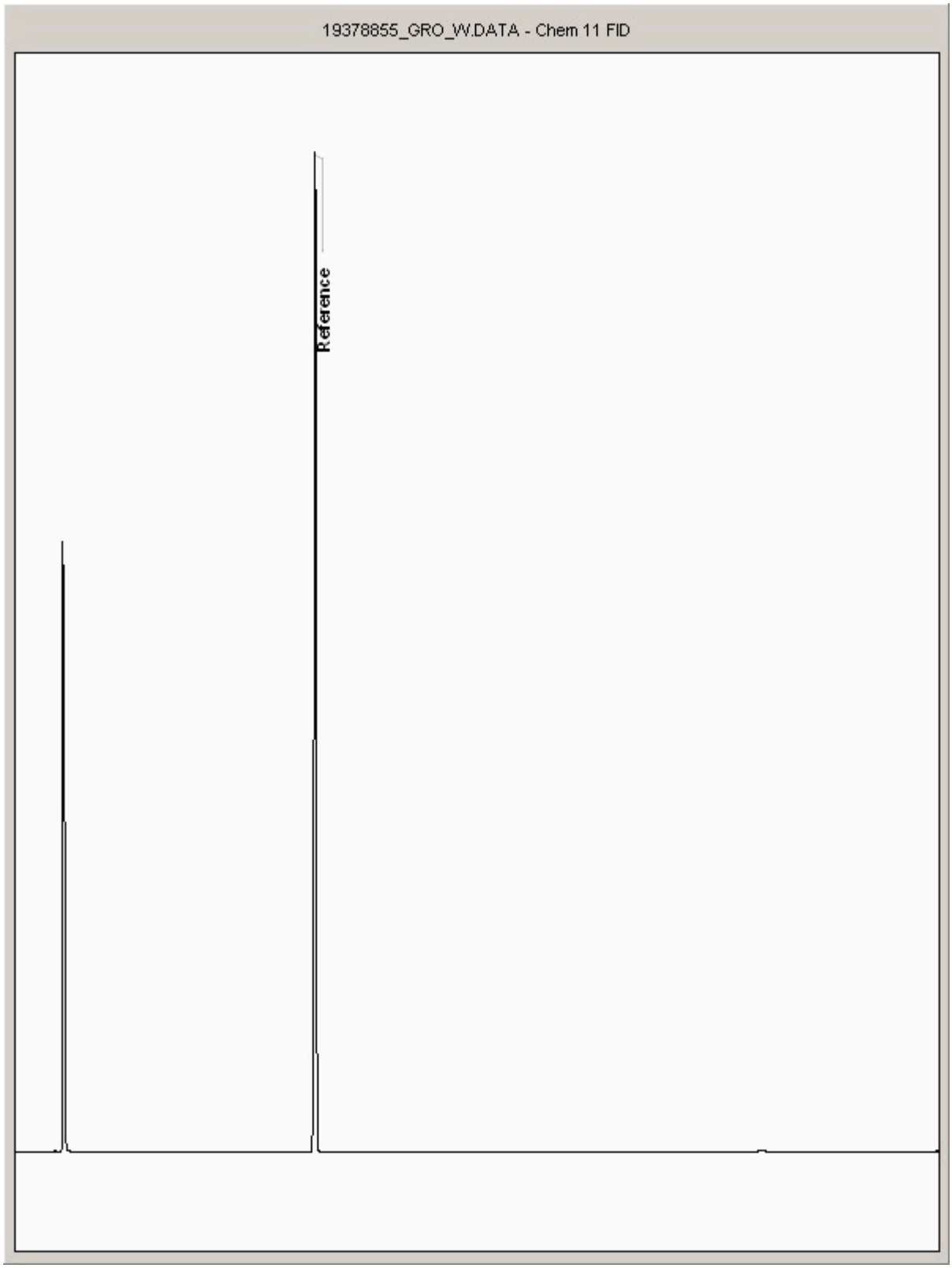
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19378855
Sample ID : WS 23

Depth : 0.20



CERTIFICATE OF ANALYSIS

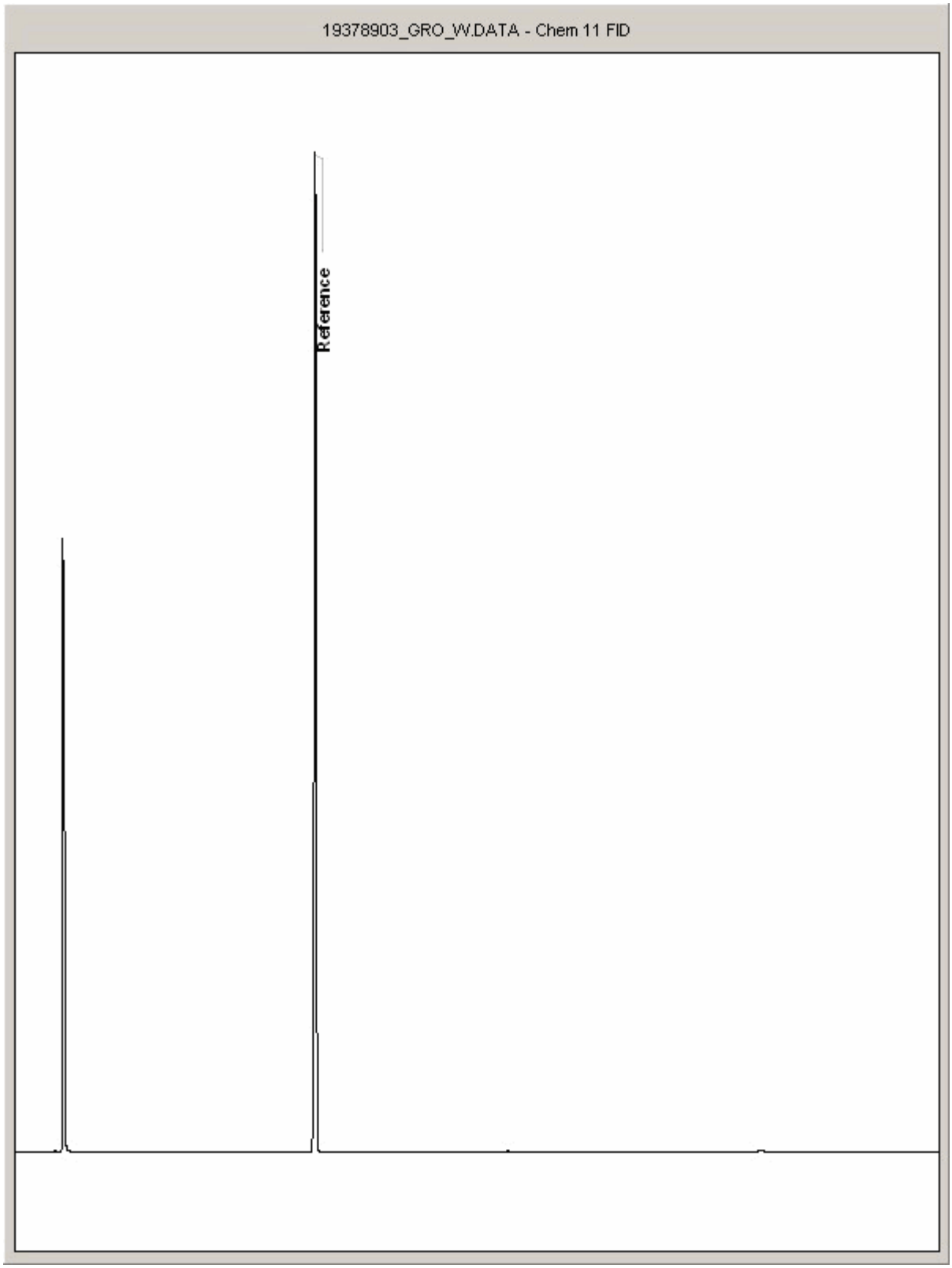
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19378903
Sample ID : WS 25A

Depth : 0.30



CERTIFICATE OF ANALYSIS

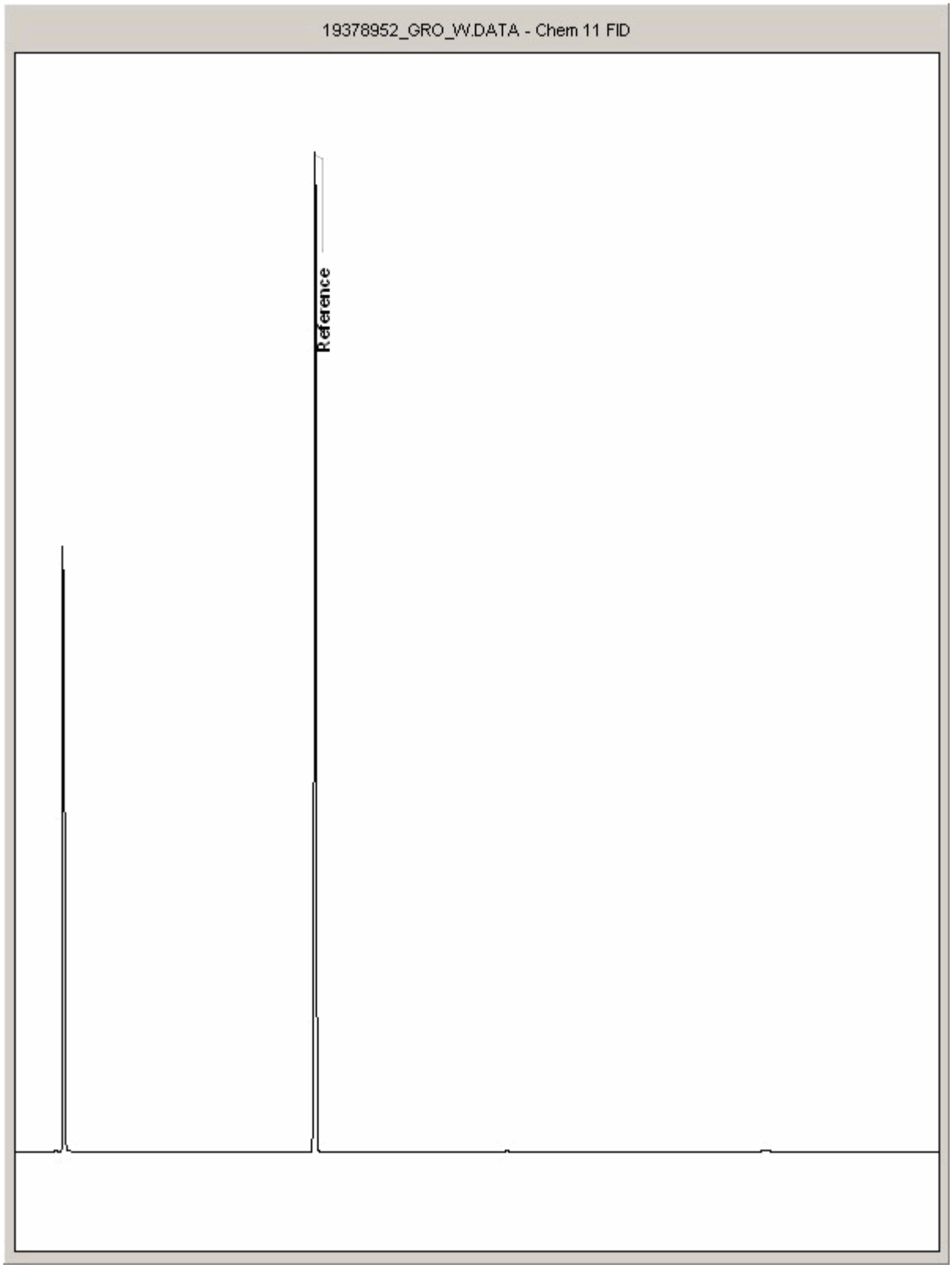
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19378952
Sample ID : WS 20

Depth : 1.50



Validated

CERTIFICATE OF ANALYSIS

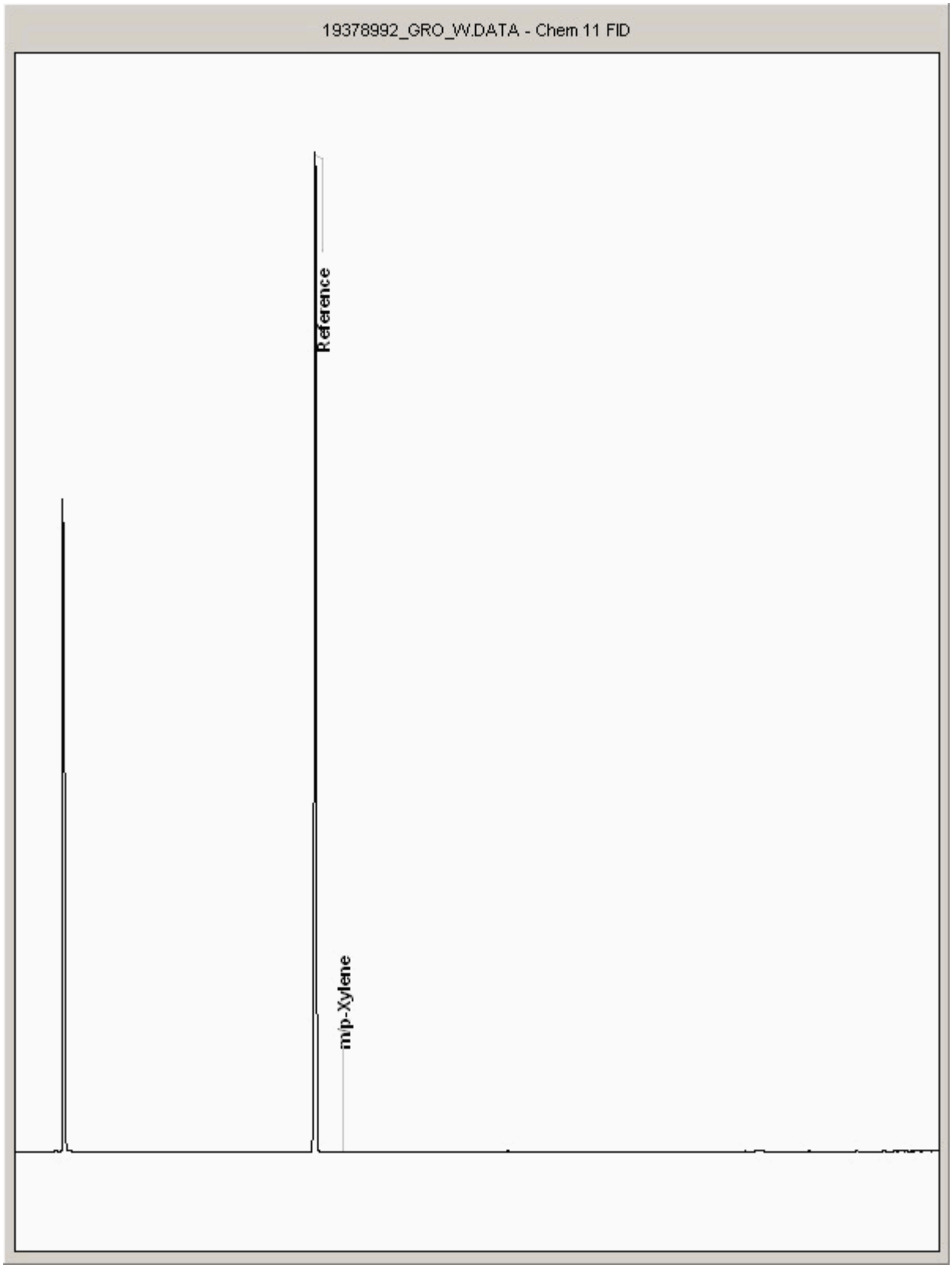
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19378992
Sample ID : WS38

Depth : 0.20



CERTIFICATE OF ANALYSIS

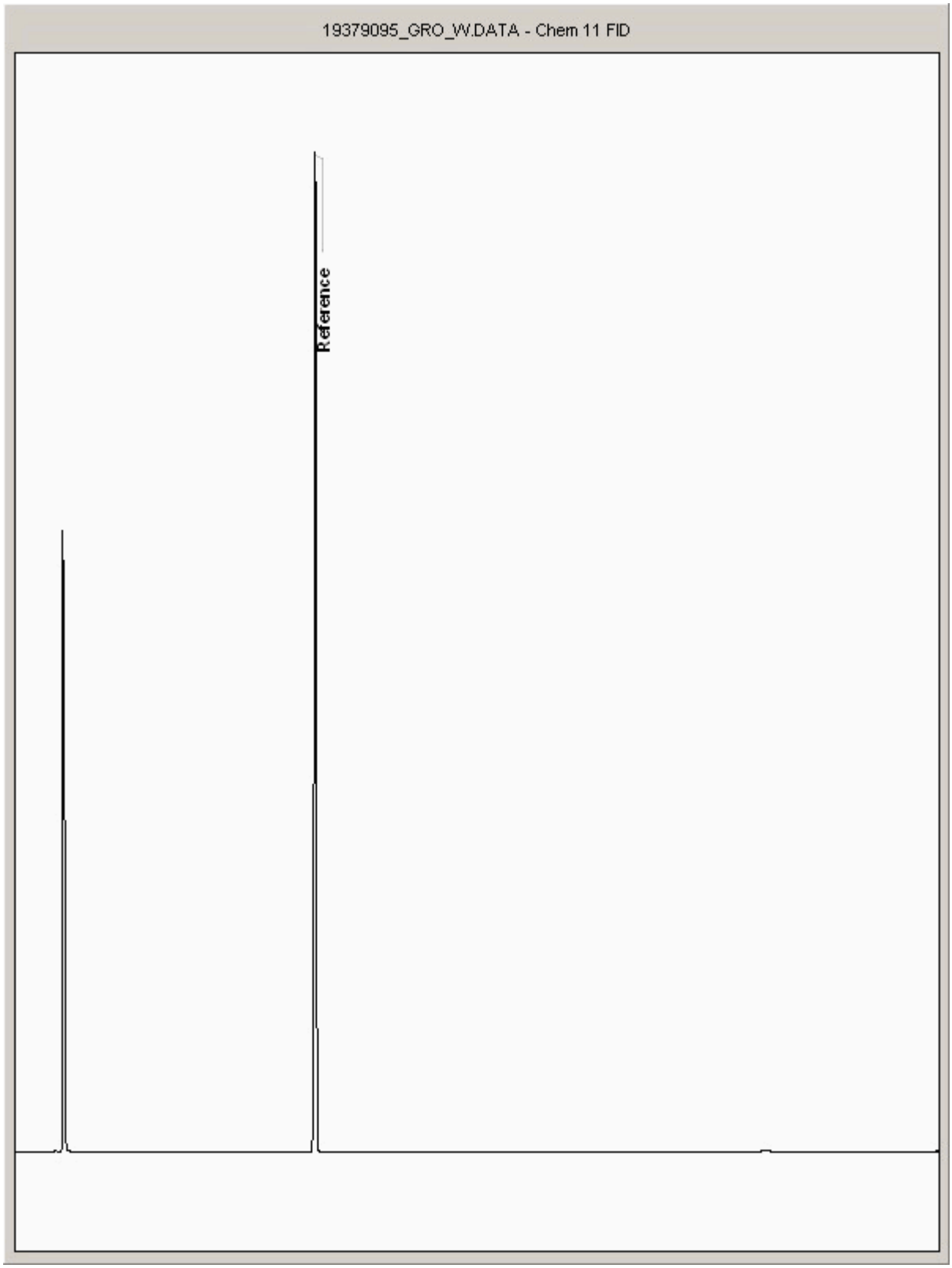
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19379095
Sample ID : WS58

Depth : 1.00



CERTIFICATE OF ANALYSIS

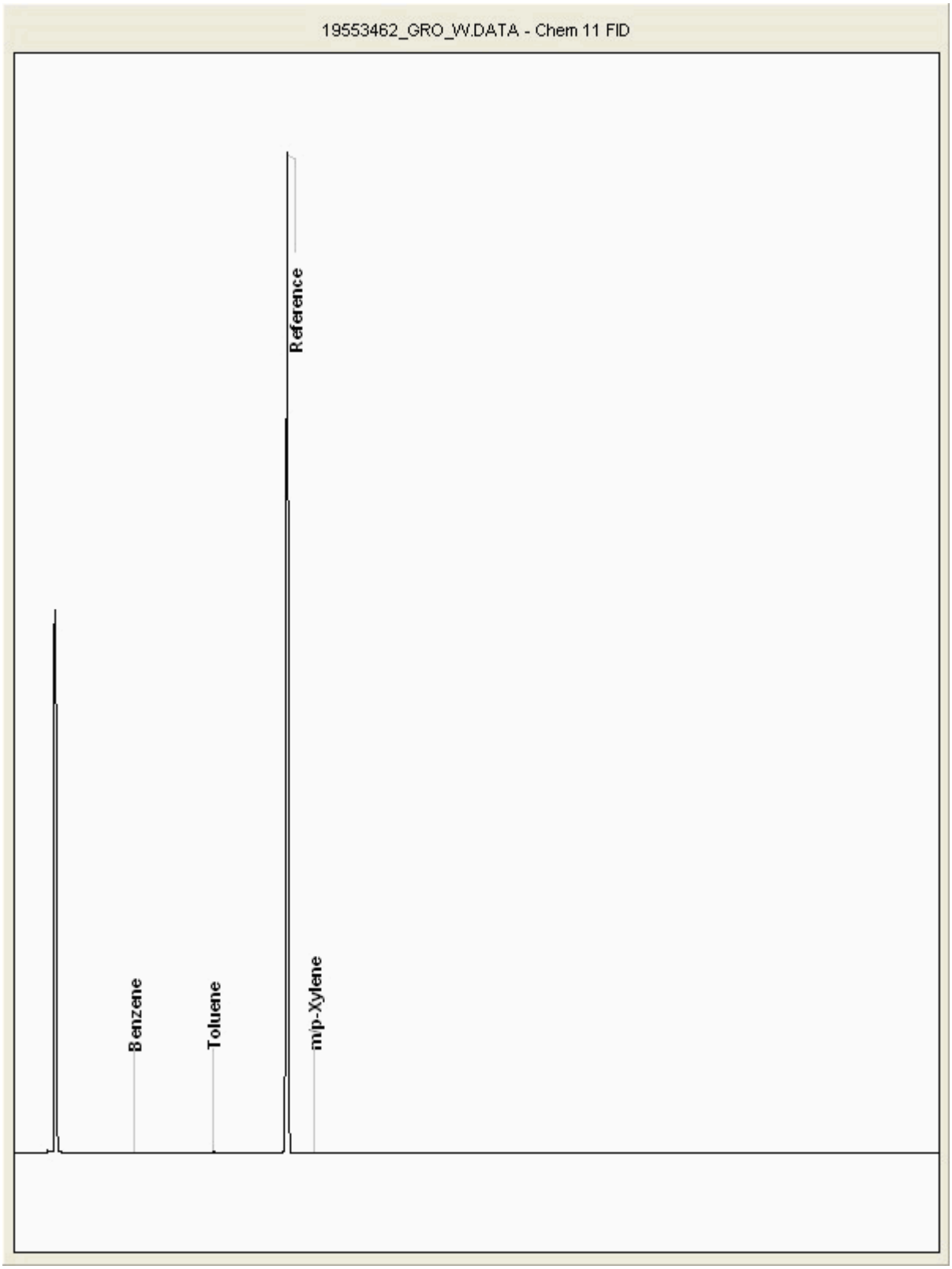
SDG:	190201-81	**Client Reference:**	A090070-474	**Report Number:**	497663
Location:	HE Compton	**Order Number:**	18/COMP043	**Superseded Report:**	497661

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19553462
Sample ID : WS 07

Depth : 0.30 - 0.30



Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. Samples will be run in duplicate upon request, but an additional charge may be incurred.

3. If sufficient sample is received a sub sample will be retained free of charge for 30 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of one month after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

4. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

5. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

6. When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2005), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

7. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised. This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

8. If appropriate preserved bottles are not received preservation will take place on receipt. However, the integrity of the data may be compromised.

9. NDP - No determination possible due to insufficient/unsuitable sample.

10. Metals in water are performed on a filtered sample, and therefore represent dissolved metals - total metals must be requested separately.

11. Results relate only to the items tested.

12. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

13. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

14. **Product analyses** - Organic analyses on products can only be semi-quantitative due to the matrix effects and high dilution factors employed.

15. Phenols monohydric by HPLC include phenol, cresols (2-Methylphenol, 3-Methylphenol and 4-Methylphenol) and Xylenols (2,3 Dimethylphenol, 2,4 Dimethylphenol, 2,5 Dimethylphenol, 2,6 Dimethylphenol, 3,4 Dimethyphenol, 3,5 Dimethylphenol).

16. Total of 5 speciated phenols by HPLC includes Phenol, 2,3,5-Trimethyl Phenol, 2-Isopropylphenol, Cresols and Xylenols (as detailed in 15).

17. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

18. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

19. Mercury results quoted on soils will not include volatile mercury as the analysis is performed on a dried and crushed sample.

20. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

21. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis. The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

22. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

23. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l. Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only. It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

24. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

Sample Deviations

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
§	**Sampled on date not provided**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**

Asbestos

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.

The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

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WYG Geo-Environment
Arndale Court
Headingley
Leeds
West Yorkshire
LS6 2UJ

Attention: Regulation

CERTIFICATE OF ANALYSIS

Date of report Generation:	26 February 2019
Customer:	H_WYG_LEE
Sample Delivery Group (SDG):	190211-18
Your Reference:	A090070-474
Location:	HE Compton
Report No:	494368

This report has been revised and directly supersedes 494093 in its entirety.

We received 31 samples on Monday February 11, 2019 and 26 of these samples were scheduled for analysis which was completed on Tuesday February 26, 2019. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Environmental Hawarden (Method codes TM) or ALS Environmental Aberdeen (Method codes S).

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:
Regulation 13

Regulation 13
Operations Manager

ALS Life Sciences Limited. ALS Life Sciences Limited registered Office: Units 7 & 8 Hawarden Business Park, Manor Road, Hawarden, Deeside, CH5 3US. Registered in England and Wales No. 4057291.

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
19320719	WS01		0.50	31/01/2019
19320720	WS02		0.30	06/02/2019
19320721	WS03		0.10	06/02/2019
19320723	WS03		0.30	06/02/2019
19320743	WS04		0.25	31/01/2019
19320744	WS04		0.35	31/01/2019
19320741	WS05		0.20	30/01/2019
19320742	WS05		0.55	30/01/2019
19322900	WS06		0.25	31/01/2019
19320745	WS06		0.35	31/01/2019
19320748	WS11		0.30	07/02/2019
19320749	WS11		1.00	07/02/2019
19320750	WS18		0.30	07/02/2019
19320724	WS31		0.10	07/02/2019
19320725	WS31		0.30	07/02/2019
19320727	WS31		1.00	07/02/2019
19320728	WS31		1.50	07/02/2019
19320729	WS32		0.30	08/02/2019
19320730	WS32		1.00	08/02/2019
19320731	WS32		1.80	08/02/2019
19320732	WS55		0.30	29/01/2019
19320733	WS56		0.10	28/01/2019
19320735	WS56		0.25	28/01/2019
19320740	WS59		0.10	28/01/2019
19320746	WS59		0.30	28/01/2019
19320747	WS59		0.70	28/01/2019
19320734	WS56A		0.10	29/01/2019
19320736	WS56A		0.65	29/01/2019
19320737	WS56A		1.15	29/01/2019
19320738	WS58A		0.10	28/01/2019
19320739	WS58A		0.30	28/01/2019

Maximum Sample/Coolbox Temperature (°C) : **8.4**

ISO5667-3 Water quality - Sampling - Part3 -
During Transportation samples shall be stored in a cooling device capable of maintaining a temperature of (5±3)°C.

ALS have data which show that a cool box with 4 frozen icepacks is capable of maintaining pre-chilled samples at a temperature of (5±3)°C for a period of up to 24hrs.

Only received samples which have had analysis scheduled will be shown on the following pages.

CERTIFICATE OF ANALYSIS

Validated

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	19320719			19320720			19320721			19320723			19320743			19320744			19320741	
			Customer Sample Reference	WS01			WS02			WS03			WS03			WS04			WS04			WS05	
			AGS Reference																				
			Depth (m)	0.50			0.30			0.10			0.30			0.25			0.35			0.20	
			Container	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)
			Sample Type	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Anions by Kone (soil)	All	NDPs: 1 Tests: 25			X			X			X			X			X			X			X
Asbestos ID in Solid Samples	All	NDPs: 0 Tests: 26		X			X			X			X			X			X			X	
Boron Water Soluble	All	NDPs: 0 Tests: 26			X			X			X			X			X			X			X
Cyanide Comp/Free/Total/Thiocyanate	All	NDPs: 0 Tests: 26			X			X			X			X			X			X			X
Easily Liberated Sulphide	All	NDPs: 0 Tests: 26			X			X			X			X			X			X			X
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 26			X			X			X			X			X			X			X
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 26			X			X			X			X			X			X			X
GRO by GC-FID (S)	All	NDPs: 0 Tests: 26				X			X			X			X			X			X		
Metals in solid samples by OES	All	NDPs: 0 Tests: 26			X			X			X			X			X			X			X
PAH by GCMS	All	NDPs: 0 Tests: 26			X			X			X			X			X			X			X
PCBs by GCMS	All	NDPs: 0 Tests: 26			X			X			X			X			X			X			X
pH	All	NDPs: 0 Tests: 26			X			X			X			X			X			X			X
Phenols Spec MS (S)	All	NDPs: 0 Tests: 26			X			X			X			X			X			X			X
Sample description	All	NDPs: 0 Tests: 26			X			X			X			X			X			X			X
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 11									X			X			X			X			X

19320728	WS31		1.50	250g Amber Jar (ALE210)	S	N					X		X		X		X		X				X		X		X		X		X		X		
				1kg TUB	S				X																										
19320724	WS31		0.10	60g VOC (ALE215)	S																X														
				250g Amber Jar (ALE210)	S		X				X		X		X		X		X				X		X		X		X		X		X		
				1kg TUB	S				X																										
19320750	WS18		0.30	60g VOC (ALE215)	S																X														
				250g Amber Jar (ALE210)	S		X				X		X		X		X		X				X		X		X		X		X		X		
				1kg TUB	S				X																										
19320748	WS11		0.30	60g VOC (ALE215)	S																X														
				250g Amber Jar (ALE210)	S		X				X		X		X		X		X				X		X		X		X		X		X		
				1kg TUB	S				X																										
19320745	WS06		0.35	60g VOC (ALE215)	S																X														
				250g Amber Jar (ALE210)	S		X				X		X		X		X		X				X		X		X		X		X		X		
				1kg TUB	S				X																										
19322900	WS06		0.25	60g VOC (ALE215)	S																X														
				250g Amber Jar (ALE210)	S		X		X		X		X		X		X		X				X		X		X		X		X		X		
19320742	WS05		0.55	60g VOC (ALE215)	S																X														
				250g Amber Jar (ALE210)	S		X				X		X		X		X		X				X		X		X		X		X		X		X
				1kg TUB	S				X																										
19320741	WS05		0.20	60g VOC (ALE215)	S																X														

CERTIFICATE OF ANALYSIS

Validated

SDG:	190211-18	Client Reference:	A090070-474	Report Number:	494368
Location:	HE Compton	Order Number:	18/COMPO43	Superseded Report:	494093

Results Legend

- X — Test
- N — No Determination Possible

Sample Types -

S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

Lab Sample No(s)			19320719			19320720			19320721			19320723			19320743			19320744			19320741	
Customer Sample Reference			WS01			WS02			WS03			WS03			WS04			WS04			WS05	
AGS Reference																						
Depth (m)			0.50			0.30			0.10			0.30			0.25			0.35			0.20	
Container			1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)
Sample Type			S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Total Organic Carbon	All	NDPs: 0 Tests: 26		X			X			X			X			X			X			X
Total Sulphate	All	NDPs: 0 Tests: 26		X			X			X			X			X			X			X
TPH CWG GC (S)	All	NDPs: 0 Tests: 26		X			X			X			X			X			X			X
VOC MS (S)	All	NDPs: 0 Tests: 26			X			X			X			X			X			X		

19320728	WS31		1.50	250g Amber Jar (ALE210)	S		X		X		X		
				1kg TUB	S								
19320724	WS31		0.10	60g VOC (ALE215)	S								X
				250g Amber Jar (ALE210)	S		X		X		X		
				1kg TUB	S								
19320750	WS18		0.30	60g VOC (ALE215)	S								X
				250g Amber Jar (ALE210)	S		X		X		X		
				1kg TUB	S								
19320748	WS11		0.30	60g VOC (ALE215)	S								X
				250g Amber Jar (ALE210)	S		X		X		X		
				1kg TUB	S								
19320745	WS06		0.35	60g VOC (ALE215)	S								X
				250g Amber Jar (ALE210)	S		X		X		X		
				1kg TUB	S								
19322900	WS06		0.25	60g VOC (ALE215)	S								X
				250g Amber Jar (ALE210)	S		X		X		X		
19320742	WS05		0.55	60g VOC (ALE215)	S								X
				250g Amber Jar (ALE210)	S		X		X		X		
				1kg TUB	S								
19320741	WS05		0.20	60g VOC (ALE215)	S								X

Validated

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	19320728	19320729			19320731			19320732			19320733			19320735			19320740			19320746
			Customer Sample Reference	WS31	WS32			WS32			WS55			WS56			WS56			WS59			WS59
			AGS Reference																				
			Depth (m)	1.50	0.30			1.80			0.30			0.10			0.25			0.10			0.30
			Container	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB
			Sample Type	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Anions by Kone (soil)	All	NDPs: 1 Tests: 25			X			X			X			X			X			X			
Asbestos ID in Solid Samples	All	NDPs: 0 Tests: 26		X			X			X			X			X			X			X	
Boron Water Soluble	All	NDPs: 0 Tests: 26			X			X			X			X			X			X			
Cyanide Comp/Free/Total/Thiocyanate	All	NDPs: 0 Tests: 26			X			X			X			X			X			X			
Easily Liberated Sulphide	All	NDPs: 0 Tests: 26			X			X			X			X			X			X			
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 26			X			X			X			X			X			X			
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 26			X			X			X			X			X			X			
GRO by GC-FID (S)	All	NDPs: 0 Tests: 26	X			X			X			X			X			X			X		
Metals in solid samples by OES	All	NDPs: 0 Tests: 26			X			X			X			X			X			X			
PAH by GCMS	All	NDPs: 0 Tests: 26			X			X			X			X			X			X			
PCBs by GCMS	All	NDPs: 0 Tests: 26			X			X			X			X			X			X			
pH	All	NDPs: 0 Tests: 26			X			X			X			X			X			X			
Phenols Spec MS (S)	All	NDPs: 0 Tests: 26			X			X			X			X			X			X			
Sample description	All	NDPs: 0 Tests: 26			X			X			X			X			X			X			
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 11												X			X			X			

19320739	WS58A		0.30	60g VOC (ALE215)	S								X							
				250g Amber Jar (ALE210)	S	X		X	X	X	X	X		X	X	X	X	X	X	
				1kg TUB	S		X													
19320738	WS58A		0.10	60g VOC (ALE215)	S								X							
				250g Amber Jar (ALE210)	S	X		X	X	X	X	X		X	X	X	X	X	X	
				1kg TUB	S		X													
19320736	WS56A		0.65	60g VOC (ALE215)	S								X							
				250g Amber Jar (ALE210)	S	X		X	X	X	X	X		X	X	X	X	X	X	
				1kg TUB	S		X													
19320734	WS56A		0.10	60g VOC (ALE215)	S								X							
				250g Amber Jar (ALE210)	S	X		X	X	X	X	X		X	X	X	X	X	X	
				1kg TUB	S		X													
19320747	WS59		0.70	60g VOC (ALE215)	S								X							
				250g Amber Jar (ALE210)	S	X		X	X	X	X	X		X	X	X	X	X	X	X
				1kg TUB	S		X													
19320746	WS59		0.30	60g VOC (ALE215)	S								X							
				250g Amber Jar (ALE210)	S	X		X	X	X	X	X		X	X	X	X	X	X	X

Validated

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Results Legend

- X — Test
- N — No Determination Possible

Sample Types -

- S - Soil/Solid
- UNS - Unspecified Solid
- GW - Ground Water
- SW - Surface Water
- LE - Land Leachate
- PL - Prepared Leachate
- PR - Process Water
- SA - Saline Water
- TE - Trade Effluent
- TS - Treated Sewage
- US - Untreated Sewage
- RE - Recreational Water
- DW - Drinking Water Non-regulatory
- UNL - Unspecified Liquid
- SL - Sludge
- G - Gas
- OTH - Other

Lab Sample No(s)			19320728	19320729			19320731			19320732			19320733			19320735			19320740			19320746
Customer Sample Reference			WS31	WS32			WS32			WS55			WS56			WS56			WS59			WS59
AGS Reference																						
Depth (m)			1.50	0.30			1.80			0.30			0.10			0.25			0.10			0.30
Container			60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB
Sample Type			S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Total Organic Carbon	All	NDPs: 0 Tests: 26			X			X			X			X			X			X		
Total Sulphate	All	NDPs: 0 Tests: 26			X			X			X			X			X			X		
TPH CWG GC (S)	All	NDPs: 0 Tests: 26			X			X			X			X			X			X		
VOC MS (S)	All	NDPs: 0 Tests: 26	X			X			X			X			X			X			X	

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19320739	WS58A		0.30	60g VOC (ALE215)	S								X
				250g Amber Jar (ALE210)	S		X		X		X		
				1kg TUB	S								
19320738	WS58A		0.10	60g VOC (ALE215)	S								X
				250g Amber Jar (ALE210)	S		X		X		X		
				1kg TUB	S								
19320736	WS56A		0.65	60g VOC (ALE215)	S								X
				250g Amber Jar (ALE210)	S		X		X		X		
				1kg TUB	S								
19320734	WS56A		0.10	60g VOC (ALE215)	S								X
				250g Amber Jar (ALE210)	S		X		X		X		
				1kg TUB	S								
19320747	WS59		0.70	60g VOC (ALE215)	S								X
				250g Amber Jar (ALE210)	S		X		X		X		
				1kg TUB	S								
19320746	WS59		0.30	60g VOC (ALE215)	S								X
				250g Amber Jar (ALE210)	S		X		X		X		

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Sample Descriptions

Grain Sizes

very fine	<0.063mm	fine	0.063mm - 0.1mm	medium	0.1mm - 2mm	coarse	2mm - 10mm	very coarse	>10mm

Lab Sample No(s)	Customer Sample Ref.	Depth (m)	Colour	Description	Inclusions	Inclusions 2
19320719	WS01	0.50	White	Chalk	Vegetation	Stones
19320720	WS02	0.30	White	Chalk	Vegetation	Stones
19320721	WS03	0.10	Dark Brown	Sandy Loam	Vegetation	Stones
19320723	WS03	0.30	White	Chalk	Vegetation	Stones
19320743	WS04	0.25	Dark Brown	Sandy Loam	Vegetation	Stones
19320744	WS04	0.35	White	Chalk	Vegetation	Stones
19320741	WS05	0.20	Light Brown	Loamy Sand	Stones	None
19320742	WS05	0.55	White	Chalk	Stones	None
19320745	WS06	0.35	White	Chalk	Stones	None
19322900	WS06	0.25	Grey	Sandy Clay Loam	Stones	None
19320748	WS11	0.30	White	Chalk	Stones	None
19320750	WS18	0.30	White	Chalk	Stones	None
19320724	WS31	0.10	Dark Brown	Sandy Loam	Vegetation	Stones
19320728	WS31	1.50	Light Brown	Sandy Loam	Stones	None
19320729	WS32	0.30	Dark Brown	Sandy Clay	Stones	None
19320731	WS32	1.80	Grey	Loamy Sand	Stones	N/A
19320732	WS55	0.30	White	Chalk	Stones	None
19320733	WS56	0.10	Dark Brown	Sandy Loam	Stones	Vegetation
19320735	WS56	0.25	Dark Brown	Sandy Loam	Vegetation	Stones
19320740	WS59	0.10	Dark Brown	Sandy Loam	Vegetation	Stones
19320746	WS59	0.30	Light Brown	Silt Loam	Stones	None
19320747	WS59	0.70	Light Brown	Sandy Loam	Stones	Vegetation
19320734	WS56A	0.10	Dark Brown	Sandy Loam	Vegetation	Stones
19320736	WS56A	0.65	Dark Brown	Sand	Vegetation	Stones
19320738	WS58A	0.10	Dark Brown	Sandy Loam	Vegetation	Stones
19320739	WS58A	0.30	Dark Brown	Sand	Vegetation	Stones

These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally ocurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.

Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

CERTIFICATE OF ANALYSIS

Validated

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS01	WS02	WS03	WS03	WS04	WS04
			Depth (m)	0.50	0.30	0.10	0.30	0.25	0.35
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	31/01/2019	06/02/2019	06/02/2019	06/02/2019	31/01/2019	31/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18	190211-18	190211-18	190211-18	190211-18
			Lab Sample No.(s)	19320719	19320720	19320721	19320723	19320743	19320744
			AGS Reference						
Moisture Content Ratio (% of as received sample)	%	PM024		20	20	3.6	11	1.8	18
Organic Carbon, Total	<0.2 %	TM132		<0.2 #	<0.2 #	0.251 M	<0.2 #	<0.2 M	<0.2 #
pH	1 pH Units	TM133		9.29 #	9.08 #	8.88 M	9.11 #	9.31 M	9.51 #
Cyanide, Total	<1 mg/kg	TM153		<1 @ #	<1 @ #	<1 M	<1 @ #	<1 @ M	<1 @ #
PCB congener 28	<3 µg/kg	TM168		<3 #	<3 #	<3 M	<3 #	<3 M	<3 #
PCB congener 52	<3 µg/kg	TM168		<3 #	<3 #	<3 M	<3 #	<3 M	<3 #
PCB congener 101	<3 µg/kg	TM168		<3 #	<3 #	<3 M	<3 #	<3 M	<3 #
PCB congener 118	<3 µg/kg	TM168		<3 #	<3 #	<3 M	<3 #	<3 M	<3 #
PCB congener 138	<3 µg/kg	TM168		<3 #	<3 #	<3 M	<3 #	<3 M	<3 #
PCB congener 153	<3 µg/kg	TM168		<3 #	<3 #	<3 M	<3 #	<3 M	<3 #
PCB congener 180	<3 µg/kg	TM168		<3 #	<3 #	<3 M	<3 #	<3 M	<3 #
Sum of detected PCB 7 Congeners	<21 µg/kg	TM168		<21	<21	<21	<21	<21	<21
Sulphide, Easily liberated	<15 mg/kg	TM180		<15 @ #	<15 #	<15 @ M	<15 #	<15 @ M	<15 @ #
Arsenic	<0.6 mg/kg	TM181		<0.6 #	0.742 #	8.6 M	<0.6 #	0.75 M	<0.6 #
Cadmium	<0.02 mg/kg	TM181		0.0956 #	0.127 #	0.316 M	0.117 #	0.201 M	0.104 #
Chromium	<0.9 mg/kg	TM181		1.44 #	1.49 #	3.74 M	2 #	3.61 M	2.23 #
Copper	<1.4 mg/kg	TM181		<1.4 #	3.91 #	2.07 M	1.78 #	1.73 M	<1.4 #
Lead	<0.7 mg/kg	TM181		<0.7 #	1.12 #	5.14 M	1.03 #	0.964 M	<0.7 #
Mercury	<0.14 mg/kg	TM181		<0.14 #	<0.14 #	<0.14 M	<0.14 #	<0.14 M	<0.14 #
Nickel	<0.2 mg/kg	TM181		1.51 #	2 #	4.59 M	2.44 #	1.18 M	2.13 #
Selenium	<1 mg/kg	TM181		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Vanadium	<0.2 mg/kg	TM181		1.83 #	2.35 #	4.7 #	2.35 #	1.74 #	2.33 #
Zinc	<1.9 mg/kg	TM181		8.7 #	15.3 #	27.4 M	11.7 #	7.79 M	10.3 #
Sulphate, Total	<48 mg/kg	TM221		279 #	104 #	157 M	112 #	109 M	288 #
Total Sulphur (ASB)	<0.0016 %	TM221		0.0093	0.00347	0.00523	0.00374	0.00364	0.0096
Boron, water soluble	<1 mg/kg	TM222		<1 #	<1 #	<1 M	<1 #	<1 M	<1 #
Chloride (soluble)	<5 mg/kg	TM243		6.93 #	5.25 #	8.57 M	7.19 #	20.2 M	23.9 #

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	Depth (m)	Sample Type	Date Sampled	Sampled Time	Date Received	SDG Ref	Lab Sample No.(s)	AGS Reference
			WS05	0.20	Soil/Solid (S)	30/01/2019	.	11/02/2019	190211-18	19320741	
			WS05	0.55	Soil/Solid (S)	30/01/2019	.	11/02/2019	190211-18	19320742	
			WS06	0.25	Soil/Solid (S)	31/01/2019	.	11/02/2019	190211-18	19322900	
			WS06	0.35	Soil/Solid (S)	31/01/2019	.	11/02/2019	190211-18	19320745	
			WS11	0.30	Soil/Solid (S)	07/02/2019	.	11/02/2019	190211-18	19320748	
			WS18	0.30	Soil/Solid (S)	07/02/2019	.	11/02/2019	190211-18	19320750	
Moisture Content Ratio (% of as received sample)	%	PM024	9.3		16			7.1		22		20		18	
Organic Carbon, Total	<0.2 %	TM132	<0.2	M	<0.2	#		<0.2	M	<0.2	#	0.288	#	<0.2	#
pH	1 pH Units	TM133	8.89	M	9.23	#		9.06	M	9.18	#	10.6	#	9.39	#
Cyanide, Total	<1 mg/kg	TM153	<1	@ M	<1	@ #		<1	@ M	<1	@ #	<1	@ #	<1	#
PCB congener 28	<3 µg/kg	TM168	<3	M	<3	#		<3	M	<3	#	<3	#	<3	#
PCB congener 52	<3 µg/kg	TM168	<3	M	<3	#		<3	M	<3	#	<3	#	<3	#
PCB congener 101	<3 µg/kg	TM168	<3	M	<3	#		<3	M	<3	#	<3	#	<3	#
PCB congener 118	<3 µg/kg	TM168	<3	M	<3	#		<3	M	<3	#	<3	#	<3	#
PCB congener 138	<3 µg/kg	TM168	<3	M	<3	#		<3	M	<3	#	<3	#	<3	#
PCB congener 153	<3 µg/kg	TM168	<3	M	<3	#		<3	M	<3	#	<3	#	<3	#
PCB congener 180	<3 µg/kg	TM168	<3	M	<3	#		<3	M	<3	#	<3	#	<3	#
Sum of detected PCB 7 Congeners	<21 µg/kg	TM168	<21		<21			<21		<21		<21		<21	
Sulphide, Easily liberated	<15 mg/kg	TM180	<15	@ M	<15	@ #		<15	@ M	<15	@ #	<15	#	<15	#
Arsenic	<0.6 mg/kg	TM181	1.97	M	<0.6	#		2.4	M	<0.6	#	2.25	#	<0.6	#
Cadmium	<0.02 mg/kg	TM181	0.0587	M	0.106	#		0.158	M	0.091	#	0.138	#	0.123	#
Chromium	<0.9 mg/kg	TM181	1.74	M	1.09	#		4.01	M	1.44	#	1.74	#	1.03	#
Copper	<1.4 mg/kg	TM181	2.59	M	<1.4	#		15	M	1.54	#	24.7	#	3.26	#
Lead	<0.7 mg/kg	TM181	0.817	M	<0.7	#		6.54	M	<0.7	#	3.03	#	2.82	#
Mercury	<0.14 mg/kg	TM181	<0.14	M	<0.14	#		<0.14	M	<0.14	#	<0.14	#	<0.14	#
Nickel	<0.2 mg/kg	TM181	2.85	M	1.67	#		4.04	M	2.11	#	3.89	#	1.37	#
Selenium	<1 mg/kg	TM181	<1	#	<1	#		<1	#	<1	#	<1	#	<1	#
Vanadium	<0.2 mg/kg	TM181	5.6	#	1.83	#		4.6	#	2.39	#	4.6	#	1.64	#
Zinc	<1.9 mg/kg	TM181	8.55	M	10.4	#		20.4	M	12.2	#	27.6	#	12.1	#
Sulphate, Total	<48 mg/kg	TM221	542	M	258	#		187	M	223	#	250	#	199	#
Total Sulphur (ASB)	<0.0016 %	TM221	0.0181		0.00859			0.00624		0.00743		0.00833		0.00664	
Boron, water soluble	<1 mg/kg	TM222	<1	M	<1	#		<1	M	<1	#	<1	#	<1	#
Chloride (soluble)	<5 mg/kg	TM243	6.46	M	8.81	#		773	M	45.9	#	7.35	#	5.35	#

Validated

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS31	WS31	WS32	WS32	WS55	WS56
			Depth (m)	0.10	1.50	0.30	1.80	0.30	0.10
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	07/02/2019	07/02/2019	08/02/2019	08/02/2019	29/01/2019	28/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18	190211-18	190211-18	190211-18	190211-18
			Lab Sample No.(s)	19320724	19320728	19320729	19320731	19320732	19320733
			AGS Reference						
Moisture Content Ratio (% of as received sample)	%	PM024		16	8.1	13	16	18	17
Organic Carbon, Total	<0.2 %	TM132		1.15 M	<0.2 M	0.548 M	<0.2 M	<0.2 #	1.83 M
pH	1 pH Units	TM133		8.21 M	9.13 M	8.54 M	8.2 M	8.97 #	8.16 M
Cyanide, Total	<1 mg/kg	TM153		<1 M	<1 @ M	<1 M	<1 M	<1 @ #	<1 @ M
PCB congener 28	<3 µg/kg	TM168		<3 M	<3 M	<3 M	<3 M	<3 #	<3 M
PCB congener 52	<3 µg/kg	TM168		<3 M	<3 M	<3 M	<3 M	<3 #	<3 M
PCB congener 101	<3 µg/kg	TM168		<3 M	<3 M	<3 M	<3 M	<3 #	<3 M
PCB congener 118	<3 µg/kg	TM168		<3 M	<3 M	<3 M	<3 M	<3 #	<3 M
PCB congener 138	<3 µg/kg	TM168		<3 M	<3 M	<3 M	<3 M	<3 #	<3 M
PCB congener 153	<3 µg/kg	TM168		<3 M	<3 M	<3 M	<3 M	<3 #	<3 M
PCB congener 180	<3 µg/kg	TM168		<3 M	<3 M	<3 M	<3 M	<3 #	<3 M
Sum of detected PCB 7 Congeners	<21 µg/kg	TM168		<21	<21	<21	<21	<21	<21
Sulphide, Easily liberated	<15 mg/kg	TM180		<15 @ M	<15 M	<15 M	<15 M	<15 @ #	<15 @ M
Arsenic	<0.6 mg/kg	TM181		6.55 M	3.59 M	6.16 M	1.05 M	<0.6 #	7.54 M
Cadmium	<0.02 mg/kg	TM181		0.369 M	0.169 M	0.32 M	0.125 M	0.0637 #	0.372 M
Chromium	<0.9 mg/kg	TM181		12.8 M	3.51 M	12.2 M	2.83 M	0.978 #	14.9 M
Copper	<1.4 mg/kg	TM181		11.1 M	3.75 M	9.66 M	4.74 M	<1.4 #	13.8 M
Lead	<0.7 mg/kg	TM181		27.5 M	2.12 M	31.3 M	2.59 M	<0.7 #	27.9 M
Mercury	<0.14 mg/kg	TM181		<0.14 M	<0.14 M	<0.14 M	<0.14 M	<0.14 #	<0.14 M
Nickel	<0.2 mg/kg	TM181		13.8 M	6.5 M	13.6 M	9.36 M	1.41 #	15.9 M
Selenium	<1 mg/kg	TM181		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Vanadium	<0.2 mg/kg	TM181		23.1 #	10.4 #	22.2 #	5.77 #	1.37 #	29.2 #
Zinc	<1.9 mg/kg	TM181		72.8 M	15 M	51.7 M	23.9 M	9.65 #	68.2 M
Sulphate, Total	<48 mg/kg	TM221		217 M	149 M	140 M	505 M	275 #	517 M
Total Sulphur (ASB)	<0.0016 %	TM221		0.00723	0.00496	0.00468	0.0168	0.00915	0.0172
Boron, water soluble	<1 mg/kg	TM222		<1 M	<1 M	<1 M	<1 M	<1 #	<1 M
Chloride (soluble)	<5 mg/kg	TM243		7.08 M		6.96 M	20.1 M	7.79 #	14.3 M

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS56	WS59	WS59	WS59	WS56A	WS56A
			Depth (m)	0.25	0.10	0.30	0.70	0.10	0.65
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	28/01/2019	28/01/2019	28/01/2019	28/01/2019	29/01/2019	29/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18	190211-18	190211-18	190211-18	190211-18
			Lab Sample No.(s)	19320735	19320740	19320746	19320747	19320734	19320736
			AGS Reference						
Moisture Content Ratio (% of as received sample)	%	PM024		8.8	18	16	15	21	15
Organic Carbon, Total	<0.2 %	TM132		<0.2 M	1.72 M	0.601 M	<0.2 M	1.36 M	<0.2 M
pH	1 pH Units	TM133		8.84 M	8.22 M	8.79 M	9.1 M	8.15 M	9.03 M
Cyanide, Total	<1 mg/kg	TM153		<1 @ M	<1 @ M	<1 @ M	<1 @ M	<1 @ M	<1 @ M
PCB congener 28	<3 µg/kg	TM168		<3 M	<3 M	<3 M	<3 M	<3 M	<3 M
PCB congener 52	<3 µg/kg	TM168		<3 M	<3 M	<3 M	<3 M	<3 M	<3 M
PCB congener 101	<3 µg/kg	TM168		<3 M	<3 M	<3 M	<3 M	<3 M	<3 M
PCB congener 118	<3 µg/kg	TM168		<3 M	<3 M	<3 M	<3 M	<3 M	<3 M
PCB congener 138	<3 µg/kg	TM168		<3 M	<3 M	<3 M	<3 M	<3 M	<3 M
PCB congener 153	<3 µg/kg	TM168		<3 M	<3 M	<3 M	<3 M	<3 M	<3 M
PCB congener 180	<3 µg/kg	TM168		<3 M	<3 M	<3 M	<3 M	<3 M	<3 M
Sum of detected PCB 7 Congeners	<21 µg/kg	TM168		<21	<21	<21	<21	<21	<21
Sulphide, Easily liberated	<15 mg/kg	TM180		<15 @ M	<15 @ M	<15 @ M	<15 @ M	<15 @ M	<15 @ M
Arsenic	<0.6 mg/kg	TM181		4.04 M	7.87 M	4.73 M	2.22 M	8.82 M	2.84 M
Cadmium	<0.02 mg/kg	TM181		0.158 M	0.366 M	0.209 M	0.149 M	0.383 M	0.145 M
Chromium	<0.9 mg/kg	TM181		5.39 M	14.8 M	8.75 M	3.43 M	16.4 M	5.9 M
Copper	<1.4 mg/kg	TM181		5.04 M	13.6 M	7.16 M	3.95 M	21.2 M	4.77 M
Lead	<0.7 mg/kg	TM181		9.36 M	30.3 M	13.3 M	2.68 M	32.5 M	3.76 M
Mercury	<0.14 mg/kg	TM181		<0.14 M	<0.14 M	<0.14 M	<0.14 M	<0.14 M	<0.14 M
Nickel	<0.2 mg/kg	TM181		6.96 M	16.6 M	9.95 M	5.37 M	18.4 M	8.01 M
Selenium	<1 mg/kg	TM181		<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Vanadium	<0.2 mg/kg	TM181		12.2 #	27.8 #	17.1 #	8.08 #	32.7 #	11.3 #
Zinc	<1.9 mg/kg	TM181		26.6 M	69.4 M	45.1 M	19.6 M	80.2 M	22.3 M
Sulphate, Total	<48 mg/kg	TM221		<48 M	442 M	341 M	424 M	523 M	341 M
Total Sulphur (ASB)	<0.0016 %	TM221		<0.0016	0.0147	0.0114	0.0141	0.0174	0.0114
Boron, water soluble	<1 mg/kg	TM222		<1 M	<1 M	<1 M	<1 M	<1 M	<1 M
Chloride (soluble)	<5 mg/kg	TM243		7.43 M	14.5 M	56.8 M	11.2 M	12.5 M	<5 M

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS58A	WS58A
			Depth (m)	0.10	0.30
			Sample Type	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	28/01/2019	28/01/2019
			Sampled Time	.	.
			Date Received	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18
			Lab Sample No.(s)	19320738	19320739
			AGS Reference		
Moisture Content Ratio (% of as received sample)	%	PM024		16	14
Organic Carbon, Total	<0.2 %	TM132		1.34 M	0.529 M
pH	1 pH Units	TM133		8.59 M	8.61 M
Cyanide, Total	<1 mg/kg	TM153		<1 @ M	<1 @ M
PCB congener 28	<3 µg/kg	TM168		<3 M	<3 M
PCB congener 52	<3 µg/kg	TM168		<3 M	<3 M
PCB congener 101	<3 µg/kg	TM168		<3 M	<3 M
PCB congener 118	<3 µg/kg	TM168		<3 M	<3 M
PCB congener 138	<3 µg/kg	TM168		<3 M	<3 M
PCB congener 153	<3 µg/kg	TM168		<3 M	<3 M
PCB congener 180	<3 µg/kg	TM168		<3 M	<3 M
Sum of detected PCB 7 Congeners	<21 µg/kg	TM168		<21	<21
Sulphide, Easily liberated	<15 mg/kg	TM180		<15 @ M	<15 @ M
Arsenic	<0.6 mg/kg	TM181		7.23 M	5.22 M
Cadmium	<0.02 mg/kg	TM181		0.292 M	0.234 M
Chromium	<0.9 mg/kg	TM181		12.6 M	8.88 M
Copper	<1.4 mg/kg	TM181		11.5 M	7.13 M
Lead	<0.7 mg/kg	TM181		19.7 M	8.33 M
Mercury	<0.14 mg/kg	TM181		<0.14 M	<0.14 M
Nickel	<0.2 mg/kg	TM181		14.2 M	9.71 M
Selenium	<1 mg/kg	TM181		<1 #	<1 #
Vanadium	<0.2 mg/kg	TM181		25.4 #	17.5 #
Zinc	<1.9 mg/kg	TM181		59.3 M	39.1 M
Sulphate, Total	<48 mg/kg	TM221		741 M	1120 M
Total Sulphur (ASB)	<0.0016 %	TM221		0.0247	0.0372
Boron, water soluble	<1 mg/kg	TM222		<1 M	<1 M
Chloride (soluble)	<5 mg/kg	TM243		25.1 M	26.3 M

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS01	WS02	WS03	WS03	WS04	WS04
			Depth (m)	0.50	0.30	0.10	0.30	0.25	0.35
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	31/01/2019	06/02/2019	06/02/2019	06/02/2019	31/01/2019	31/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18	190211-18	190211-18	190211-18	190211-18
			Lab Sample No.(s)	19320719	19320720	19320721	19320723	19320743	19320744
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		89.2	90.8	95.9	93.6	93.5	93.2
Acenaphthene-d10 % recovery**	%	TM218		82.9	89.7	94.9	92.8	87.1	83.9
Phenanthrene-d10 % recovery**	%	TM218		85.2	93.8	97.7	95.2	85.6	85.8
Chrysene-d12 % recovery**	%	TM218		79.9	89.7	84.3	95.4	80.3	77
Perylene-d12 % recovery**	%	TM218		85.9	85.8	79.6	92.3	85.9	84.5
Naphthalene	<9 µg/kg	TM218		<9 @ #	<9 @ #	<9 @ M	<9 @ #	<9 @ M	<9 @ #
Acenaphthylene	<12 µg/kg	TM218		<12 @ #	<12 @ #	<12 @ M	<12 @ #	<12 @ M	<12 @ #
Acenaphthene	<8 µg/kg	TM218		<8 @ #	<8 @ #	<8 @ M	<8 @ #	<8 @ M	<8 @ #
Fluorene	<10 µg/kg	TM218		<10 @ #	<10 @ #	<10 @ M	<10 @ #	<10 @ M	<10 @ #
Phenanthrene	<15 µg/kg	TM218		<15 @ #	<15 @ #	<15 @ M	<15 @ #	<15 @ M	<15 @ #
Anthracene	<16 µg/kg	TM218		<16 @ #	<16 @ #	<16 @ M	<16 @ #	<16 @ M	<16 @ #
Fluoranthene	<17 µg/kg	TM218		<17 @ #	<17 @ #	<17 @ M	<17 @ #	<17 @ M	<17 @ #
Pyrene	<15 µg/kg	TM218		<15 @ #	<15 @ #	<15 @ M	<15 @ #	<15 @ M	<15 @ #
Benz(a)anthracene	<14 µg/kg	TM218		<14 @ #	<14 @ #	<14 @ M	<14 @ #	<14 @ M	<14 @ #
Chrysene	<10 µg/kg	TM218		<10 @ #	<10 @ #	<10 @ M	<10 @ #	<10 @ M	<10 @ #
Benzo(b)fluoranthene	<15 µg/kg	TM218		<15 @ #	<15 @ #	<15 @ M	<15 @ #	<15 @ M	<15 @ #
Benzo(k)fluoranthene	<14 µg/kg	TM218		<14 @ #	<14 @ #	<14 @ M	<14 @ #	<14 @ M	<14 @ #
Benzo(a)pyrene	<15 µg/kg	TM218		<15 @ #	<15 @ #	<15 @ M	<15 @ #	<15 @ M	<15 @ #
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		<18 @ #	<18 @ #	<18 @ M	<18 @ #	<18 @ M	<18 @ #
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		<23 @ #	<23 @ #	<23 @ M	<23 @ #	<23 @ M	<23 @ #
Benzo(g,h,i)perylene	<24 µg/kg	TM218		<24 @ #	<24 @ #	<24 @ M	<24 @ #	<24 @ M	<24 @ #
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		<118	<118	<118	<118	<118	<118

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS05	WS05	WS06	WS06	WS11	WS18
			Depth (m)	0.20	0.55	0.25	0.35	0.30	0.30
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	30/01/2019	30/01/2019	31/01/2019	31/01/2019	07/02/2019	07/02/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18	190211-18	190211-18	190211-18	190211-18
			Lab Sample No.(s)	19320741	19320742	19322900	19320745	19320748	19320750
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		90.9	89.4	90.3	95.3	100	90.4
Acenaphthene-d10 % recovery**	%	TM218		93.3	83.6	81.9	86.5	0	83.9
Phenanthrene-d10 % recovery**	%	TM218		98.2	85.8	84.1	87.9	85.4	88.2
Chrysene-d12 % recovery**	%	TM218		103	74.1	81.3	75.9	86.7	78.5
Perylene-d12 % recovery**	%	TM218		110	75.4	84.3	76.7	83.6	80.5
Naphthalene	<9 µg/kg	TM218		<9 @ M	<9 @ #	<9 @ M	<9 @ #	<9 #	<9 #
Acenaphthylene	<12 µg/kg	TM218		<12 @ M	<12 @ #	<12 @ M	<12 @ #	<12 #	<12 #
Acenaphthene	<8 µg/kg	TM218		<8 @ M	<8 @ #	<8 @ M	<8 @ #	<8 #	<8 #
Fluorene	<10 µg/kg	TM218		<10 @ M	<10 @ #	<10 @ M	<10 @ #	<10 #	<10 #
Phenanthrene	<15 µg/kg	TM218		<15 @ M	<15 @ #	<15 @ M	<15 @ #	<15 #	<15 #
Anthracene	<16 µg/kg	TM218		<16 @ M	<16 @ #	<16 @ M	<16 @ #	<16 #	<16 #
Fluoranthene	<17 µg/kg	TM218		<17 @ M	<17 @ #	<17 @ M	<17 @ #	22.7 #	<17 #
Pyrene	<15 µg/kg	TM218		<15 @ M	<15 @ #	<15 @ M	<15 @ #	<15 #	<15 #
Benz(a)anthracene	<14 µg/kg	TM218		<14 @ M	<14 @ #	<14 @ M	<14 @ #	<14 #	<14 #
Chrysene	<10 µg/kg	TM218		<10 @ M	<10 @ #	<10 @ M	<10 @ #	<10 #	<10 #
Benzo(b)fluoranthene	<15 µg/kg	TM218		<15 @ M	<15 @ #	<15 @ M	<15 @ #	<15 #	<15 #
Benzo(k)fluoranthene	<14 µg/kg	TM218		<14 @ M	<14 @ #	<14 @ M	<14 @ #	<14 #	<14 #
Benzo(a)pyrene	<15 µg/kg	TM218		<15 @ M	<15 @ #	<15 @ M	<15 @ #	<15 #	<15 #
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		<18 @ M	<18 @ #	<18 @ M	<18 @ #	<18 #	<18 #
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		<23 @ M	<23 @ #	<23 @ M	<23 @ #	<23 #	<23 #
Benzo(g,h,i)perylene	<24 µg/kg	TM218		<24 @ M	<24 @ #	<24 @ M	<24 @ #	<24 #	<24 #
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		<118	<118	<118	<118	<118	<118

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS31	WS31	WS32	WS32	WS55	WS56
			Depth (m)	0.10	1.50	0.30	1.80	0.30	0.10
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	07/02/2019	07/02/2019	08/02/2019	08/02/2019	29/01/2019	28/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18	190211-18	190211-18	190211-18	190211-18
			Lab Sample No.(s)	19320724	19320728	19320729	19320731	19320732	19320733
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		89.6	90.8	108	84	94.6	91.1
Acenaphthene-d10 % recovery**	%	TM218		86.1	87.2	103	83.7	93.5	93.3
Phenanthrene-d10 % recovery**	%	TM218		89.1	90.4	98.4	86.4	96.7	99.1
Chrysene-d12 % recovery**	%	TM218		82.2	84.7	103	76.4	95.2	102
Perylene-d12 % recovery**	%	TM218		77.6	79	104	73.1	98.3	109
Naphthalene	<9 µg/kg	TM218		<9 M	<9 M	<9 M	<9 M	<9 @ #	<9 @ M
Acenaphthylene	<12 µg/kg	TM218		<12 M	<12 M	<12 M	<12 M	<12 @ #	<12 @ M
Acenaphthene	<8 µg/kg	TM218		<8 M	<8 M	<8 M	<8 M	<8 @ #	<8 @ M
Fluorene	<10 µg/kg	TM218		<10 M	<10 M	<10 M	<10 M	<10 @ #	<10 @ M
Phenanthrene	<15 µg/kg	TM218		38.6 M	<15 M	<15 M	<15 M	<15 @ #	45.8 @ M
Anthracene	<16 µg/kg	TM218		<16 M	<16 M	<16 M	<16 M	<16 @ #	<16 @ M
Fluoranthene	<17 µg/kg	TM218		201 M	<17 M	26.4 M	<17 M	50.7 @ #	203 @ M
Pyrene	<15 µg/kg	TM218		187 M	<15 M	23.5 M	<15 M	46.6 @ #	182 @ M
Benz(a)anthracene	<14 µg/kg	TM218		94.7 M	<14 M	16.7 M	<14 M	27.4 @ #	104 @ M
Chrysene	<10 µg/kg	TM218		78.8 M	<10 M	16 M	<10 M	28.3 @ #	103 @ M
Benzo(b)fluoranthene	<15 µg/kg	TM218		91.3 M	<15 M	23.9 M	<15 M	46.6 @ #	139 @ M
Benzo(k)fluoranthene	<14 µg/kg	TM218		43.9 M	<14 M	<14 M	<14 M	18.9 @ #	63 @ M
Benzo(a)pyrene	<15 µg/kg	TM218		93.4 M	<15 M	17.7 M	<15 M	43 @ #	130 @ M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		48.7 M	<18 M	<18 M	<18 M	33.1 @ #	77.9 @ M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		<23 M	<23 M	<23 M	<23 M	<23 @ #	<23 @ M
Benzo(g,h,i)perylene	<24 µg/kg	TM218		69.7 M	<24 M	<24 M	<24 M	54.7 @ #	110 @ M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		946	<118	124	<118	349	1160

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS56	WS59	WS59	WS59	WS56A	WS56A
			Depth (m)	0.25	0.10	0.30	0.70	0.10	0.65
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	28/01/2019	28/01/2019	28/01/2019	28/01/2019	29/01/2019	29/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18	190211-18	190211-18	190211-18	190211-18
			Lab Sample No.(s)	19320735	19320740	19320746	19320747	19320734	19320736
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		90.6	94	91.9	98.7	94.7	89.3
Acenaphthene-d10 % recovery**	%	TM218		86.5	87.8	84.6	96.2	89.4	87.6
Phenanthrene-d10 % recovery**	%	TM218		87.8	88.3	87.5	94.5	88.9	92
Chrysene-d12 % recovery**	%	TM218		82.6	83.6	75.9	89.9	86.3	84.9
Perylene-d12 % recovery**	%	TM218		92.9	89.5	75.3	101	91.2	79.6
Naphthalene	<9 µg/kg	TM218		<9 @ M	<9 @ M	<9 @ M	<9 @ M	<9 @ M	<9 @ M
Acenaphthylene	<12 µg/kg	TM218		<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ M
Acenaphthene	<8 µg/kg	TM218		11.9 @ M	<8 @ M	12.5 @ M	<8 @ M	<8 @ M	<8 @ M
Fluorene	<10 µg/kg	TM218		<10 @ M	<10 @ M	14.1 @ M	<10 @ M	<10 @ M	<10 @ M
Phenanthrene	<15 µg/kg	TM218		247 @ M	31.6 @ M	168 @ M	<15 @ M	48.9 @ M	<15 @ M
Anthracene	<16 µg/kg	TM218		69.6 @ M	<16 @ M	51.8 @ M	<16 @ M	<16 @ M	<16 @ M
Fluoranthene	<17 µg/kg	TM218		774 @ M	152 @ M	289 @ M	<17 @ M	178 @ M	34 @ M
Pyrene	<15 µg/kg	TM218		626 @ M	138 @ M	234 @ M	<15 @ M	161 @ M	24.6 @ M
Benz(a)anthracene	<14 µg/kg	TM218		408 @ M	76.1 @ M	117 @ M	<14 @ M	88.3 @ M	17.9 @ M
Chrysene	<10 µg/kg	TM218		463 @ M	75.1 @ M	93.8 @ M	<10 @ M	83.5 @ M	17.6 @ M
Benzo(b)fluoranthene	<15 µg/kg	TM218		724 @ M	60.9 @ M	165 @ M	<15 @ M	82.4 @ M	27.7 @ M
Benzo(k)fluoranthene	<14 µg/kg	TM218		332 @ M	41.3 @ M	57.4 @ M	<14 @ M	53.9 @ M	<14 @ M
Benzo(a)pyrene	<15 µg/kg	TM218		935 @ M	108 @ M	110 @ M	<15 @ M	122 @ M	<15 @ M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		669 @ M	64 @ M	71.8 @ M	<18 @ M	70.7 @ M	<18 @ M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		102 @ M	<23 @ M	<23 @ M	<23 @ M	<23 @ M	<23 @ M
Benzo(g,h,i)perylene	<24 µg/kg	TM218		739 @ M	76.2 @ M	88.3 @ M	<24 @ M	84.7 @ M	<24 @ M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		6100	822	1470	<118	973	122

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

PAH by GCMS

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS58A	WS58A
			Depth (m)	0.10	0.30
			Sample Type	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	28/01/2019	28/01/2019
			Sampled Time	.	.
			Date Received	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18
			Lab Sample No.(s)	19320738	19320739
			AGS Reference		
Naphthalene-d8 % recovery**	%	TM218		84.9	90.6
Acenaphthene-d10 % recovery**	%	TM218		80.2	84.3
Phenanthrene-d10 % recovery**	%	TM218		83	85.2
Chrysene-d12 % recovery**	%	TM218		79	82.2
Perylene-d12 % recovery**	%	TM218		73.6	90.2
Naphthalene	<9 µg/kg	TM218		<9 @ M	<9 @ M
Acenaphthylene	<12 µg/kg	TM218		<12 @ M	<12 @ M
Acenaphthene	<8 µg/kg	TM218		17.2 @ M	10.2 @ M
Fluorene	<10 µg/kg	TM218		15.1 @ M	13.2 @ M
Phenanthrene	<15 µg/kg	TM218		248 @ M	303 @ M
Anthracene	<16 µg/kg	TM218		41.5 @ M	79 @ M
Fluoranthene	<17 µg/kg	TM218		641 @ M	800 @ M
Pyrene	<15 µg/kg	TM218		566 @ M	613 @ M
Benz(a)anthracene	<14 µg/kg	TM218		316 @ M	365 @ M
Chrysene	<10 µg/kg	TM218		297 @ M	368 @ M
Benzo(b)fluoranthene	<15 µg/kg	TM218		393 @ M	374 @ M
Benzo(k)fluoranthene	<14 µg/kg	TM218		141 @ M	188 @ M
Benzo(a)pyrene	<15 µg/kg	TM218		331 @ M	476 @ M
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		191 @ M	319 @ M
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		54.3 @ M	56.3 @ M
Benzo(g,h,i)perylene	<24 µg/kg	TM218		242 @ M	308 @ M
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		3490	4270

Validated

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Phenols Spec MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS01	WS02	WS03	WS03	WS04	WS04
			Depth (m)	0.50	0.30	0.10	0.30	0.25	0.35
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	31/01/2019	06/02/2019	06/02/2019	06/02/2019	31/01/2019	31/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18	190211-18	190211-18	190211-18	190211-18
			Lab Sample No.(s)	19320719	19320720	19320721	19320723	19320743	19320744
			AGS Reference						
4-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4,6-Trichlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4-Dichlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Pentachlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	1.92
Phenol	<1 µg/kg	TM072		<1	<1	<1	<1	1.67	<1
4-Chloro-3-methylphenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4-Dimethylphenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2-Chlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Sum of Detected Phenols	<9 µg/kg	TM072		<9	<9	<9	<9	<9	<9

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Phenols Spec MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS05	WS05	WS06	WS06	WS11	WS18
			Depth (m)	0.20	0.55	0.25	0.35	0.30	0.30
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	30/01/2019	30/01/2019	31/01/2019	31/01/2019	07/02/2019	07/02/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18	190211-18	190211-18	190211-18	190211-18
			Lab Sample No.(s)	19320741	19320742	19322900	19320745	19320748	19320750
			AGS Reference						
4-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4,6-Trichlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4-Dichlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Pentachlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Phenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
4-Chloro-3-methylphenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4-Dimethylphenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2-Chlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Sum of Detected Phenols	<9 µg/kg	TM072		<9	<9	<9	<9	<9	<9

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Phenols Spec MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS31	WS31	WS32	WS32	WS55	WS56
			Depth (m)	0.10	1.50	0.30	1.80	0.30	0.10
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	07/02/2019	07/02/2019	08/02/2019	08/02/2019	29/01/2019	28/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18	190211-18	190211-18	190211-18	190211-18
			Lab Sample No.(s)	19320724	19320728	19320729	19320731	19320732	19320733
			AGS Reference						
4-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4,6-Trichlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4-Dichlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Pentachlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Phenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
4-Chloro-3-methylphenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4-Dimethylphenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2-Chlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Sum of Detected Phenols	<9 µg/kg	TM072		<9	<9	<9	<9	<9	<9

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Phenols Spec MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS56	WS59	WS59	WS59	WS56A	WS56A
			Depth (m)	0.25	0.10	0.30	0.70	0.10	0.65
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	28/01/2019	28/01/2019	28/01/2019	28/01/2019	29/01/2019	29/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18	190211-18	190211-18	190211-18	190211-18
			Lab Sample No.(s)	19320735	19320740	19320746	19320747	19320734	19320736
			AGS Reference						
4-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4,6-Trichlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	1.29	<1
2-Nitrophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4-Dichlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Pentachlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Phenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
4-Chloro-3-methylphenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2,4-Dimethylphenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
2-Chlorophenol	<1 µg/kg	TM072		<1	<1	<1	<1	<1	<1
Sum of Detected Phenols	<9 µg/kg	TM072		<9	<9	<9	<9	<9	<9

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Phenols Spec MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS58A	WS58A				
			Depth (m)	0.10	0.30				
			Sample Type	Soil/Solid (S)	Soil/Solid (S)				
			Date Sampled	28/01/2019	28/01/2019				
			Sampled Time	.	.				
			Date Received	11/02/2019	11/02/2019				
			SDG Ref	190211-18	190211-18				
			Lab Sample No.(s)	19320738	19320739				
			AGS Reference						
4-Nitrophenol	<1 µg/kg	TM072		<1	<1				
2,4,6-Trichlorophenol	<1 µg/kg	TM072		<1	<1				
2-Nitrophenol	<1 µg/kg	TM072		<1	<1				
2,4-Dichlorophenol	<1 µg/kg	TM072		<1	<1				
Pentachlorophenol	<1 µg/kg	TM072		<1	<1				
Phenol	<1 µg/kg	TM072		<1	<1				
4-Chloro-3-methylphenol	<1 µg/kg	TM072		<1	<1				
2,4-Dimethylphenol	<1 µg/kg	TM072		<1	<1				
2-Chlorophenol	<1 µg/kg	TM072		<1	<1				
Sum of Detected Phenols	<9 µg/kg	TM072		<9	<9				

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3♦§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS03	WS03	WS04	WS04	WS05	WS05
			Depth (m)	0.10	0.30	0.25	0.35	0.20	0.55
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	06/02/2019	06/02/2019	31/01/2019	31/01/2019	30/01/2019	30/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18	190211-18	190211-18	190211-18	190211-18
			Lab Sample No.(s)	19320721	19320723	19320743	19320744	19320741	19320742
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Pentachlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Nitrobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Isophorone	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachloroethane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Diethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dibenzofuran	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Carbazole	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Azobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
3-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS03	WS03	WS04	WS04	WS05	WS05
			Depth (m)	0.10	0.30	0.25	0.35	0.20	0.55
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	06/02/2019	06/02/2019	31/01/2019	31/01/2019	30/01/2019	30/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18	190211-18	190211-18	190211-18	190211-18
			Lab Sample No.(s)	19320721	19320723	19320743	19320744	19320741	19320742
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
2-Methylnaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Acenaphthylene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Acenaphthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(a)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(b)fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(k)fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(a)pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Chrysene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Fluoranthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Fluorene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Phenanthrene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Pyrene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Naphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100
Bis(2-chloroisopropyl) ether	<100 µg/kg	TM157		<100	<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3♦§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS56	WS56	WS59	WS59	WS59
			Depth (m)	0.10	0.25	0.10	0.30	0.70
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	28/01/2019	28/01/2019	28/01/2019	28/01/2019	28/01/2019
			Sampled Time	.	.	.	.	.
			Date Received	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18	190211-18	190211-18	190211-18
			Lab Sample No.(s)	19320733	19320735	19320740	19320746	19320747
			AGS Reference					
Phenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100
Pentachlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100	<100	<100	<100
Nitrobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100
Isophorone	<100 µg/kg	TM157		<100	<100	<100	<100	<100
Hexachloroethane	<100 µg/kg	TM157		<100	<100	<100	<100	<100
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100	<100	<100	<100
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100
Diethyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100
Dibenzofuran	<100 µg/kg	TM157		<100	<100	<100	<100	<100
Carbazole	<100 µg/kg	TM157		<100	<100	<100	<100	<100
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100	<100	<100	<100
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100	<100	<100	<100
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100	<100	<100	<100
Azobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100
4-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100
4-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100
4-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100
4-Chloroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100	<100	<100	<100
3-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100
2-Nitrophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100
2-Nitroaniline	<100 µg/kg	TM157		<100	<100	<100	<100	<100
2-Methylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS56	WS56	WS59	WS59	WS59
			Depth (m)	0.10	0.25	0.10	0.30	0.70
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	28/01/2019	28/01/2019	28/01/2019	28/01/2019	28/01/2019
			Sampled Time	-	-	-	-	-
			Date Received	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18	190211-18	190211-18	190211-18
			Lab Sample No.(s)	19320733	19320735	19320740	19320746	19320747
			AGS Reference					
2-Chlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100	<100	<100	<100
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100	<100	<100	<100
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100	<100	<100	<100
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100
2-Methylnaphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100
Acenaphthylene	<100 µg/kg	TM157		<100	<100	<100	<100	<100
Acenaphthene	<100 µg/kg	TM157		<100	<100	<100	<100	<100
Anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100
Benzo(a)anthracene	<100 µg/kg	TM157		<100	165	159	<100	<100
Benzo(b)fluoranthene	<100 µg/kg	TM157		132	186	195	<100	<100
Benzo(k)fluoranthene	<100 µg/kg	TM157		<100	197	159	<100	<100
Benzo(a)pyrene	<100 µg/kg	TM157		<100	154	159	<100	<100
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	165	159	<100	<100
Chrysene	<100 µg/kg	TM157		120	296	183	119	<100
Fluoranthene	<100 µg/kg	TM157		156	340	268	190	<100
Fluorene	<100 µg/kg	TM157		<100	<100	<100	<100	<100
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		144	186	220	<100	<100
Phenanthrene	<100 µg/kg	TM157		<100	110	<100	<100	<100
Pyrene	<100 µg/kg	TM157		168	307	256	190	<100
Naphthalene	<100 µg/kg	TM157		<100	<100	<100	<100	<100
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100	<100	<100	<100
Bis(2-chloroisopropyl) ether	<100 µg/kg	TM157		<100	<100	<100	<100	<100

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS01	WS02	WS03	WS03	WS04	WS04
			Depth (m)	0.50	0.30	0.10	0.30	0.25	0.35
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	31/01/2019	06/02/2019	06/02/2019	06/02/2019	31/01/2019	31/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18	190211-18	190211-18	190211-18	190211-18
			Lab Sample No.(s)	19320719	19320720	19320721	19320723	19320743	19320744
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		111 @	110 @	98 @	107	106 @	107 @
GRO TOT (Moisture Corrected)	<100 µg/kg	TM089		<100 @ #	<100 @ #	<100 @ M	<100 #	<100 @ M	<100 @ #
Aliphatics >C5-C6	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10	<10 @	<10 @
Aliphatics >C6-C8	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10	<10 @	<10 @
Aliphatics >C8-C10	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10	<10 @	<10 @
Aliphatics >C10-C12	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10	<10 @	<10 @
Aliphatics >C12-C16	<100 µg/kg	TM173		<100	<100	<100	271	<100	<100
Aliphatics >C16-C21	<100 µg/kg	TM173		<100	<100	<100	<100	<100	<100
Aliphatics >C21-C35	<100 µg/kg	TM173		<100	<100	3330	237	2030	<100
Aliphatics >C35-C44	<100 µg/kg	TM173		<100	<100	<100	<100	<100	<100
Total Aliphatics >C12-C44	<100 µg/kg	TM173		<100	<100	3330	508	2030	<100
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10	<10 @	<10 @
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10	<10 @	<10 @
Aromatics >EC8-EC10	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10	<10 @	<10 @
Aromatics >EC10-EC12	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10	<10 @	<10 @
Aromatics >EC12-EC16	<100 µg/kg	TM173		<100	856	<100	<100	<100	<100
Aromatics >EC16-EC21	<100 µg/kg	TM173		<100	<100	<100	<100	<100	<100
Aromatics >EC21-EC35	<100 µg/kg	TM173		<100	786	838	721	<100	<100
Aromatics >EC35-EC44	<100 µg/kg	TM173		<100	<100	574	2440	<100	<100
Aromatics >EC40-EC44	<100 µg/kg	TM173		<100	<100	<100	1630	<100	<100
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		<100	1640	1410	3160	<100	<100
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173		<100	1640	4750	3670	2030	<100

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS05	WS05	WS06	WS06	WS11	WS18
			Depth (m)	0.20	0.55	0.25	0.35	0.30	0.30
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	30/01/2019	30/01/2019	31/01/2019	31/01/2019	07/02/2019	07/02/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18	190211-18	190211-18	190211-18	190211-18
			Lab Sample No.(s)	19320741	19320742	19322900	19320745	19320748	19320750
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		108 @	106 @	110 @	111 @	107	116
GRO TOT (Moisture Corrected)	<100 µg/kg	TM089		<100 @ M	<100 @ #	<100 @ M	<100 @ #	<100 #	<100 #
Aliphatics >C5-C6	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10	<10
Aliphatics >C6-C8	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10	<10
Aliphatics >C8-C10	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10	<10
Aliphatics >C10-C12	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10	<10
Aliphatics >C12-C16	<100 µg/kg	TM173		<100	<100	<100	<100	1570	346
Aliphatics >C16-C21	<100 µg/kg	TM173		<100	<100	<100	<100	<100	<100
Aliphatics >C21-C35	<100 µg/kg	TM173		6190	<100	<100	<100	6820	1460
Aliphatics >C35-C44	<100 µg/kg	TM173		766	<100	<100	<100	<100	<100
Total Aliphatics >C12-C44	<100 µg/kg	TM173		6950	<100	<100	<100	8390	1810
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10	<10
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10	<10
Aromatics >EC10-EC12	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10	<10
Aromatics >EC12-EC16	<100 µg/kg	TM173		<100	<100	<100	<100	<100	<100
Aromatics >EC16-EC21	<100 µg/kg	TM173		<100	<100	<100	<100	256	<100
Aromatics >EC21-EC35	<100 µg/kg	TM173		<100	<100	<100	<100	3870	<100
Aromatics >EC35-EC44	<100 µg/kg	TM173		<100	<100	<100	<100	1570	326
Aromatics >EC40-EC44	<100 µg/kg	TM173		<100	<100	<100	<100	465	289
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		<100	<100	<100	<100	5690	326
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173		6950	<100	<100	<100	14100	2140

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS31	WS31	WS32	WS32	WS55	WS56
			Depth (m)	0.10	1.50	0.30	1.80	0.30	0.10
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	07/02/2019	07/02/2019	08/02/2019	08/02/2019	29/01/2019	28/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18	190211-18	190211-18	190211-18	190211-18
			Lab Sample No.(s)	19320724	19320728	19320729	19320731	19320732	19320733
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		104	109	105	106	107 @	104 @
GRO TOT (Moisture Corrected)	<100 µg/kg	TM089		<100 M	<100 M	<100 M	<100 M	<100 @ #	<100 @ M
Aliphatics >C5-C6	<10 µg/kg	TM089		<10	<10	<10	<10	<10 @	<10 @
Aliphatics >C6-C8	<10 µg/kg	TM089		<10	<10	<10	<10	<10 @	<10 @
Aliphatics >C8-C10	<10 µg/kg	TM089		<10	<10	<10	<10	<10 @	<10 @
Aliphatics >C10-C12	<10 µg/kg	TM089		<10	<10	<10	<10	<10 @	<10 @
Aliphatics >C12-C16	<100 µg/kg	TM173		<100	<100	1220	<100	<100	<100
Aliphatics >C16-C21	<100 µg/kg	TM173		952	<100	674	<100	<100	<100
Aliphatics >C21-C35	<100 µg/kg	TM173		7150	178	2710	3170	<100	3930
Aliphatics >C35-C44	<100 µg/kg	TM173		<100	<100	<100	<100	<100	<100
Total Aliphatics >C12-C44	<100 µg/kg	TM173		8110	178	4600	3170	<100	3930
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10	<10	<10	<10	<10 @	<10 @
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10	<10	<10	<10	<10 @	<10 @
Aromatics >EC8-EC10	<10 µg/kg	TM089		<10	<10	<10	<10	<10 @	<10 @
Aromatics >EC10-EC12	<10 µg/kg	TM089		<10	<10	<10	<10	<10 @	<10 @
Aromatics >EC12-EC16	<100 µg/kg	TM173		<100	<100	<100	<100	<100	<100
Aromatics >EC16-EC21	<100 µg/kg	TM173		628	<100	<100	<100	<100	<100
Aromatics >EC21-EC35	<100 µg/kg	TM173		11100	<100	3350	1530	1530	6370
Aromatics >EC35-EC44	<100 µg/kg	TM173		3900	942	918	<100	561	<100
Aromatics >EC40-EC44	<100 µg/kg	TM173		1280	509	446	<100	<100	<100
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		15600	942	4260	1530	2090	6370
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173		23700	1120	8870	4700	2090	10300

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS56	WS59	WS59	WS59	WS56A	WS56A
			Depth (m)	0.25	0.10	0.30	0.70	0.10	0.65
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	28/01/2019	28/01/2019	28/01/2019	28/01/2019	29/01/2019	29/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18	190211-18	190211-18	190211-18	190211-18
			Lab Sample No.(s)	19320735	19320740	19320746	19320747	19320734	19320736
			AGS Reference						
GRO Surrogate % recovery**	%	TM089		103 @	97.3 @	104 @	106 @	91.9 @	118 @
GRO TOT (Moisture Corrected)	<100 µg/kg	TM089		<100 @ M	<100 @ M	<100 @ M	<100 @ M	<100 @ M	<100 @ M
Aliphatics >C5-C6	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
Aliphatics >C6-C8	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
Aliphatics >C8-C10	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	10.6 @
Aliphatics >C10-C12	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
Aliphatics >C12-C16	<100 µg/kg	TM173		<100	<100	<100	<100	<100	<100
Aliphatics >C16-C21	<100 µg/kg	TM173		3320	<100	1680	<100	<100	<100
Aliphatics >C21-C35	<100 µg/kg	TM173		13000	5410	9330	1410	8300	3170
Aliphatics >C35-C44	<100 µg/kg	TM173		2810	<100	1690	<100	<100	<100
Total Aliphatics >C12-C44	<100 µg/kg	TM173		19200	5410	12700	1410	8300	3170
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
Aromatics >EC8-EC10	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
Aromatics >EC10-EC12	<10 µg/kg	TM089		<10 @	<10 @	<10 @	<10 @	<10 @	<10 @
Aromatics >EC12-EC16	<100 µg/kg	TM173		<100	<100	<100	<100	<100	<100
Aromatics >EC16-EC21	<100 µg/kg	TM173		2720	1860	791	<100	853	<100
Aromatics >EC21-EC35	<100 µg/kg	TM173		16600	15100	9390	1050	17800	3590
Aromatics >EC35-EC44	<100 µg/kg	TM173		7720	6300	4490	<100	5000	1340
Aromatics >EC40-EC44	<100 µg/kg	TM173		3140	2380	1900	<100	1520	704
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		27000	23300	14700	1050	23600	4930
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173		46200	28700	27400	2450	31900	8110

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS58A	WS58A
			Depth (m)	0.10	0.30
			Sample Type	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	28/01/2019	28/01/2019
			Sampled Time	.	.
			Date Received	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18
			Lab Sample No.(s)	19320738	19320739
			AGS Reference		
GRO Surrogate % recovery**	%	TM089		99.3 @	107 @
GRO TOT (Moisture Corrected)	<100 µg/kg	TM089		<100 @ M	<100 @ M
Aliphatics >C5-C6	<10 µg/kg	TM089		<10 @	<10 @
Aliphatics >C6-C8	<10 µg/kg	TM089		<10 @	<10 @
Aliphatics >C8-C10	<10 µg/kg	TM089		<10 @	<10 @
Aliphatics >C10-C12	<10 µg/kg	TM089		<10 @	<10 @
Aliphatics >C12-C16	<100 µg/kg	TM173		<100	<100
Aliphatics >C16-C21	<100 µg/kg	TM173		<100	1040
Aliphatics >C21-C35	<100 µg/kg	TM173		3010	8660
Aliphatics >C35-C44	<100 µg/kg	TM173		<100	927
Total Aliphatics >C12-C44	<100 µg/kg	TM173		3010	10600
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10 @	<10 @
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10 @	<10 @
Aromatics >EC8-EC10	<10 µg/kg	TM089		<10 @	<10 @
Aromatics >EC10-EC12	<10 µg/kg	TM089		<10 @	<10 @
Aromatics >EC12-EC16	<100 µg/kg	TM173		<100	<100
Aromatics >EC16-EC21	<100 µg/kg	TM173		<100	2690
Aromatics >EC21-EC35	<100 µg/kg	TM173		5160	15000
Aromatics >EC35-EC44	<100 µg/kg	TM173		2040	4840
Aromatics >EC40-EC44	<100 µg/kg	TM173		646	1820
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		7200	22500
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173		10200	33100

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS01	WS02	WS03	WS03	WS04	WS04
			Depth (m)	0.50	0.30	0.10	0.30	0.25	0.35
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	31/01/2019	06/02/2019	06/02/2019	06/02/2019	31/01/2019	31/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18	190211-18	190211-18	190211-18	190211-18
			Lab Sample No.(s)	19320719	19320720	19320721	19320723	19320743	19320744
			AGS Reference						
Dibromofluoromethane**	%	TM116		138 @	105 @	107 @	98.2	105 @	99.1 @
Toluene-d8**	%	TM116		97.1 @	98.7 @	96.5 @	97.4	97.4 @	98.9 @
4-Bromofluorobenzene**	%	TM116		104 @	97.9 @	87.2 @	94.5	93.9 @	98.9 @
Dichlorodifluoromethane	<6 µg/kg	TM116				<6 @ M	<6 #	<6 @ M	<6 @ #
Chloromethane	<7 µg/kg	TM116				<7 @ #	<7 #	<7 @ #	<7 @ #
Vinyl Chloride	<6 µg/kg	TM116				<6 @ M	<6 #	<6 @ M	<6 @ #
Bromomethane	<10 µg/kg	TM116				<10 @ M	<10 #	<10 @ M	<10 @ #
Chloroethane	<10 µg/kg	TM116				<10 @ M	<10 #	<10 @ M	<10 @ #
Trichlorofluorormethane	<6 µg/kg	TM116				<6 @ M	<6 #	<6 @ M	<6 @ #
1,1-Dichloroethene	<10 µg/kg	TM116				<10 @ #	<10 #	<10 @ #	<10 @ #
Carbon Disulphide	<7 µg/kg	TM116				<7 @ M	<7 #	<7 @ M	<7 @ #
Dichloromethane	<10 µg/kg	TM116				<10 @ #	<10 #	<10 @ #	<10 @ #
Methyl Tertiary Butyl Ether	<10 µg/kg	TM116		<10 @ #	<10 @ #	<10 @ M	<10 #	<10 @ M	<10 @ #
trans-1,2-Dichloroethene	<10 µg/kg	TM116				<10 @ M	<10 #	<10 @ M	<10 @ #
1,1-Dichloroethane	<8 µg/kg	TM116				<8 @ M	<8 #	<8 @ M	<8 @ #
cis-1,2-Dichloroethene	<6 µg/kg	TM116				<6 @ M	<6 #	<6 @ M	<6 @ #
2,2-Dichloropropane	<10 µg/kg	TM116				<10 @	<10	<10 @	<10 @
Bromochloromethane	<10 µg/kg	TM116				<10 @ M	<10 #	<10 @ M	<10 @ #
Chloroform	<8 µg/kg	TM116				<8 @ M	<8 #	<8 @ M	<8 @ #
1,1,1-Trichloroethane	<7 µg/kg	TM116				<7 @ M	<7 #	<7 @ M	<7 @ #
1,1-Dichloropropene	<10 µg/kg	TM116				<10 @ M	<10 #	<10 @ M	<10 @ #
Carbontetrachloride	<10 µg/kg	TM116				<10 @ M	<10 #	<10 @ M	<10 @ #
1,2-Dichloroethane	<5 µg/kg	TM116				<5 @ M	<5 #	<5 @ M	<5 @ #
Benzene	<9 µg/kg	TM116		<9 @ #	<9 @ #	<9 @ M	<9 #	<9 @ M	<9 @ #
Trichloroethene	<9 µg/kg	TM116				<9 @ #	<9 #	<9 @ #	<9 @ #
1,2-Dichloropropane	<10 µg/kg	TM116				<10 @ M	<10 #	<10 @ M	<10 @ #
Dibromomethane	<9 µg/kg	TM116				<9 @ M	<9 #	<9 @ M	<9 @ #
Bromodichloromethane	<7 µg/kg	TM116				<7 @ M	<7 #	<7 @ M	<7 @ #
cis-1,3-Dichloropropene	<10 µg/kg	TM116				<10 @ M	<10 #	<10 @ M	<10 @ #
Toluene	<7 µg/kg	TM116		<7 @ #	<7 @ #	<7 @ M	<7 #	<7 @ M	<7 @ #
trans-1,3-Dichloropropene	<10 µg/kg	TM116				<10 @	<10	<10 @	<10 @
1,1,2-Trichloroethane	<10 µg/kg	TM116				<10 @ M	<10 #	<10 @ M	<10 @ #

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS01	WS02	WS03	WS03	WS04	WS04
			Depth (m)	0.50	0.30	0.10	0.30	0.25	0.35
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	31/01/2019	06/02/2019	06/02/2019	06/02/2019	31/01/2019	31/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18	190211-18	190211-18	190211-18	190211-18
			Lab Sample No.(s)	19320719	19320720	19320721	19320723	19320743	19320744
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116				<7 @ M	<7 #	<7 @ M	<7 @ #
Tetrachloroethene	<5 µg/kg	TM116				<5 @ M	<5 #	<5 @ M	<5 @ #
Dibromochloromethane	<10 µg/kg	TM116				<10 @ M	<10 #	<10 @ M	<10 @ #
1,2-Dibromoethane	<10 µg/kg	TM116				<10 @ M	<10 #	<10 @ M	<10 @ #
Chlorobenzene	<5 µg/kg	TM116				<5 @ M	<5 #	<5 @ M	<5 @ #
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116				<10 @ M	<10 #	<10 @ M	<10 @ #
Ethylbenzene	<4 µg/kg	TM116	<4 @ #	<4 @ #		<4 @ M	<4 #	<4 @ M	<4 @ #
p/m-Xylene	<10 µg/kg	TM116	<10 @ #	<10 @ #		<10 @ #	<10 #	<10 @ #	<10 @ #
o-Xylene	<10 µg/kg	TM116	<10 @ #	<10 @ #		<10 @ M	<10 #	<10 @ M	<10 @ #
Styrene	<10 µg/kg	TM116				<10 @ #	<10 #	<10 @ #	<10 @ #
Bromoform	<10 µg/kg	TM116				<10 @ M	<10 #	<10 @ M	<10 @ #
Isopropylbenzene	<5 µg/kg	TM116				<5 @ #	<5 #	<5 @ #	<5 @ #
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116				<10 @ #	<10 #	<10 @ #	<10 @ #
1,2,3-Trichloropropane	<16 µg/kg	TM116				<16 @ M	<16 #	<16 @ M	<16 @ #
Bromobenzene	<10 µg/kg	TM116				<10 @ M	<10 #	<10 @ M	<10 @ #
Propylbenzene	<10 µg/kg	TM116				<10 @ M	<10 #	<10 @ M	<10 @ #
2-Chlorotoluene	<9 µg/kg	TM116				<9 @ M	<9 #	<9 @ M	<9 @ #
1,3,5-Trimethylbenzene	<8 µg/kg	TM116				<8 @ M	<8 #	<8 @ M	<8 @ #
4-Chlorotoluene	<10 µg/kg	TM116				<10 @ M	<10 #	<10 @ M	<10 @ #
tert-Butylbenzene	<14 µg/kg	TM116				<14 @ M	<14 #	<14 @ M	<14 @ #
1,2,4-Trimethylbenzene	<9 µg/kg	TM116				<9 @ #	<9 #	<9 @ #	<9 @ #
sec-Butylbenzene	<10 µg/kg	TM116				<10 @	<10	<10 @	<10 @
4-Isopropyltoluene	<10 µg/kg	TM116				<10 @ M	<10 #	<10 @ M	<10 @ #
1,3-Dichlorobenzene	<8 µg/kg	TM116				<8 @ M	<8 #	<8 @ M	<8 @ #
1,4-Dichlorobenzene	<5 µg/kg	TM116				<5 @ M	<5 #	<5 @ M	<5 @ #
n-Butylbenzene	<11 µg/kg	TM116				<11 @	<11	<11 @	<11 @
1,2-Dichlorobenzene	<10 µg/kg	TM116				<10 @ M	<10 #	<10 @ M	<10 @ #
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116				<14 @ M	<14 #	<14 @ M	<14 @ #
Tert-amyl methyl ether	<10 µg/kg	TM116				<10 @ #	<10 #	<10 @ #	<10 @ #
1,2,4-Trichlorobenzene	<20 µg/kg	TM116				<20 @	<20	<20 @	<20 @
Hexachlorobutadiene	<20 µg/kg	TM116				<20 @	<20	<20 @	<20 @
Naphthalene	<13 µg/kg	TM116				<13 @ M	<13 #	<13 @ M	<13 @ #

Validated

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	Depth (m)	Sample Type	Date Sampled	Sampled Time	Date Received	SDG Ref	Lab Sample No.(s)	AGS Reference
			WS01	0.50	Soil/Solid (S)	31/01/2019	.	11/02/2019	190211-18	19320719	
			WS02	0.30	Soil/Solid (S)	06/02/2019	.	11/02/2019	190211-18	19320720	
			WS03	0.10	Soil/Solid (S)	06/02/2019	.	11/02/2019	190211-18	19320721	
			WS03	0.30	Soil/Solid (S)	06/02/2019	.	11/02/2019	190211-18	19320723	
			WS04	0.25	Soil/Solid (S)	31/01/2019	.	11/02/2019	190211-18	19320743	
			WS04	0.35	Soil/Solid (S)	31/01/2019	.	11/02/2019	190211-18	19320744	
1,2,3-Trichlorobenzene	<20 µg/kg	TM116			<20 @ #	<20 #		<20 @ #		<20 @ #	
Sum of Detected Xylenes	<0.02 mg/kg	TM116	<0.02 @		<0.02 @	<0.02 @		<0.02		<0.02 @	
Sum of BTEX	<40 µg/kg	TM116	<40 @		<40 @	<40 @		<40		<40 @	

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS05	WS05	WS06	WS06	WS11	WS18
			Depth (m)	0.20	0.55	0.25	0.35	0.30	0.30
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	30/01/2019	30/01/2019	31/01/2019	31/01/2019	07/02/2019	07/02/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18	190211-18	190211-18	190211-18	190211-18
			Lab Sample No.(s)	19320741	19320742	19322900	19320745	19320748	19320750
			AGS Reference						
Dibromofluoromethane**	%	TM116		103 @	109 @	106 @	105 @	111	142
Toluene-d8**	%	TM116		98.9 @	100 @	96.4 @	98.7 @	98.9	101
4-Bromofluorobenzene**	%	TM116		98.4 @	102 @	90.1 @	99 @	98.1	104
Dichlorodifluoromethane	<6 µg/kg	TM116		<6 @ M	<6 @ #				
Chloromethane	<7 µg/kg	TM116		<7 @ #	<7 @ #				
Vinyl Chloride	<6 µg/kg	TM116		<6 @ M	<6 @ #				
Bromomethane	<10 µg/kg	TM116		<10 @ M	<10 @ #				
Chloroethane	<10 µg/kg	TM116		<10 @ M	<10 @ #				
Trichlorofluorormethane	<6 µg/kg	TM116		<6 @ M	<6 @ #				
1,1-Dichloroethene	<10 µg/kg	TM116		<10 @ #	<10 @ #				
Carbon Disulphide	<7 µg/kg	TM116		<7 @ M	<7 @ #				
Dichloromethane	<10 µg/kg	TM116		<10 @ #	<10 @ #				
Methyl Tertiary Butyl Ether	<10 µg/kg	TM116		<10 @ M	<10 @ #	<10 @ M	<10 @ #	<10 #	<10 #
trans-1,2-Dichloroethene	<10 µg/kg	TM116		<10 @ M	<10 @ #				
1,1-Dichloroethane	<8 µg/kg	TM116		<8 @ M	<8 @ #				
cis-1,2-Dichloroethene	<6 µg/kg	TM116		<6 @ M	<6 @ #				
2,2-Dichloropropane	<10 µg/kg	TM116		<10 @	<10 @				
Bromochloromethane	<10 µg/kg	TM116		<10 @ M	<10 @ #				
Chloroform	<8 µg/kg	TM116		<8 @ M	<8 @ #				
1,1,1-Trichloroethane	<7 µg/kg	TM116		<7 @ M	<7 @ #				
1,1-Dichloropropene	<10 µg/kg	TM116		<10 @ M	<10 @ #				
Carbontetrachloride	<10 µg/kg	TM116		<10 @ M	<10 @ #				
1,2-Dichloroethane	<5 µg/kg	TM116		<5 @ M	<5 @ #				
Benzene	<9 µg/kg	TM116		<9 @ M	<9 @ #	<9 @ M	<9 @ #	<9 #	<9 #
Trichloroethene	<9 µg/kg	TM116		<9 @ #	<9 @ #				
1,2-Dichloropropane	<10 µg/kg	TM116		<10 @ M	<10 @ #				
Dibromomethane	<9 µg/kg	TM116		<9 @ M	<9 @ #				
Bromodichloromethane	<7 µg/kg	TM116		<7 @ M	<7 @ #				
cis-1,3-Dichloropropene	<10 µg/kg	TM116		<10 @ M	<10 @ #				
Toluene	<7 µg/kg	TM116		<7 @ M	<7 @ #	<7 @ M	<7 @ #	<7 #	<7 #
trans-1,3-Dichloropropene	<10 µg/kg	TM116		<10 @	<10 @				
1,1,2-Trichloroethane	<10 µg/kg	TM116		<10 @ M	<10 @ #				

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS05	WS05	WS06	WS06	WS11	WS18
			Depth (m)	0.20	0.55	0.25	0.35	0.30	0.30
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	30/01/2019	30/01/2019	31/01/2019	31/01/2019	07/02/2019	07/02/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18	190211-18	190211-18	190211-18	190211-18
			Lab Sample No.(s)	19320741	19320742	19322900	19320745	19320748	19320750
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<7 @ M	<7 @ #				
Tetrachloroethene	<5 µg/kg	TM116		<5 @ M	<5 @ #				
Dibromochloromethane	<10 µg/kg	TM116		<10 @ M	<10 @ #				
1,2-Dibromoethane	<10 µg/kg	TM116		<10 @ M	<10 @ #				
Chlorobenzene	<5 µg/kg	TM116		<5 @ M	<5 @ #				
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<10 @ M	<10 @ #				
Ethylbenzene	<4 µg/kg	TM116		<4 @ M	<4 @ #	<4 @ M	<4 @ #	<4 #	<4 #
p/m-Xylene	<10 µg/kg	TM116		<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 #	<10 #
o-Xylene	<10 µg/kg	TM116		<10 @ M	<10 @ #	<10 @ M	<10 @ #	<10 #	<10 #
Styrene	<10 µg/kg	TM116		<10 @ #	<10 @ #				
Bromoform	<10 µg/kg	TM116		<10 @ M	<10 @ #				
Isopropylbenzene	<5 µg/kg	TM116		<5 @ #	<5 @ #				
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<10 @ #	<10 @ #				
1,2,3-Trichloropropane	<16 µg/kg	TM116		<16 @ M	<16 @ #				
Bromobenzene	<10 µg/kg	TM116		<10 @ M	<10 @ #				
Propylbenzene	<10 µg/kg	TM116		<10 @ M	<10 @ #				
2-Chlorotoluene	<9 µg/kg	TM116		<9 @ M	<9 @ #				
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<8 @ M	<8 @ #				
4-Chlorotoluene	<10 µg/kg	TM116		<10 @ M	<10 @ #				
tert-Butylbenzene	<14 µg/kg	TM116		<14 @ M	<14 @ #				
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<9 @ #	<9 @ #				
sec-Butylbenzene	<10 µg/kg	TM116		<10 @	<10 @				
4-Isopropyltoluene	<10 µg/kg	TM116		<10 @ M	<10 @ #				
1,3-Dichlorobenzene	<8 µg/kg	TM116		<8 @ M	<8 @ #				
1,4-Dichlorobenzene	<5 µg/kg	TM116		<5 @ M	<5 @ #				
n-Butylbenzene	<11 µg/kg	TM116		<11 @	<11 @				
1,2-Dichlorobenzene	<10 µg/kg	TM116		<10 @ M	<10 @ #				
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<14 @ M	<14 @ #				
Tert-amyl methyl ether	<10 µg/kg	TM116		<10 @ #	<10 @ #				
1,2,4-Trichlorobenzene	<20 µg/kg	TM116		<20 @	<20 @				
Hexachlorobutadiene	<20 µg/kg	TM116		<20 @	<20 @				
Naphthalene	<13 µg/kg	TM116		<13 @ M	<13 @ #				

Validated

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS05	WS05	WS06	WS06	WS11	WS18
			Depth (m)	0.20	0.55	0.25	0.35	0.30	0.30
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	30/01/2019	30/01/2019	31/01/2019	31/01/2019	07/02/2019	07/02/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18	190211-18	190211-18	190211-18	190211-18
			Lab Sample No.(s)	19320741	19320742	19322900	19320745	19320748	19320750
			AGS Reference						
1,2,3-Trichlorobenzene	<20 µg/kg	TM116		<20 @ #	<20 @ #				
Sum of Detected Xylenes	<0.02 mg/kg	TM116		<0.02 @	<0.02 @	<0.02 @	<0.02 @	<0.02	<0.02
Sum of BTEX	<40 µg/kg	TM116		<40 @	<40 @	<40 @	<40 @	<40	<40

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS31	WS31	WS32	WS32	WS55	WS56
			Depth (m)	0.10	1.50	0.30	1.80	0.30	0.10
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	07/02/2019	07/02/2019	08/02/2019	08/02/2019	29/01/2019	28/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18	190211-18	190211-18	190211-18	190211-18
			Lab Sample No.(s)	19320724	19320728	19320729	19320731	19320732	19320733
			AGS Reference						
Dibromofluoromethane**	%	TM116		102	109	103	112	106 @	113 @
Toluene-d8**	%	TM116		94.6	98.1	98.9	98.1	98.2 @	98.8 @
4-Bromofluorobenzene**	%	TM116		81.9	104	88.6	99.8	96.1 @	89.6 @
Dichlorodifluoromethane	<6 µg/kg	TM116							<6 @ M
Chloromethane	<7 µg/kg	TM116							<7 @ #
Vinyl Chloride	<6 µg/kg	TM116							<6 @ M
Bromomethane	<10 µg/kg	TM116							<10 @ M
Chloroethane	<10 µg/kg	TM116							<10 @ M
Trichlorofluorormethane	<6 µg/kg	TM116							<6 @ M
1,1-Dichloroethene	<10 µg/kg	TM116							<10 @ #
Carbon Disulphide	<7 µg/kg	TM116							<7 @ M
Dichloromethane	<10 µg/kg	TM116							<10 @ #
Methyl Tertiary Butyl Ether	<10 µg/kg	TM116		<10 M	<10 M	<10 M	<10 M	<10 @ #	<10 @ M
trans-1,2-Dichloroethene	<10 µg/kg	TM116							<10 @ M
1,1-Dichloroethane	<8 µg/kg	TM116							<8 @ M
cis-1,2-Dichloroethene	<6 µg/kg	TM116							<6 @ M
2,2-Dichloropropane	<10 µg/kg	TM116							<10 @
Bromochloromethane	<10 µg/kg	TM116							<10 @ M
Chloroform	<8 µg/kg	TM116							<8 @ M
1,1,1-Trichloroethane	<7 µg/kg	TM116							<7 @ M
1,1-Dichloropropene	<10 µg/kg	TM116							<10 @ M
Carbontetrachloride	<10 µg/kg	TM116							<10 @ M
1,2-Dichloroethane	<5 µg/kg	TM116							<5 @ M
Benzene	<9 µg/kg	TM116		<9 M	<9 M	<9 M	<9 M	<9 @ #	<9 @ M
Trichloroethene	<9 µg/kg	TM116							<9 @ #
1,2-Dichloropropane	<10 µg/kg	TM116							<10 @ M
Dibromomethane	<9 µg/kg	TM116							<9 @ M
Bromodichloromethane	<7 µg/kg	TM116							<7 @ M
cis-1,3-Dichloropropene	<10 µg/kg	TM116							<10 @ M
Toluene	<7 µg/kg	TM116		<7 M	<7 M	<7 M	<7 M	<7 @ #	<7 @ M
trans-1,3-Dichloropropene	<10 µg/kg	TM116							<10 @
1,1,2-Trichloroethane	<10 µg/kg	TM116							<10 @ M

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS31	WS31	WS32	WS32	WS55	WS56
			Depth (m)	0.10	1.50	0.30	1.80	0.30	0.10
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	07/02/2019	07/02/2019	08/02/2019	08/02/2019	29/01/2019	28/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18	190211-18	190211-18	190211-18	190211-18
			Lab Sample No.(s)	19320724	19320728	19320729	19320731	19320732	19320733
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116							<7 @ M
Tetrachloroethene	<5 µg/kg	TM116							<5 @ M
Dibromochloromethane	<10 µg/kg	TM116							<10 @ M
1,2-Dibromoethane	<10 µg/kg	TM116							<10 @ M
Chlorobenzene	<5 µg/kg	TM116							<5 @ M
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116							<10 @ M
Ethylbenzene	<4 µg/kg	TM116	<4 M	<4 M	<4 M	<4 M	<4 @ #	<4 @ M	
p/m-Xylene	<10 µg/kg	TM116	<10 #	<10 #	<10 #	<10 #	<10 @ #	<10 @ #	
o-Xylene	<10 µg/kg	TM116	<10 M	<10 M	<10 M	<10 M	<10 @ #	<10 @ M	
Styrene	<10 µg/kg	TM116							<10 @ #
Bromoform	<10 µg/kg	TM116							<10 @ M
Isopropylbenzene	<5 µg/kg	TM116							<5 @ #
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116							<10 @ #
1,2,3-Trichloropropane	<16 µg/kg	TM116							<16 @ M
Bromobenzene	<10 µg/kg	TM116							<10 @ M
Propylbenzene	<10 µg/kg	TM116							<10 @ M
2-Chlorotoluene	<9 µg/kg	TM116							<9 @ M
1,3,5-Trimethylbenzene	<8 µg/kg	TM116							<8 @ M
4-Chlorotoluene	<10 µg/kg	TM116							<10 @ M
tert-Butylbenzene	<14 µg/kg	TM116							<14 @ M
1,2,4-Trimethylbenzene	<9 µg/kg	TM116							<9 @ #
sec-Butylbenzene	<10 µg/kg	TM116							<10 @
4-Isopropyltoluene	<10 µg/kg	TM116							<10 @ M
1,3-Dichlorobenzene	<8 µg/kg	TM116							<8 @ M
1,4-Dichlorobenzene	<5 µg/kg	TM116							<5 @ M
n-Butylbenzene	<11 µg/kg	TM116							<11 @
1,2-Dichlorobenzene	<10 µg/kg	TM116							<10 @ M
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116							<14 @ M
Tert-amyl methyl ether	<10 µg/kg	TM116							<10 @ #
1,2,4-Trichlorobenzene	<20 µg/kg	TM116							<20 @
Hexachlorobutadiene	<20 µg/kg	TM116							<20 @
Naphthalene	<13 µg/kg	TM116							<13 @ M

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	Depth (m)	Sample Type	Date Sampled	Sampled Time	Date Received	SDG Ref	Lab Sample No.(s)	AGS Reference
			WS31	0.10	Soil/Solid (S)	07/02/2019	.	11/02/2019	190211-18	19320724	
			WS31	1.50	Soil/Solid (S)	07/02/2019	.	11/02/2019	190211-18	19320728	
			WS32	0.30	Soil/Solid (S)	08/02/2019	.	11/02/2019	190211-18	19320729	
			WS32	1.80	Soil/Solid (S)	08/02/2019	.	11/02/2019	190211-18	19320731	
			WS55	0.30	Soil/Solid (S)	29/01/2019	.	11/02/2019	190211-18	19320732	
			WS56	0.10	Soil/Solid (S)	28/01/2019	.	11/02/2019	190211-18	19320733	
1,2,3-Trichlorobenzene	<20 µg/kg	TM116									<20 @ #
Sum of Detected Xylenes	<0.02 mg/kg	TM116	<0.02	<0.02	<0.02	<0.02	<0.02 @	<0.02 @			
Sum of BTEX	<40 µg/kg	TM116	<40	<40	<40	<40	<40 @	<40 @			

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS56	WS59	WS59	WS59	WS56A	WS56A
			Depth (m)	0.25	0.10	0.30	0.70	0.10	0.65
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	28/01/2019	28/01/2019	28/01/2019	28/01/2019	29/01/2019	29/01/2019
			Sampled Time	.	.	.	.	.	.
			Date Received	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019	11/02/2019
			SDG Ref	190211-18	190211-18	190211-18	190211-18	190211-18	190211-18
			Lab Sample No.(s)	19320735	19320740	19320746	19320747	19320734	19320736
			AGS Reference						
Dibromofluoromethane**	%	TM116		99.3 @	106 @	104 @	106 @	127 @	112 @
Toluene-d8**	%	TM116		95.7 @	91.4 @	96.7 @	98.5 @	99.7 @	99 @
4-Bromofluorobenzene**	%	TM116		84.9 @	74.2 @	89.5 @	98 @	82.4 @	96.4 @
Dichlorodifluoromethane	<6 µg/kg	TM116		<6 @ M	<6 @ M	<6 @ M	<6 @ M		
Chloromethane	<7 µg/kg	TM116		<7 @ #	<7 @ #	<7 @ #	<7 @ #		
Vinyl Chloride	<6 µg/kg	TM116		<6 @ M	<6 @ M	<6 @ M	<6 @ M		
Bromomethane	<10 µg/kg	TM116		<10 @ M	<10 @ M	<10 @ M	<10 @ M		
Chloroethane	<10 µg/kg	TM116		<10 @ M	<10 @ M	<10 @ M	<10 @ M		
Trichlorofluoromethane	<6 µg/kg	TM116		<6 @ M	<6 @ M	<6 @ M	<6 @ M		
1,1-Dichloroethene	<10 µg/kg	TM116		<10 @ #	<10 @ #	<10 @ #	<10 @ #		
Carbon Disulphide	<7 µg/kg	TM116		<7 @ M	<7 @ M	<7 @ M	<7 @ M		
Dichloromethane	<10 µg/kg	TM116		<10 @ #	<10 @ #	<10 @ #	<10 @ #		
Methyl Tertiary Butyl Ether	<10 µg/kg	TM116		<10 @ M	<10 @ M	<10 @ M	<10 @ M	<10 @ M	<10 @ M
trans-1,2-Dichloroethene	<10 µg/kg	TM116		<10 @ M	<10 @ M	<10 @ M	<10 @ M		
1,1-Dichloroethane	<8 µg/kg	TM116		<8 @ M	<8 @ M	<8 @ M	<8 @ M		
cis-1,2-Dichloroethene	<6 µg/kg	TM116		<6 @ M	<6 @ M	<6 @ M	<6 @ M		
2,2-Dichloropropane	<10 µg/kg	TM116		<10 @	<10 @	<10 @	<10 @		
Bromochloromethane	<10 µg/kg	TM116		<10 @ M	<10 @ M	<10 @ M	<10 @ M		
Chloroform	<8 µg/kg	TM116		<8 @ M	<8 @ M	<8 @ M	<8 @ M		
1,1,1-Trichloroethane	<7 µg/kg	TM116		<7 @ M	<7 @ M	<7 @ M	<7 @ M		
1,1-Dichloropropene	<10 µg/kg	TM116		<10 @ M	<10 @ M	<10 @ M	<10 @ M		
Carbontetrachloride	<10 µg/kg	TM116		<10 @ M	<10 @ M	<10 @ M	<10 @ M		
1,2-Dichloroethane	<5 µg/kg	TM116		<5 @ M	<5 @ M	<5 @ M	<5 @ M		
Benzene	<9 µg/kg	TM116		<9 @ M	<9 @ M	<9 @ M	<9 @ M	<9 @ M	<9 @ M
Trichloroethene	<9 µg/kg	TM116		<9 @ #	<9 @ #	<9 @ #	<9 @ #		
1,2-Dichloropropane	<10 µg/kg	TM116		<10 @ M	<10 @ M	<10 @ M	<10 @ M		
Dibromomethane	<9 µg/kg	TM116		<9 @ M	<9 @ M	<9 @ M	<9 @ M		
Bromodichloromethane	<7 µg/kg	TM116		<7 @ M	<7 @ M	<7 @ M	<7 @ M		
cis-1,3-Dichloropropene	<10 µg/kg	TM116		<10 @ M	<10 @ M	<10 @ M	<10 @ M		
Toluene	<7 µg/kg	TM116		<7 @ M	<7 @ M	<7 @ M	<7 @ M	<7 @ M	<7 @ M
trans-1,3-Dichloropropene	<10 µg/kg	TM116		<10 @	<10 @	<10 @	<10 @		
1,1,2-Trichloroethane	<10 µg/kg	TM116		<10 @ M	<10 @ M	<10 @ M	<10 @ M		

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	Depth (m)	Sample Type	Date Sampled	Sampled Time	Date Received	SDG Ref	Lab Sample No.(s)	AGS Reference
			WS56	0.25	Soil/Solid (S)	28/01/2019	.	11/02/2019	190211-18	19320735	
			WS59	0.10	Soil/Solid (S)	28/01/2019	.	11/02/2019	190211-18	19320740	
			WS59	0.30	Soil/Solid (S)	28/01/2019	.	11/02/2019	190211-18	19320746	
			WS59	0.70	Soil/Solid (S)	28/01/2019	.	11/02/2019	190211-18	19320747	
			WS56A	0.10	Soil/Solid (S)	29/01/2019	.	11/02/2019	190211-18	19320734	
			WS56A	0.65	Soil/Solid (S)	29/01/2019	.	11/02/2019	190211-18	19320736	
1,3-Dichloropropane	<7 µg/kg	TM116	<7 @ M	<7 @ M	<7 @ M	<7 @ M					
Tetrachloroethene	<5 µg/kg	TM116	<5 @ M	<5 @ M	<5 @ M	<5 @ M					
Dibromochloromethane	<10 µg/kg	TM116	<10 @ M	<10 @ M	<10 @ M	<10 @ M					
1,2-Dibromoethane	<10 µg/kg	TM116	<10 @ M	<10 @ M	<10 @ M	<10 @ M					
Chlorobenzene	<5 µg/kg	TM116	<5 @ M	<5 @ M	<5 @ M	<5 @ M					
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116	<10 @ M	<10 @ M	<10 @ M	<10 @ M					
Ethylbenzene	<4 µg/kg	TM116	<4 @ M	<4 @ M	<4 @ M	<4 @ M	<4 @ M	<4 @ M			
p/m-Xylene	<10 µg/kg	TM116	<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #	<10 @ #			
o-Xylene	<10 µg/kg	TM116	<10 @ M	<10 @ M	<10 @ M	<10 @ M	<10 @ M	<10 @ M			
Styrene	<10 µg/kg	TM116	<10 @ #	<10 @ #	<10 @ #	<10 @ #					
Bromoform	<10 µg/kg	TM116	<10 @ M	<10 @ M	<10 @ M	<10 @ M					
Isopropylbenzene	<5 µg/kg	TM116	<5 @ #	<5 @ #	<5 @ #	<5 @ #					
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116	<10 @ #	<10 @ #	<10 @ #	<10 @ #					
1,2,3-Trichloropropane	<16 µg/kg	TM116	<16 @ M	<16 @ M	<16 @ M	<16 @ M					
Bromobenzene	<10 µg/kg	TM116	<10 @ M	<10 @ M	<10 @ M	<10 @ M					
Propylbenzene	<10 µg/kg	TM116	<10 @ M	<10 @ M	<10 @ M	<10 @ M					
2-Chlorotoluene	<9 µg/kg	TM116	<9 @ M	<9 @ M	<9 @ M	<9 @ M					
1,3,5-Trimethylbenzene	<8 µg/kg	TM116	<8 @ M	<8 @ M	<8 @ M	<8 @ M					
4-Chlorotoluene	<10 µg/kg	TM116	<10 @ M	<10 @ M	<10 @ M	<10 @ M					
tert-Butylbenzene	<14 µg/kg	TM116	<14 @ M	<14 @ M	<14 @ M	<14 @ M					
1,2,4-Trimethylbenzene	<9 µg/kg	TM116	<9 @ #	<9 @ #	<9 @ #	<9 @ #					
sec-Butylbenzene	<10 µg/kg	TM116	<10 @	<10 @	<10 @	<10 @					
4-Isopropyltoluene	<10 µg/kg	TM116	<10 @ M	<10 @ M	<10 @ M	<10 @ M					
1,3-Dichlorobenzene	<8 µg/kg	TM116	<8 @ M	<8 @ M	<8 @ M	<8 @ M					
1,4-Dichlorobenzene	<5 µg/kg	TM116	<5 @ M	<5 @ M	<5 @ M	<5 @ M					
n-Butylbenzene	<11 µg/kg	TM116	<11 @	<11 @	<11 @	<11 @					
1,2-Dichlorobenzene	<10 µg/kg	TM116	<10 @ M	<10 @ M	<10 @ M	<10 @ M					
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116	<14 @ M	<14 @ M	<14 @ M	<14 @ M					
Tert-amyl methyl ether	<10 µg/kg	TM116	<10 @ #	<10 @ #	<10 @ #	<10 @ #					
1,2,4-Trichlorobenzene	<20 µg/kg	TM116	<20 @	<20 @	<20 @	<20 @					
Hexachlorobutadiene	<20 µg/kg	TM116	<20 @	<20 @	<20 @	<20 @					
Naphthalene	<13 µg/kg	TM116	<13 @ M	<13 @ M	<13 @ M	<13 @ M					

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	Depth (m)	Sample Type	Date Sampled	Sampled Time	Date Received	SDG Ref	Lab Sample No.(s)	AGS Reference
			WS56	0.25	Soil/Solid (S)	28/01/2019	.	11/02/2019	190211-18	19320735	
			WS59	0.10	Soil/Solid (S)	28/01/2019	.	11/02/2019	190211-18	19320740	
			WS59	0.30	Soil/Solid (S)	28/01/2019	.	11/02/2019	190211-18	19320746	
			WS59	0.70	Soil/Solid (S)	28/01/2019	.	11/02/2019	190211-18	19320747	
			WS56A	0.10	Soil/Solid (S)	29/01/2019	.	11/02/2019	190211-18	19320734	
			WS56A	0.65	Soil/Solid (S)	29/01/2019	.	11/02/2019	190211-18	19320736	
1,2,3-Trichlorobenzene	<20 µg/kg	TM116	<20 @ #	<20 @ #	<20 @ #	<20 @ #					
Sum of Detected Xylenes	<0.02 mg/kg	TM116	<0.02 @	<0.02 @	<0.02 @	<0.02 @	<0.02 @	<0.02 @			
Sum of BTEX	<40 µg/kg	TM116	<40 @	<40 @	<40 @	<40 @	<40 @	<40 @			

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted test.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3♦§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	WS58A	WS58A				
			Depth (m)	0.10	0.30				
			Sample Type	Soil/Solid (S)	Soil/Solid (S)				
			Date Sampled	28/01/2019	28/01/2019				
			Sampled Time	.	.				
			Date Received	11/02/2019	11/02/2019				
			SDG Ref	190211-18	190211-18				
			Lab Sample No.(s)	19320738	19320739				
			AGS Reference						
Dibromofluoromethane**	%	TM116		101 @	109 @				
Toluene-d8**	%	TM116		92 @	98.5 @				
4-Bromofluorobenzene**	%	TM116		76 @	91 @				
Methyl Tertiary Butyl Ether	<10 µg/kg	TM116		<10 @ M	<10 @ M				
Benzene	<9 µg/kg	TM116		<9 @ M	<9 @ M				
Toluene	<7 µg/kg	TM116		<7 @ M	<7 @ M				
Ethylbenzene	<4 µg/kg	TM116		<4 @ M	<4 @ M				
p/m-Xylene	<10 µg/kg	TM116		<10 @ #	<10 @ #				
o-Xylene	<10 µg/kg	TM116		<10 @ M	<10 @ M				
Sum of Detected Xylenes	<0.02 mg/kg	TM116		<0.02 @	<0.02 @				
Sum of BTEX	<40 µg/kg	TM116		<40 @	<40 @				

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Asbestos Identification - Solid Samples

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
*	Subcontracted test.
(F)	Trigger breach confirmed
1-5&+§@	Sample deviation (see appendix)

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS01 0.50 SOLID 31/01/2019 00:00:00 11/02/2019 06:00:00 190211-18 19320719 TM048	19/02/2019	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS02 0.30 SOLID 06/02/2019 00:00:00 11/02/2019 06:00:00 190211-18 19320720 TM048	22/02/19	Andrzej Ferfecki	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS03 0.10 SOLID 06/02/2019 00:00:00 11/02/2019 06:00:00 190211-18 19320721 TM048	22/02/2019	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS03 0.30 SOLID 06/02/2019 00:00:00 11/02/2019 06:00:00 190211-18 19320723 TM048	22/02/19	Andrzej Ferfecki	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS04 0.25 SOLID 31/01/2019 00:00:00 11/02/2019 06:00:00 190211-18 19320743 TM048	20/02/2019	Lucy Caroe	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS04 0.35 SOLID 31/01/2019 00:00:00 11/02/2019 06:00:00 190211-18 19320744 TM048	19/02/2019	Lucy Caroe	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS05 0.20 SOLID 30/01/2019 00:00:00 11/02/2019 06:00:00 190211-18 19320741 TM048	20/02/2019	James Richards	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS05 0.55 SOLID 30/01/2019 00:00:00 11/02/2019 06:00:00 190211-18 19320742 TM048	20/02/2019	James Richards	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

Validated

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS06 0.25 SOLID 31/01/2019 00:00:00 11/02/2019 06:00:00 190211-18 19322900 TM048	20/02/2019	Lucy Caroe	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS06 0.35 SOLID 31/01/2019 00:00:00 11/02/2019 06:00:00 190211-18 19320745 TM048	20/02/2019	Lucy Caroe	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS11 0.30 SOLID 07/02/2019 00:00:00 11/02/2019 06:00:00 190211-18 19320748 TM048	22/02/19	Andrzej Ferfecki	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS18 0.30 SOLID 07/02/2019 00:00:00 11/02/2019 06:00:00 190211-18 19320750 TM048	22/02/19	Andrzej Ferfecki	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS31 0.10 SOLID 07/02/2019 00:00:00 11/02/2019 06:00:00 190211-18 19320724 TM048	22/02/19	Andrzej Ferfecki	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS31 1.50 SOLID 07/02/2019 00:00:00 11/02/2019 06:00:00 190211-18 19320728 TM048	22/02/2019	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS32 0.30 SOLID 08/02/2019 00:00:00 11/02/2019 06:00:00 190211-18 19320729 TM048	22/02/2019	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS32 1.80 SOLID 08/02/2019 00:00:00 11/02/2019 06:00:00 190211-18 19320731 TM048	22/02/2019	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS55 0.30 SOLID 29/01/2019 00:00:00 11/02/2019 06:00:00 190211-18 19320732 TM048	20/02/2019	Lucy Caroe	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Detected

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS56 0.10 SOLID 28/01/2019 00:00:00 11/02/2019 06:00:00 190211-18 19320733 TM048	20/02/2019	James Richards	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS56 0.25 SOLID 28/01/2019 00:00:00 11/02/2019 06:00:00 190211-18 19320735 TM048	19/02/2019	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS59 0.10 SOLID 28/01/2019 00:00:00 11/02/2019 06:00:00 190211-18 19320740 TM048	19/02/2019	Lucy Caroe	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS59 0.30 SOLID 28/01/2019 00:00:00 11/02/2019 06:00:00 190211-18 19320746 TM048	19/02/2019	James Richards	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS59 0.70 SOLID 28/01/2019 00:00:00 11/02/2019 06:00:00 190211-18 19320747 TM048	20/02/2019	Lucy Caroe	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS56A 0.10 SOLID 29/01/2019 00:00:00 11/02/2019 06:00:00 190211-18 19320734 TM048	19/02/2019	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS56A 0.65 SOLID 29/01/2019 00:00:00 11/02/2019 06:00:00 190211-18 19320736 TM048	19/02/2019	Marcin Magdziarek	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS58A 0.10 SOLID 28/01/2019 00:00:00 11/02/2019 06:00:00 190211-18 19320738 TM048	19/02/2019	James Richards	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	WS58A 0.30 SOLID 28/01/2019 00:00:00 11/02/2019 06:00:00 190211-18 19320739 TM048	19/02/2019	James Richards	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Notification of NDPs (No determination possible)

Date Received : 11/02/2019 10:13:21

Sample No	Customer Sample Ref.	Depth (m)	Test	Comment
19320728	WS31	1.50	Anions by Kone (soil)	Sample cannot be filtered

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Table of Results - Appendix

Method No	Reference	Description
PM001		Preparation of Samples for Metals Analysis
PM024	Modified BS 1377	Soil preparation including homogenisation, moisture screens of soils for Asbestos Containing Material
TM048	HSG 248, Asbestos: The analysts' guide for sampling, analysis and clearance procedures	Identification of Asbestos in Bulk Material
TM072	Modified: US EPA Method 8141A	Determination of Phenols by GC-MS
TM089	Modified: US EPA Methods 8020 & 602	Determination of Gasoline Range Hydrocarbons (GRO) by Headspace GC-FID (C4-C12)
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS
TM132	In - house Method	ELTRA CS800 Operators Guide
TM133	BS 1377: Part 3 1990;BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter
TM153	Method 4500A,B,C, I, M AWWA/APHA, 20th Ed., 1999	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate using the Skalar SANS+ System Segmented Flow Analyser
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone
TM168	EPA Method 8082, Polychlorinated Biphenyls by Gas Chromatography	Determination of WHO12 and EC7 Polychlorinated Biphenyl Congeners by GC-MS in Soils
TM173	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Determination of Speciated Extractable Petroleum Hydrocarbons in Soils by GC-FID
TM180	Sulphide in waters and waste waters 1991 ISBN 01 175 7186 SCA rec. 2007 (unpublished)'	The Determination Of Easily Liberated Sulphide In Soil Samples by Ion Selective Electrode Technique
TM181	US EPA Method 6010B	Determination of Routine Metals in Soil by iCap 6500 Duo ICP-OES
TM218	Shaker extraction - EPA method 3546.	The determination of PAH in soil samples by GC-MS
TM221	Inductively Coupled Plasma - Atomic Emission Spectroscopy. An Atlas of Spectral Information: Winge, Fassel, Peterson and Floyd	Determination of Acid extractable Sulphate in Soils by IRIS Emission Spectrometer
TM222	In-House Method	Determination of Hot Water Soluble Boron in Soils (10:1 Water:soil) by IRIS Emission Spectrometer
TM243		Mixed Anions In Soils By Kone

NA = not applicable.

Chemical testing (unless subcontracted) performed at ALS Environmental Hawarden (Method codes TM) or ALS Environmental Aberdeen (Method codes S).

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Test Completion Dates

Lab Sample No(s)	19320719	19320720	19320721	19320723	19320743	19320744	19320741	19320742	19320745	19322900
Customer Sample Ref.	WS01	WS02	WS03	WS03	WS04	WS04	WS05	WS05	WS06	WS06
AGS Ref.										
Depth	0.50	0.30	0.10	0.30	0.25	0.35	0.20	0.55	0.35	0.25
Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Anions by Kone (soil)	21-Feb-2019	25-Feb-2019	22-Feb-2019	22-Feb-2019	21-Feb-2019	21-Feb-2019	21-Feb-2019	21-Feb-2019	21-Feb-2019	25-Feb-2019
Asbestos ID in Solid Samples	19-Feb-2019	22-Feb-2019	22-Feb-2019	22-Feb-2019	20-Feb-2019	19-Feb-2019	20-Feb-2019	20-Feb-2019	20-Feb-2019	20-Feb-2019
Boron Water Soluble	21-Feb-2019	22-Feb-2019	23-Feb-2019	23-Feb-2019	20-Feb-2019	21-Feb-2019	20-Feb-2019	21-Feb-2019	21-Feb-2019	21-Feb-2019
Cyanide Comp/Free/Total/Thiocyanate	20-Feb-2019	25-Feb-2019	25-Feb-2019	25-Feb-2019	20-Feb-2019	20-Feb-2019	20-Feb-2019	22-Feb-2019	22-Feb-2019	22-Feb-2019
Easily Liberated Sulphide	19-Feb-2019	20-Feb-2019	22-Feb-2019	20-Feb-2019	20-Feb-2019	19-Feb-2019	19-Feb-2019	19-Feb-2019	19-Feb-2019	19-Feb-2019
EPH CWG (Aliphatic) GC (S)	21-Feb-2019	26-Feb-2019	22-Feb-2019	25-Feb-2019	26-Feb-2019	26-Feb-2019	26-Feb-2019	21-Feb-2019	26-Feb-2019	21-Feb-2019
EPH CWG (Aromatic) GC (S)	21-Feb-2019	26-Feb-2019	22-Feb-2019	25-Feb-2019	26-Feb-2019	26-Feb-2019	26-Feb-2019	21-Feb-2019	26-Feb-2019	21-Feb-2019
GRO by GC-FID (S)	20-Feb-2019		22-Feb-2019	20-Feb-2019	21-Feb-2019	20-Feb-2019	20-Feb-2019	20-Feb-2019	21-Feb-2019	21-Feb-2019
Metals in solid samples by OES	20-Feb-2019	21-Feb-2019	22-Feb-2019	22-Feb-2019	21-Feb-2019	20-Feb-2019	21-Feb-2019	21-Feb-2019	21-Feb-2019	20-Feb-2019
PAH by GCMS	25-Feb-2019	22-Feb-2019	22-Feb-2019	22-Feb-2019	25-Feb-2019	25-Feb-2019	21-Feb-2019	21-Feb-2019	21-Feb-2019	25-Feb-2019
PCBs by GCMS	25-Feb-2019	22-Feb-2019	22-Feb-2019	22-Feb-2019	25-Feb-2019	25-Feb-2019	21-Feb-2019	21-Feb-2019	21-Feb-2019	25-Feb-2019
pH	20-Feb-2019	22-Feb-2019	22-Feb-2019	22-Feb-2019	20-Feb-2019	20-Feb-2019	19-Feb-2019	19-Feb-2019	20-Feb-2019	20-Feb-2019
Phenols Spec MS (S)	25-Feb-2019	25-Feb-2019	25-Feb-2019	25-Feb-2019	25-Feb-2019	25-Feb-2019	25-Feb-2019	25-Feb-2019	25-Feb-2019	25-Feb-2019
Sample description	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019
Semi Volatile Organic Compounds			20-Feb-2019	20-Feb-2019	20-Feb-2019	20-Feb-2019	18-Feb-2019	18-Feb-2019		
Total Organic Carbon	20-Feb-2019	22-Feb-2019	23-Feb-2019	23-Feb-2019	18-Feb-2019	20-Feb-2019	18-Feb-2019	18-Feb-2019	18-Feb-2019	20-Feb-2019
Total Sulphate	20-Feb-2019	22-Feb-2019	25-Feb-2019	25-Feb-2019	19-Feb-2019	20-Feb-2019	20-Feb-2019	20-Feb-2019	19-Feb-2019	20-Feb-2019
TPH CWG GC (S)	21-Feb-2019	26-Feb-2019	22-Feb-2019	25-Feb-2019	26-Feb-2019	26-Feb-2019	26-Feb-2019	21-Feb-2019	26-Feb-2019	21-Feb-2019
VOC MS (S)	20-Feb-2019	22-Feb-2019	22-Feb-2019	20-Feb-2019	21-Feb-2019	20-Feb-2019	20-Feb-2019	20-Feb-2019	21-Feb-2019	21-Feb-2019

Lab Sample No(s)	19320748	19320750	19320724	19320728	19320729	19320731	19320732	19320733	19320735	19320740
Customer Sample Ref.	WS11	WS18	WS31	WS31	WS32	WS32	WS55	WS56	WS56	WS59
AGS Ref.										
Depth	0.30	0.30	0.10	1.50	0.30	1.80	0.30	0.10	0.25	0.10
Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Anions by Kone (soil)	22-Feb-2019	25-Feb-2019	22-Feb-2019		22-Feb-2019	22-Feb-2019	21-Feb-2019	21-Feb-2019	21-Feb-2019	21-Feb-2019
Asbestos ID in Solid Samples	22-Feb-2019	22-Feb-2019	22-Feb-2019	22-Feb-2019	22-Feb-2019	22-Feb-2019	20-Feb-2019	20-Feb-2019	19-Feb-2019	19-Feb-2019
Boron Water Soluble	23-Feb-2019	22-Feb-2019	22-Feb-2019	23-Feb-2019	22-Feb-2019	23-Feb-2019	21-Feb-2019	21-Feb-2019	20-Feb-2019	21-Feb-2019
Cyanide Comp/Free/Total/Thiocyanate	22-Feb-2019	25-Feb-2019	25-Feb-2019	22-Feb-2019	25-Feb-2019	25-Feb-2019	22-Feb-2019	22-Feb-2019	20-Feb-2019	20-Feb-2019
Easily Liberated Sulphide	20-Feb-2019	20-Feb-2019	22-Feb-2019	20-Feb-2019	20-Feb-2019	20-Feb-2019	19-Feb-2019	19-Feb-2019	20-Feb-2019	20-Feb-2019
EPH CWG (Aliphatic) GC (S)	25-Feb-2019	25-Feb-2019	22-Feb-2019	25-Feb-2019	25-Feb-2019	22-Feb-2019	26-Feb-2019	26-Feb-2019	26-Feb-2019	26-Feb-2019
EPH CWG (Aromatic) GC (S)	25-Feb-2019	25-Feb-2019	22-Feb-2019	25-Feb-2019	25-Feb-2019	22-Feb-2019	26-Feb-2019	26-Feb-2019	26-Feb-2019	26-Feb-2019
GRO by GC-FID (S)	21-Feb-2019	21-Feb-2019	20-Feb-2019	20-Feb-2019	21-Feb-2019	21-Feb-2019	21-Feb-2019	21-Feb-2019	20-Feb-2019	20-Feb-2019
Metals in solid samples by OES	22-Feb-2019	21-Feb-2019	22-Feb-2019	22-Feb-2019	23-Feb-2019	22-Feb-2019	21-Feb-2019	20-Feb-2019	21-Feb-2019	20-Feb-2019
PAH by GCMS	26-Feb-2019	25-Feb-2019	22-Feb-2019	22-Feb-2019	26-Feb-2019	22-Feb-2019	22-Feb-2019	21-Feb-2019	25-Feb-2019	25-Feb-2019
PCBs by GCMS	21-Feb-2019	21-Feb-2019	22-Feb-2019	21-Feb-2019	21-Feb-2019	22-Feb-2019	21-Feb-2019	21-Feb-2019	25-Feb-2019	25-Feb-2019
pH	22-Feb-2019	22-Feb-2019	22-Feb-2019	22-Feb-2019	22-Feb-2019	22-Feb-2019	19-Feb-2019	19-Feb-2019	19-Feb-2019	19-Feb-2019
Phenols Spec MS (S)	25-Feb-2019	25-Feb-2019	25-Feb-2019	25-Feb-2019	25-Feb-2019	25-Feb-2019	25-Feb-2019	25-Feb-2019	25-Feb-2019	25-Feb-2019
Sample description	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019
Semi Volatile Organic Compounds								18-Feb-2019	20-Feb-2019	20-Feb-2019
Total Organic Carbon	22-Feb-2019	20-Feb-2019	23-Feb-2019	22-Feb-2019	22-Feb-2019	23-Feb-2019	18-Feb-2019	20-Feb-2019	18-Feb-2019	20-Feb-2019
Total Sulphate	25-Feb-2019	22-Feb-2019	25-Feb-2019	25-Feb-2019	25-Feb-2019	25-Feb-2019	20-Feb-2019	20-Feb-2019	20-Feb-2019	20-Feb-2019
TPH CWG GC (S)	25-Feb-2019	25-Feb-2019	22-Feb-2019	25-Feb-2019	25-Feb-2019	22-Feb-2019	26-Feb-2019	26-Feb-2019	26-Feb-2019	26-Feb-2019
VOC MS (S)	21-Feb-2019	21-Feb-2019	20-Feb-2019	20-Feb-2019	21-Feb-2019	21-Feb-2019	21-Feb-2019	21-Feb-2019	20-Feb-2019	20-Feb-2019

Validated

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Lab Sample No(s)	19320746	19320747	19320734	19320736	19320738	19320739
Customer Sample Ref.	WS59	WS59	WS56A	WS56A	WS58A	WS58A
AGS Ref.						
Depth	0.30	0.70	0.10	0.65	0.10	0.30
Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Anions by Kone (soil)	25-Feb-2019	21-Feb-2019	21-Feb-2019	21-Feb-2019	21-Feb-2019	21-Feb-2019
Asbestos ID in Solid Samples	19-Feb-2019	20-Feb-2019	19-Feb-2019	19-Feb-2019	19-Feb-2019	19-Feb-2019
Boron Water Soluble	21-Feb-2019	21-Feb-2019	20-Feb-2019	21-Feb-2019	20-Feb-2019	21-Feb-2019
Cyanide Comp/Free/Total/Thiocyanate	22-Feb-2019	22-Feb-2019	20-Feb-2019	20-Feb-2019	20-Feb-2019	20-Feb-2019
Easily Liberated Sulphide	19-Feb-2019	19-Feb-2019	19-Feb-2019	19-Feb-2019	20-Feb-2019	20-Feb-2019
EPH CWG (Aliphatic) GC (S)	26-Feb-2019	26-Feb-2019	22-Feb-2019	26-Feb-2019	21-Feb-2019	26-Feb-2019
EPH CWG (Aromatic) GC (S)	26-Feb-2019	26-Feb-2019	22-Feb-2019	26-Feb-2019	21-Feb-2019	26-Feb-2019
GRO by GC-FID (S)	21-Feb-2019	21-Feb-2019	21-Feb-2019	20-Feb-2019	20-Feb-2019	21-Feb-2019
Metals in solid samples by OES	20-Feb-2019	20-Feb-2019	21-Feb-2019	20-Feb-2019	21-Feb-2019	20-Feb-2019
PAH by GCMS	21-Feb-2019	22-Feb-2019	25-Feb-2019	22-Feb-2019	22-Feb-2019	25-Feb-2019
PCBs by GCMS	21-Feb-2019	21-Feb-2019	25-Feb-2019	22-Feb-2019	22-Feb-2019	25-Feb-2019
pH	19-Feb-2019	19-Feb-2019	19-Feb-2019	19-Feb-2019	20-Feb-2019	19-Feb-2019
Phenols Spec MS (S)	25-Feb-2019	25-Feb-2019	25-Feb-2019	25-Feb-2019	25-Feb-2019	25-Feb-2019
Sample description	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019	15-Feb-2019
Semi Volatile Organic Compounds	18-Feb-2019	18-Feb-2019				
Total Organic Carbon	20-Feb-2019	20-Feb-2019	18-Feb-2019	20-Feb-2019	18-Feb-2019	20-Feb-2019
Total Sulphate	20-Feb-2019	20-Feb-2019	19-Feb-2019	20-Feb-2019	19-Feb-2019	20-Feb-2019
TPH CWG GC (S)	26-Feb-2019	26-Feb-2019	22-Feb-2019	26-Feb-2019	21-Feb-2019	26-Feb-2019
VOC MS (S)	21-Feb-2019	21-Feb-2019	20-Feb-2019	20-Feb-2019	20-Feb-2019	21-Feb-2019

ASSOCIATED AQC DATA

Anions by Kone (soil)

Component	Method Code	QC 1919	QC 1937	QC 1922	QC 1925	QC 1933	QC 1907
Chloride (soluble)	TM243	78.01 : 122.19	**94.29** 78.01 : 122.19	**89.52** 78.01 : 122.19	78.01 : 122.19	78.01 : 122.19	78.01 : 122.19
Water Soluble Sulphate as SO4 2:1 Extract	TM243	70.43 : 130.79	**97.49** 70.43 : 130.79	**98.99** 70.43 : 130.79	70.43 : 130.79	70.43 : 130.79	70.43 : 130.79

Component	Method Code	QC 1916
Chloride (soluble)	TM243	78.01 : 122.19
Water Soluble Sulphate as SO4 2:1 Extract	TM243	70.43 : 130.79

Boron Water Soluble

Component	Method Code	QC 1956	QC 1926	QC 1917	QC 1994	QC 1928	QC 1960
Water Soluble Boron	TM222	**99.5** 86.05 : 109.75	**90.5** 86.05 : 109.75	**92.5** 86.05 : 109.75	**94.5** 86.05 : 109.75	**103.0** 86.05 : 109.75	**102.0** 86.05 : 109.75

Cyanide Comp/Free/Total/Thiocyanate

Component	Method Code	QC 1942	QC 1994	QC 1968	QC 1922	QC 1932	QC 1964
Free Cyanide	TM153	**99.2** 87.60 : 108.63	**98.3** 87.60 : 108.63	**96.1** 87.60 : 108.63	**103.0** 87.60 : 108.63	**98.4** 87.60 : 108.63	**101.0** 87.60 : 108.63
Thiocyanate	TM153	**94.61** 92.90 : 108.39	**94.01** 92.90 : 108.39	**91.62** 92.90 : 108.39	**95.21** 92.90 : 108.39	**93.41** 92.90 : 108.39	**93.41** 92.90 : 108.39
Total Cyanide	TM153	**105.71** 87.00 : 103.00	**105.71** 87.00 : 103.00	**104.29** 87.00 : 103.00	**107.14** 87.00 : 103.00	**105.71** 87.00 : 103.00	**107.86** 87.00 : 103.00

Component	Method Code	QC 1976	QC 1926
Free Cyanide	TM153	**96.6** 87.60 : 108.63	**98.3** 87.60 : 108.63
Thiocyanate	TM153	**90.42** 92.90 : 108.39	**91.62** 92.90 : 108.39
Total Cyanide	TM153	**107.14** 87.00 : 103.00	**107.14** 87.00 : 103.00

Easily Liberated Sulphide

Component	Method Code	QC 1922	QC 1941	QC 1979	QC 1925	QC 1931
Easily Liberated Sulphide	TM180	**96.56** 51.10 : 121.66	**81.9** 51.10 : 121.66	**86.22** 51.10 : 121.66	**105.26** 51.10 : 121.66	**82.23** 51.10 : 121.66

EPH CWG (Aliphatic) GC (S)

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EPH CWG (Aliphatic) GC (S)

Component	Method Code	QC 1947	QC 1903	QC 1945	QC 1994	QC 1971	QC 1970
Total Aliphatics >C12-C35	TM173	**96.46** 70.61 : 106.16	**97.5** 70.61 : 106.16	**72.71** 70.76 : 104.69	**85.63** 70.71 : 106.26	**88.96** 66.17 : 105.28	**84.58** 70.71 : 106.26

EPH CWG (Aromatic) GC (S)

Component	Method Code	QC 1947	QC 1903	QC 1945	QC 1994	QC 1971	QC 1970
Total Aromatics >EC12-EC35	TM173	**90.0** 67.75 : 104.04	**93.33** 67.75 : 104.04	**70.0** 68.16 : 102.29	**86.67** 65.82 : 105.00	**87.33** 65.78 : 102.90	**68.67** 65.82 : 105.00

GRO by GC-FID (S)

Component	Method Code	QC 1917	QC 1952	QC 1935	QC 1942	QC 1929	QC 1926
QC	TM089	**82.55** 70.34 : 111.95	**79.75** 70.34 : 111.95	**83.13** 70.01 : 104.45	**80.27** 70.34 : 111.95	**80.72** 70.34 : 111.95	**82.46** 70.34 : 111.95

Metals in solid samples by OES

Component	Method Code	QC 1934	QC 1981	QC 1981	QC 1961	QC 1997	QC 1989
Aluminium	TM181	**89.38** 77.84 : 119.01	**92.92** 77.84 : 119.01	**100.0** 77.84 : 119.01	**101.77** 77.84 : 119.01	**99.12** 77.84 : 119.01	**93.81** 77.84 : 119.01
Antimony	TM181	**95.93** 84.28 : 107.67	**96.75** 84.28 : 107.67	**98.37** 84.28 : 107.67	**100.0** 84.28 : 107.67	**99.19** 84.28 : 107.67	**99.59** 84.28 : 107.67
Arsenic	TM181	**98.55** 87.05 : 109.36	**99.42** 87.05 : 109.36	**100.29** 87.05 : 109.36	**102.91** 87.05 : 109.36	**101.45** 87.05 : 109.36	**102.91** 87.05 : 109.36
Barium	TM181	**91.56** 82.49 : 109.34	**91.74** 82.49 : 109.34	**95.41** 82.49 : 109.34	**95.41** 82.49 : 109.34	**99.08** 82.49 : 109.34	**99.08** 82.49 : 109.34
Beryllium	TM181	**95.9** 85.44 : 109.61	**96.27** 85.44 : 109.61	**98.88** 85.44 : 109.61	**100.0** 85.44 : 109.61	**98.88** 85.44 : 109.61	**95.15** 85.44 : 109.61
Boron	TM181	**86.25** 73.51 : 104.66	**88.25** 73.51 : 104.66	**92.84** 73.51 : 104.66	**92.26** 73.51 : 104.66	**87.97** 73.51 : 104.66	**85.39** 73.51 : 104.66
Cadmium	TM181	**101.23** 81.46 : 106.43	**96.3** 81.46 : 106.43	**97.12** 81.46 : 106.43	**93.0** 81.46 : 106.43	**95.88** 81.46 : 106.43	**91.36** 81.46 : 106.43
Chromium	TM181	**95.13** 79.78 : 102.80	**94.93** 79.78 : 102.80	**99.59** 79.78 : 102.80	**96.55** 79.78 : 102.80	**94.73** 79.78 : 102.80	**91.48** 79.78 : 102.80
Cobalt	TM181	**90.25** 80.74 : 99.26	**89.94** 80.74 : 99.26	**92.45** 80.74 : 99.26	**92.14** 80.74 : 99.26	**91.51** 80.74 : 99.26	**94.65** 80.74 : 99.26
Copper	TM181	**96.83** 82.40 : 105.45	**97.71** 82.40 : 105.45	**99.47** 82.40 : 105.45	**98.24** 82.40 : 105.45	**96.83** 82.40 : 105.45	**94.19** 82.40 : 105.45
Iron	TM181	**92.86** 82.95 : 110.58	**95.24** 82.95 : 110.58	**99.21** 82.95 : 110.58	**101.59** 82.95 : 110.58	**96.83** 82.95 : 110.58	**93.65** 82.95 : 110.58
Lead	TM181	**88.96** 78.24 : 104.05	**93.24** 78.24 : 104.05	**93.24** 78.24 : 104.05	**95.05** 78.24 : 104.05	**96.62** 78.24 : 104.05	**94.59** 78.24 : 104.05
Manganese	TM181	**106.94** 94.29 : 119.51	**106.67** 94.29 : 119.51	**109.44** 94.29 : 119.51	**112.22** 94.29 : 119.51	**109.17** 94.29 : 119.51	**106.39** 94.29 : 119.51

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Metals in solid samples by OES

		QC 1934	QC 1981	QC 1981	QC 1961	QC 1997	QC 1989
Mercury	TM181	**94.44** 83.74 : 105.34	**95.41** 83.74 : 105.34	**98.31** 83.74 : 105.34	**99.28** 83.74 : 105.34	**97.58** 83.74 : 105.34	**100.0** 83.74 : 105.34
Molybdenum	TM181	**97.12** 87.11 : 106.87	**95.47** 87.11 : 106.87	**97.53** 87.11 : 106.87	**100.82** 87.11 : 106.87	**95.88** 87.11 : 106.87	**94.24** 87.11 : 106.87
Nickel	TM181	**91.93** 81.92 : 102.18	**91.69** 81.92 : 102.18	**94.62** 81.92 : 102.18	**94.38** 81.92 : 102.18	**92.42** 81.92 : 102.18	**88.75** 81.92 : 102.18
Phosphorus	TM181	**112.32** 94.56 : 124.28	**111.31** 94.56 : 124.28	**115.35** 94.56 : 124.28	**107.27** 94.56 : 124.28	**116.97** 94.56 : 124.28	**114.75** 94.56 : 124.28
Selenium	TM181	**97.65** 86.28 : 110.48	**98.82** 86.28 : 110.48	**99.22** 86.28 : 110.48	**100.78** 86.28 : 110.48	**98.43** 86.28 : 110.48	**94.51** 86.28 : 110.48
Strontium	TM181	**91.54** 79.13 : 102.79	**91.54** 79.13 : 102.79	**96.21** 79.13 : 102.79	**95.32** 79.13 : 102.79	**93.76** 79.13 : 102.79	**91.31** 79.13 : 102.79
Thallium	TM181	**96.02** 82.94 : 111.86	**98.23** 82.94 : 111.86	**100.44** 82.94 : 111.86	**100.44** 82.94 : 111.86	**99.56** 82.94 : 111.86	**60.18** 82.94 : 111.86
Tin	TM181	**98.1** 90.25 : 108.86	**97.72** 90.25 : 108.86	**103.04** 90.25 : 108.86	**100.38** 90.25 : 108.86	**102.66** 90.25 : 108.86	**94.3** 90.25 : 108.86
Titanium	TM181	**79.39** 66.23 : 102.06	**80.92** 66.23 : 102.06	**87.79** 66.23 : 102.06	**85.5** 66.23 : 102.06	**73.74** 66.23 : 102.06	**70.84** 66.23 : 102.06
Vanadium	TM181	**96.7** 86.37 : 107.94	**96.7** 86.37 : 107.94	**100.37** 86.37 : 107.94	**98.9** 86.37 : 107.94	**97.07** 86.37 : 107.94	**95.97** 86.37 : 107.94
Zinc	TM181	**96.51** 84.68 : 113.99	**98.36** 84.68 : 113.99	**101.64** 84.68 : 113.99	**100.62** 84.68 : 113.99	**99.38** 84.68 : 113.99	**97.13** 84.68 : 113.99

Component	Method Code	QC 1900	QC 1918
Aluminium	TM181	**96.46** 77.84 : 119.01	**94.69** 77.84 : 119.01
Antimony	TM181	**101.22** 84.28 : 107.67	**91.06** 84.28 : 107.67
Arsenic	TM181	**100.87** 87.05 : 109.36	**94.19** 87.05 : 109.36
Barium	TM181	**96.33** 82.49 : 109.34	**93.58** 82.49 : 109.34
Beryllium	TM181	**99.63** 85.44 : 109.61	**95.9** 85.44 : 109.61
Boron	TM181	**86.25** 73.51 : 104.66	**83.38** 73.51 : 104.66
Cadmium	TM181	**97.12** 81.46 : 106.43	**92.59** 81.46 : 106.43
Chromium	TM181	**96.96** 79.78 : 102.80	**91.68** 79.78 : 102.80
Cobalt	TM181	**91.51** 80.74 : 99.26	**84.59** 80.74 : 99.26
Copper	TM181	**96.3** 82.40 : 105.45	**93.49** 82.40 : 105.45
Iron	TM181	**96.83** 82.95 : 110.58	**96.03** 82.95 : 110.58
Lead	TM181	**91.89** 78.24 : 104.05	**85.36** 78.24 : 104.05
Manganese	TM181	**108.33** 94.29 : 119.51	**107.78** 94.29 : 119.51
Mercury	TM181	**96.14** 83.74 : 105.34	**88.65** 83.74 : 105.34
Molybdenum	TM181	**99.59** 87.11 : 106.87	**93.0** 87.11 : 106.87

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SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
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Metals in solid samples by OES

		QC 1900	QC 1918
Nickel	TM181	**94.62** 81.92 : 102.18	**88.02** 81.92 : 102.18
Phosphorus	TM181	**105.05** 94.56 : 124.28	**107.27** 94.56 : 124.28
Selenium	TM181	**98.04** 86.28 : 110.48	**98.43** 86.28 : 110.48
Strontium	TM181	**93.99** 79.13 : 102.79	**90.87** 79.13 : 102.79
Thallium	TM181	**100.0** 82.94 : 111.86	**92.92** 82.94 : 111.86
Tin	TM181	**101.14** 90.25 : 108.86	**95.06** 90.25 : 108.86
Titanium	TM181	**72.82** 66.23 : 102.06	**83.21** 66.23 : 102.06
Vanadium	TM181	**97.8** 86.37 : 107.94	**92.31** 86.37 : 107.94
Zinc	TM181	**98.77** 84.68 : 113.99	**92.4** 84.68 : 113.99

PAH by GCMS

Component	Method Code	QC 1929	QC 1971	QC 1991	QC 1929	QC 1938	QC 1970
Acenaphthene	TM218	**95.0** 84.53 : 114.86	**91.5** 76.79 : 103.90	**92.5** 84.53 : 114.86	**83.5** 80.97 : 105.99	**90.0** 84.53 : 114.86	**103.5** 80.97 : 105.99
Acenaphthylene	TM218	**90.5** 80.13 : 113.99	**90.0** 78.40 : 108.66	**88.0** 80.13 : 113.99	**81.5** 80.24 : 105.29	**86.0** 80.13 : 113.99	**101.0** 80.24 : 105.29
Anthracene	TM218	**92.5** 71.15 : 111.65	**99.0** 76.15 : 110.07	**89.0** 71.15 : 111.65	**84.0** 79.32 : 108.94	**89.0** 71.15 : 111.65	**93.0** 79.32 : 108.94
Benz(a)anthracene	TM218	**89.5** 74.78 : 122.48	**102.5** 73.77 : 119.26	**88.5** 74.78 : 122.48	**81.5** 79.72 : 116.84	**86.0** 74.78 : 122.48	**94.0** 79.72 : 116.84
Benzo(a)pyrene	TM218	**90.5** 70.68 : 115.92	**102.5** 73.20 : 114.18	**94.0** 70.68 : 115.92	**101.5** 79.52 : 108.45	**92.0** 70.68 : 115.92	**98.0** 79.52 : 108.45
Benzo(b)fluoranthene	TM218	**91.0** 73.56 : 121.32	**105.5** 75.36 : 117.58	**97.0** 73.56 : 121.32	**90.5** 77.35 : 112.97	**85.0** 73.56 : 121.32	**83.5** 77.35 : 112.97
Benzo(ghi)perylene	TM218	**90.0** 71.68 : 115.27	**102.5** 70.73 : 116.12	**98.0** 71.68 : 115.27	**93.0** 77.68 : 107.38	**96.0** 71.68 : 115.27	**92.5** 77.68 : 107.38
Benzo(k)fluoranthene	TM218	**89.5** 73.30 : 120.87	**103.5** 75.98 : 116.59	**93.5** 73.30 : 120.87	**96.0** 82.61 : 111.93	**93.5** 73.30 : 120.87	**100.5** 82.61 : 111.93
Chrysene	TM218	**90.0** 77.24 : 120.84	**97.5** 74.82 : 114.18	**88.5** 77.24 : 120.84	**82.5** 80.28 : 111.42	**84.0** 77.24 : 120.84	**93.5** 80.28 : 111.42
Dibenzo(ah)anthracene	TM218	**89.5** 72.03 : 116.78	**98.5** 69.17 : 115.30	**95.5** 72.03 : 116.78	**87.0** 79.17 : 106.41	**93.5** 72.03 : 116.78	**98.0** 79.17 : 106.41
Fluoranthene	TM218	**89.5** 78.65 : 113.45	**106.5** 75.88 : 112.84	**88.0** 78.65 : 113.45	**85.5** 79.07 : 112.75	**84.5** 78.65 : 113.45	**85.0** 79.07 : 112.75
Fluorene	TM218	**96.0** 76.95 : 117.18	**95.5** 78.50 : 114.02	**92.5** 76.95 : 117.18	**85.0** 80.52 : 110.90	**91.0** 76.95 : 117.18	**96.5** 80.52 : 110.90
Indeno(123cd)pyrene	TM218	**83.5** 68.53 : 118.42	**99.0** 80.09 : 117.12	**90.5** 68.53 : 118.42	**93.0** 76.97 : 113.36	**90.5** 68.53 : 118.42	**88.0** 76.97 : 113.36
Naphthalene	TM218	**98.5** 78.80 : 115.10	**93.5** 75.24 : 111.26	**97.0** 78.80 : 115.10	**87.5** 79.37 : 105.57	**83.5** 78.80 : 115.10	**105.5** 79.37 : 105.57
Phenanthrene	TM218	**95.0** 76.49 : 119.30	**97.0** 77.07 : 107.43	**92.0** 76.49 : 119.30	**84.5** 79.34 : 111.91	**89.5** 76.49 : 119.30	**95.5** 79.34 : 111.91
Pyrene	TM218	**90.0** 76.20 : 119.96	**107.5** 78.74 : 112.56	**87.5** 76.20 : 119.96	**85.5** 78.80 : 115.76	**85.5** 76.20 : 119.96	**87.0** 78.80 : 115.76

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

PAH by GCMS

Component	Method Code	QC 1908
Acenaphthene	TM218	**85.0** 76.79 : 103.90
Acenaphthylene	TM218	**85.0** 78.40 : 108.66
Anthracene	TM218	**94.0** 76.15 : 110.07
Benz(a)anthracene	TM218	**99.5** 73.77 : 119.26
Benzo(a)pyrene	TM218	**97.5** 73.20 : 114.18
Benzo(b)fluoranthene	TM218	**103.0** 75.36 : 117.58
Benzo(ghi)perylene	TM218	**96.5** 70.73 : 116.12
Benzo(k)fluoranthene	TM218	**94.5** 75.98 : 116.59
Chrysene	TM218	**92.5** 74.82 : 114.18
Dibenzo(ah)anthracene	TM218	**95.0** 69.17 : 115.30
Fluoranthene	TM218	**102.0** 75.88 : 112.84
Fluorene	TM218	**89.5** 78.50 : 114.02
Indeno(123cd)pyrene	TM218	**90.5** 80.09 : 117.12
Naphthalene	TM218	**83.5** 75.24 : 111.26
Phenanthrene	TM218	**91.5** 77.07 : 107.43
Pyrene	TM218	**101.5** 78.74 : 112.56

PCBs by GCMS

Component	Method Code	QC 1983	QC 1927	QC 1973	QC 1959
PCB congener 101	TM168	**104.0** 73.09 : 112.63	**82.7** 79.46 : 109.70	**82.1** 73.09 : 112.63	**88.6** 79.46 : 109.70
PCB congener 105	TM168	**105.0** 70.08 : 112.92	**83.3** 77.82 : 109.32	**82.1** 70.08 : 112.92	**90.8** 77.82 : 109.32
PCB congener 114	TM168	**105.0** 71.45 : 111.53	**83.6** 78.15 : 110.49	**82.2** 71.45 : 111.53	**91.4** 78.15 : 110.49
PCB congener 118	TM168	**104.0** 70.76 : 113.78	**84.3** 78.85 : 110.11	**82.3** 70.76 : 113.78	**89.5** 78.85 : 110.11
PCB congener 123	TM168	**93.7** 69.96 : 112.50	**86.8** 77.04 : 109.44	**77.4** 69.96 : 112.50	**87.5** 77.04 : 109.44
PCB congener 126	TM168	**99.1** 70.61 : 116.15	**80.5** 77.79 : 112.65	**77.3** 70.61 : 116.15	**88.8** 77.79 : 112.65
PCB congener 138	TM168	**101.0** 69.88 : 115.78	**83.1** 82.92 : 114.57	**80.5** 69.88 : 115.78	**89.0** 82.92 : 114.57
PCB congener 153	TM168	**107.0** 73.32 : 111.54	**81.3** 78.13 : 108.55	**80.1** 73.32 : 111.54	**90.0** 78.13 : 108.55
PCB congener 156	TM168	**101.0** 73.48 : 118.60	**83.3** 79.00 : 111.76	**78.3** 73.48 : 118.60	**88.4** 79.00 : 111.76

PCBs by GCMS

		QC 1983	QC 1927	QC 1973	QC 1959
PCB congener 157	TM168	**98.6** 70.22 : 115.22	**78.2** 78.17 : 110.03	**76.2** 70.22 : 115.22	**86.5** 78.17 : 110.03
PCB congener 167	TM168	**111.0** 70.04 : 118.16	**82.7** 79.50 : 110.52	**82.5** 70.04 : 118.16	**91.7** 79.50 : 110.52
PCB congener 169	TM168	**108.0** 64.01 : 129.89	**83.0** 67.65 : 121.47	**81.2** 64.01 : 129.89	**91.9** 67.65 : 121.47
PCB congener 180	TM168	**105.0** 67.10 : 120.80	**84.2** 78.72 : 110.94	**81.0** 67.10 : 120.80	**91.5** 78.72 : 110.94
PCB congener 189	TM168	**105.0** 65.53 : 126.07	**79.6** 69.53 : 116.81	**78.9** 65.53 : 126.07	**88.2** 69.53 : 116.81
PCB congener 28	TM168	**104.0** 73.86 : 116.94	**86.5** 77.37 : 110.55	**84.8** 73.86 : 116.94	**90.4** 77.37 : 110.55
PCB congener 52	TM168	**102.0** 78.72 : 119.28	**85.4** 82.53 : 112.65	**82.2** 78.72 : 119.28	**88.8** 82.53 : 112.65
PCB congener 77	TM168	**111.0** 74.04 : 120.60	**90.1** 73.92 : 120.16	**88.7** 74.04 : 120.60	**98.1** 73.92 : 120.16
PCB congener 81	TM168	**113.0** 71.38 : 116.14	**92.2** 75.24 : 110.52	**85.6** 71.38 : 116.14	**92.7** 75.24 : 110.52

pH

Component	Method Code	QC 1967	QC 1916	QC 1988	QC 1940	QC 1944	QC 1982
pH	TM133	**99.77** 98.63 : 101.37	**100.46** 97.03 : 101.14	**100.57** 98.63 : 101.37	**100.57** 97.03 : 101.14	**100.92** 97.41 : 101.91	**99.54** 97.41 : 101.91

Component	Method Code	QC 1983
pH	TM133	**99.43** 98.63 : 101.37

Semi Volatile Organic Compounds

Component	Method Code	QC 1976	QC 1983	QC 1938
4-Bromophenylphenylether (Soil)	TM157	**92.0** 66.75 : 125.25	**91.5** 66.75 : 125.25	**95.0** 66.75 : 125.25
Benzo(a)anthracene (Soil)	TM157	**100.5** 67.40 : 120.50	**93.0** 67.40 : 120.50	**100.5** 67.40 : 120.50
Hexachlorobutadiene (Soil)	TM157	**97.0** 68.25 : 126.75	**99.5** 68.25 : 126.75	**102.5** 68.25 : 126.75
Naphthalene (Soil)	TM157	**92.5** 67.55 : 125.45	**95.5** 67.55 : 125.45	**98.0** 67.55 : 125.45
Nitrobenzene (Soil)	TM157	**98.0** 66.50 : 123.50	**99.5** 66.50 : 123.50	**104.0** 66.50 : 123.50
Phenol (Soil)	TM157	**90.0** 69.92 : 114.02	**99.0** 69.92 : 114.02	**102.5** 69.92 : 114.02

Total Organic Carbon

CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Total Organic Carbon

Component	Method Code	QC 1922	QC 1911	QC 1938	QC 1985	QC 1907	QC 1923
Total Organic Carbon	TM132	**90.23** 69.88 : 102.67	**94.14** 69.88 : 102.67	**91.41** 69.88 : 102.67	**94.53** 69.88 : 102.67	**84.77** 69.88 : 102.67	**81.25** 69.88 : 102.67

Component	Method Code	QC 1978	QC 1902
Total Organic Carbon	TM132	**93.36** 69.88 : 102.67	**84.38** 69.88 : 102.67

Total Sulphate

Component	Method Code	QC 1949	QC 1986	QC 1990	QC 1911	QC 1904
Total Sulphate	TM221	**82.58** 69.68 : 114.84	**101.52** 69.68 : 114.84	**84.85** 69.68 : 114.84	**87.88** 69.68 : 114.84	**95.45** 69.68 : 114.84

VOC MS (S)

Component	Method Code	QC 1928	QC 1931	QC 1967	QC 1940
1,1,1,2-tetrachloroethane	TM116	**105.4** 77.56 : 115.55	**100.2** 79.10 : 119.66	**104.0** 77.56 : 115.55	**100.2** 79.10 : 119.66
1,1,1-Trichloroethane	TM116	**104.6** 73.73 : 118.05	**98.6** 88.88 : 119.66	**99.8** 73.73 : 118.05	**94.4** 87.51 : 115.37
1,1,2-Trichloroethane	TM116	**105.2** 77.12 : 116.04	**96.0** 75.16 : 112.70	**102.4** 77.12 : 116.04	**94.2** 75.16 : 112.70
1,1-Dichloroethane	TM116	**110.0** 74.46 : 129.15	**101.2** 77.84 : 124.12	**105.2** 74.46 : 129.15	**98.6** 89.44 : 121.71
1,2-Dichloroethane	TM116	**116.4** 87.98 : 127.86	**104.8** 86.58 : 129.62	**112.6** 87.98 : 127.86	**113.0** 86.58 : 129.62
1,4-Dichlorobenzene	TM116	**106.2** 72.76 : 126.34	**100.6** 71.61 : 124.63	**112.2** 72.76 : 126.34	**112.2** 71.61 : 124.63
2-Chlorotoluene	TM116	**105.0** 72.40 : 116.20	**98.6** 66.81 : 118.43	**103.4** 72.40 : 116.20	**104.0** 66.81 : 118.43
4-Chlorotoluene	TM116	**105.2** 66.90 : 112.46	**97.2** 65.88 : 114.76	**105.4** 66.90 : 112.46	**98.2** 65.88 : 114.76
Benzene	TM116	**108.6** 81.05 : 117.28	**101.6** 93.16 : 123.63	**105.8** 81.05 : 117.28	**97.6** 88.66 : 121.07
Carbon Disulphide	TM116	**105.8** 74.91 : 122.14	**95.0** 75.11 : 124.81	**99.8** 74.91 : 122.14	**88.4** 75.11 : 124.81
Carbontetrachloride	TM116	**109.0** 80.31 : 124.50	**100.8** 82.35 : 126.46	**107.4** 80.31 : 124.50	**101.8** 82.35 : 126.46
Chlorobenzene	TM116	**110.8** 75.00 : 115.53	**100.4** 82.88 : 122.42	**106.8** 75.00 : 115.53	**98.0** 82.88 : 122.42
Chloroform	TM116	**113.0** 87.40 : 122.49	**103.8** 82.52 : 123.25	**110.6** 87.40 : 122.49	**103.8** 93.02 : 122.86
Chloromethane	TM116	**113.6** 58.11 : 136.20	**93.2** 55.37 : 133.35	**101.8** 58.11 : 136.20	**86.2** 52.88 : 131.36

VOC MS (S)

		QC 1928	QC 1931	QC 1967	QC 1940
Cis-1,2-Dichloroethene	TM116	**113.6** 80.67 : 126.72	**105.2** 78.27 : 128.90	**108.6** 80.67 : 126.72	**105.0** 78.27 : 128.90
Dibromomethane	TM116	**102.0** 67.80 : 121.75	**97.6** 71.69 : 119.43	**102.6** 67.80 : 121.75	**100.2** 71.69 : 119.43
Dichloromethane	TM116	**120.6** 81.11 : 133.25	**109.2** 81.68 : 125.21	**119.0** 81.11 : 133.25	**114.8** 89.49 : 128.89
Ethylbenzene	TM116	**102.2** 75.92 : 110.41	**96.0** 83.56 : 122.99	**99.6** 75.92 : 110.41	**88.6** 75.93 : 116.76
Hexachlorobutadiene	TM116	**75.8** 12.82 : 152.73	**64.8** 7.32 : 139.00	**67.4** 12.82 : 152.73	**84.0** 7.32 : 139.00
Isopropylbenzene	TM116	**106.2** 54.21 : 117.17	**101.8** 52.15 : 132.52	**96.0** 54.21 : 117.17	**87.8** 52.15 : 132.52
Naphthalene	TM116	**115.2** 80.86 : 128.81	**104.4** 79.29 : 125.59	**125.2** 80.86 : 128.81	**105.6** 80.29 : 135.77
o-Xylene	TM116	**101.2** 67.52 : 107.60	**94.8** 68.16 : 107.61	**94.6** 67.52 : 107.60	**89.0** 68.16 : 107.61
p/m-Xylene	TM116	**102.0** 68.32 : 108.91	**96.6** 77.41 : 112.71	**96.9** 68.32 : 108.91	**88.1** 73.52 : 108.71
Sec-Butylbenzene	TM116	**91.0** 44.91 : 118.40	**89.4** 44.71 : 117.87	**86.4** 44.91 : 118.40	**82.8** 44.71 : 117.87
Tetrachloroethene	TM116	**113.4** 76.95 : 121.02	**104.2** 81.43 : 126.65	**111.6** 76.95 : 121.02	**100.6** 81.43 : 126.65
Toluene	TM116	**98.4** 74.24 : 107.42	**94.8** 87.82 : 116.21	**98.4** 74.24 : 107.42	**90.0** 85.50 : 114.89
Trichloroethene	TM116	**108.4** 77.61 : 111.54	**98.0** 79.80 : 112.33	**102.8** 77.61 : 111.54	**93.4** 79.80 : 112.33
Trichlorofluoromethane	TM116	**110.6** 71.31 : 128.41	**104.0** 72.76 : 118.80	**112.8** 71.31 : 128.41	**97.4** 88.86 : 128.82
Vinyl Chloride	TM116	**99.0** 68.26 : 133.45	**91.0** 64.90 : 133.10	**96.0** 68.26 : 133.45	**80.0** 64.90 : 133.10

The above information details the reference name of the analytical quality control sample (AQC) that has been run with the samples contained in this report for the different methods of analysis.
The figure detailed is the percentage recovery result for the AQC.
The subscript numbers below are the percentage recovery lower control limit (LCL) and the upper control limit (UCL). The percentage recovery result for the AQC should be between these limits to be statistically in control.

CERTIFICATE OF ANALYSIS

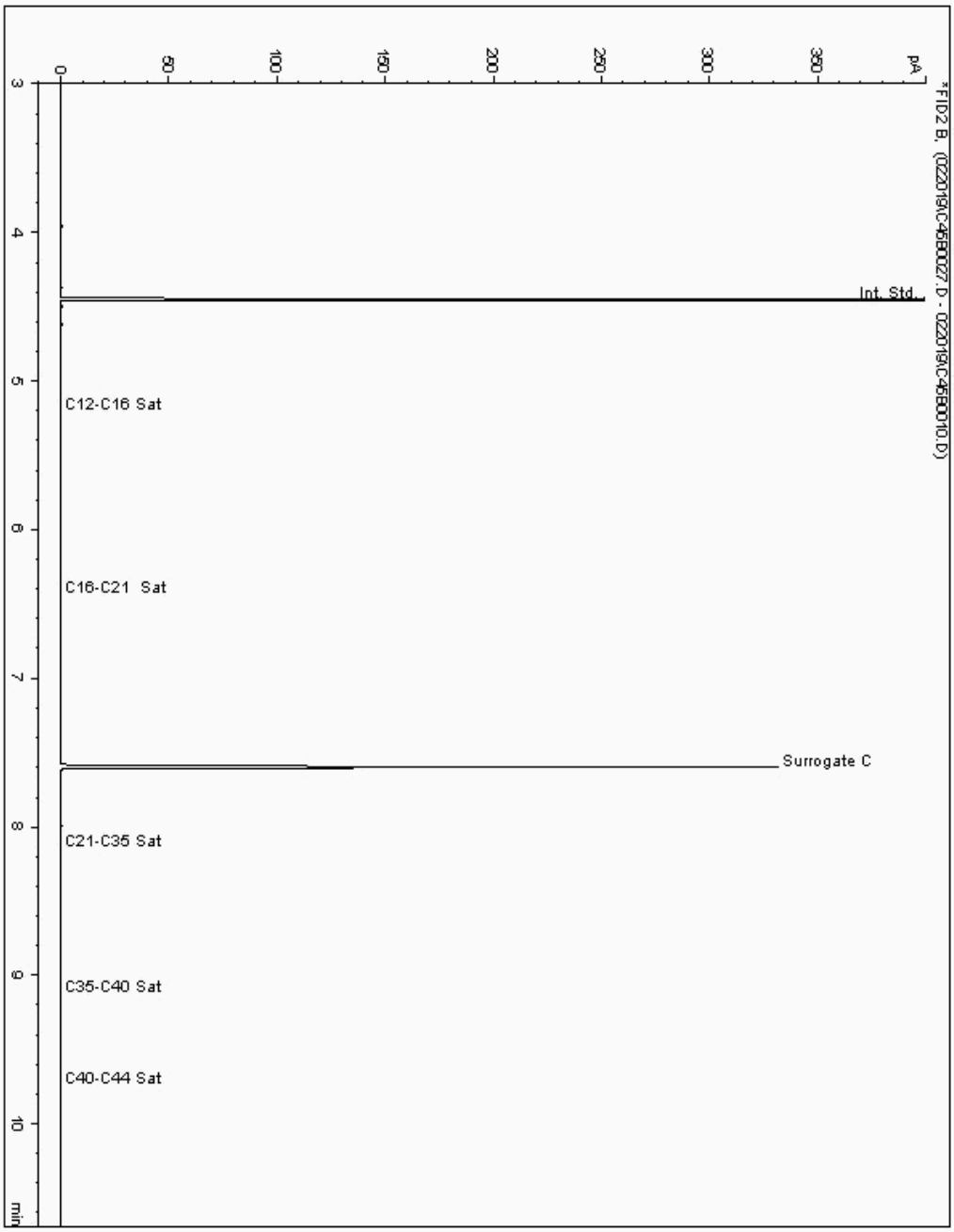
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19356386 **Depth :** 0.55
Sample ID : WS05

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180544-
Date Acquired : 21/02/2019 00:02:47 PM
Units : ppb
Dilution: WS05[0.55] ->



CERTIFICATE OF ANALYSIS

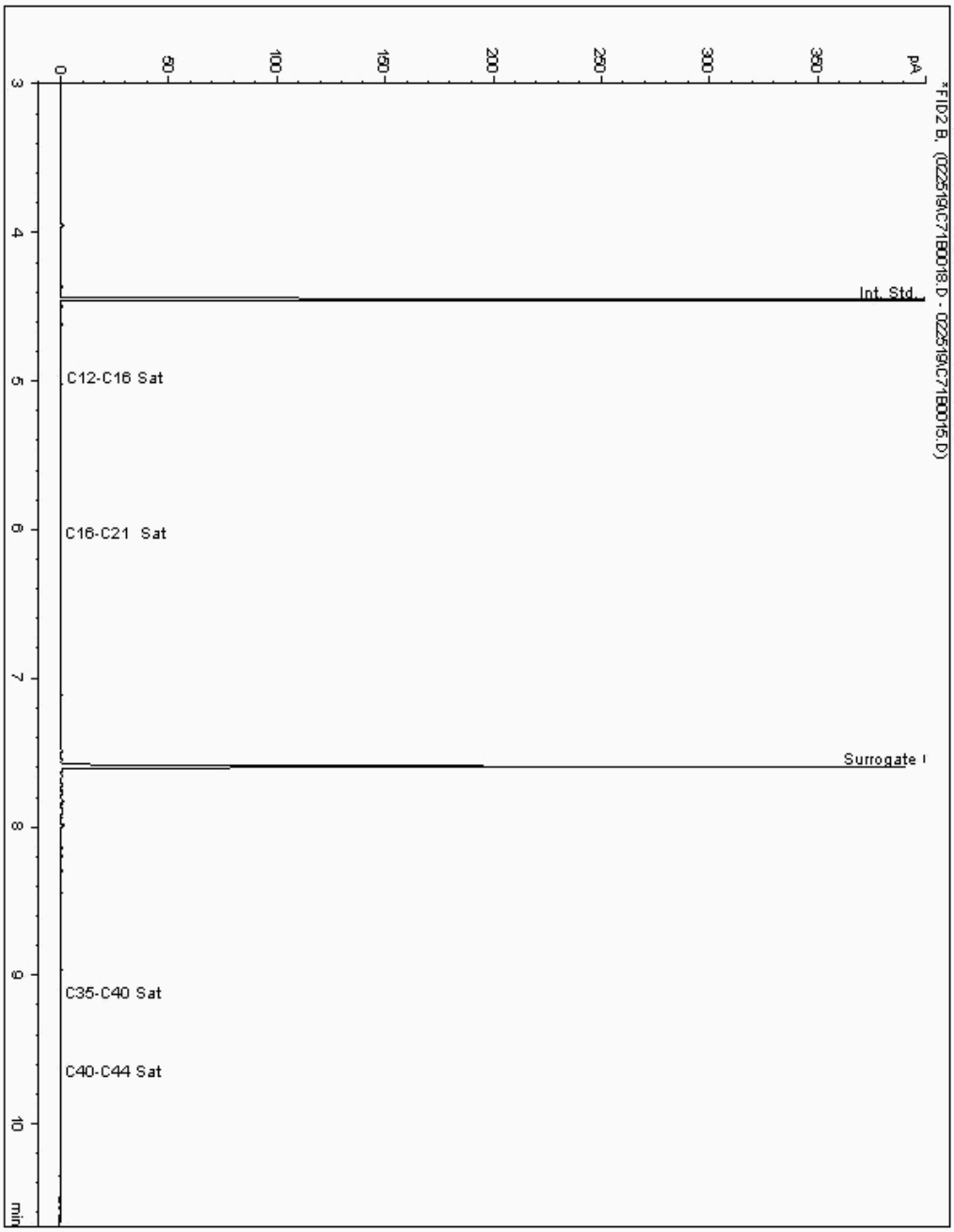
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19357146 **Depth :** 0.20
Sample ID : WS05

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180515-
Date Acquired : 25/02/2019 16:04:31 PM
Units : ppb
Dilution: WS05[0.20] ->



CERTIFICATE OF ANALYSIS

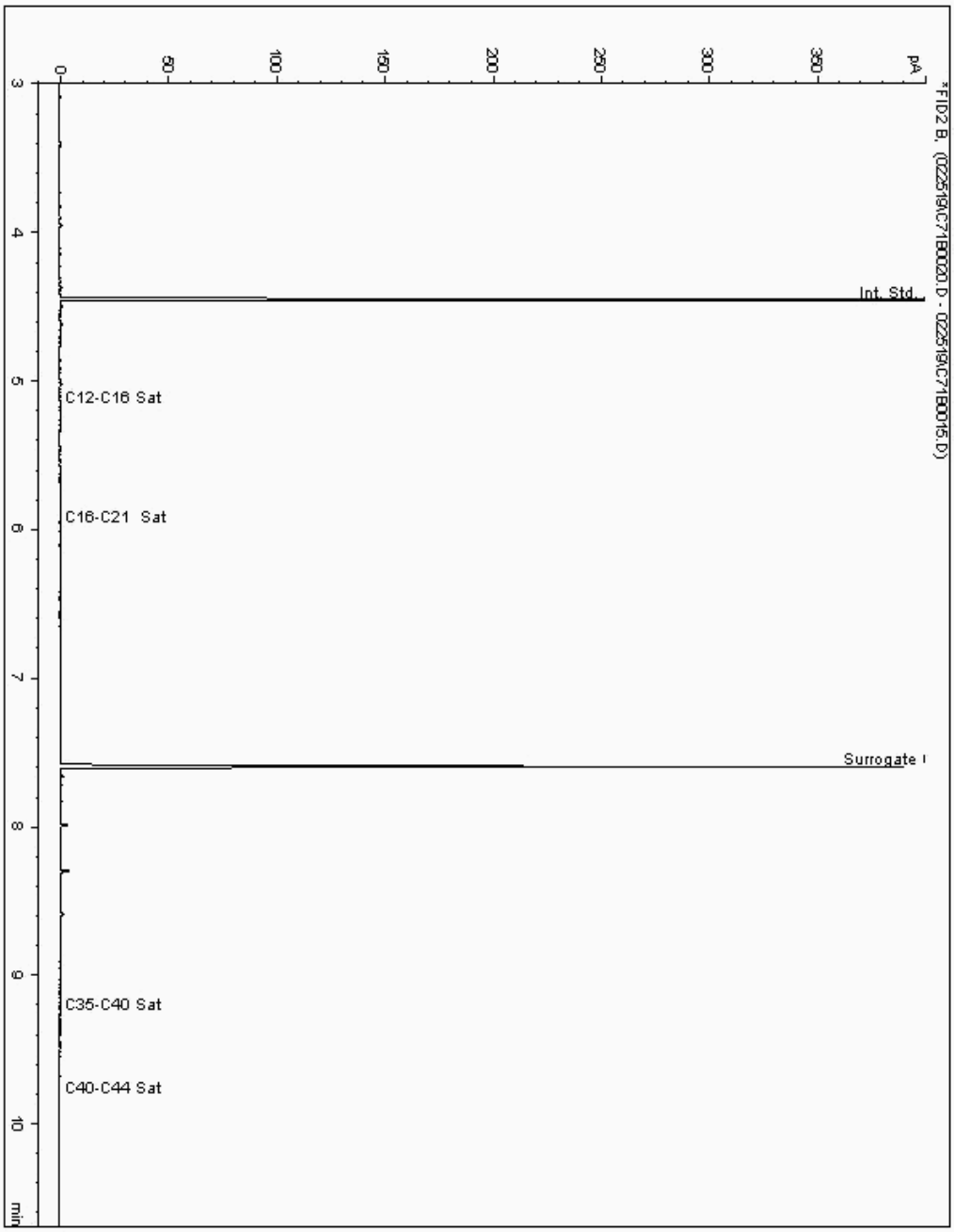
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19357358 **Depth :** 0.10
Sample ID : WS56

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180262-
Date Acquired : 25/02/2019 16:44:52 PM
Units : ppb
Dilution: WS56[0.10] ->



CERTIFICATE OF ANALYSIS

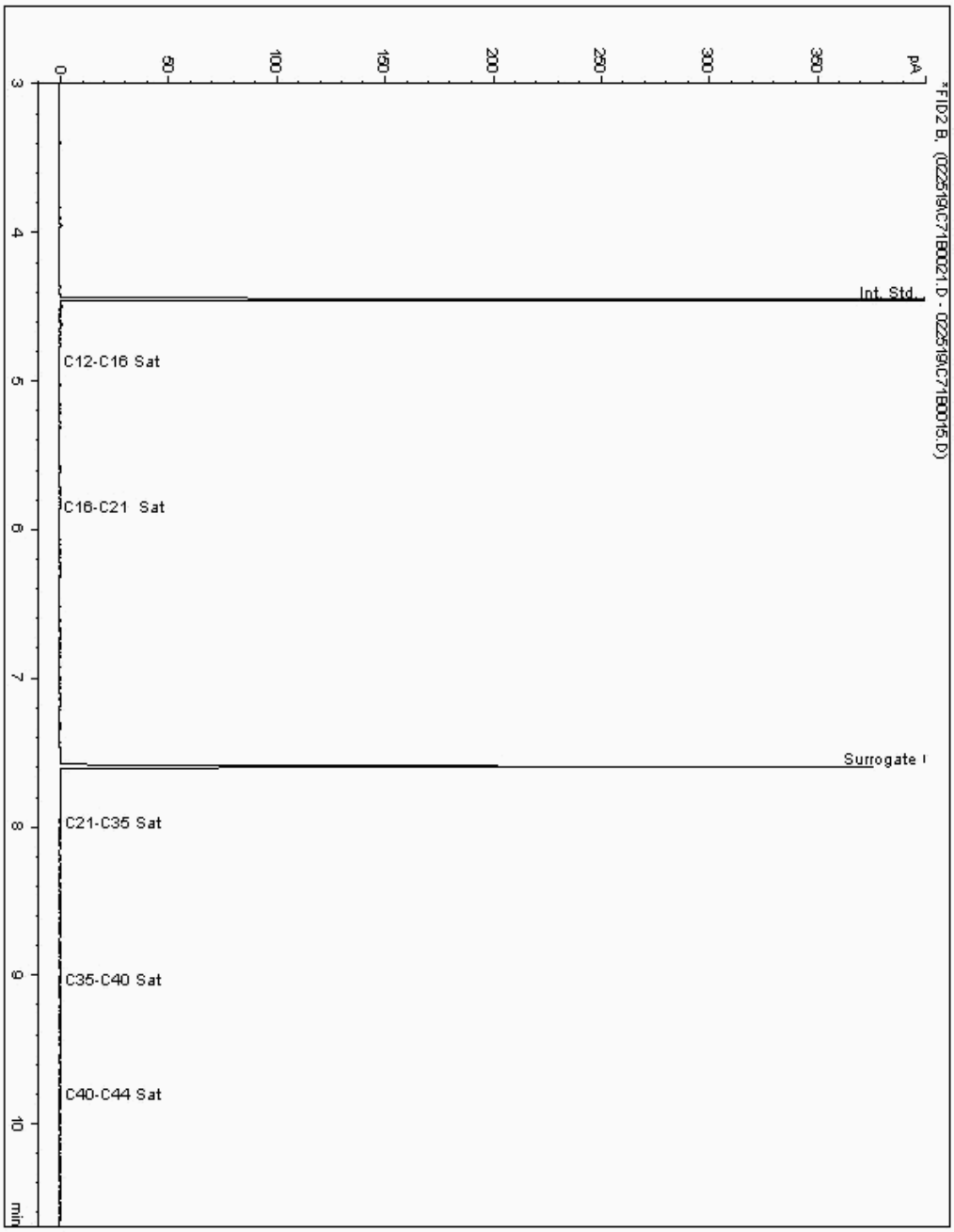
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19357653 **Depth :** 0.30
Sample ID : WS55

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180230-
Date Acquired : 25/02/2019 17:04:57 PM
Units : ppb
Dilution: WS55[0.30] ->



CERTIFICATE OF ANALYSIS

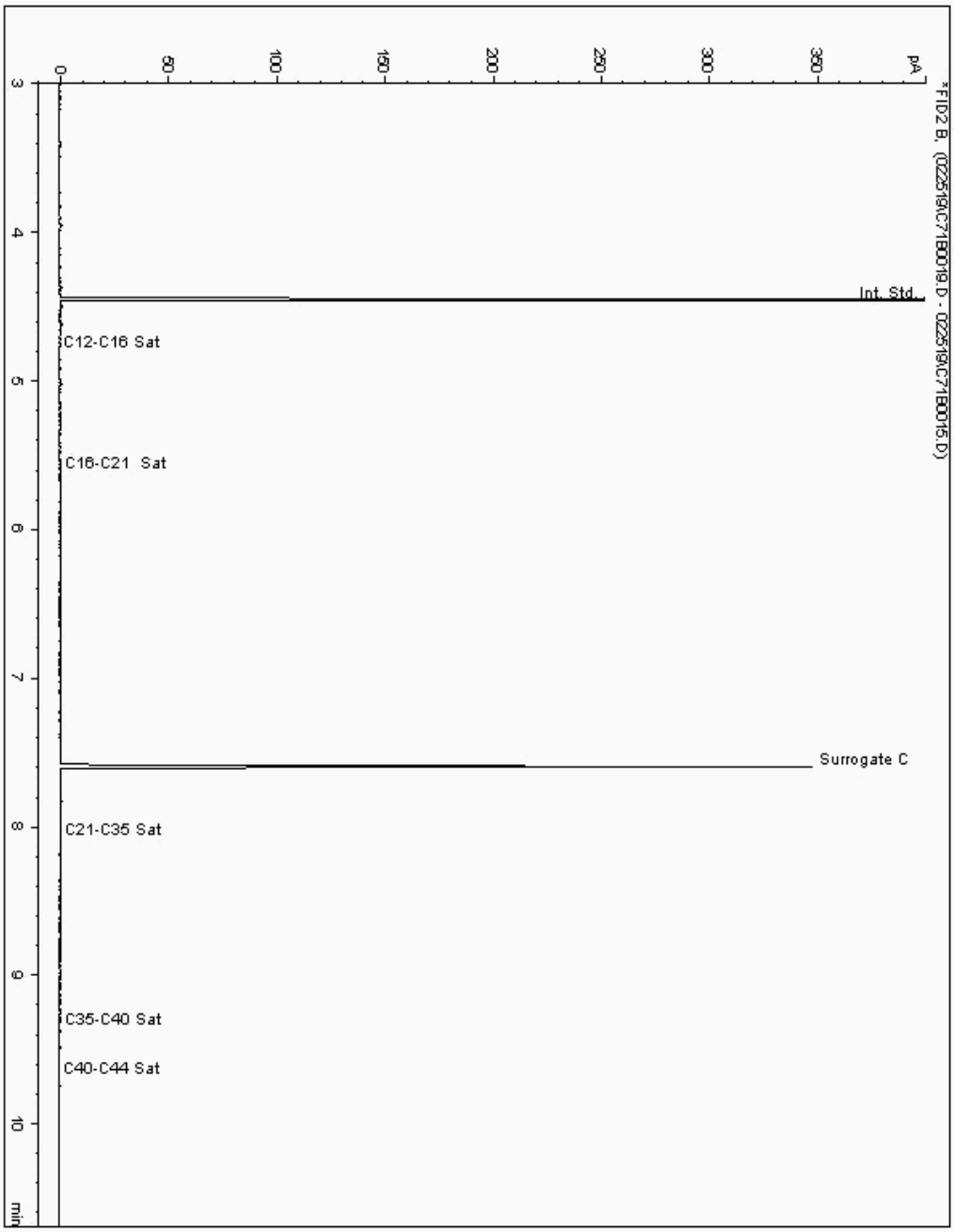
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19357888 **Depth :** 0.35
Sample ID : WS06

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18182014-
Date Acquired : 25/02/2019 16:24:48 PM
Units : ppb
Dilution: WS06[0.35] ->



CERTIFICATE OF ANALYSIS

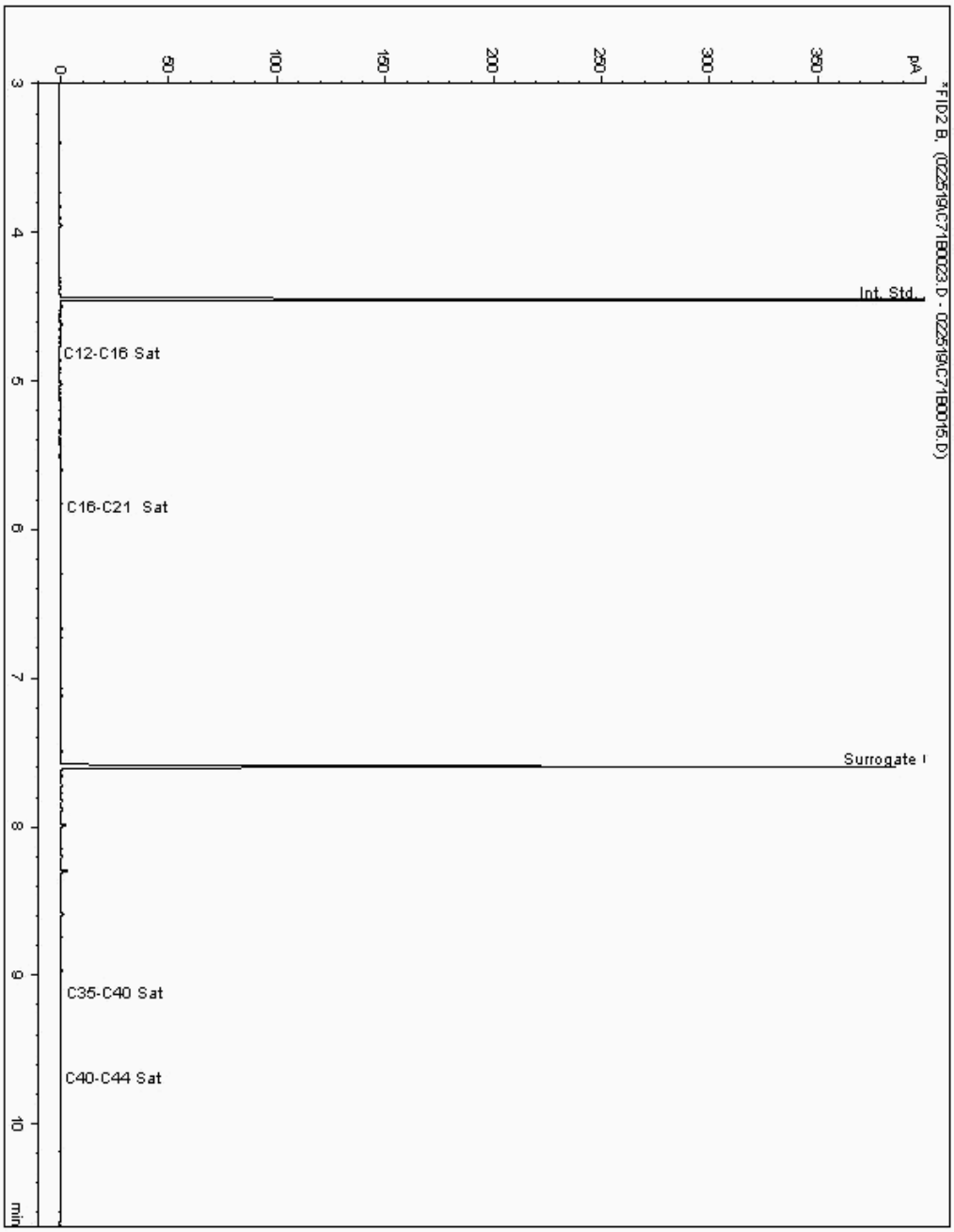
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19357995 **Depth :** 0.30
Sample ID : WS59

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180748-
Date Acquired : 25/02/2019 17:45:10 PM
Units : ppb
Dilution: WS59[0.30] ->



CERTIFICATE OF ANALYSIS

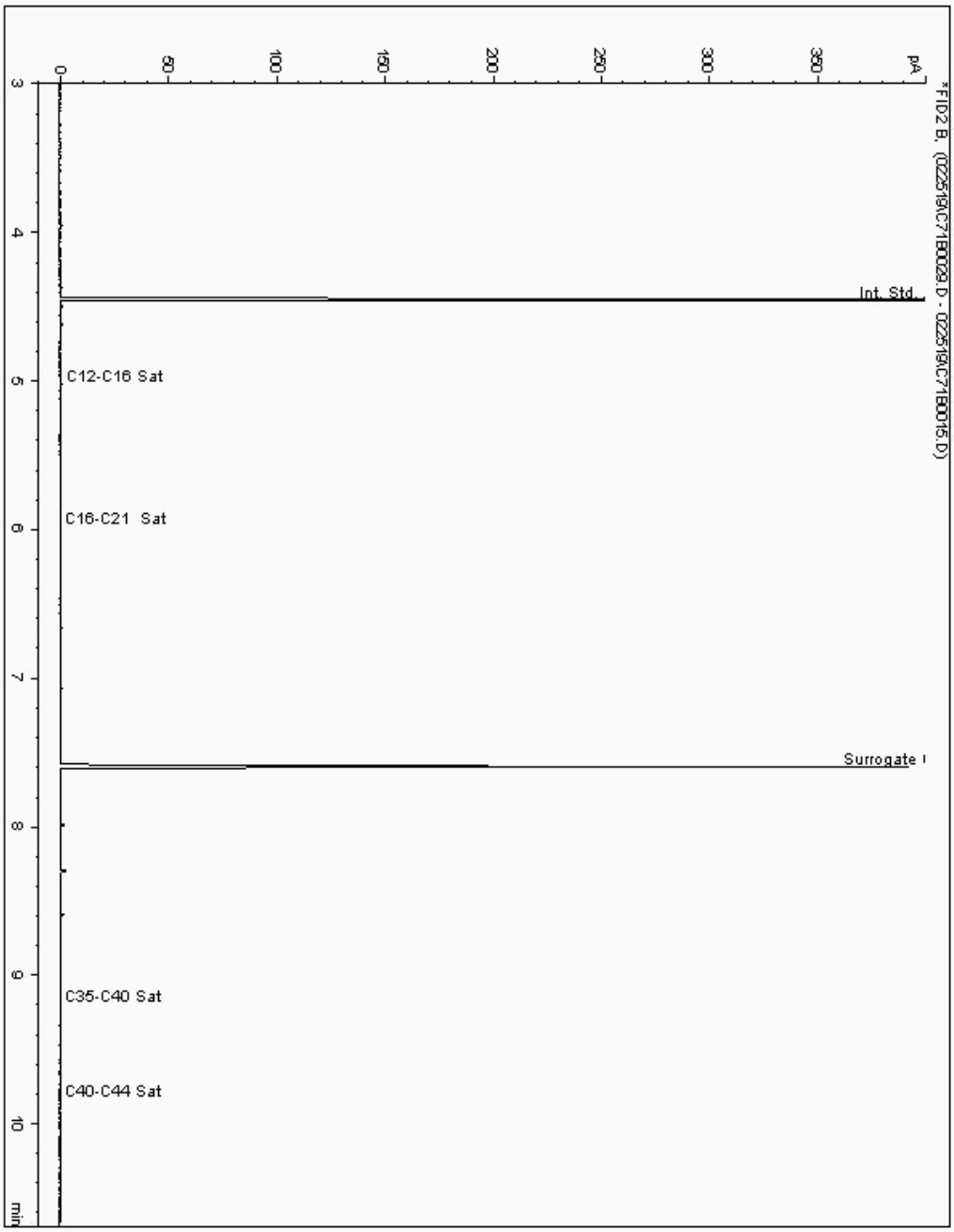
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19358303 **Depth :** 0.70
Sample ID : WS59

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180788-
Date Acquired : 25/02/2019 19:45:46 PM
Units : ppb
Dilution: WS59[0.70] ->



CERTIFICATE OF ANALYSIS

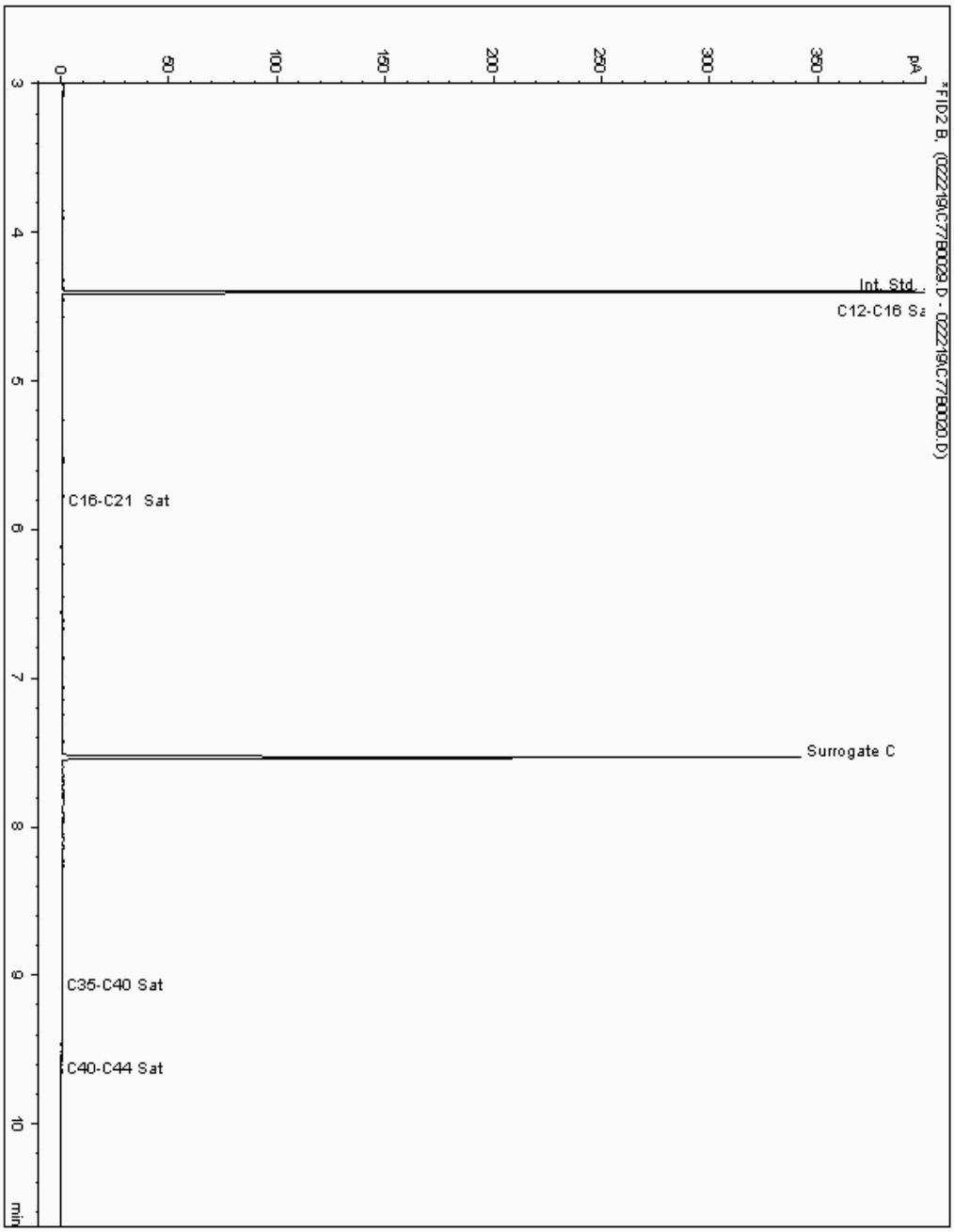
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19358526 **Depth :** 0.30
Sample ID : WS11

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18194618-
Date Acquired : 22/02/2019 18:51:25 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

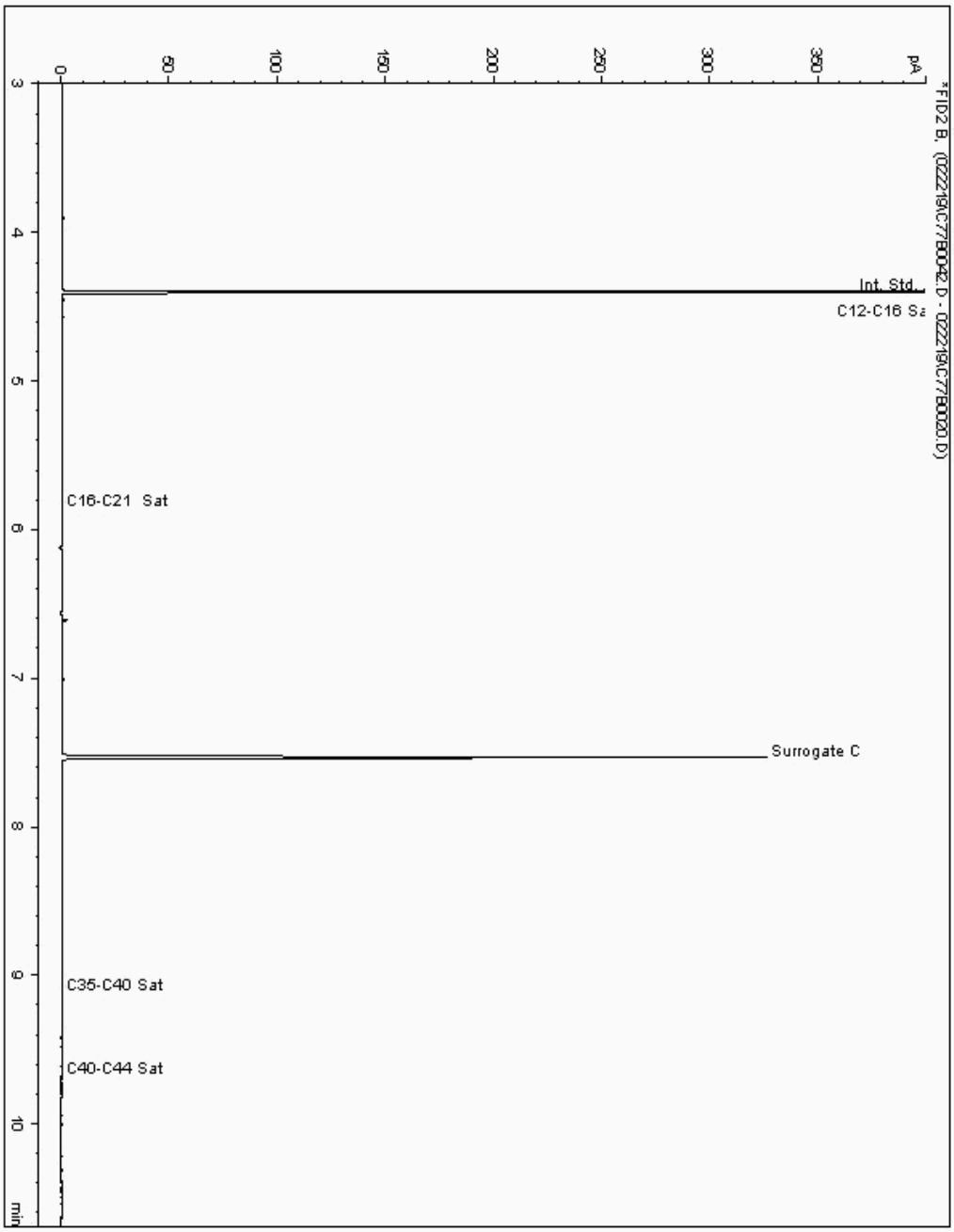
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19358797 **Depth :** 0.30
Sample ID : WS18

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18194647-
Date Acquired : 22/02/2019 22:47:39 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

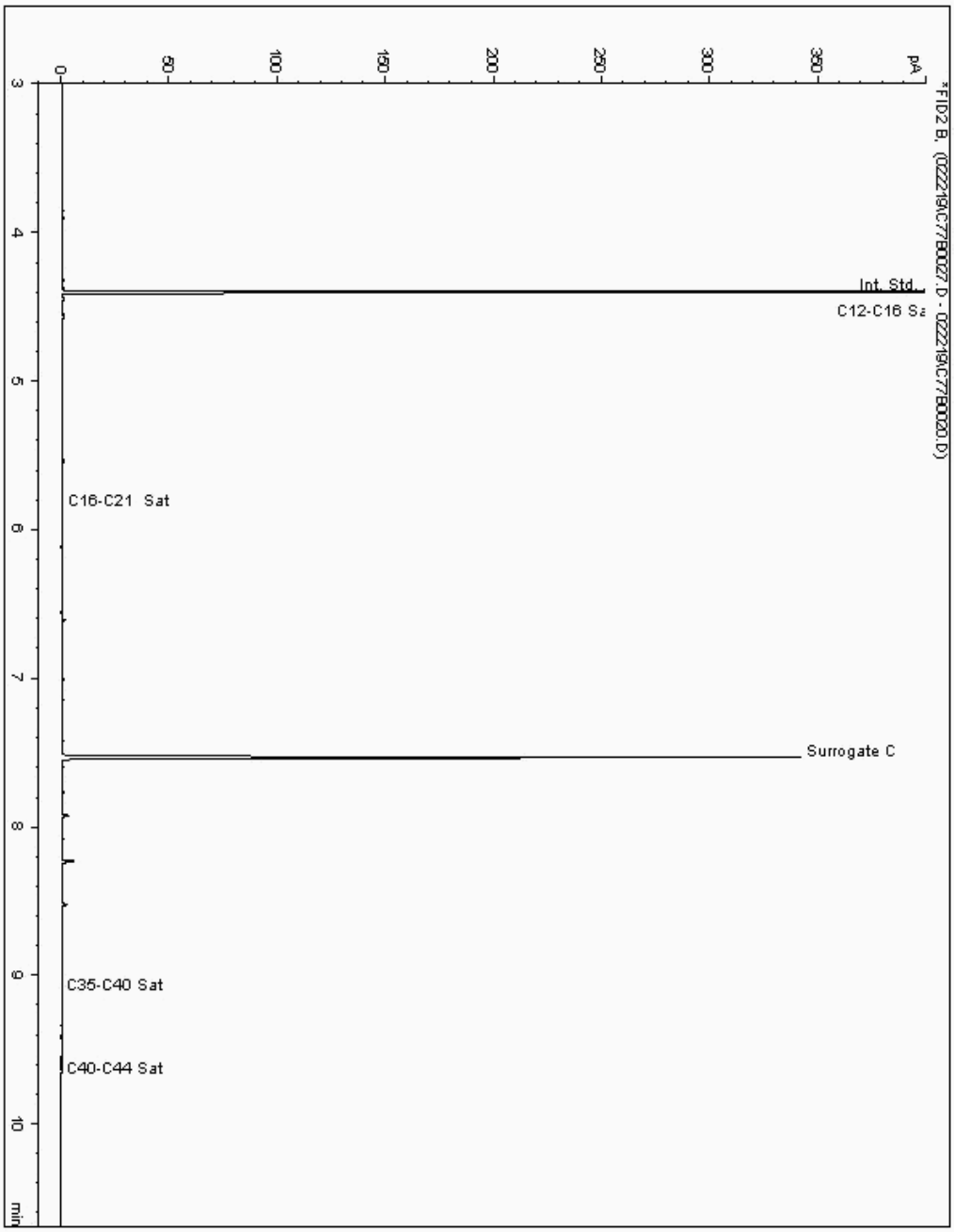
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19359039 **Depth :** 0.30
Sample ID : WS32

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18194551-
Date Acquired : 22/02/2019 18:11:26 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

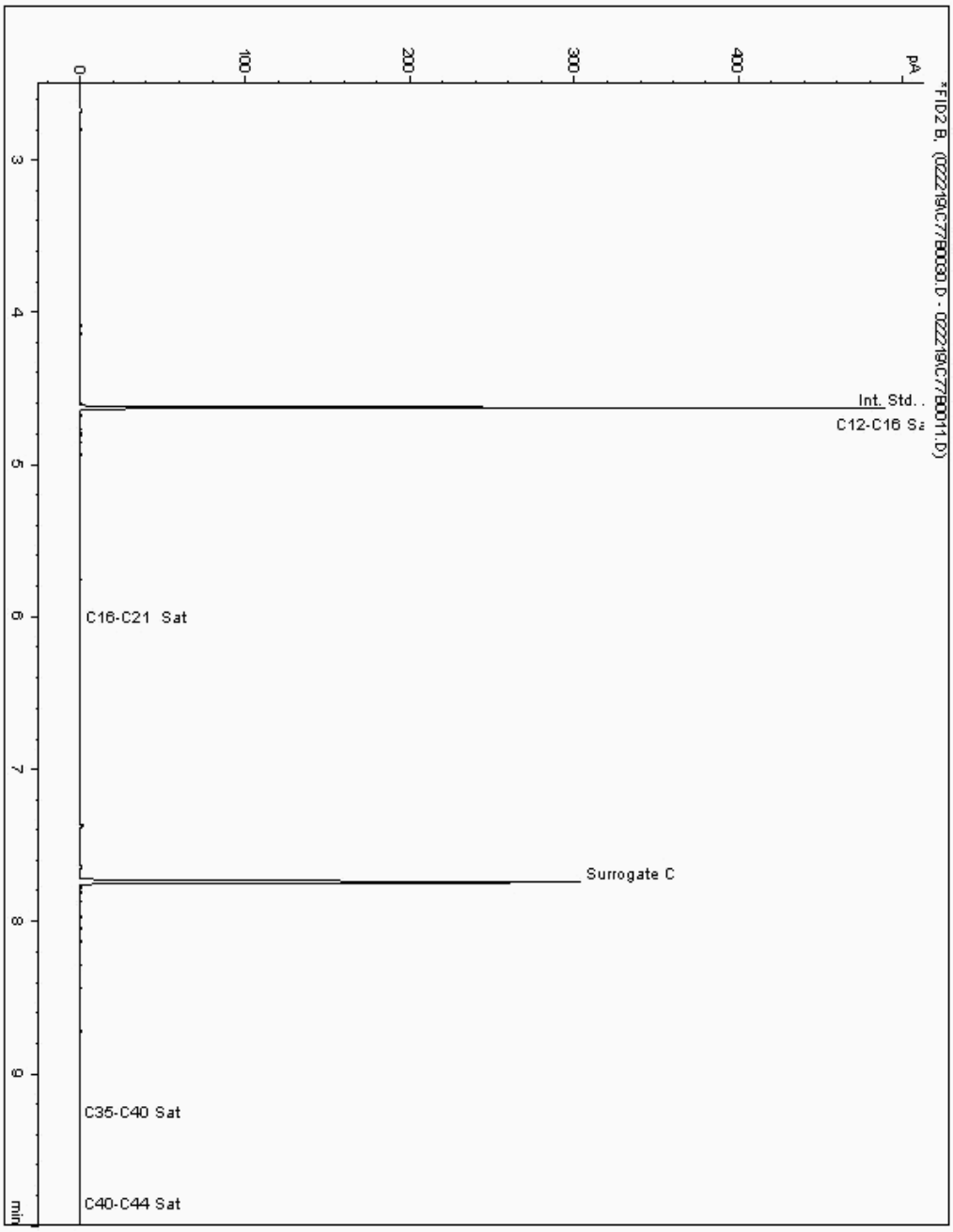
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19359201 **Depth :** 1.50
Sample ID : WS31

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18194521-
Date Acquired : 2/22/2019 6:31:02 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.990



CERTIFICATE OF ANALYSIS

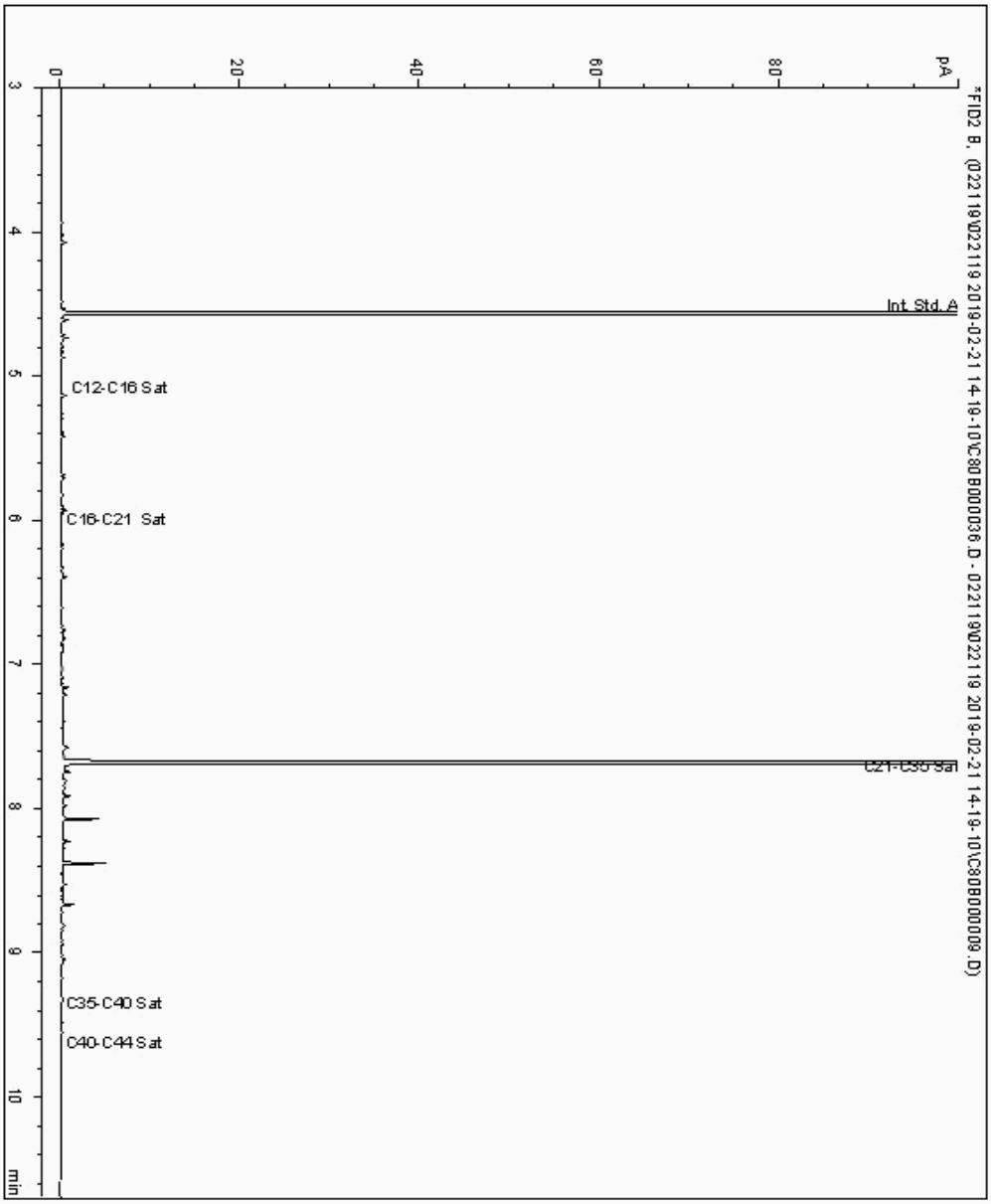
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19361397 **Depth :** 1.80
Sample ID : WS32

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18194581-
Date Acquired : 22/02/19 01:39:39
Units : ppb
Dilution :
CF : 1
Multiplier : 1.030



CERTIFICATE OF ANALYSIS

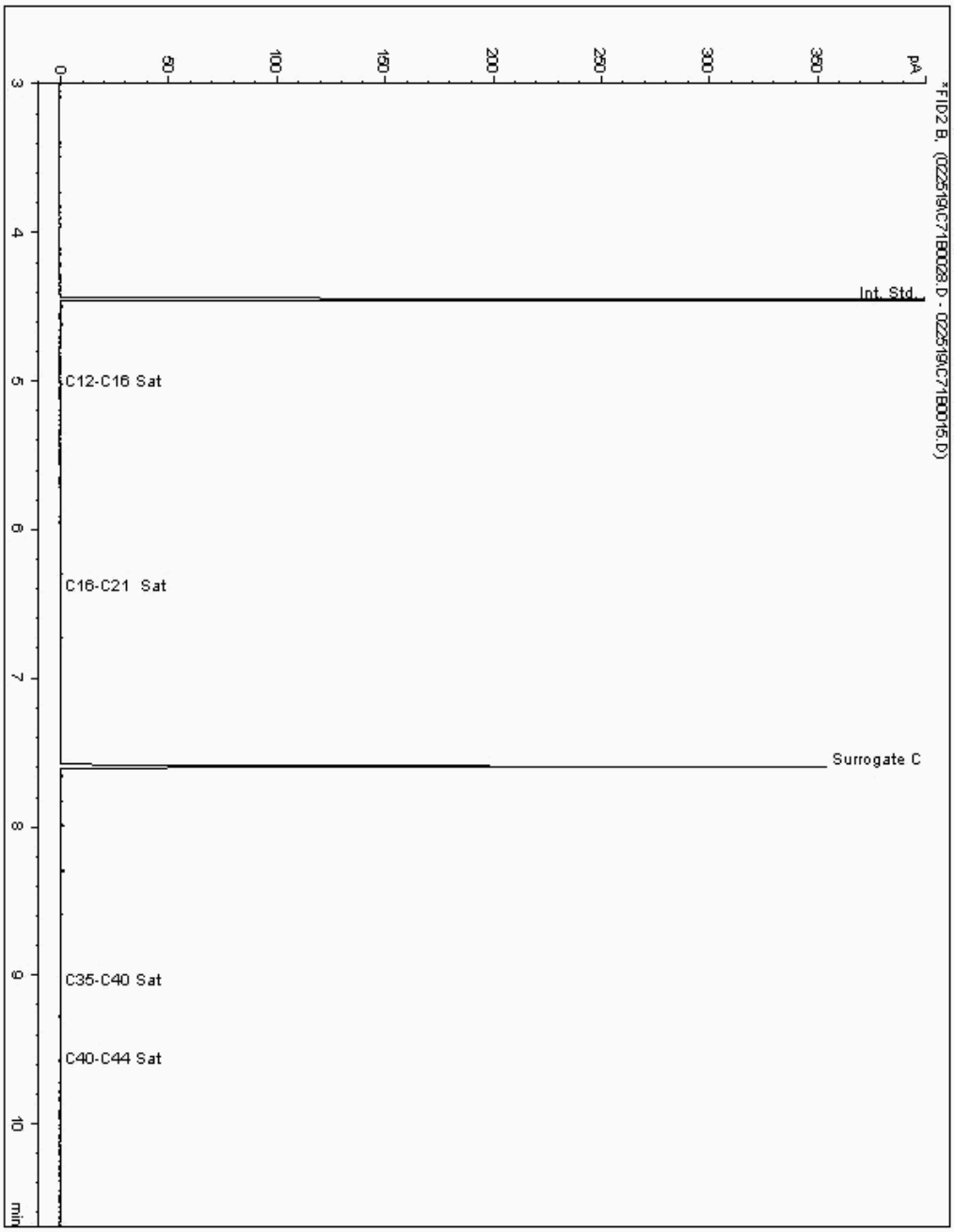
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19361545 **Depth :** 0.65
Sample ID : WS56A

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180402-
Date Acquired : 25/02/2019 19:25:43 PM
Units : ppb
Dilution: WS56A[0.65] ->



CERTIFICATE OF ANALYSIS

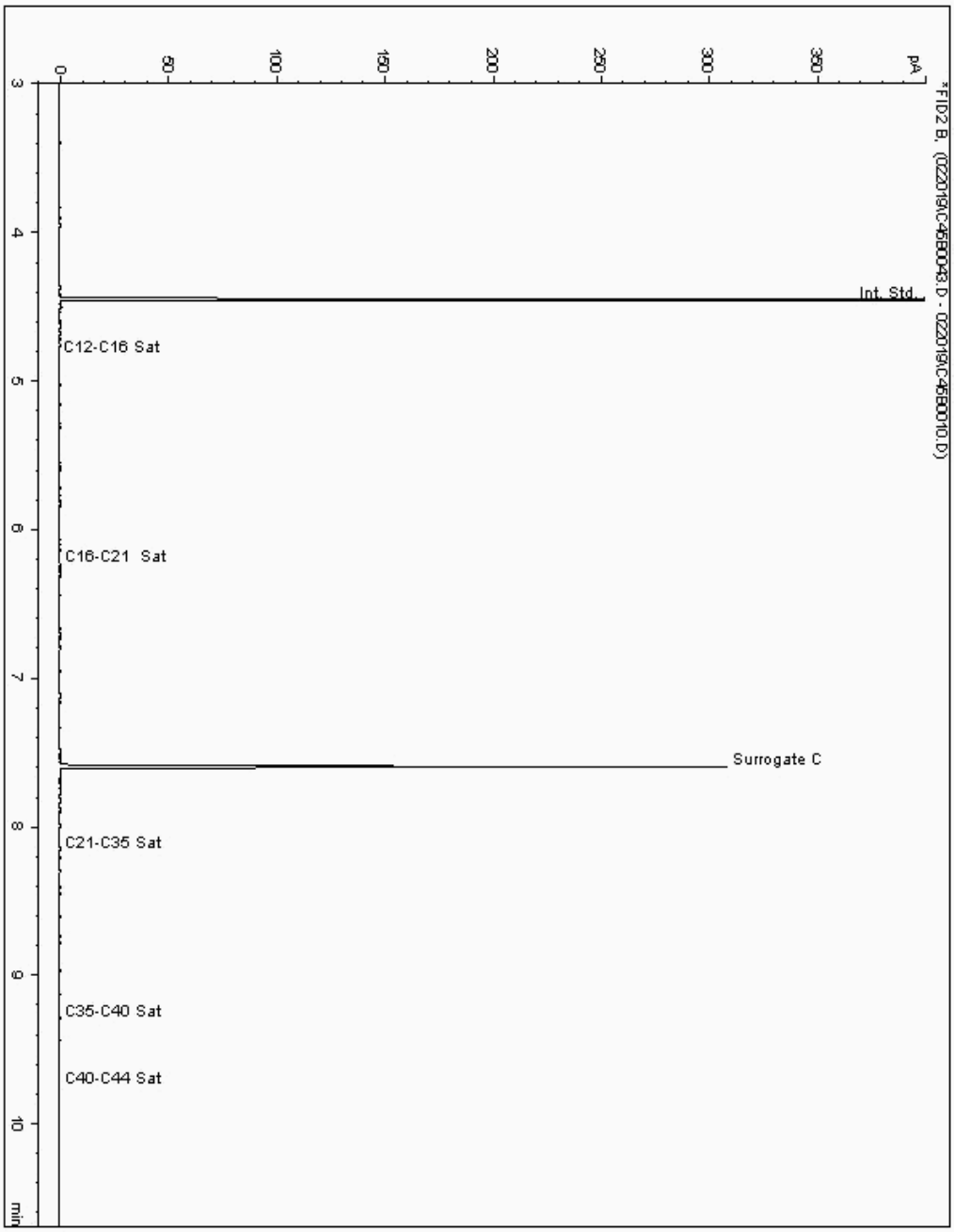
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19361730 **Depth :** 0.50
Sample ID : WS01

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180193-
Date Acquired : 21/02/2019 04:38:54 PM
Units : ppb
Dilution: WS01[0.50] ->



CERTIFICATE OF ANALYSIS

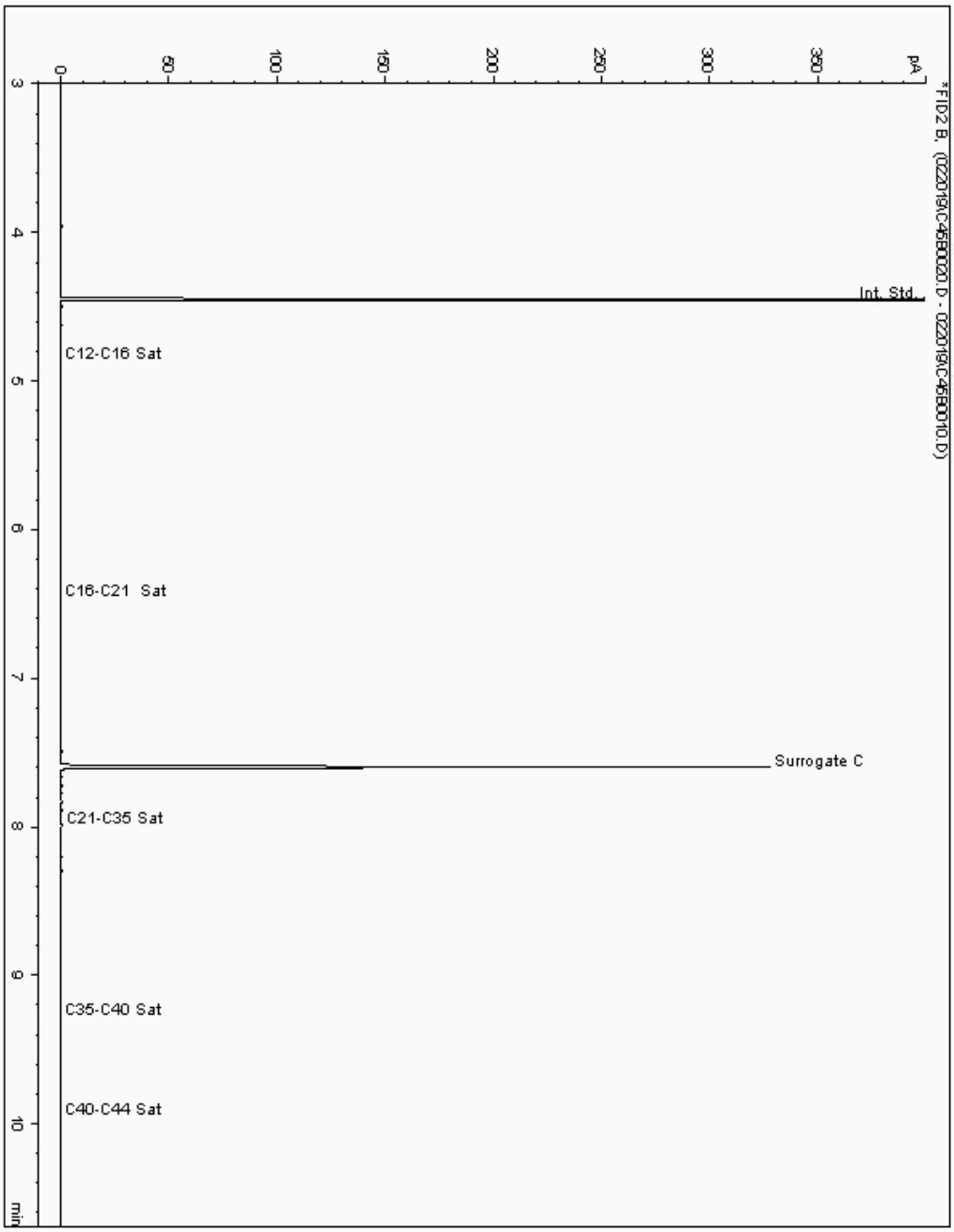
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19361874 **Depth :** 0.25
Sample ID : WS06

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180621-
Date Acquired : 20/02/2019 22:14:04 PM
Units : ppb
Dilution: WS06[0.25] ->



CERTIFICATE OF ANALYSIS

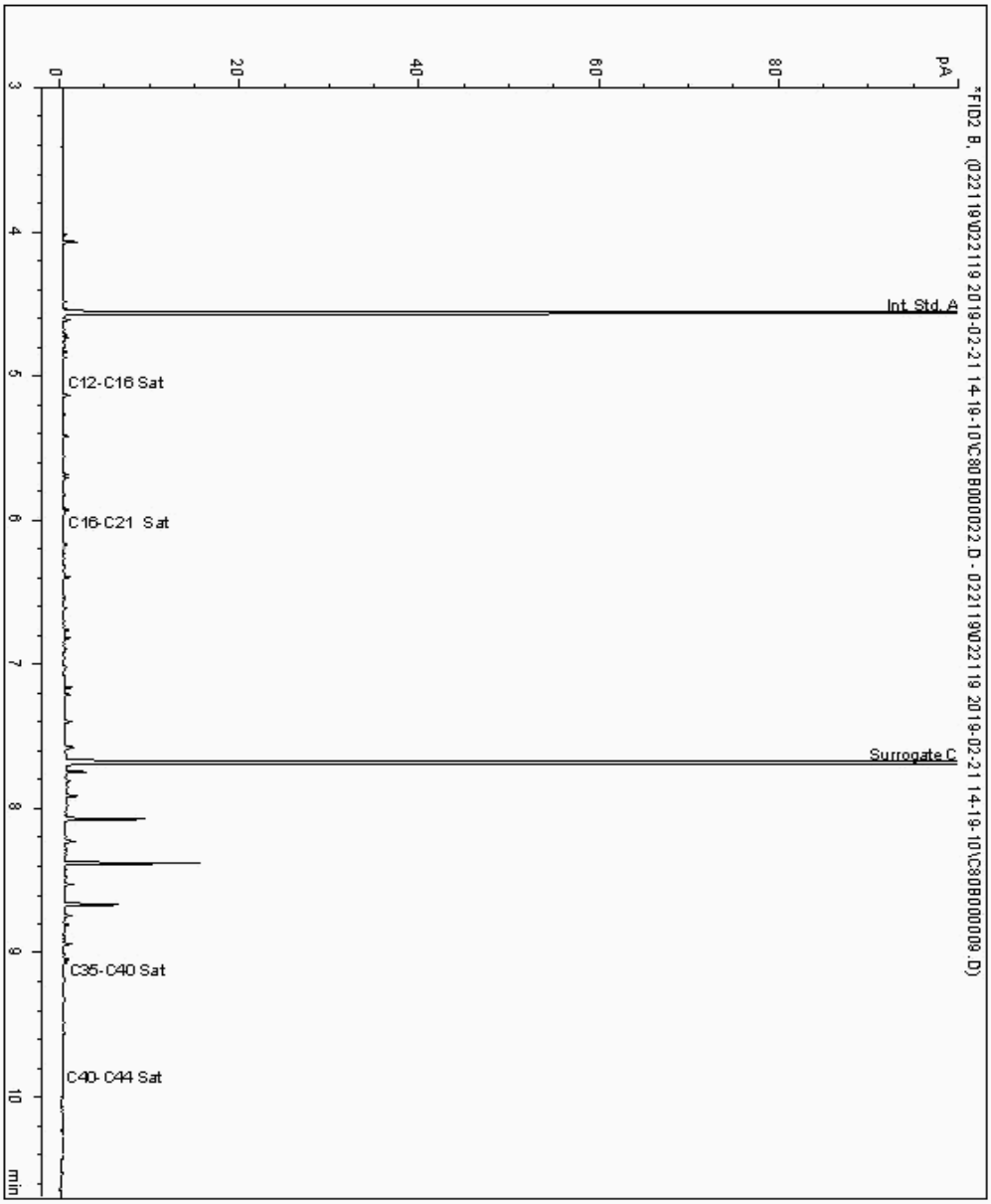
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19362027 **Sample ID :** WS56A **Depth :** 0.10

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18180298-
Date Acquired : 21/02/19 21:38:33
Units : ppb
Dilution :
CF : 1
Multiplier : 1.030



CERTIFICATE OF ANALYSIS

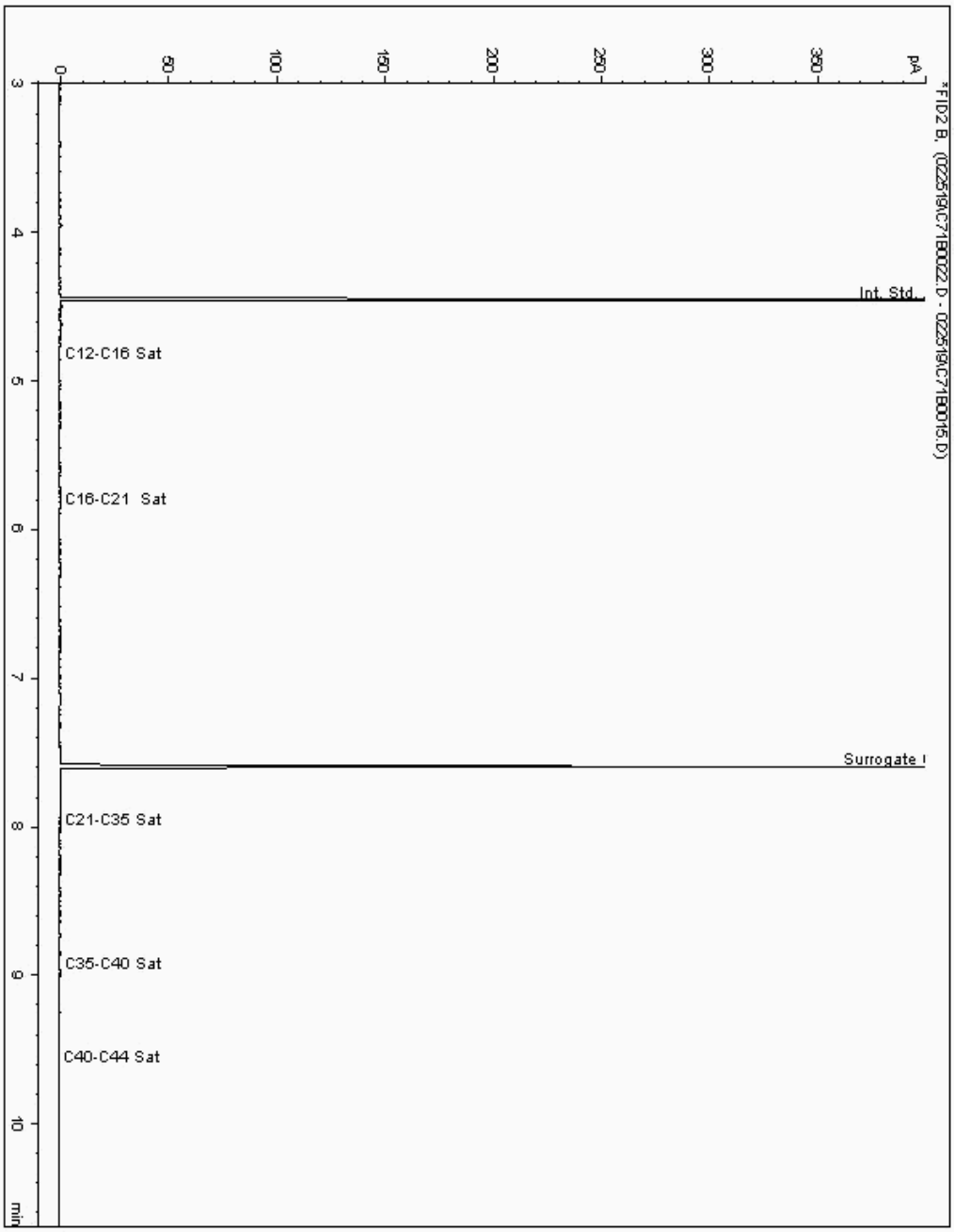
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19362179 **Depth :** 0.35
Sample ID : WS04

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180596-
Date Acquired : 25/02/2019 17:25:12 PM
Units : ppb
Dilution: WS04[0.35] ->



CERTIFICATE OF ANALYSIS

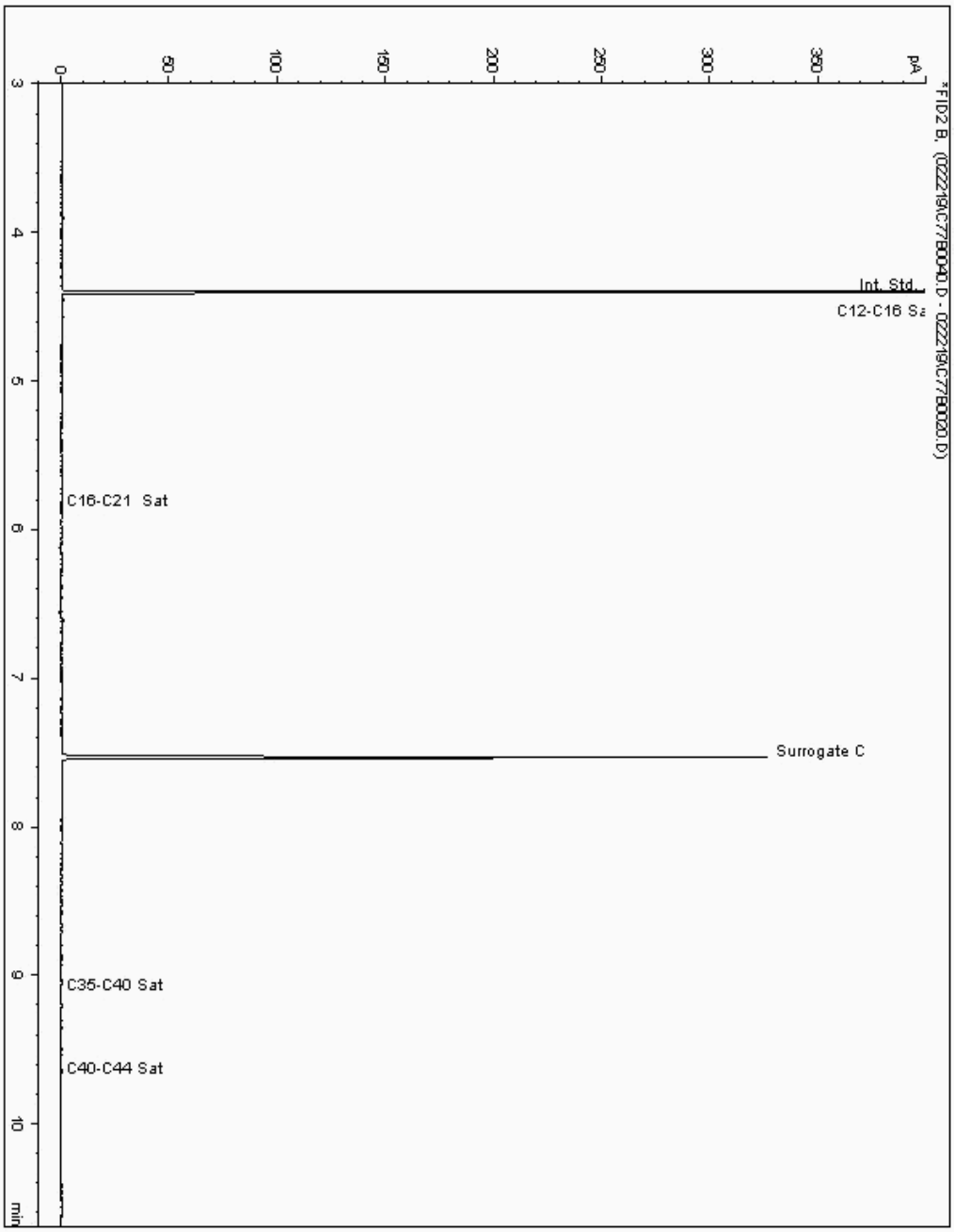
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19362279 **Depth :** 0.30
Sample ID : WS03

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18194461-
Date Acquired : 22/02/2019 22:07:39 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

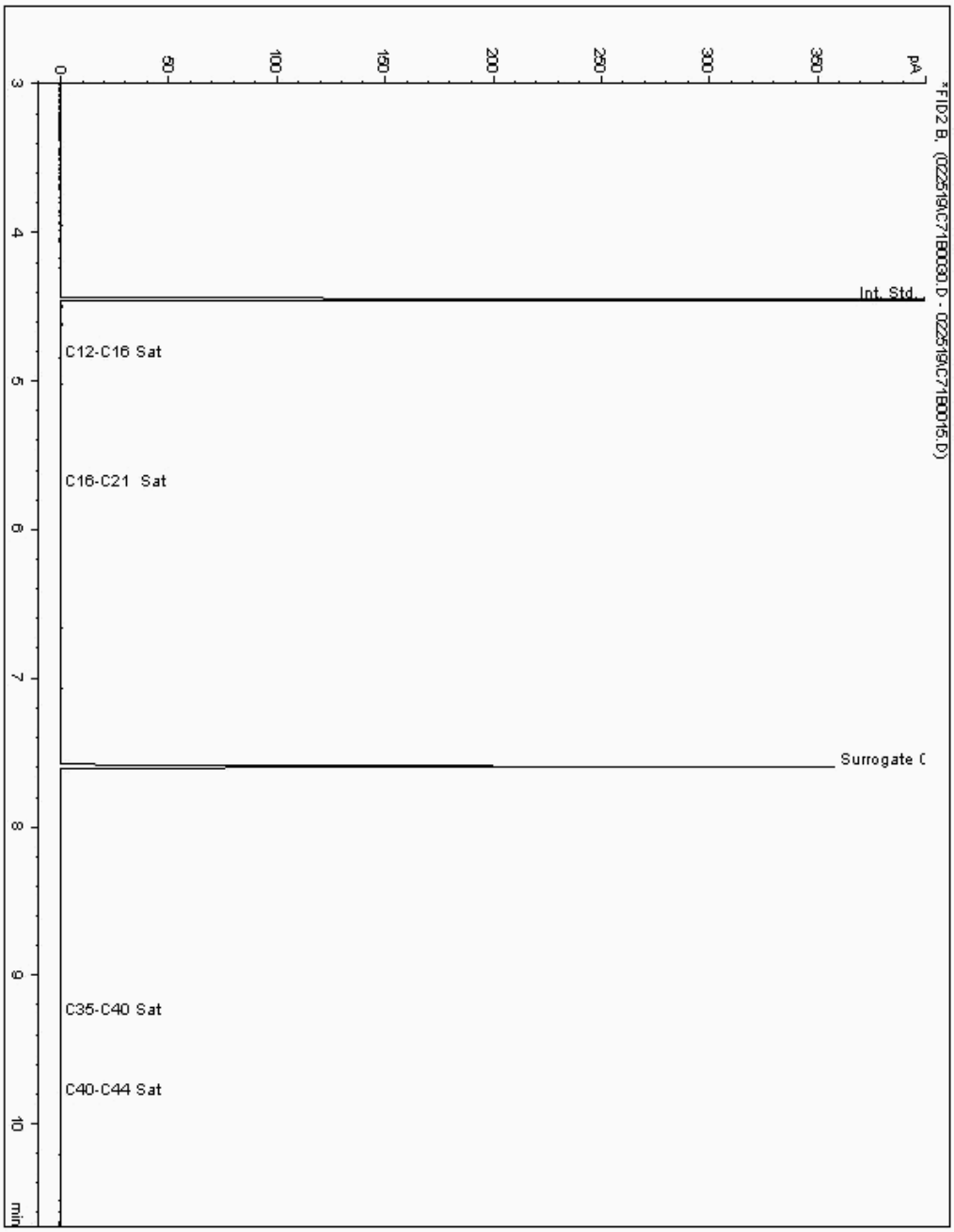
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19362352 **Depth :** 0.25
Sample ID : WS04

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180571-
Date Acquired : 25/02/2019 20:05:53 PM
Units : ppb
Dilution: WS04[0.25] ->



CERTIFICATE OF ANALYSIS

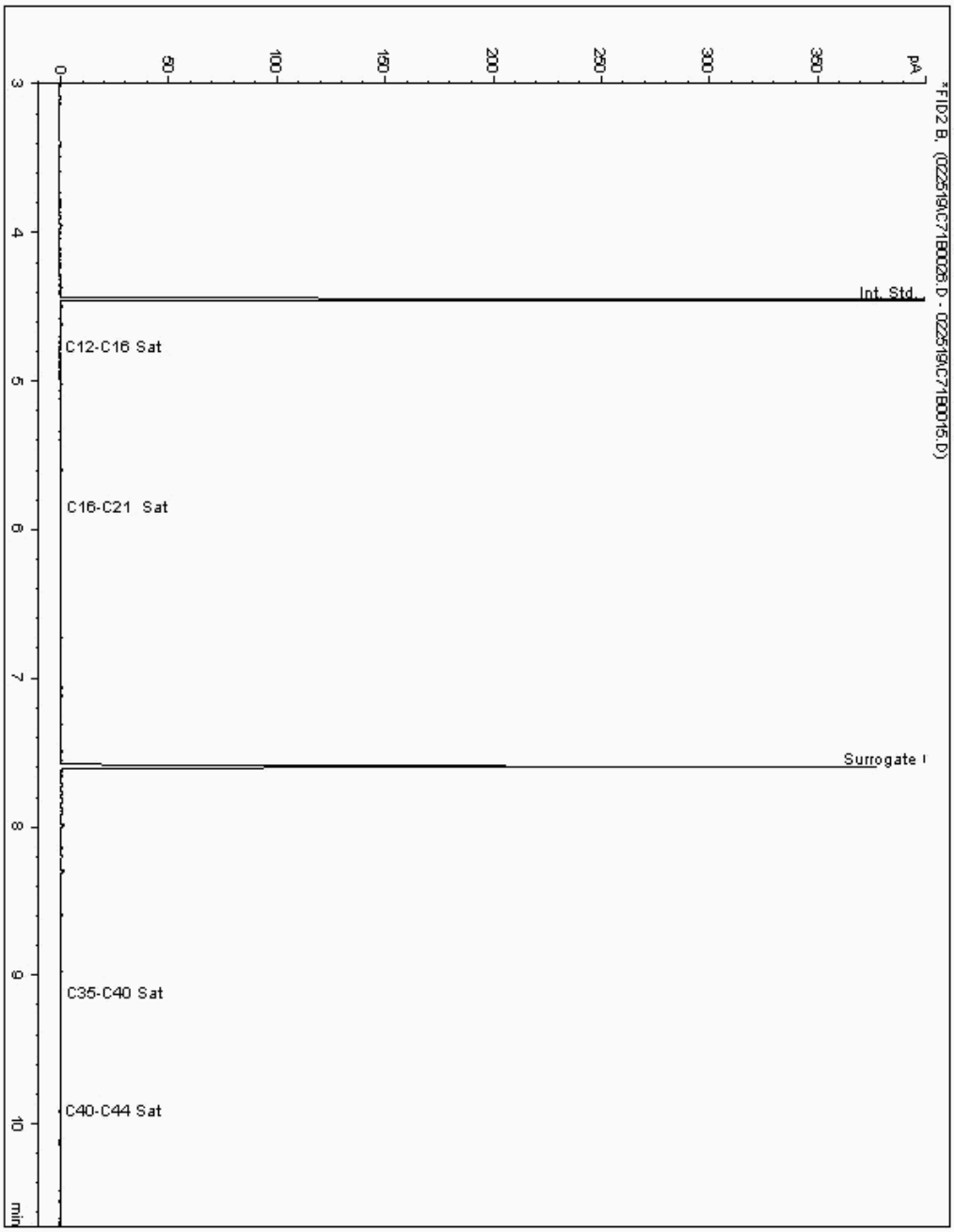
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19362456 **Depth :** 0.30
Sample ID : WS58A

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180463-
Date Acquired : 25/02/2019 18:45:25 PM
Units : ppb
Dilution: WS58A[0.30] ->



CERTIFICATE OF ANALYSIS

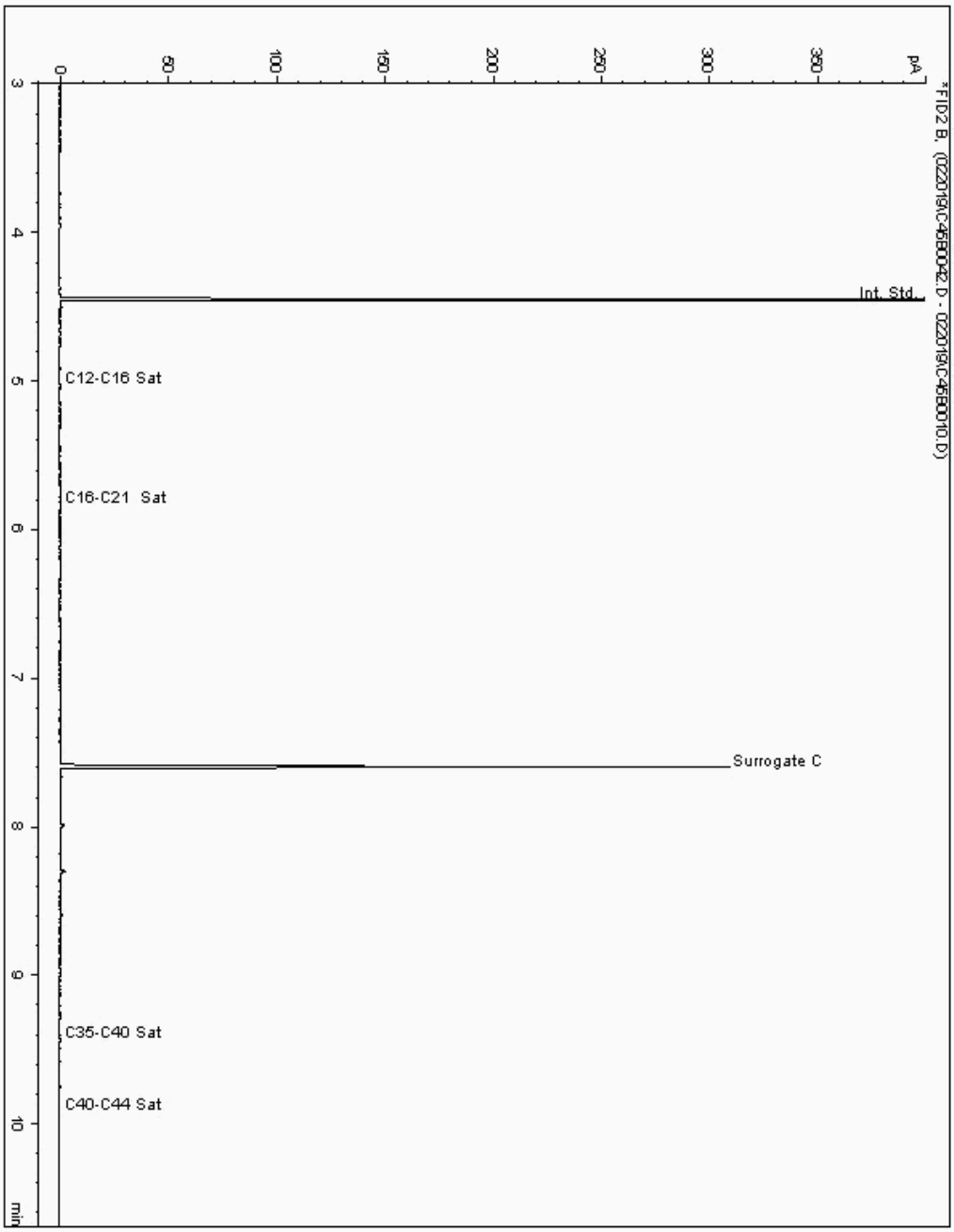
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19362516 **Depth :** 0.10
Sample ID : WS58A

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180436-
Date Acquired : 21/02/2019 04:18:26 PM
Units : ppb
Dilution: WS58A[0.10] ->



CERTIFICATE OF ANALYSIS

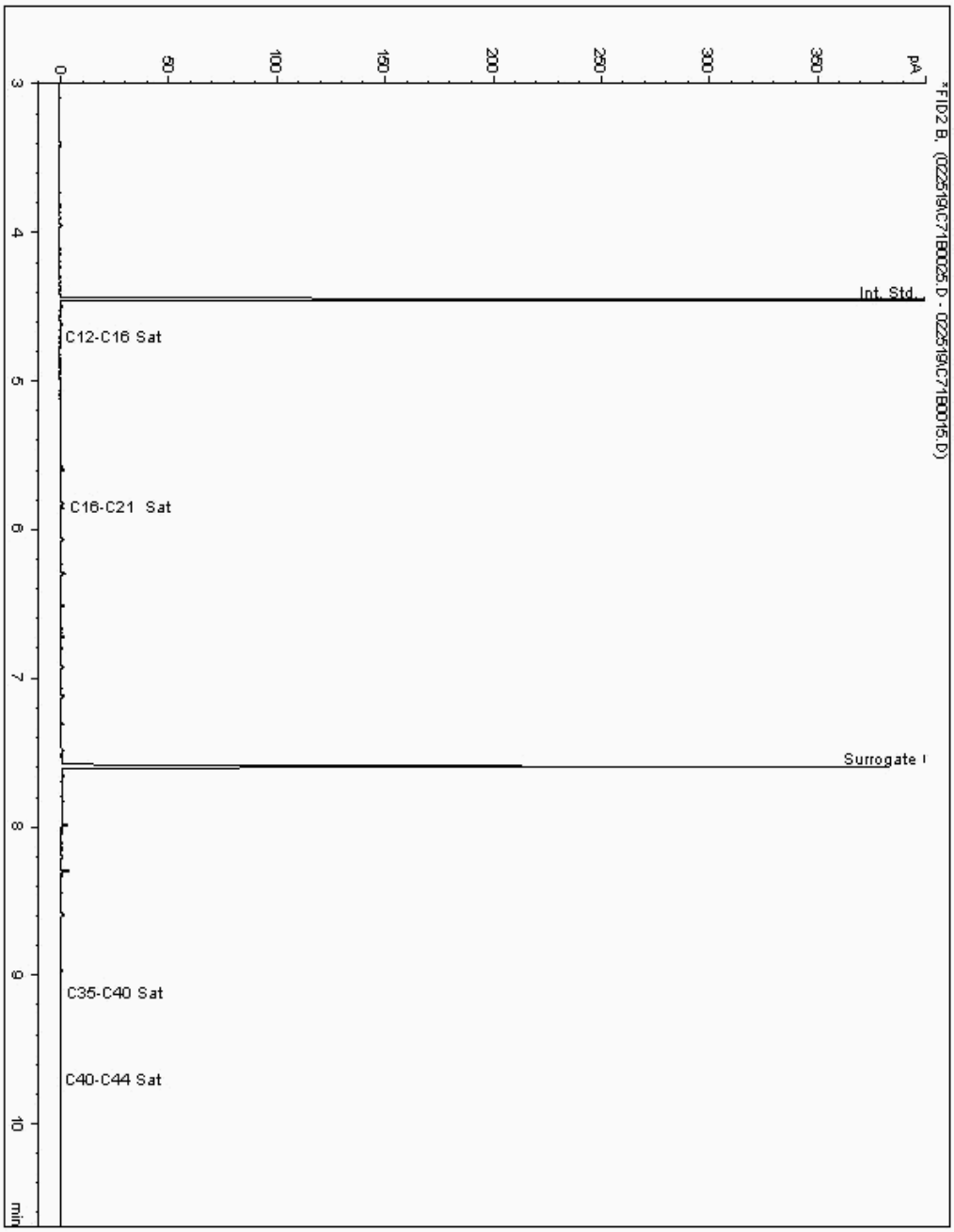
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19362582 **Depth :** 0.25
Sample ID : WS56

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180368-
Date Acquired : 25/02/2019 18:25:25 PM
Units : ppb
Dilution: WS56[0.25] ->



CERTIFICATE OF ANALYSIS

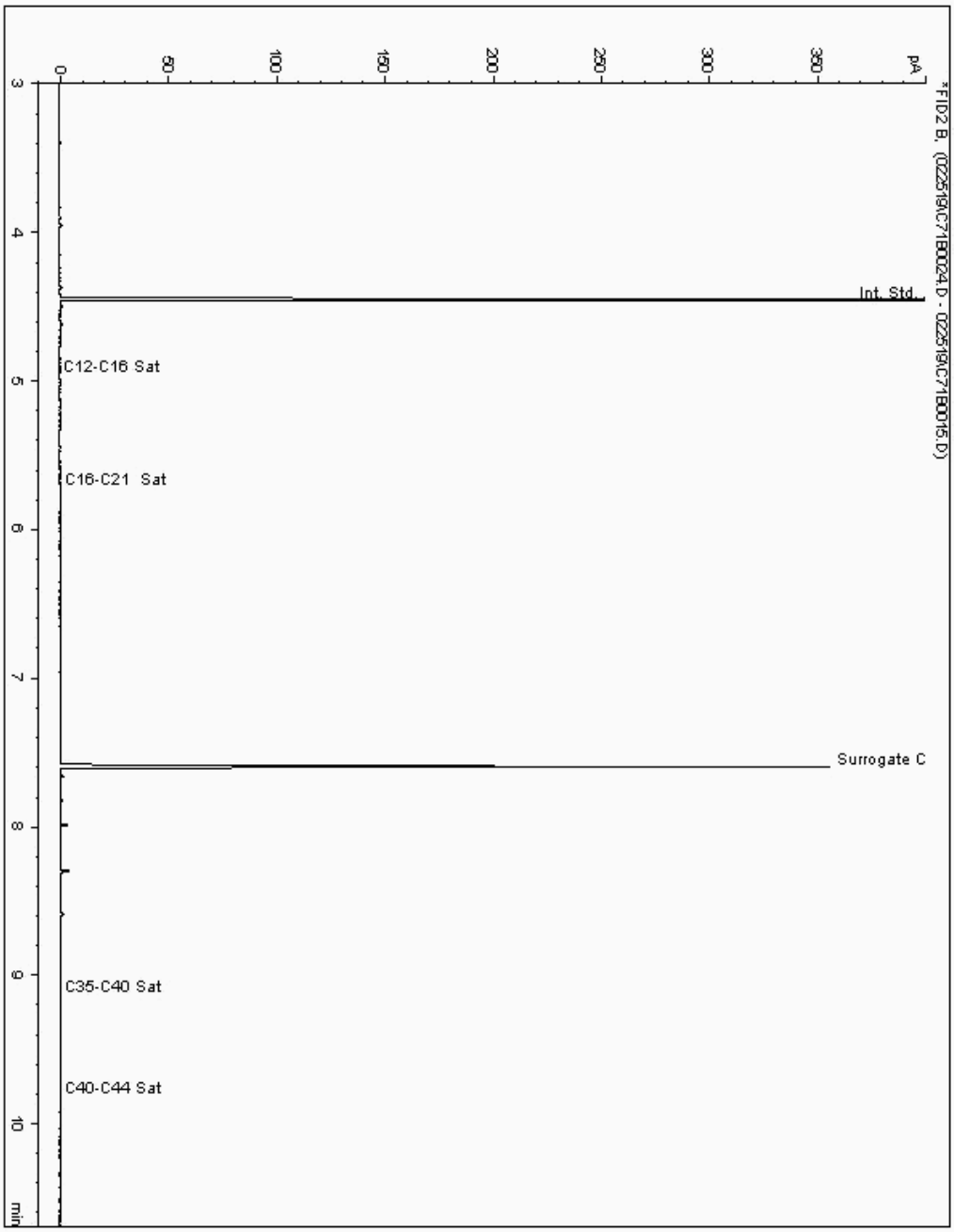
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19362627 **Depth :** 0.10
Sample ID : WS59

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180489-
Date Acquired : 25/02/2019 18:05:10 PM
Units : ppb
Dilution: WS59[0.10] ->



CERTIFICATE OF ANALYSIS

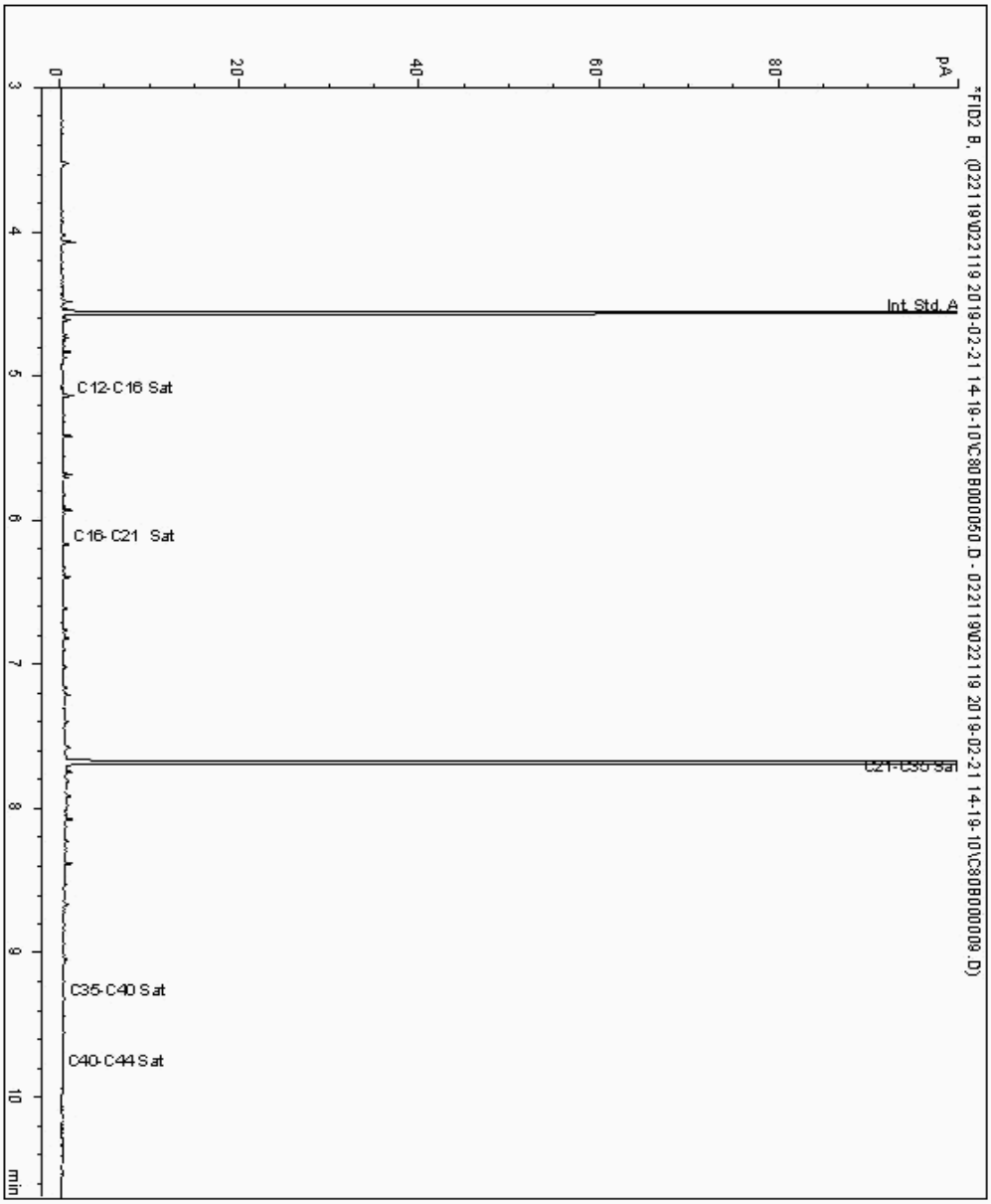
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19362870 **Depth :** 0.10
Sample ID : WS03

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18194433-
Date Acquired : 22/02/19 05:38:25
Units : ppb
Dilution :
CF : 1
Multiplier : 1.010



CERTIFICATE OF ANALYSIS

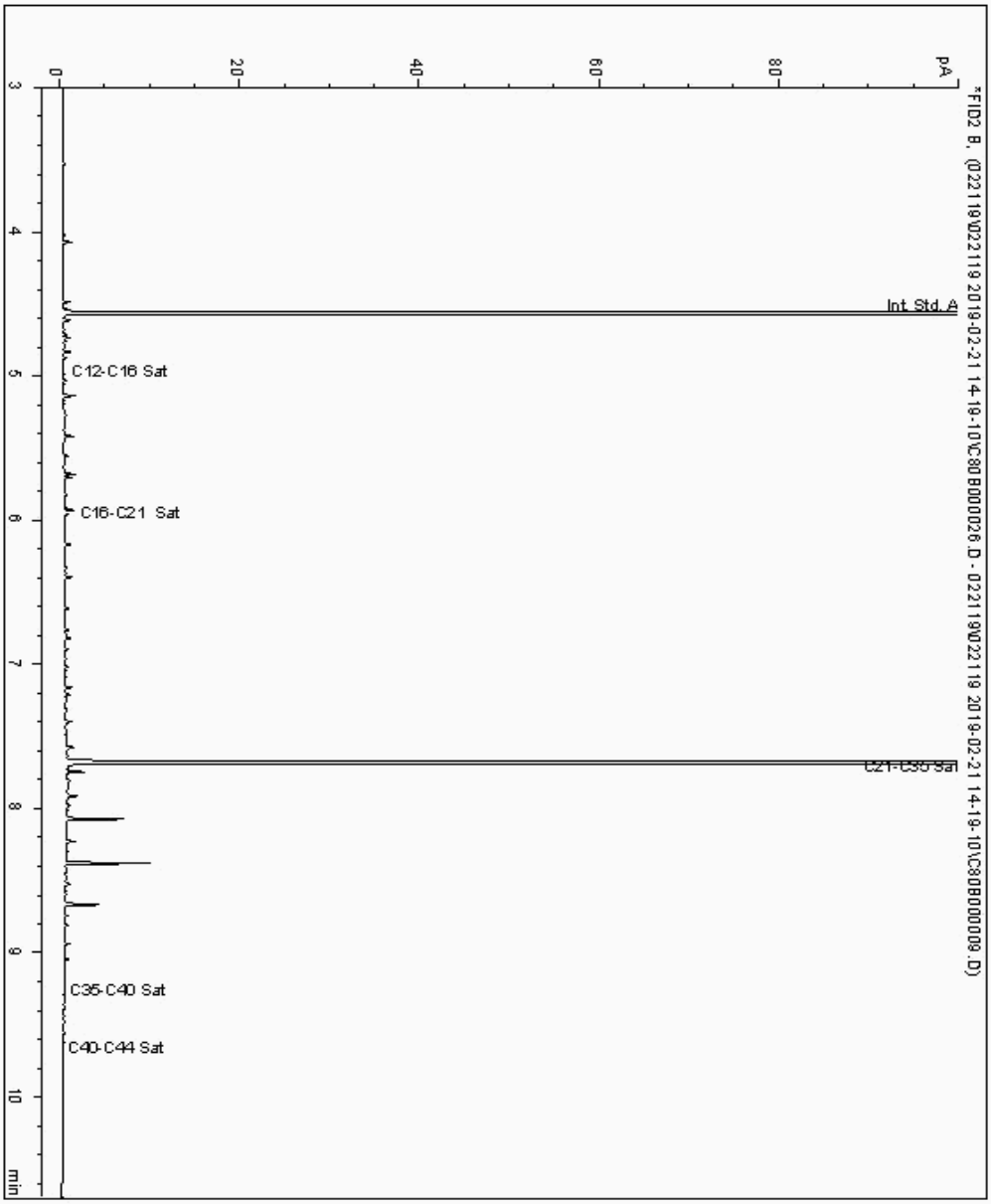
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19362952 **Depth :** 0.10
Sample ID : WS31

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18194494-
Date Acquired : 21/02/19 22:42:55
Units : ppb
Dilution :
CF : 1
Multiplier : 0.960



CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

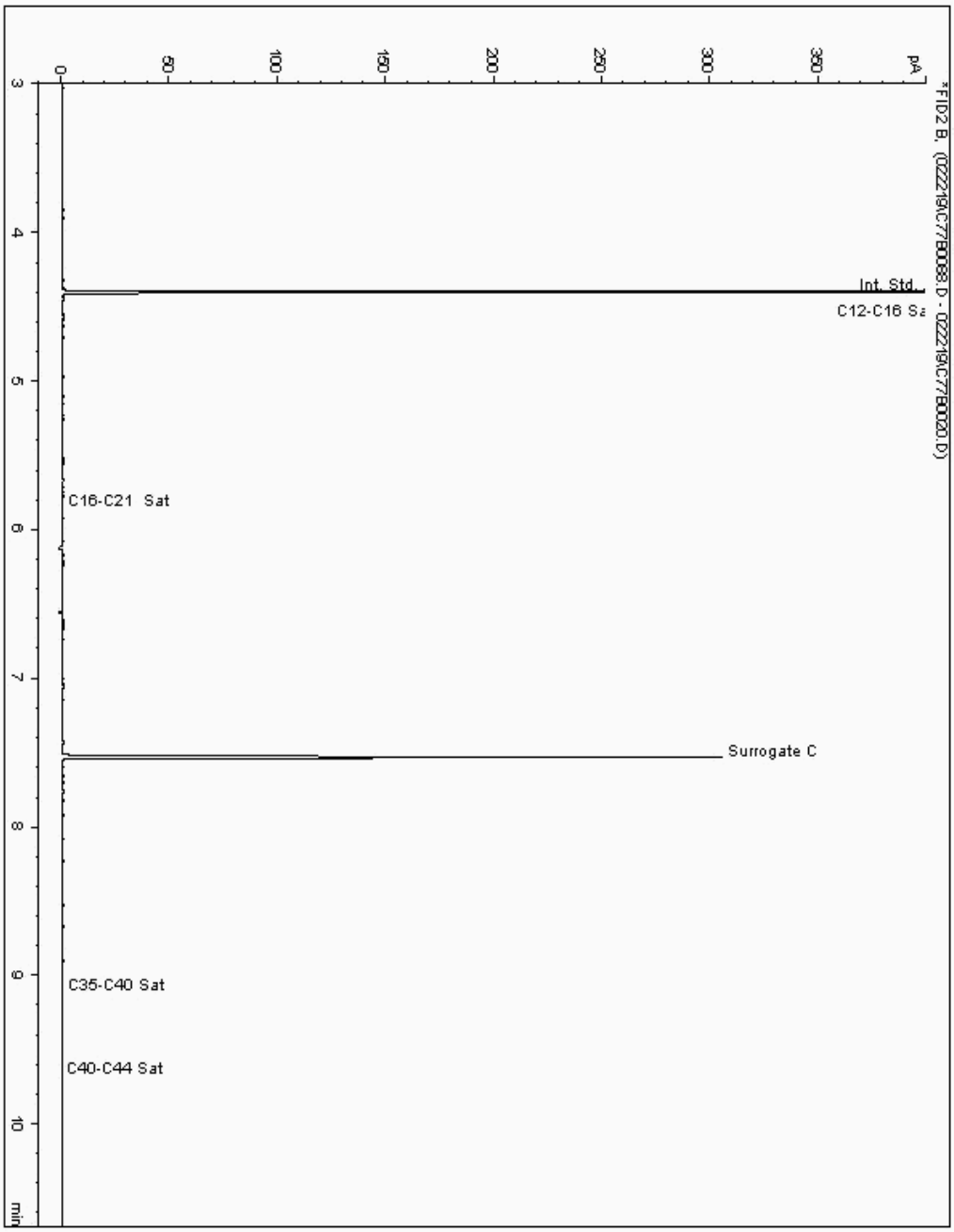
Analysis: EPH CWG (Aliphatic) GC (S)

Sample No : 19417916
Sample ID : WS02

Depth : 0.30

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18246114-
Date Acquired : 25/02/2019 19:33:51 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

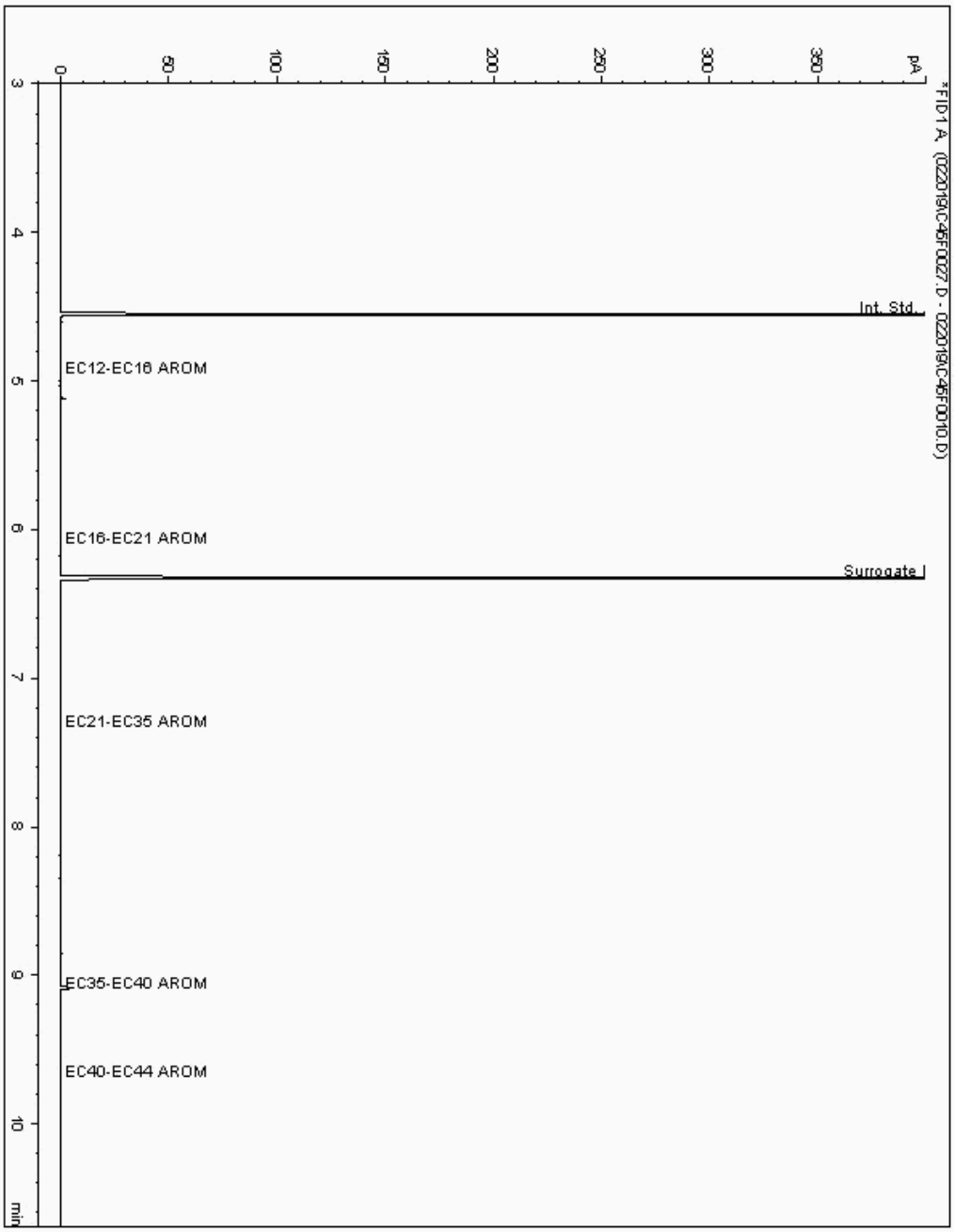
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19356386 **Depth :** 0.55
Sample ID : WS05

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180545-
Date Acquired : 21/02/2019 00:02:47 PM
Units : ppb
Dilution: WS05[0.55] ->



CERTIFICATE OF ANALYSIS

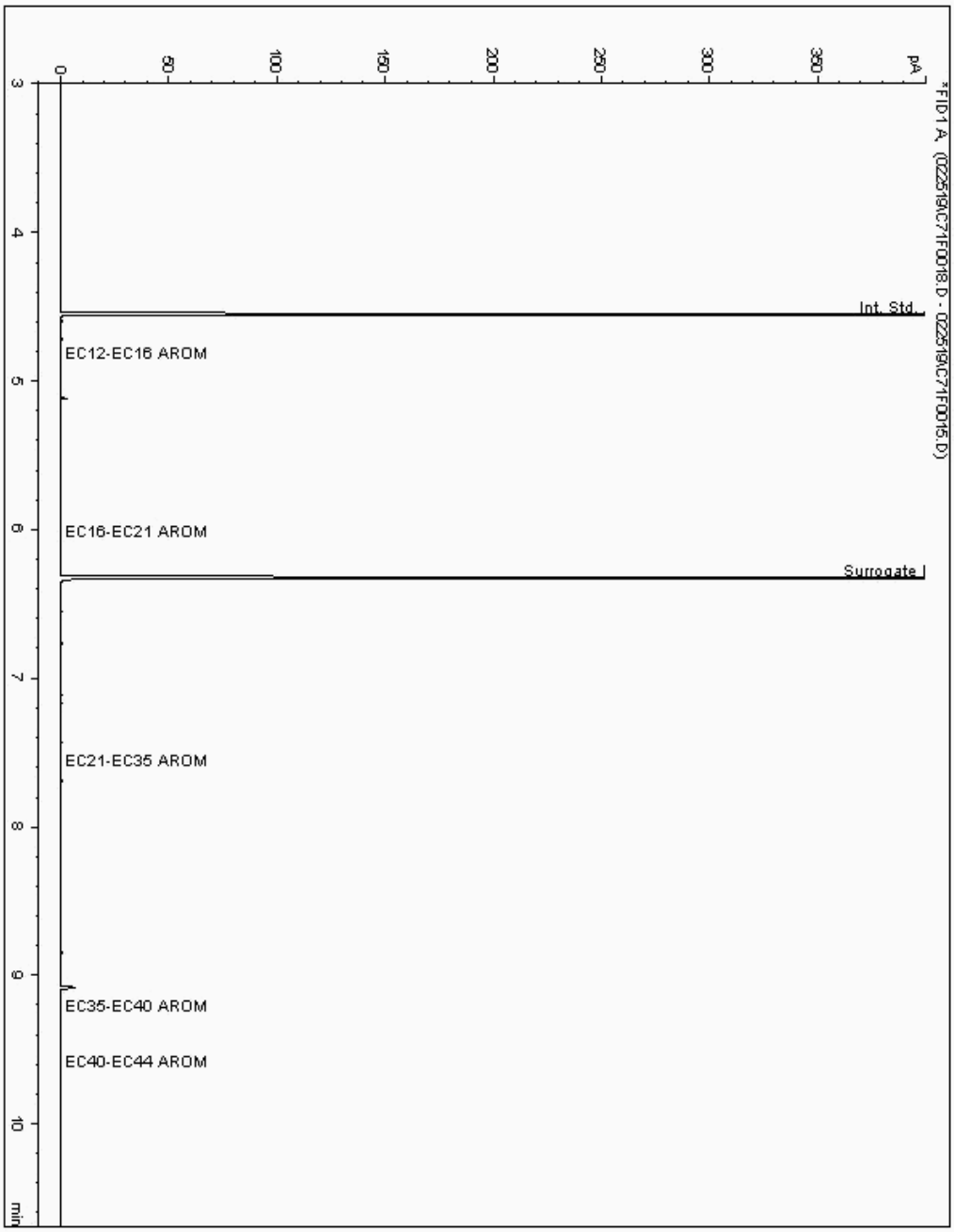
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19357146 **Depth :** 0.20
Sample ID : WS05

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180515-
Date Acquired : 25/02/2019 16:04:31 PM
Units : ppb
Dilution: WS05[0.20] ->



CERTIFICATE OF ANALYSIS

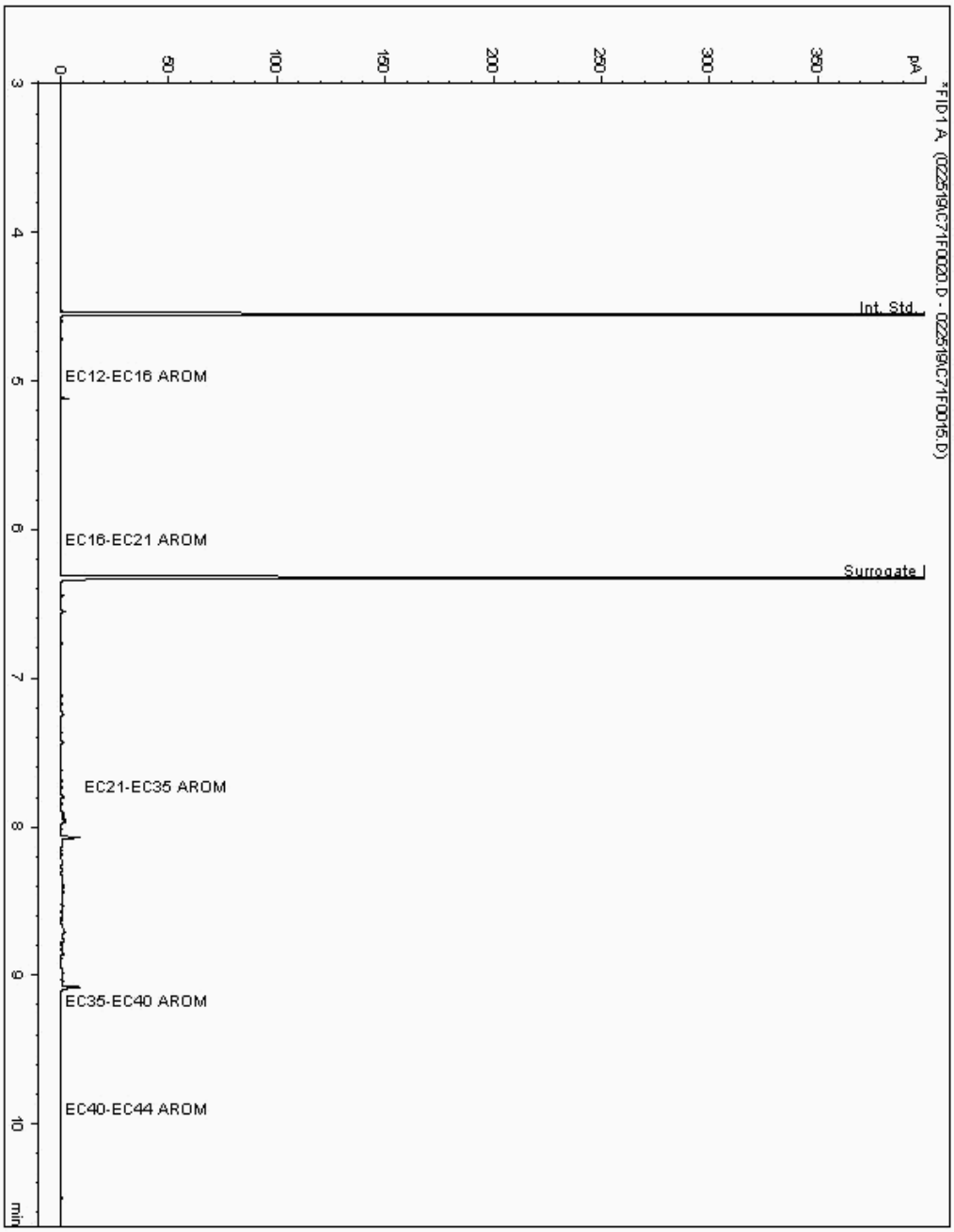
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19357358 **Depth :** 0.10
Sample ID : WS56

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180262-
Date Acquired : 25/02/2019 16:44:52 PM
Units : ppb
Dilution: WS56[0.10] ->



CERTIFICATE OF ANALYSIS

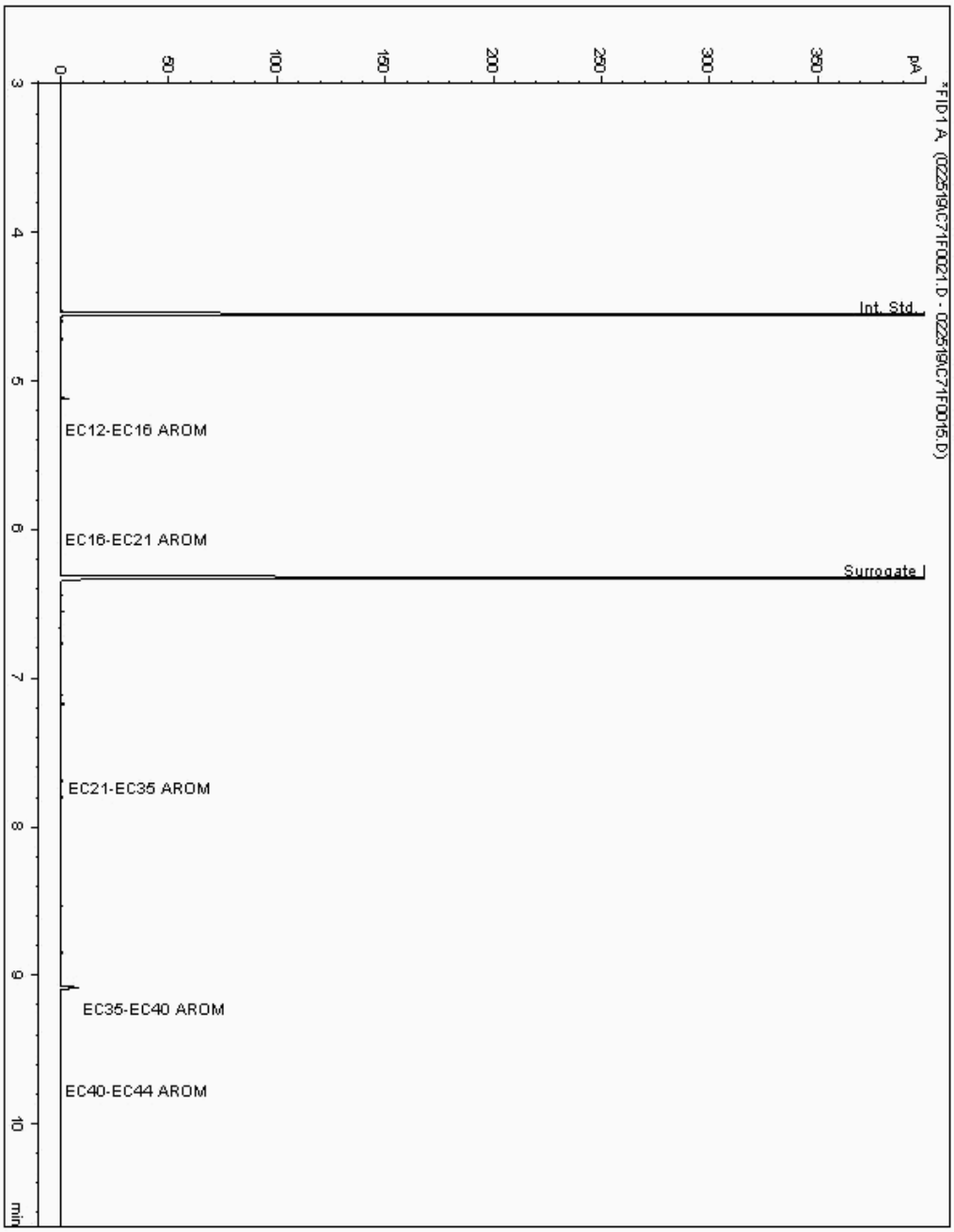
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19357653 **Depth :** 0.30
Sample ID : WS55

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180230-
Date Acquired : 25/02/2019 17:04:57 PM
Units : ppb
Dilution: WS55[0.30] ->



CERTIFICATE OF ANALYSIS

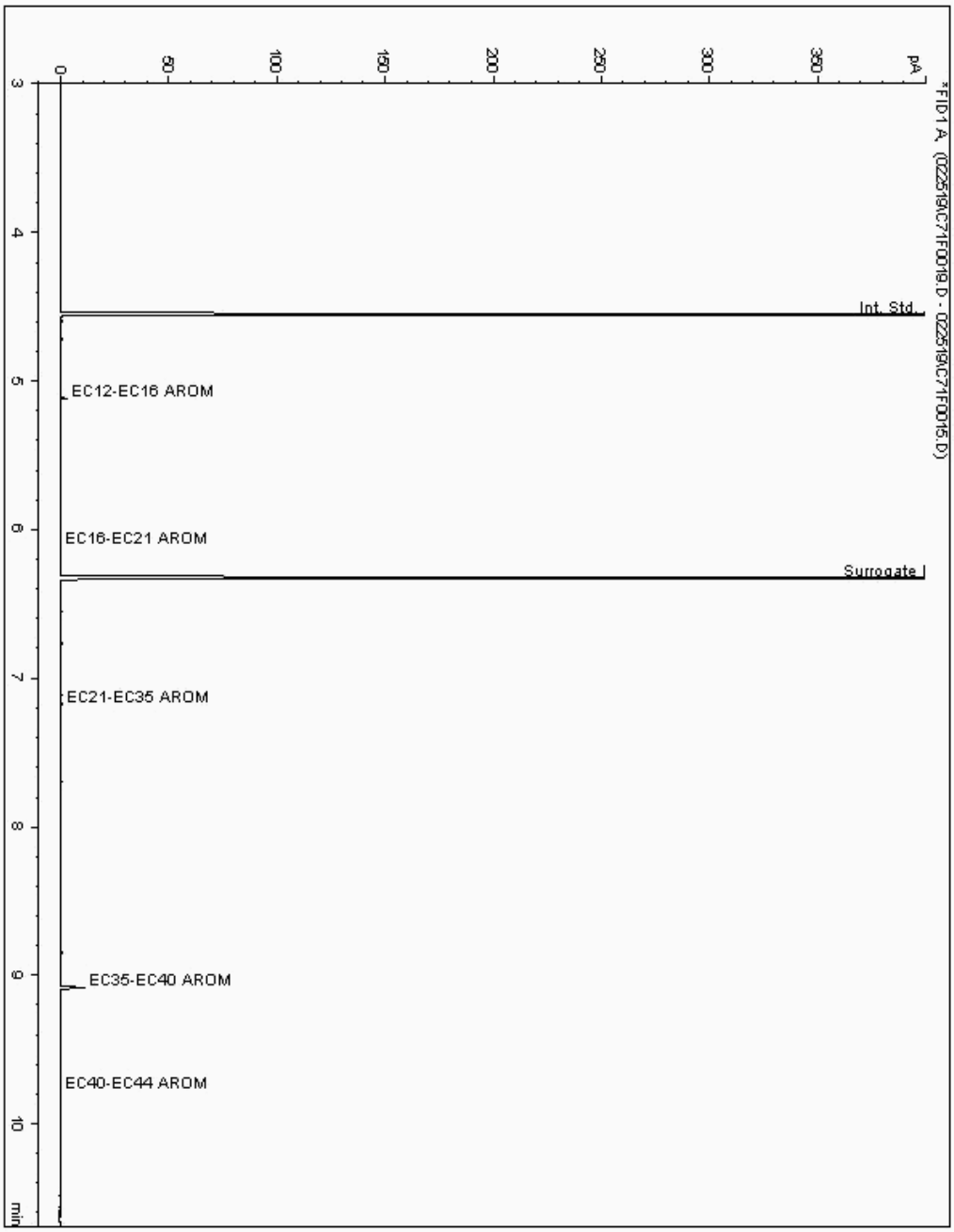
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19357888 **Depth :** 0.35
Sample ID : WS06

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18182014-
Date Acquired : 25/02/2019 16:24:48 PM
Units : ppb
Dilution: WS06[0.35] ->



CERTIFICATE OF ANALYSIS

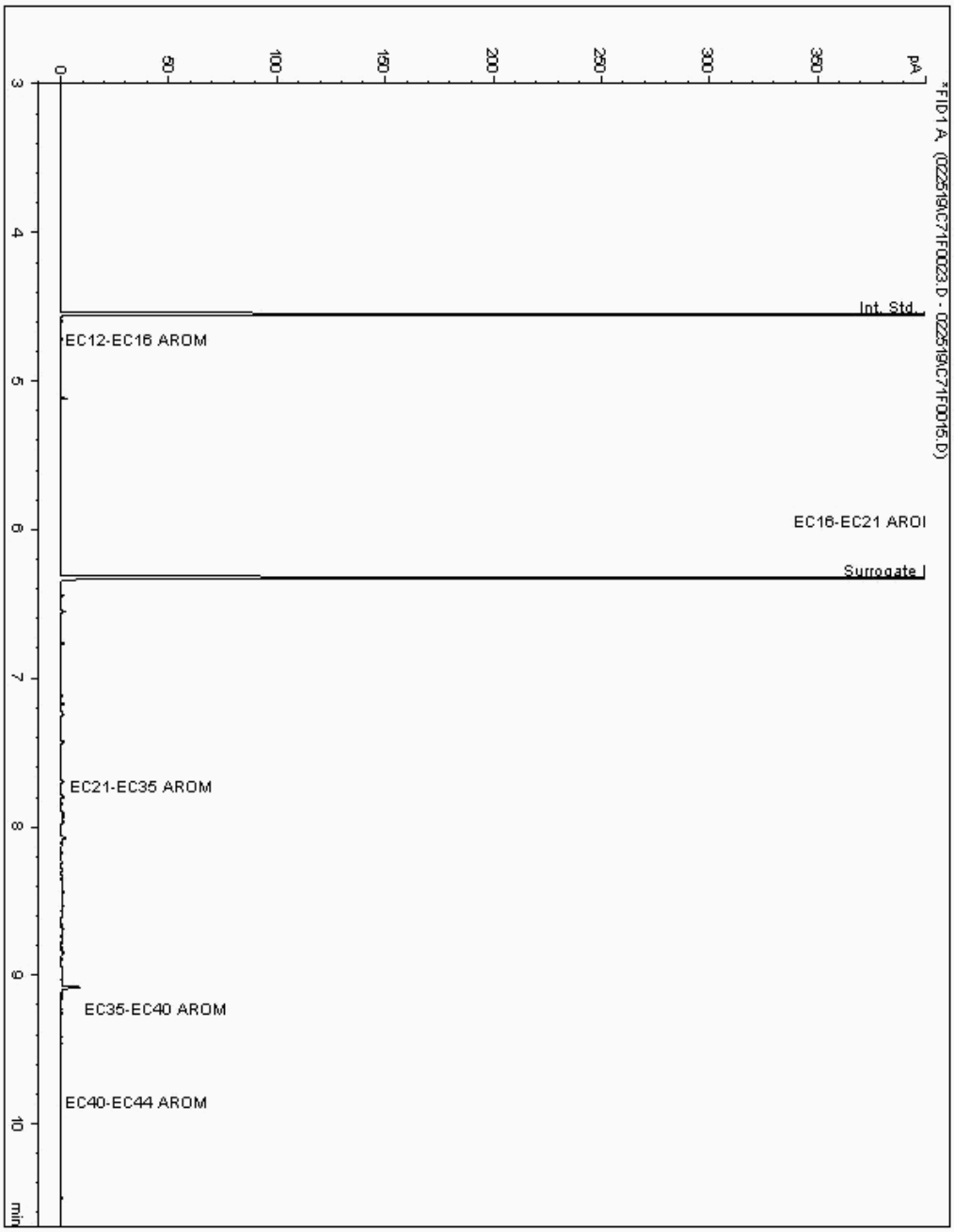
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19357995 **Depth :** 0.30
Sample ID : WS59

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180748-
Date Acquired : 25/02/2019 17:45:11 PM
Units : ppb
Dilution: WS59[0.30] ->



CERTIFICATE OF ANALYSIS

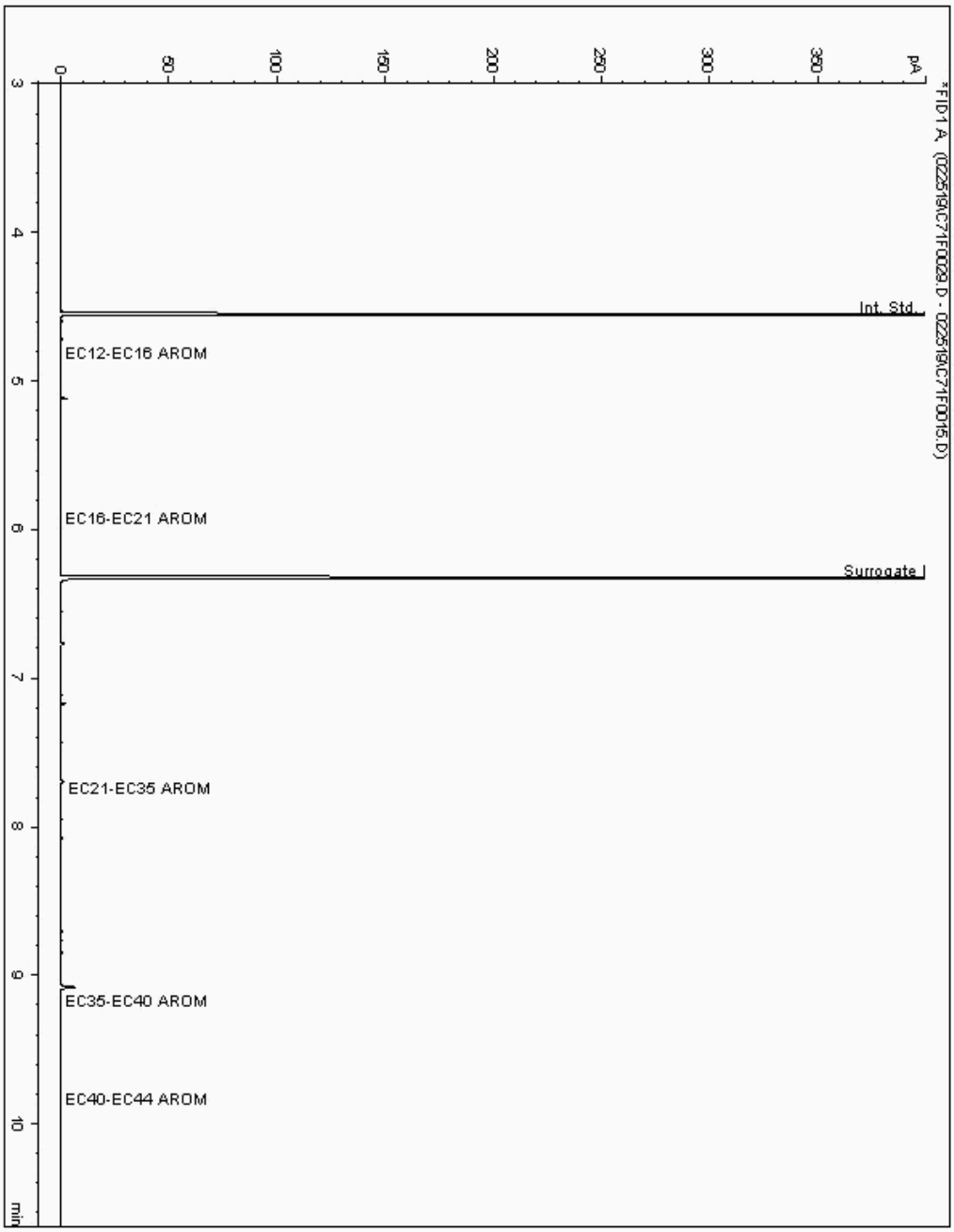
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19358303 **Depth :** 0.70
Sample ID : WS59

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180788-
Date Acquired : 25/02/2019 19:45:45 PM
Units : ppb
Dilution: WS59[0.70] ->



CERTIFICATE OF ANALYSIS

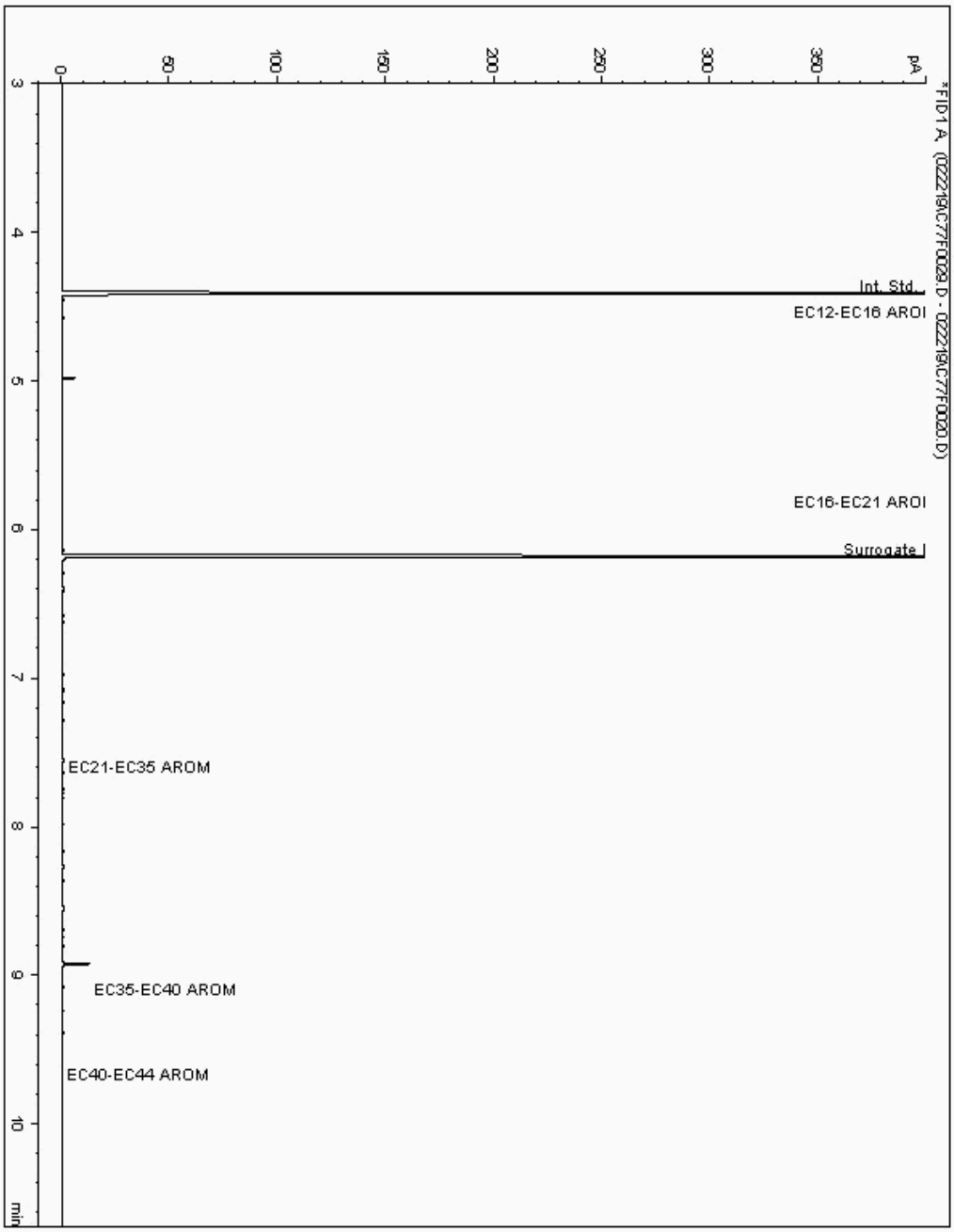
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19358526 **Depth :** 0.30
Sample ID : WS11

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18194619-
Date Acquired : 22/02/2019 18:51:25 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

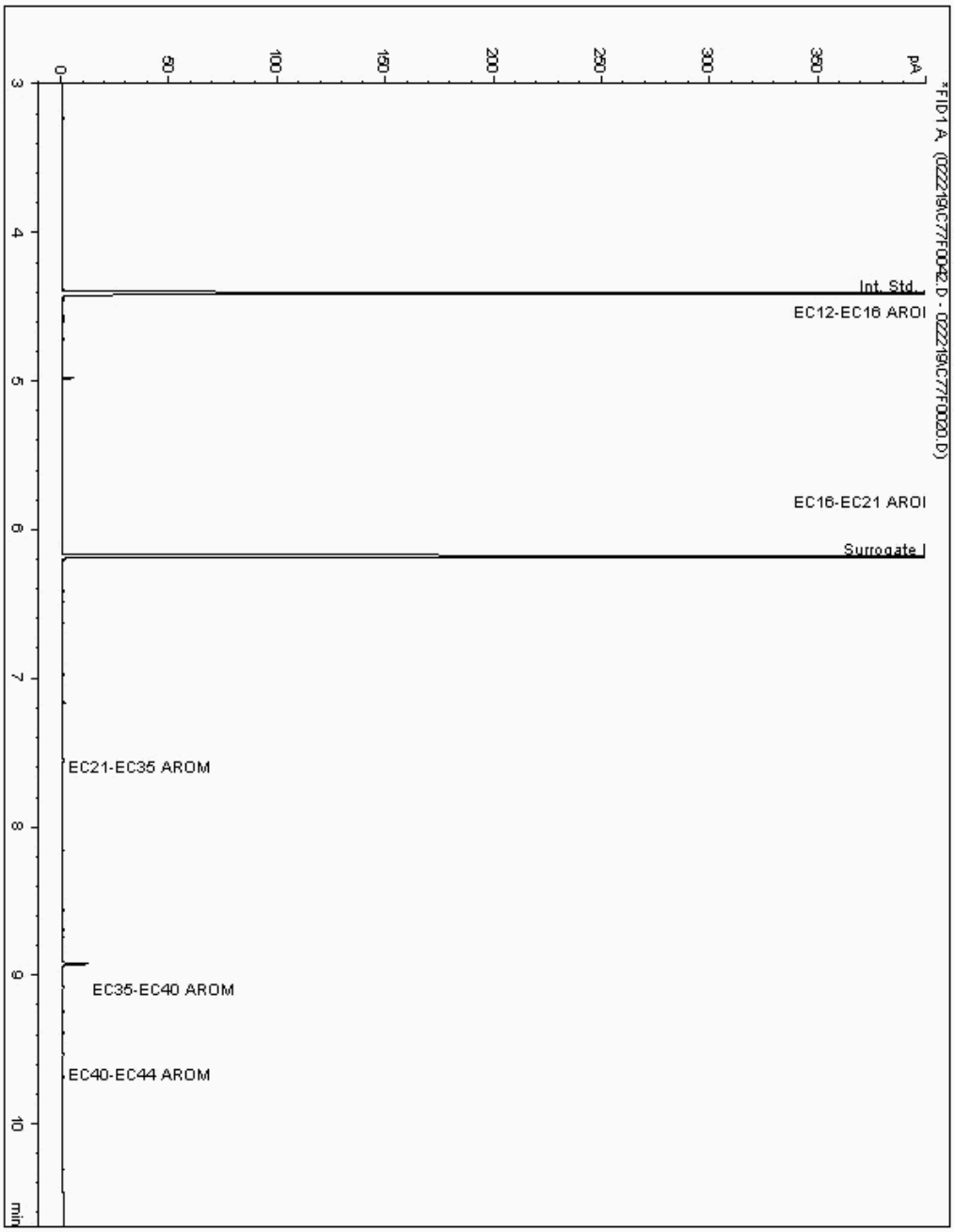
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19358797 **Depth :** 0.30
Sample ID : WS18

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18194648-
Date Acquired : 22/02/2019 22:47:39 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

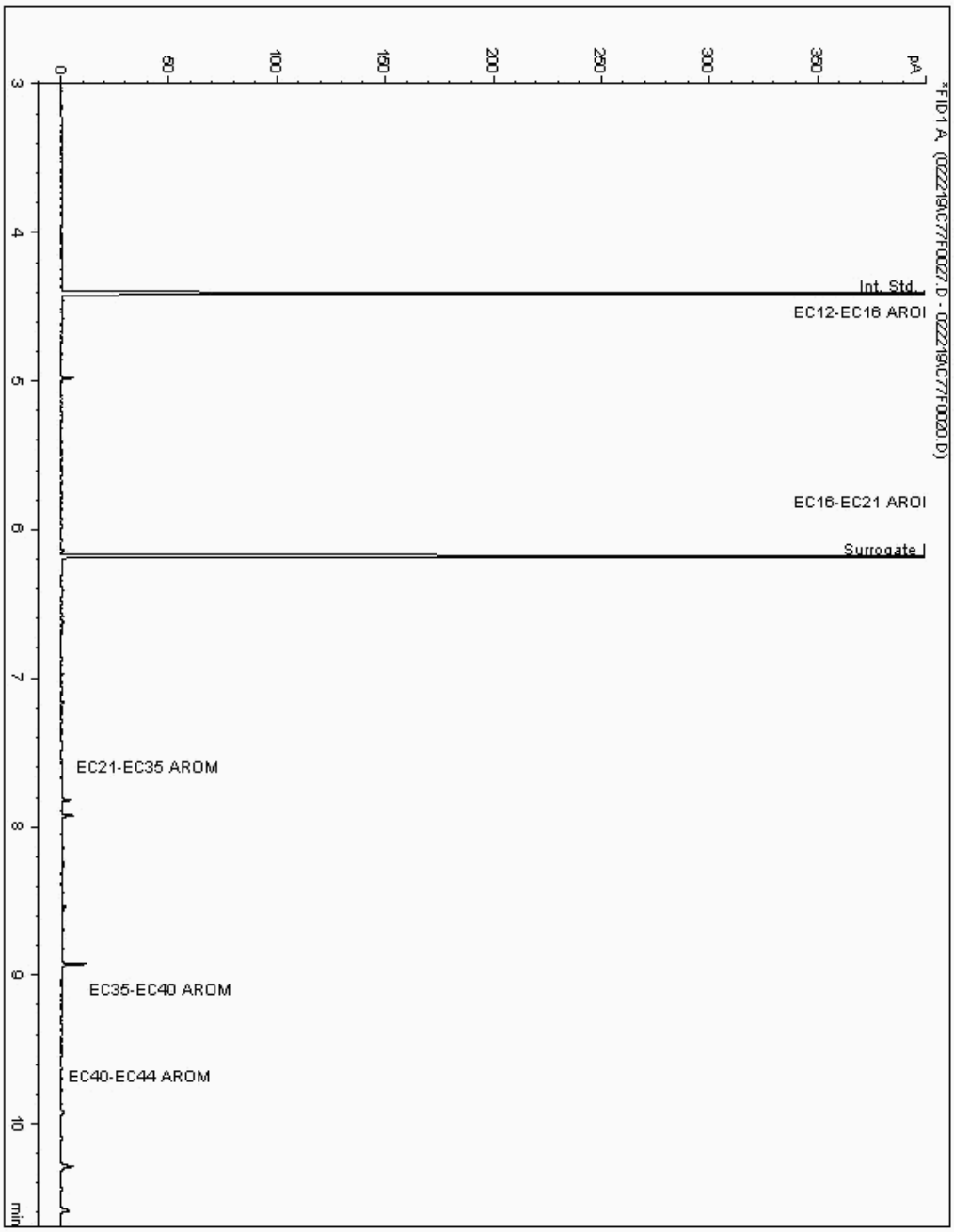
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19359039 **Depth :** 0.30
Sample ID : WS32

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18194552-
Date Acquired : 22/02/2019 18:11:26 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

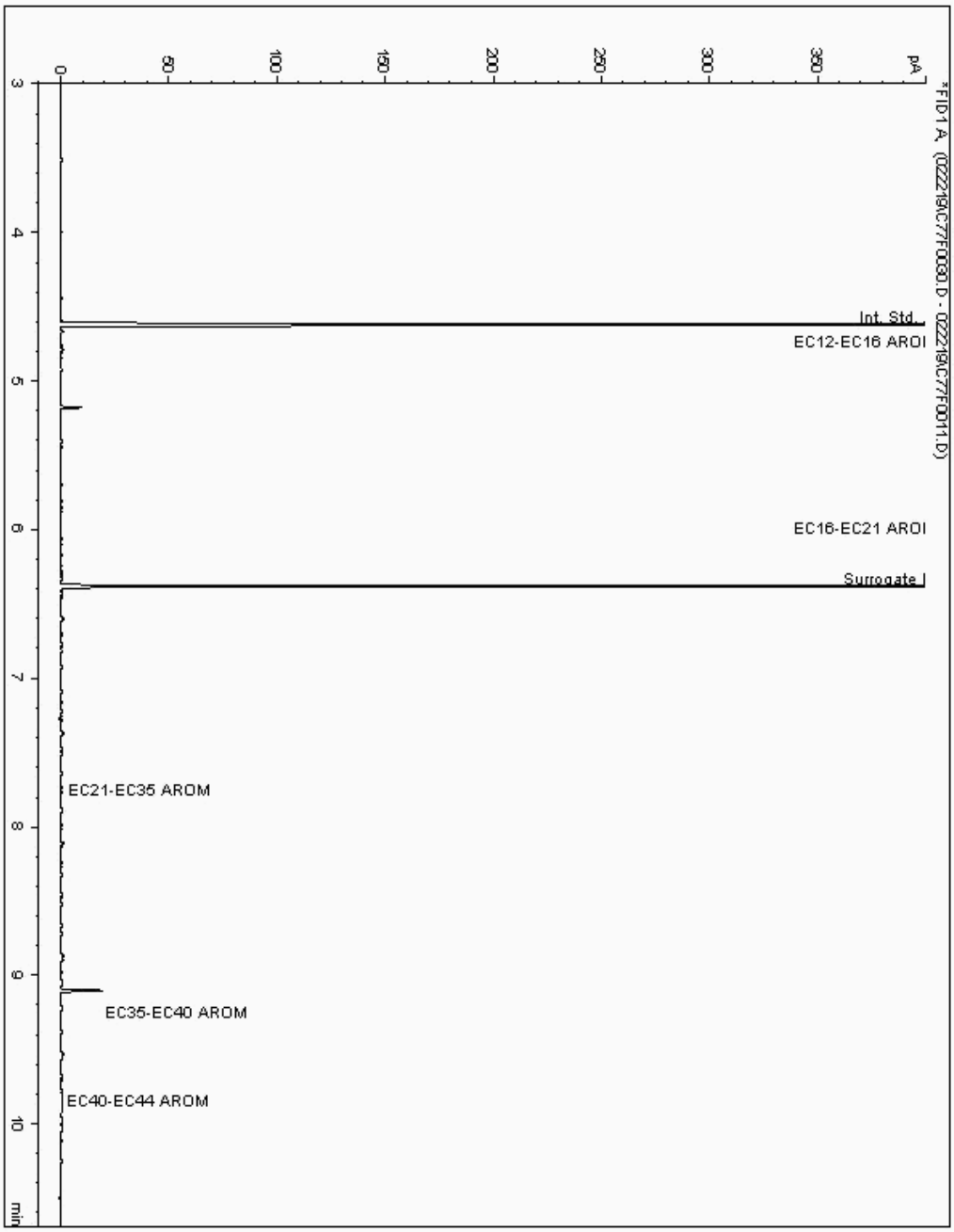
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19359201 **Depth :** 1.50
Sample ID : WS31

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18194522-
Date Acquired : 2/22/2019 6:31:02 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

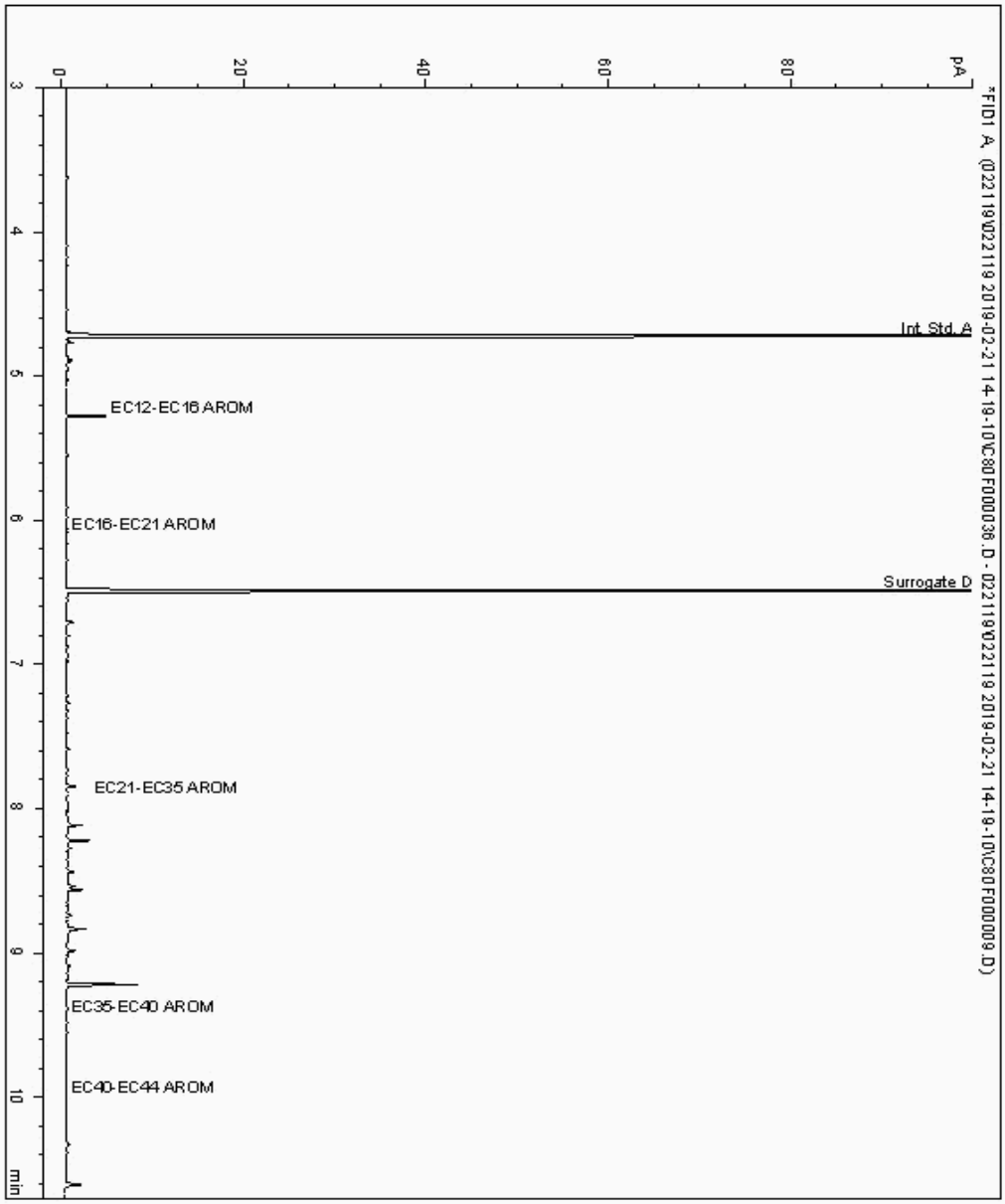
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19361397 **Depth :** 1.80
Sample ID : WS32

Speciated TPH - AROMS (C12 - C44)

Sample Identity: 18194582-
Date Acquired : 22/02/19 01:39:39
Units : ppb
Dilution :
CF : 1
Multiplier : 1.030



CERTIFICATE OF ANALYSIS

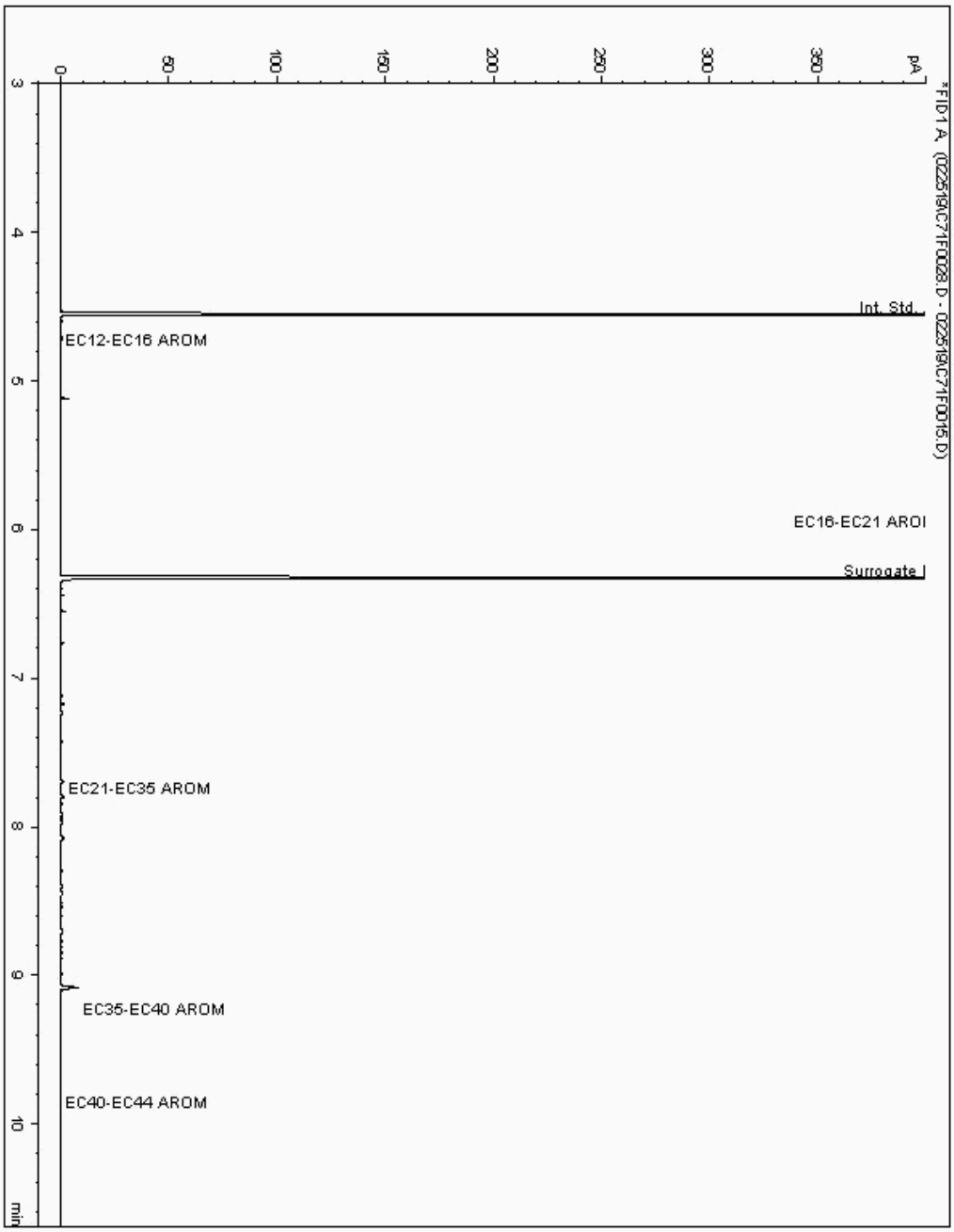
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19361545 **Depth :** 0.65
Sample ID : WS56A

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180402-
Date Acquired : 25/02/2019 19:25:44 PM
Units : ppb
Dilution: WS56A[0.65] ->



CERTIFICATE OF ANALYSIS

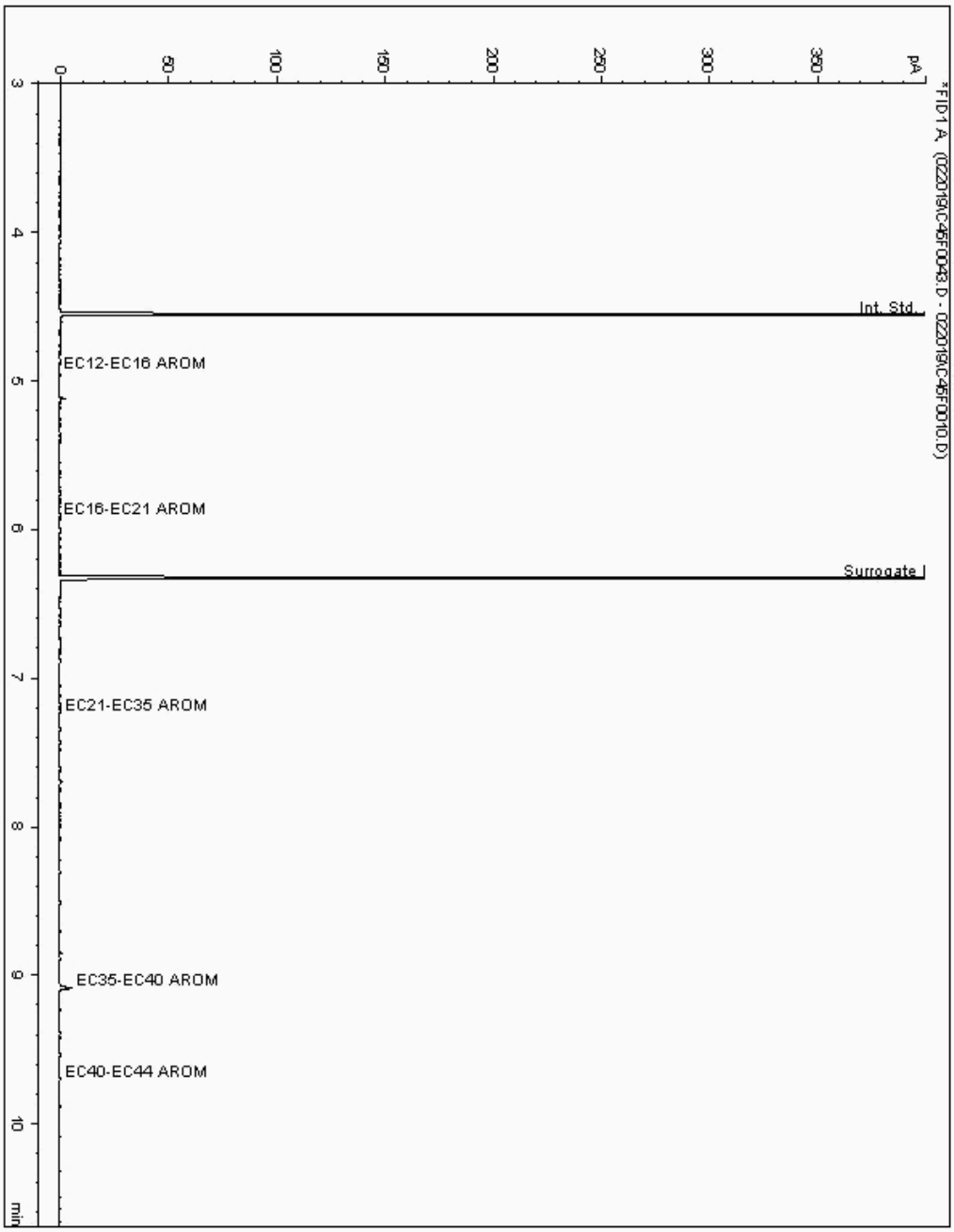
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19361730 **Depth :** 0.50
Sample ID : WS01

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180194-
Date Acquired : 21/02/2019 04:38:54 PM
Units : ppb
Dilution: WS01[0.50] ->



CERTIFICATE OF ANALYSIS

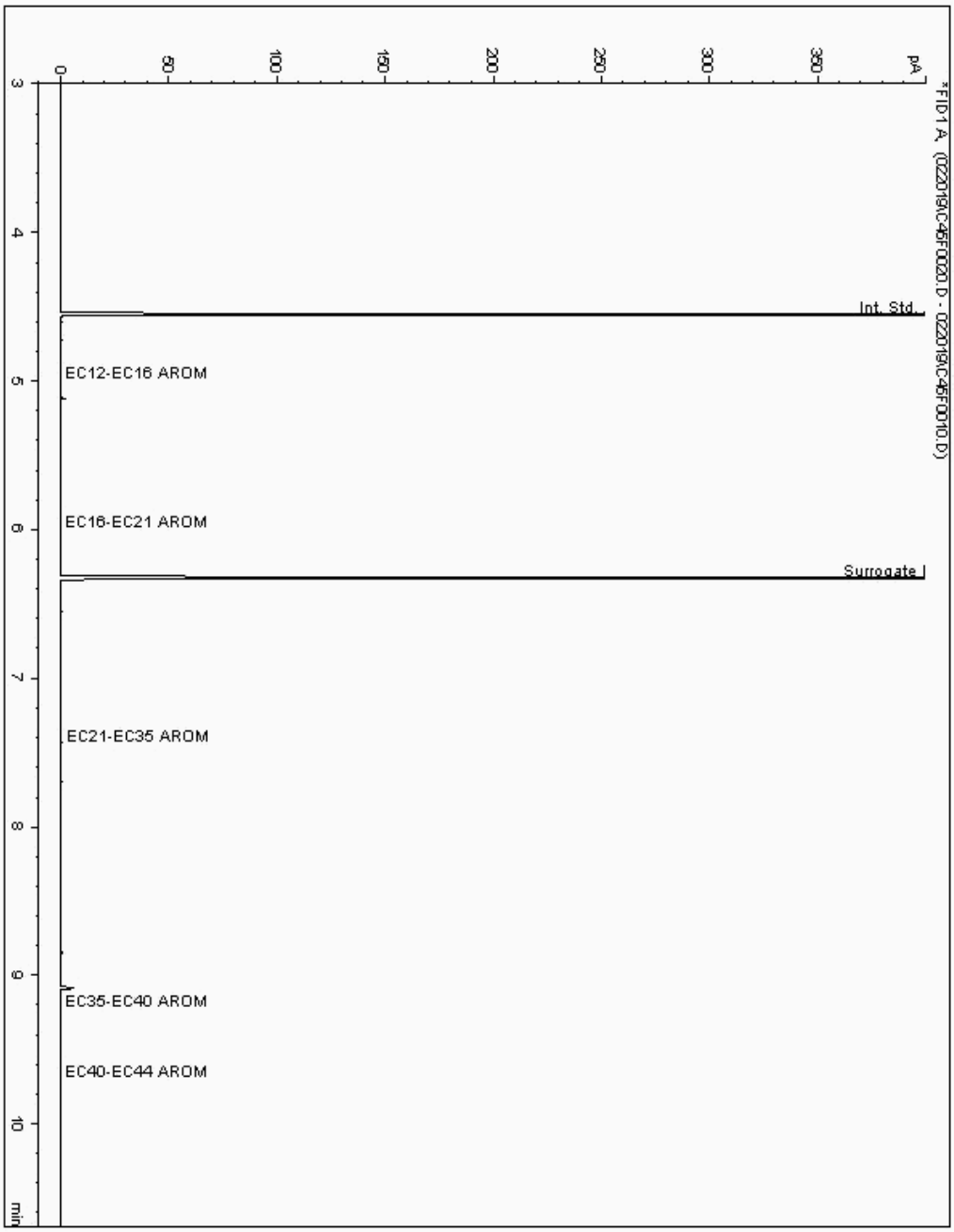
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19361874 **Depth :** 0.25
Sample ID : WS06

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180622-
Date Acquired : 20/02/2019 22:14:04 PM
Units : ppb
Dilution: WS06[0.25] ->



CERTIFICATE OF ANALYSIS

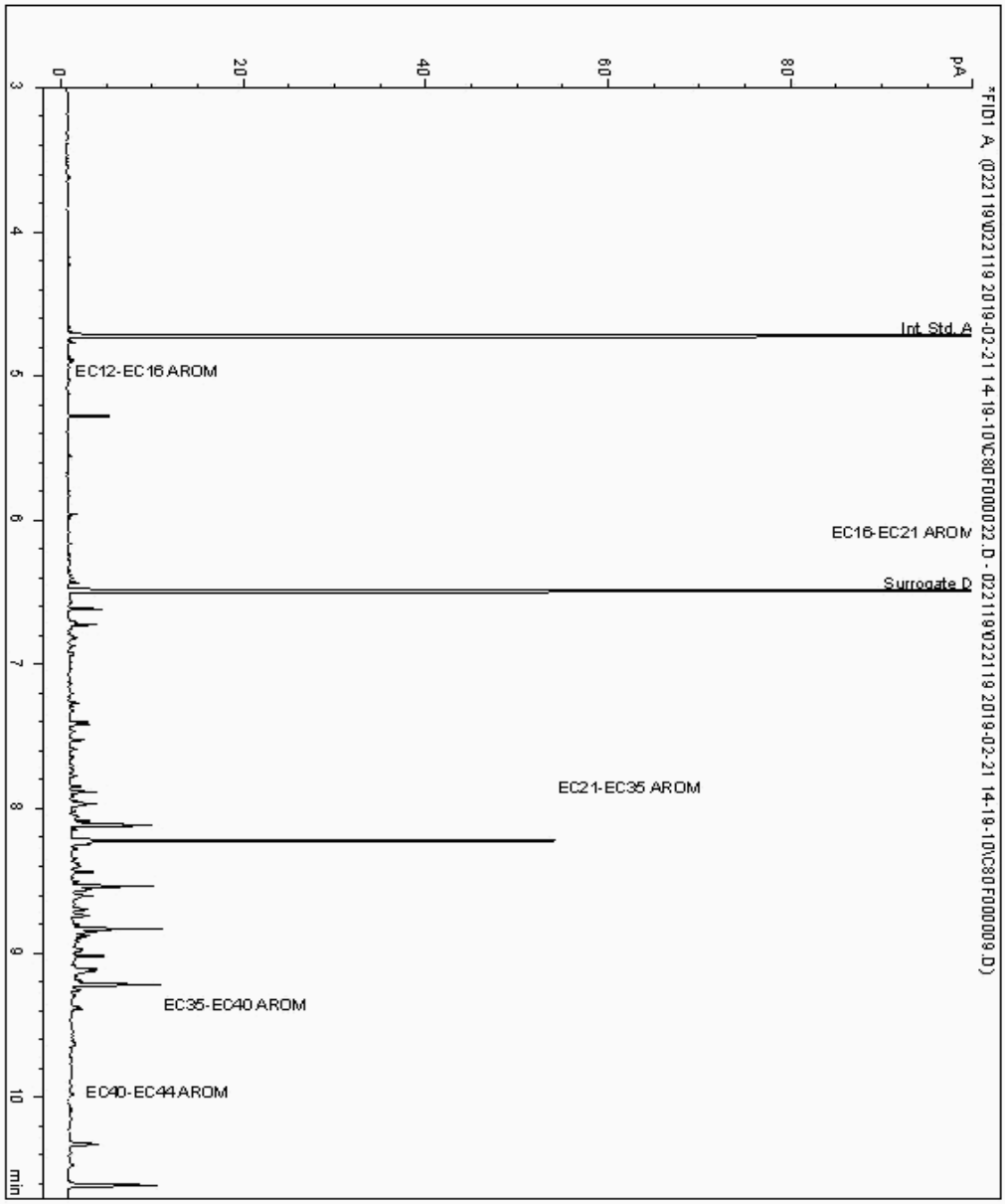
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19362027 **Depth :** 0.10
Sample ID : WS56A

Speciated TPH - AROMS (C12 - C44)

Sample Identity: 18180299-
Date Acquired : 21/02/19 21:38:33
Units : ppb
Dilution :
CF : 1
Multiplier : 1.030



CERTIFICATE OF ANALYSIS

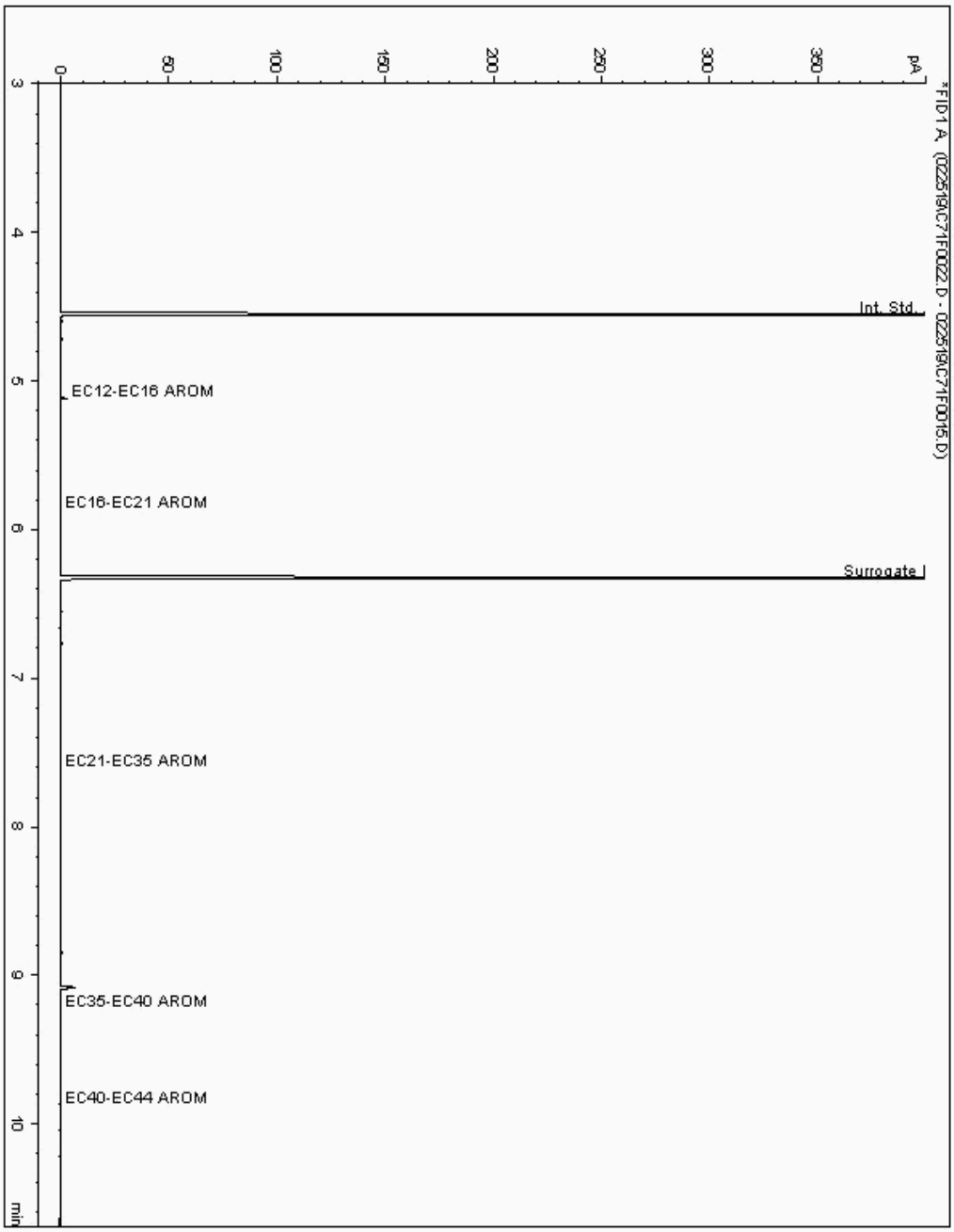
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19362179 **Depth :** 0.35
Sample ID : WS04

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180596-
Date Acquired : 25/02/2019 17:25:12 PM
Units : ppb
Dilution: WS04[0.35] ->



CERTIFICATE OF ANALYSIS

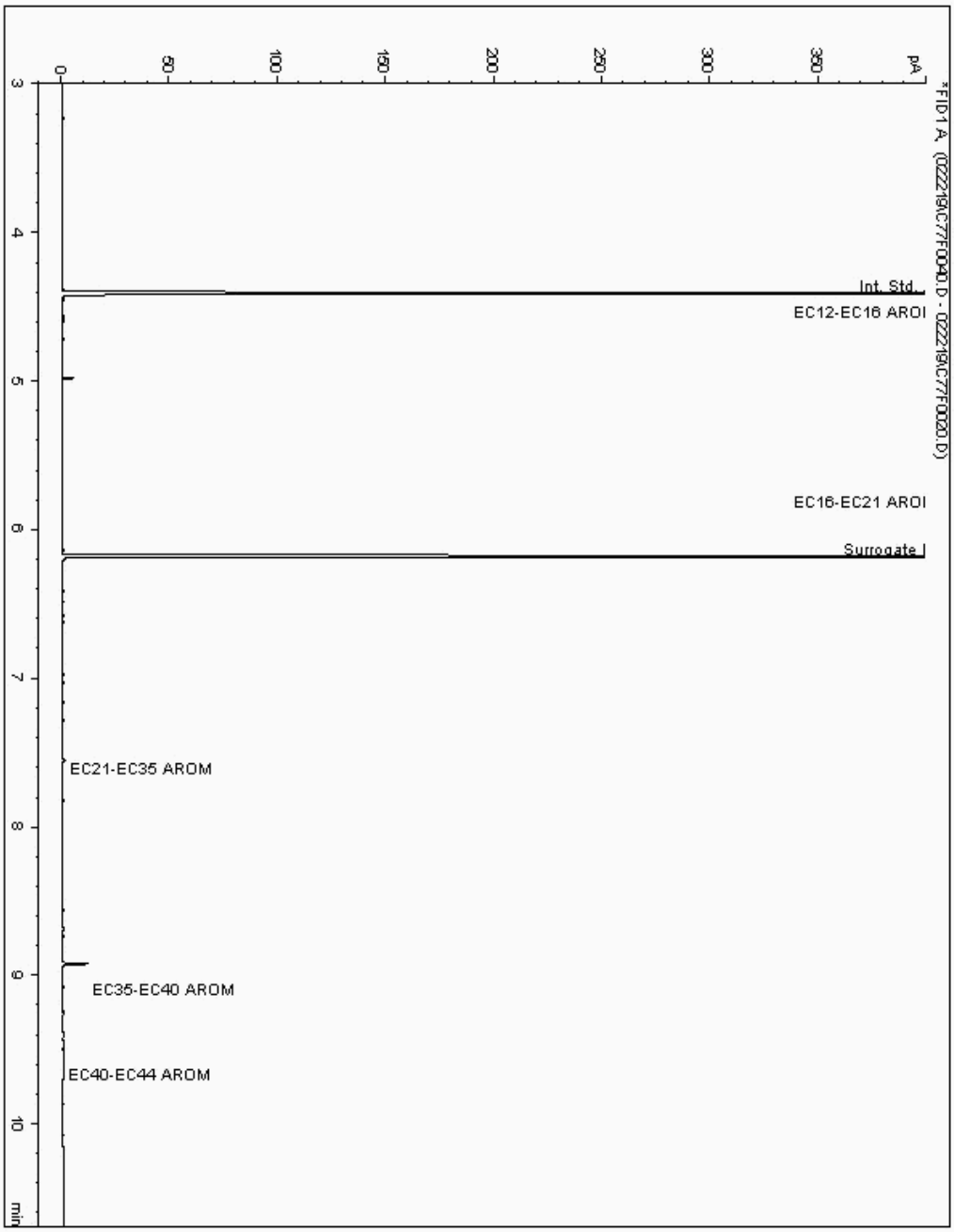
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19362279 **Depth :** 0.30
Sample ID : WS03

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18194462-
Date Acquired : 22/02/2019 22:07:38 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

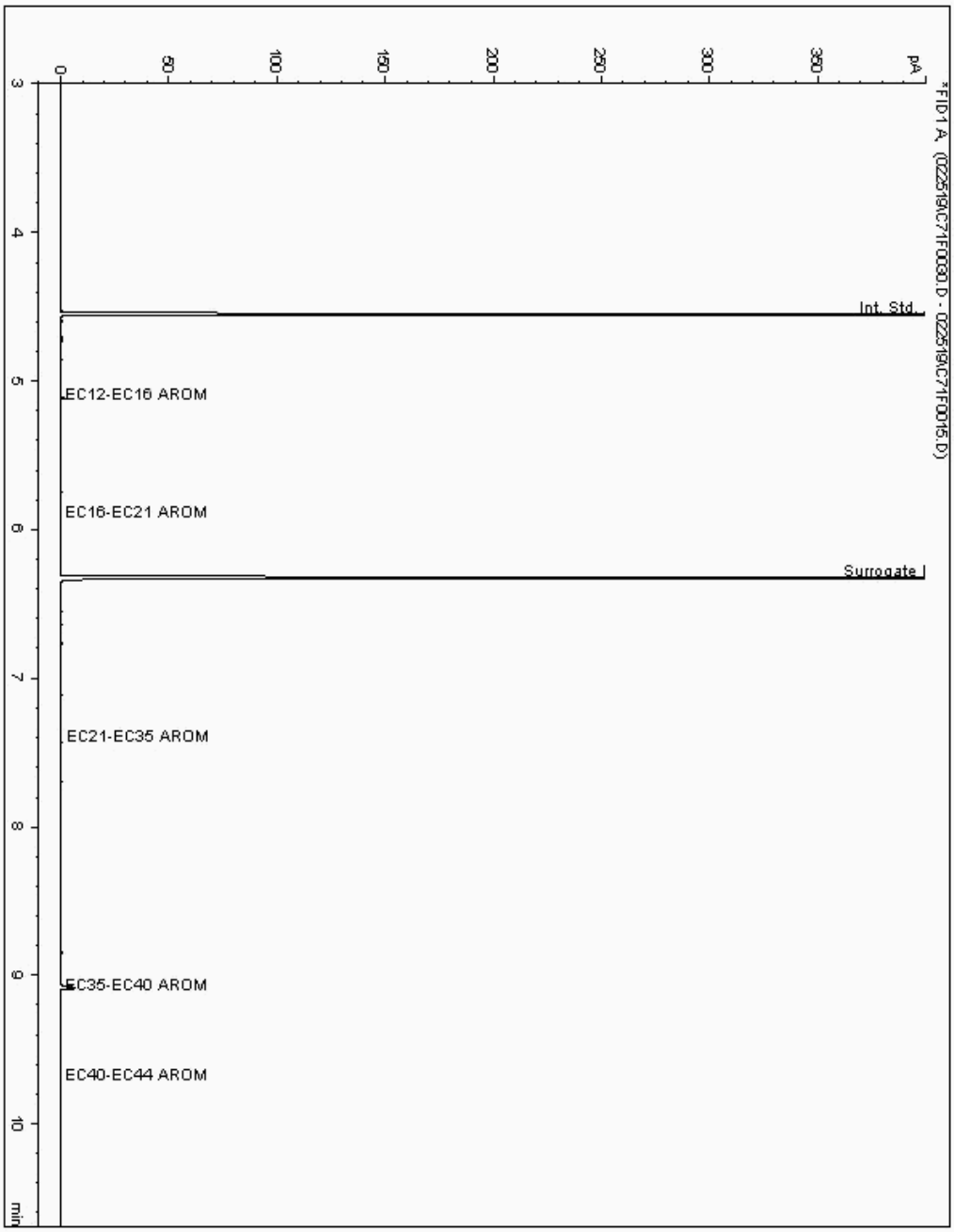
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19362352 **Depth :** 0.25
Sample ID : WS04

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180571-
Date Acquired : 25/02/2019 20:05:54 PM
Units : ppb
Dilution: WS04[0.25] ->



CERTIFICATE OF ANALYSIS

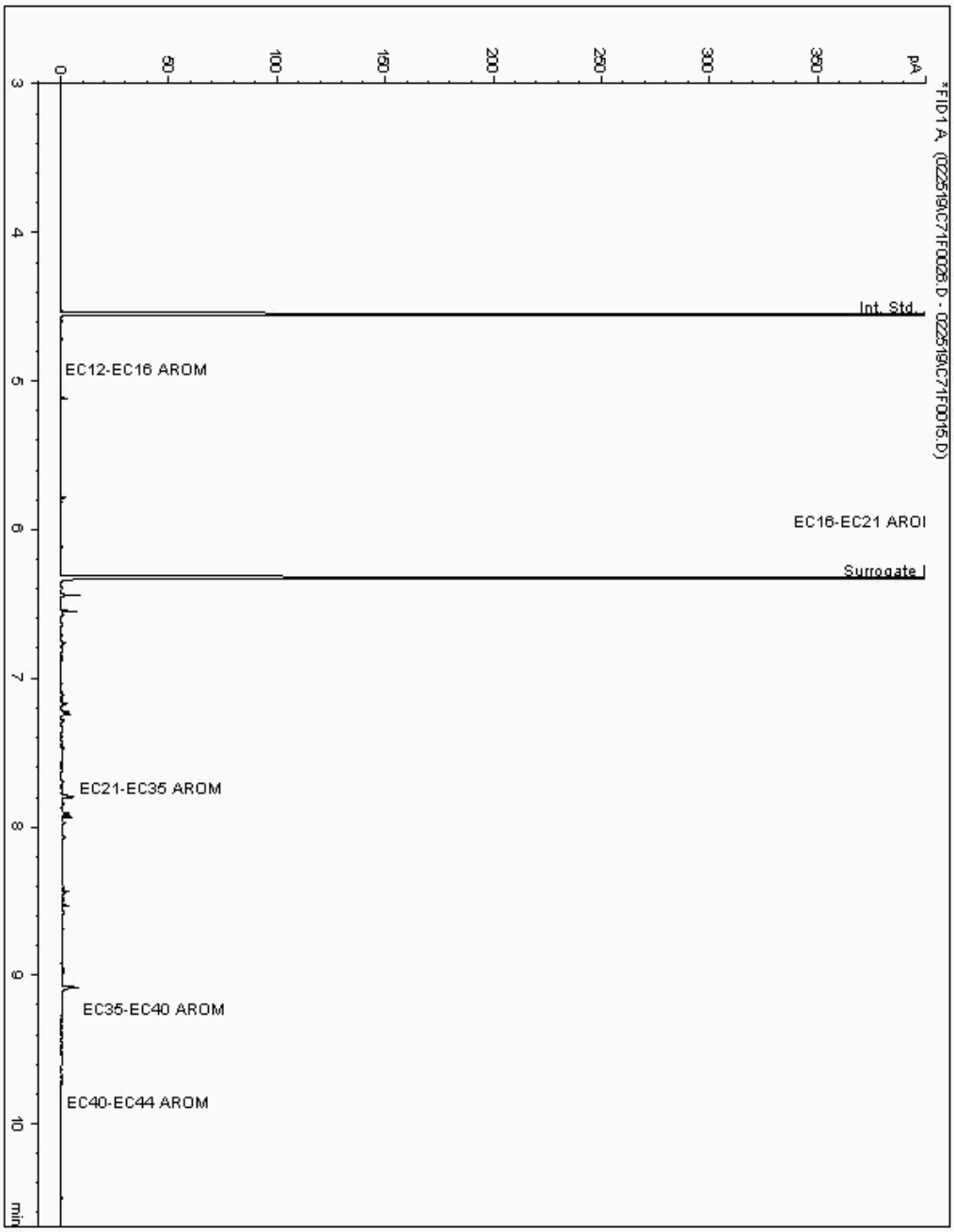
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19362456 **Depth :** 0.30
Sample ID : WS58A

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180463-
Date Acquired : 25/02/2019 18:45:25 PM
Units : ppb
Dilution: WS58A[0.30] ->



CERTIFICATE OF ANALYSIS

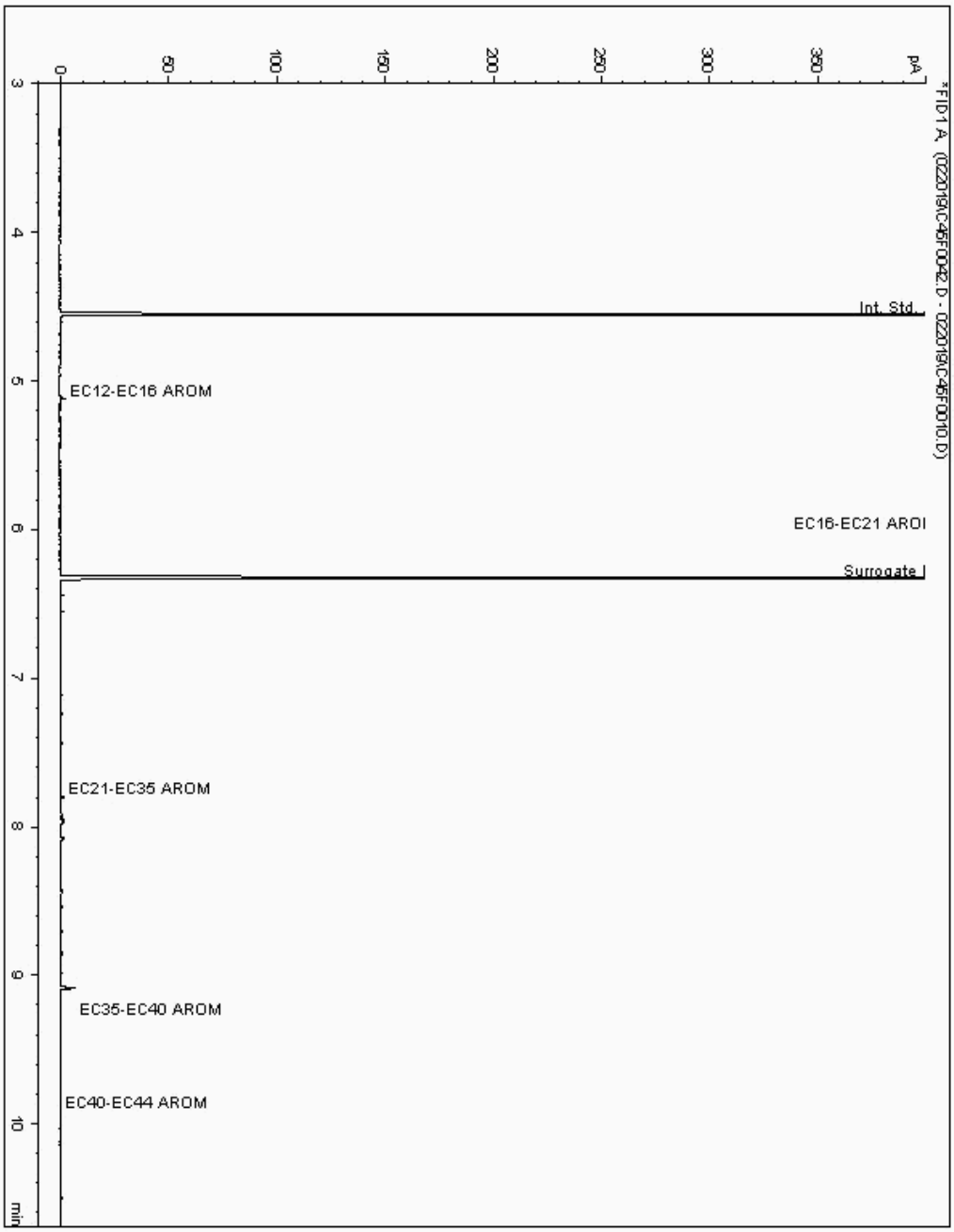
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19362516 **Depth :** 0.10
Sample ID : WS58A

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180437-
Date Acquired : 21/02/2019 04:18:26 PM
Units : ppb
Dilution: WS58A[0.10] ->



CERTIFICATE OF ANALYSIS

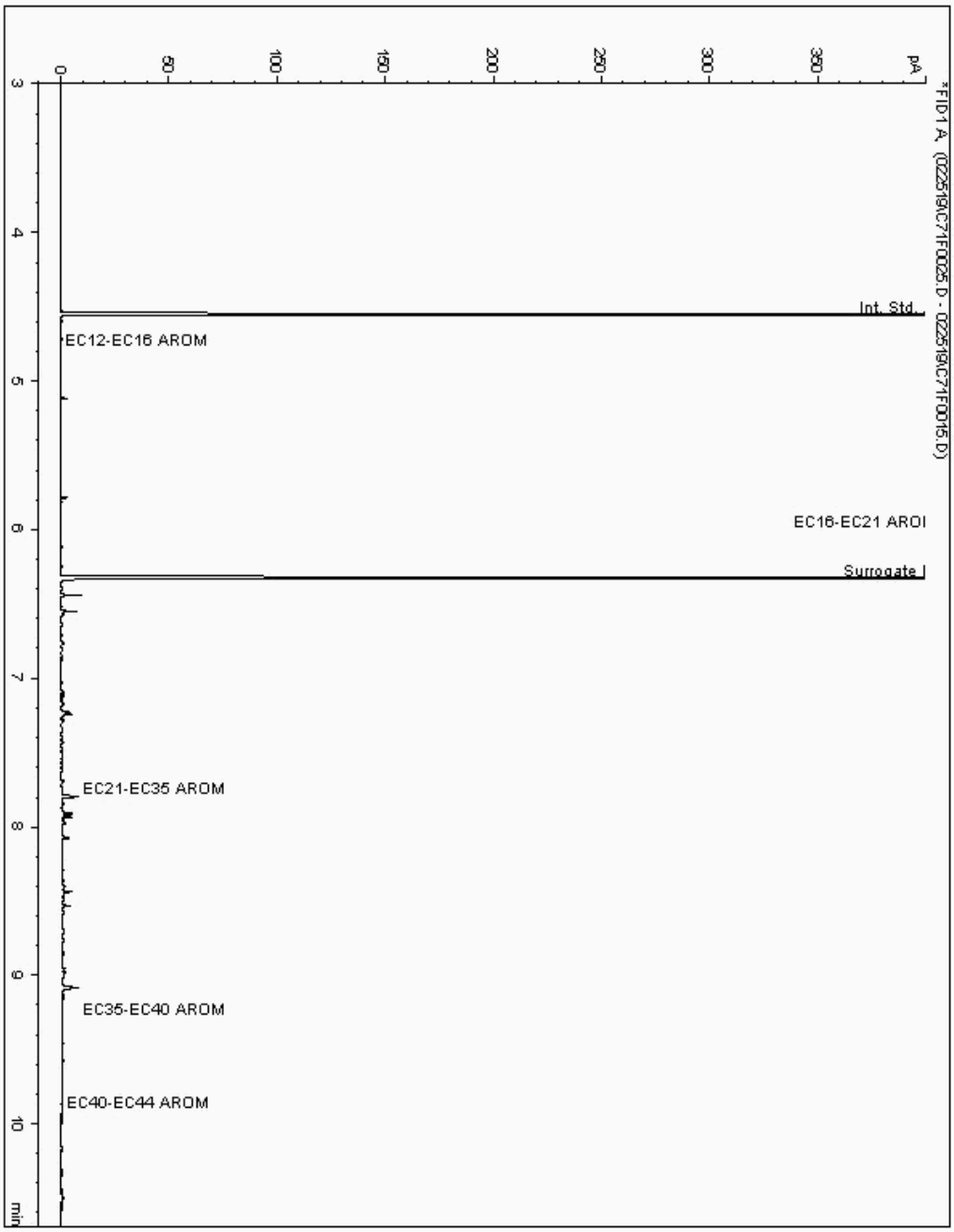
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19362582 **Depth :** 0.25
Sample ID : WS56

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180368-
Date Acquired : 25/02/2019 18:25:25 PM
Units : ppb
Dilution: WS56[0.25] ->



CERTIFICATE OF ANALYSIS

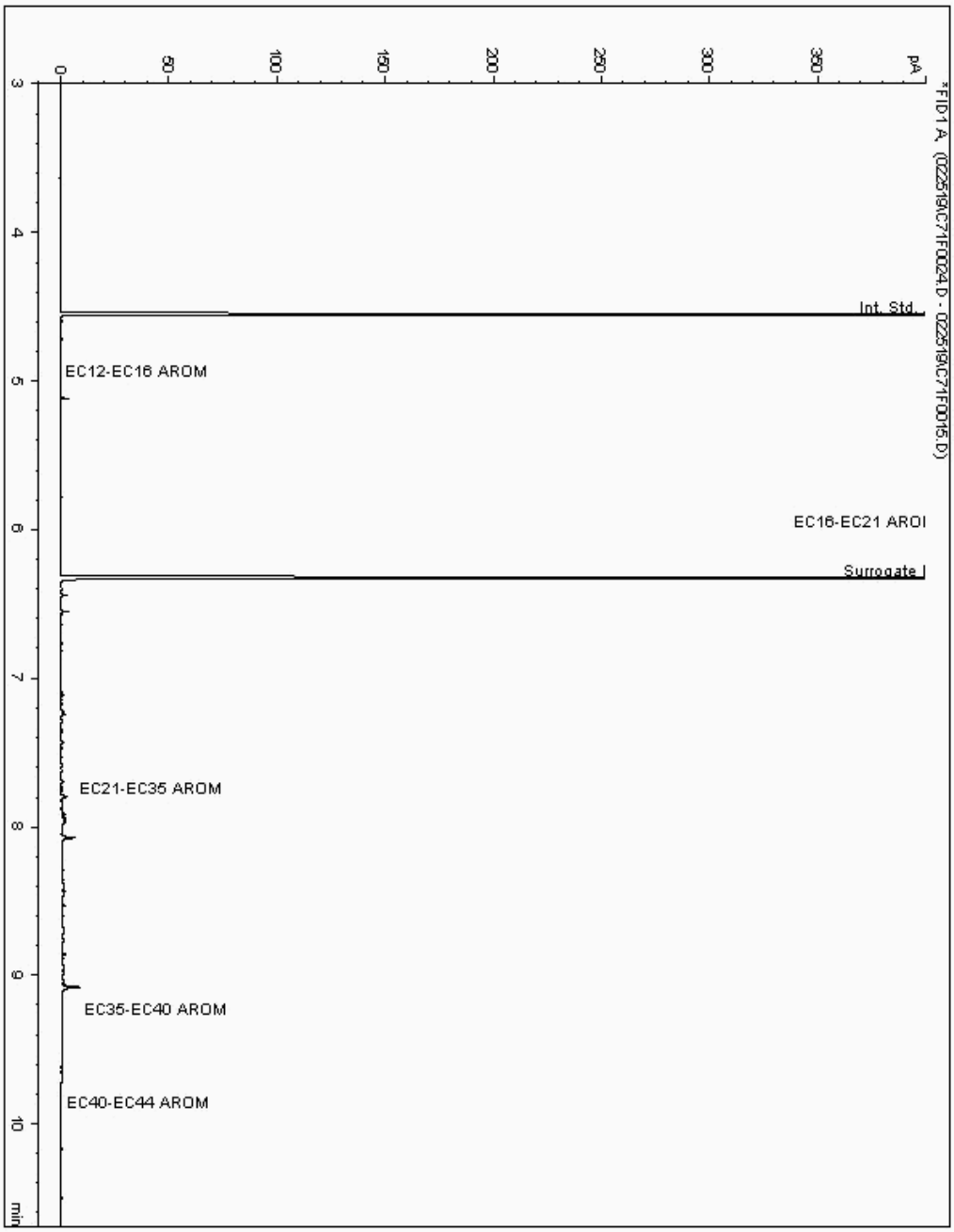
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19362627 **Depth :** 0.10
Sample ID : WS59

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18180489-
Date Acquired : 25/02/2019 18:05:09 PM
Units : ppb
Dilution: WS59[0.10] ->



CERTIFICATE OF ANALYSIS

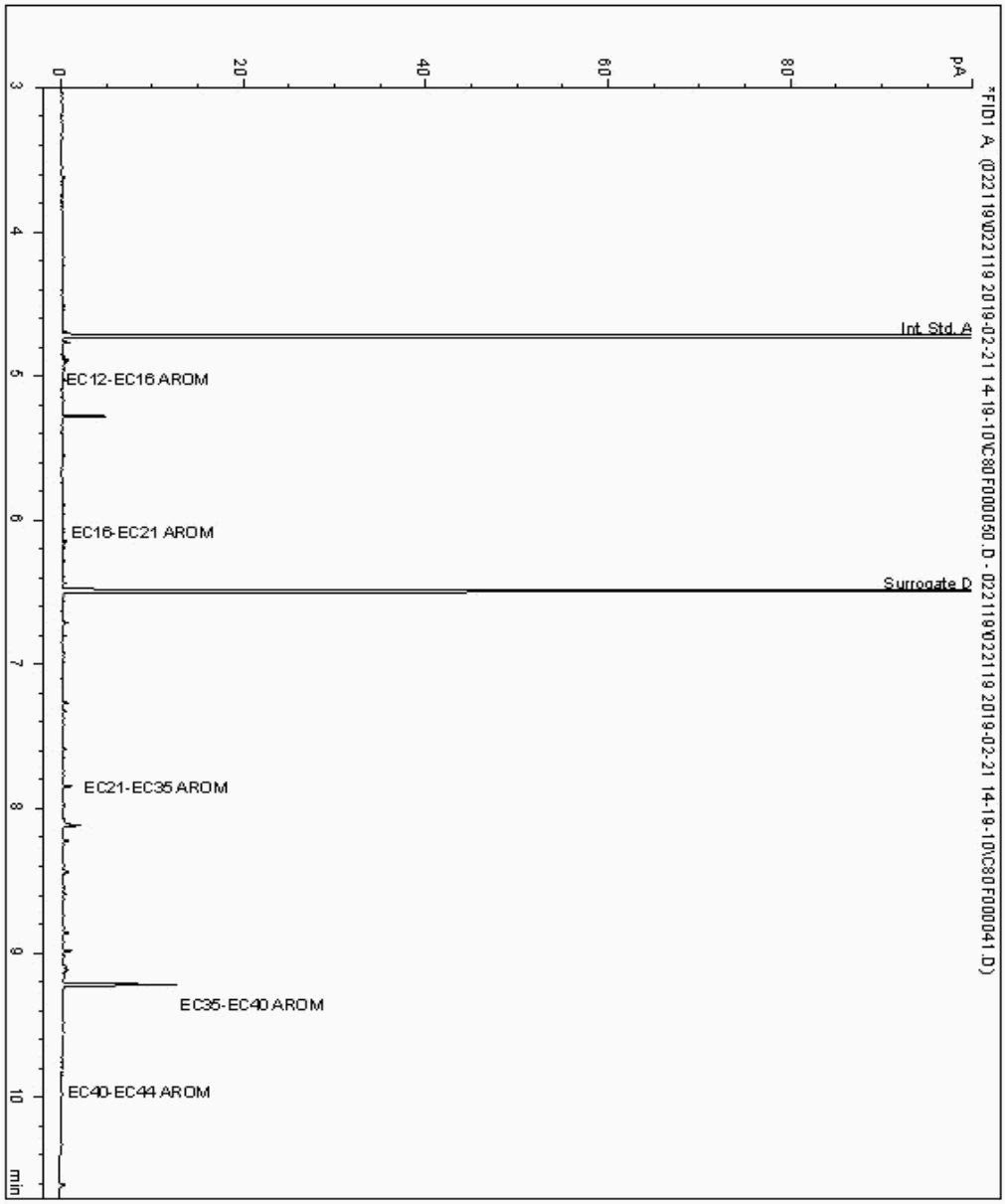
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19362870 **Depth :** 0.10
Sample ID : WS03

Speciated TPH - AROMS (C12 - C44)

Sample Identity: 18194434-
Date Acquired : 22/02/19 05:38:25
Units : ppb
Dilution :
CF : 1
Multiplier : 1.010



CERTIFICATE OF ANALYSIS

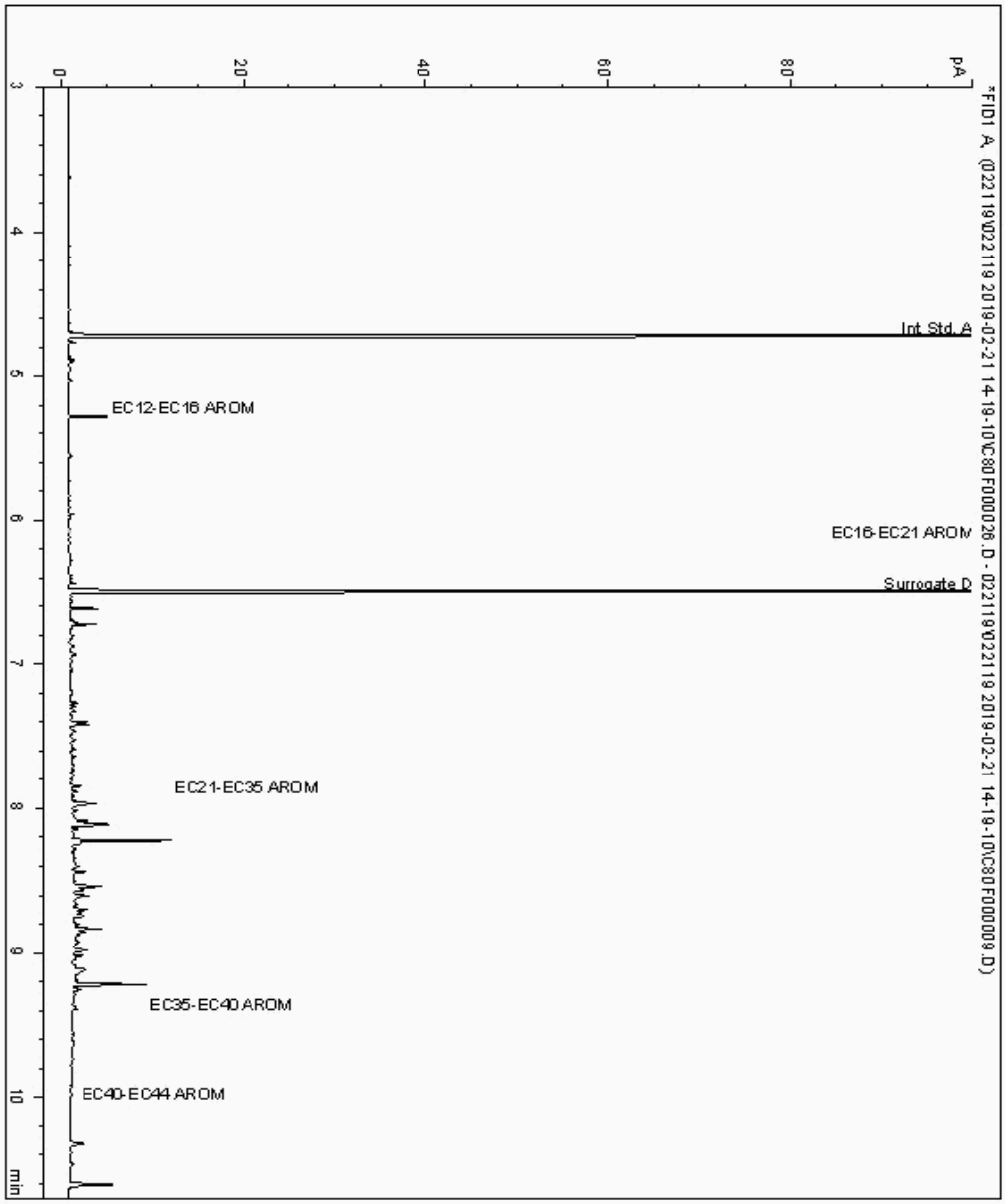
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19362952 **Depth :** 0.10
Sample ID : WS31

Speciated TPH - AROMS (C12 - C44)

Sample Identity: 18194495-
Date Acquired : 21/02/19 22:42:55
Units : ppb
Dilution :
CF : 1
Multiplier : 0.960



CERTIFICATE OF ANALYSIS

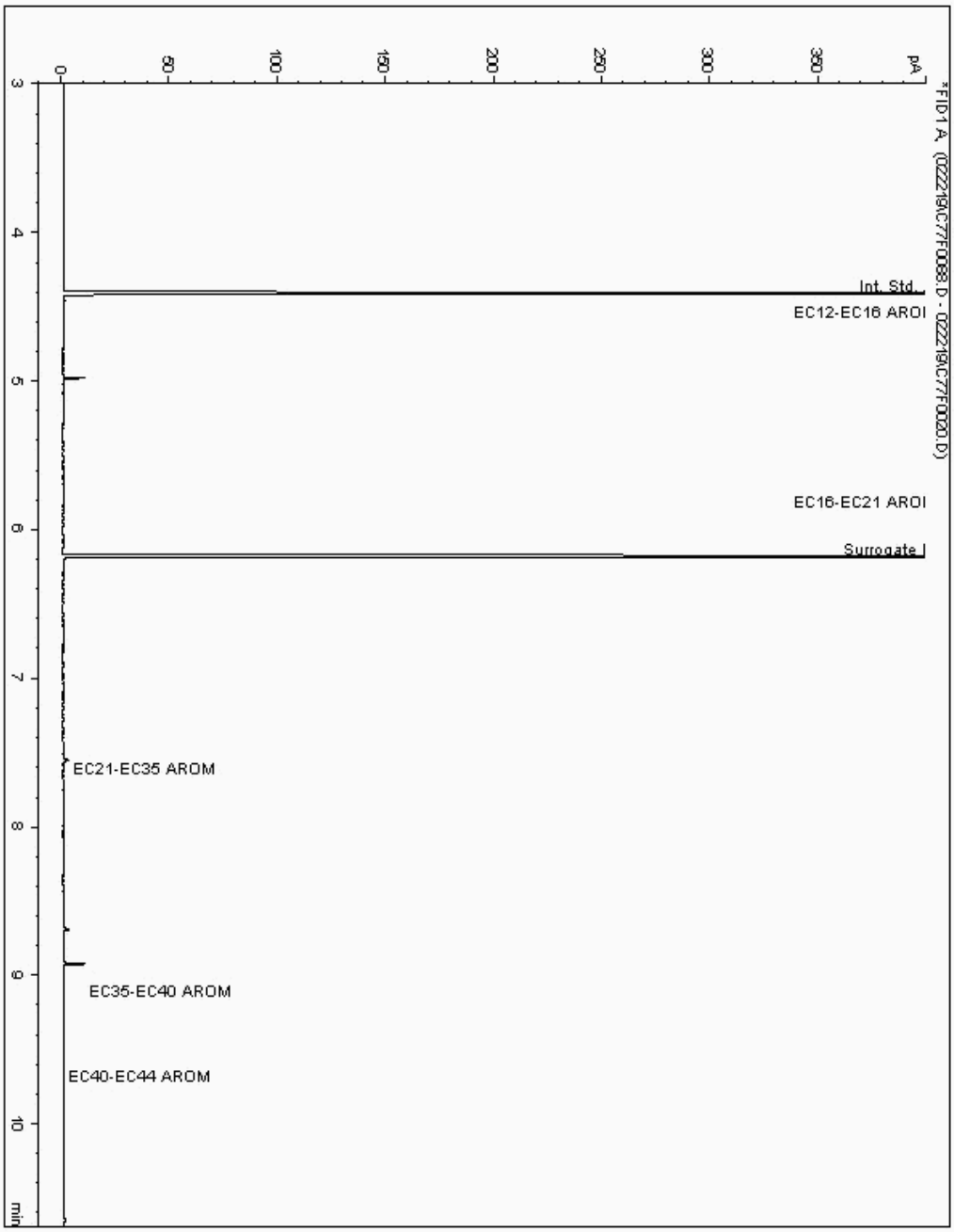
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19417916 **Depth :** 0.30
Sample ID : WS02

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18246116-
Date Acquired : 25/02/2019 19:33:51 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

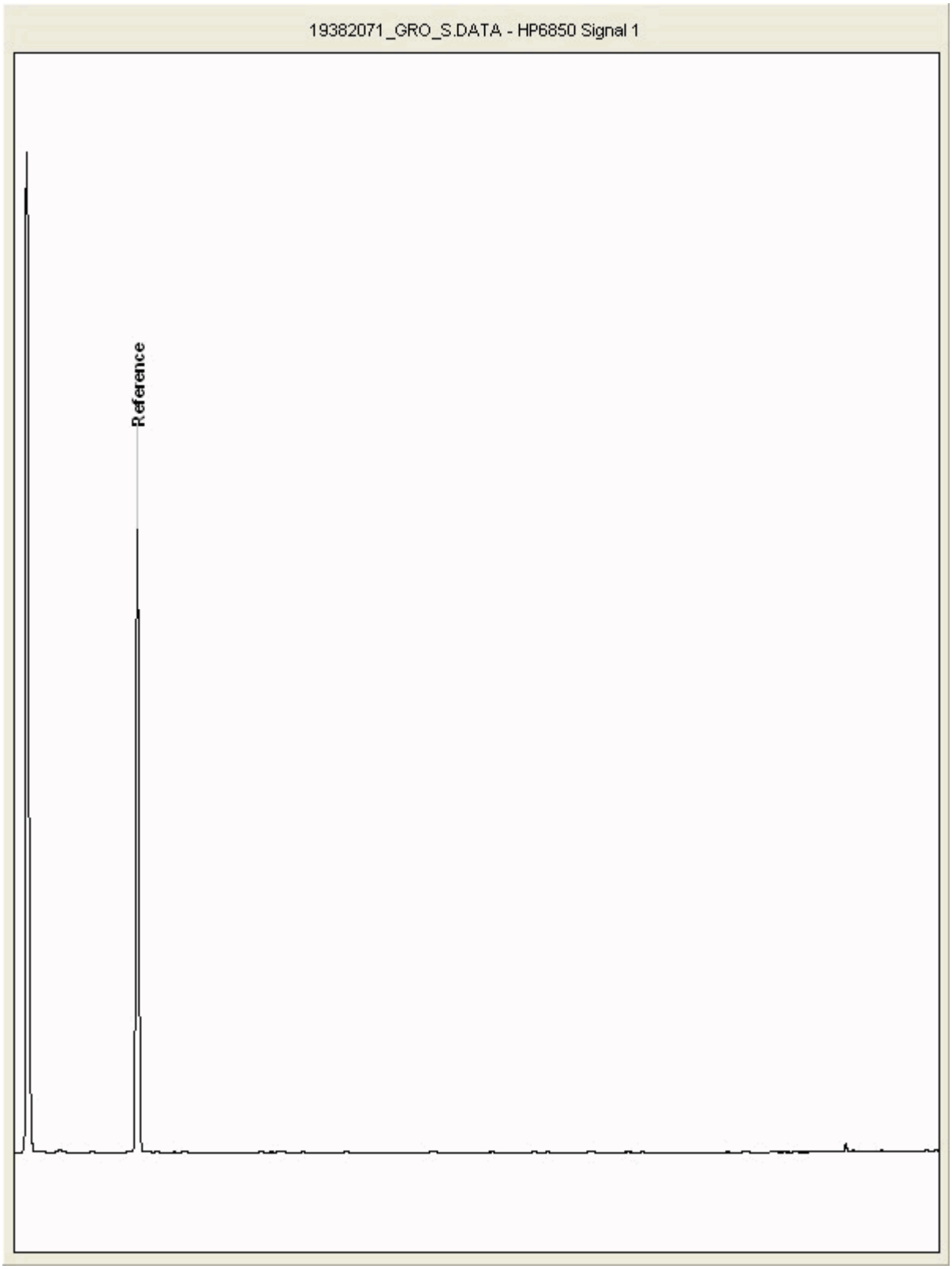
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19382071
Sample ID : WS31

Depth : 0.10

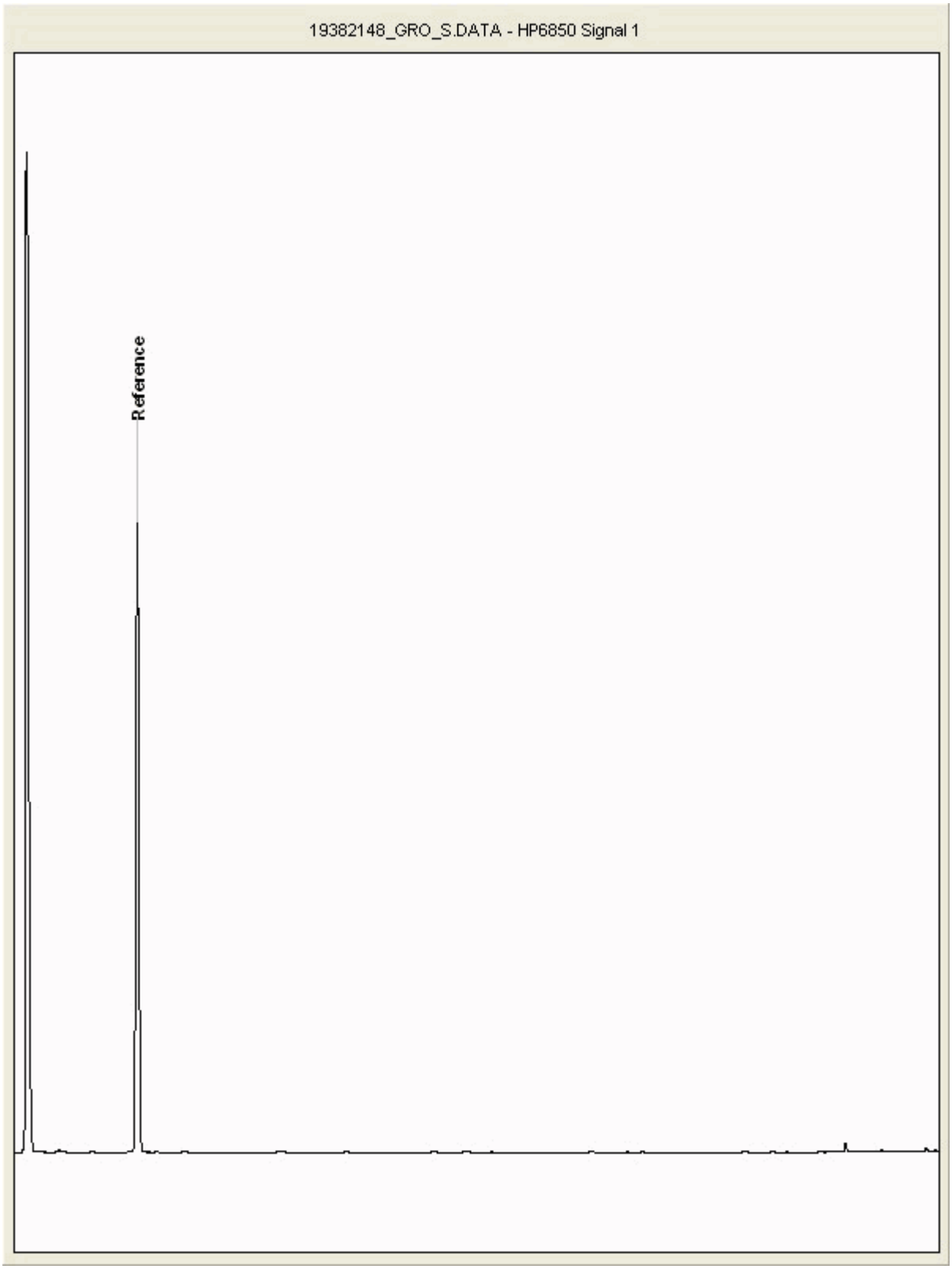


CERTIFICATE OF ANALYSIS

SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: GRO by GC-FID (S) **Sample No :** 19382148 **Depth :** 0.55
Sample ID : WS05



CERTIFICATE OF ANALYSIS

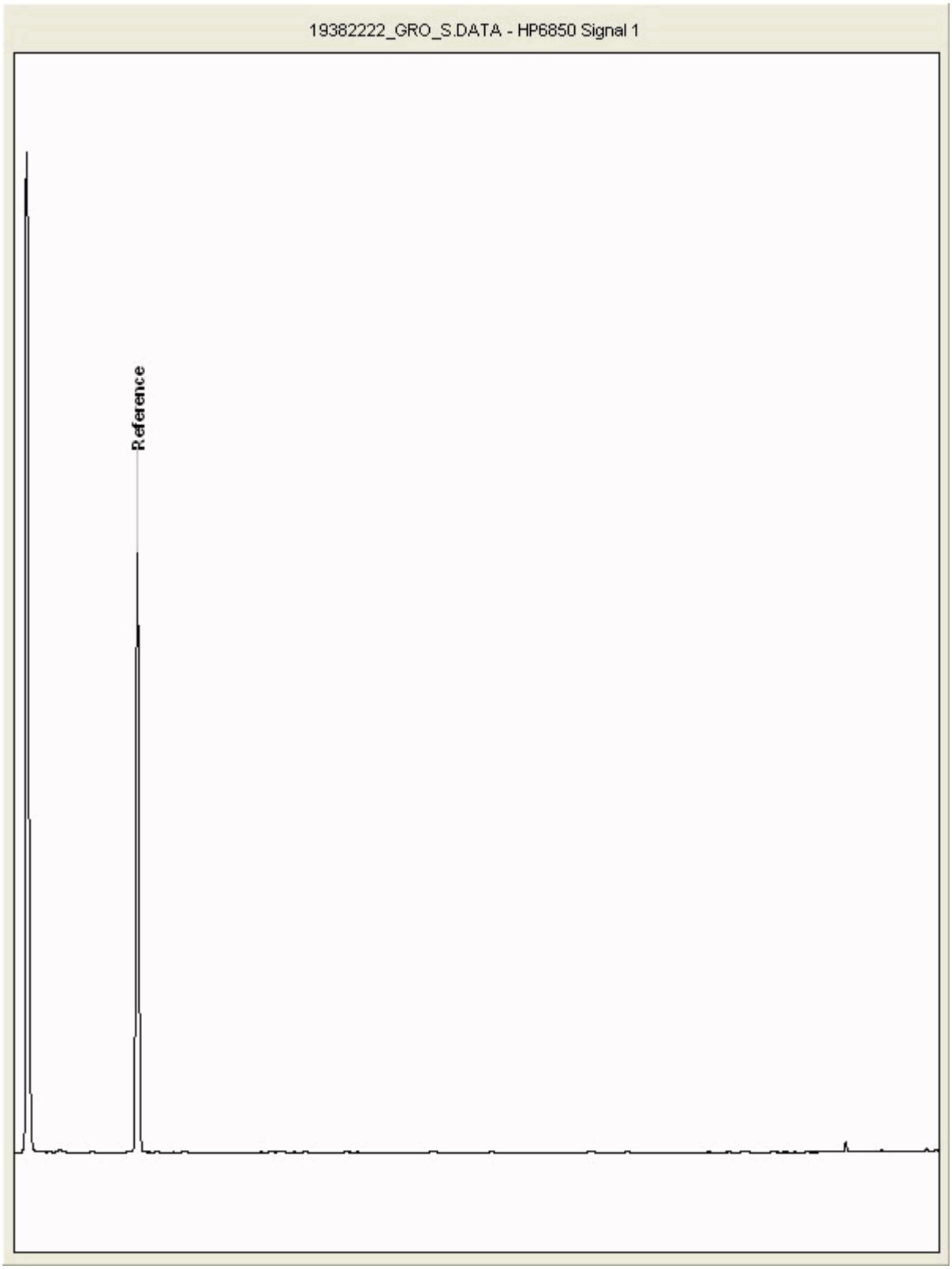
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19382222
Sample ID : WS59

Depth : 0.10



CERTIFICATE OF ANALYSIS

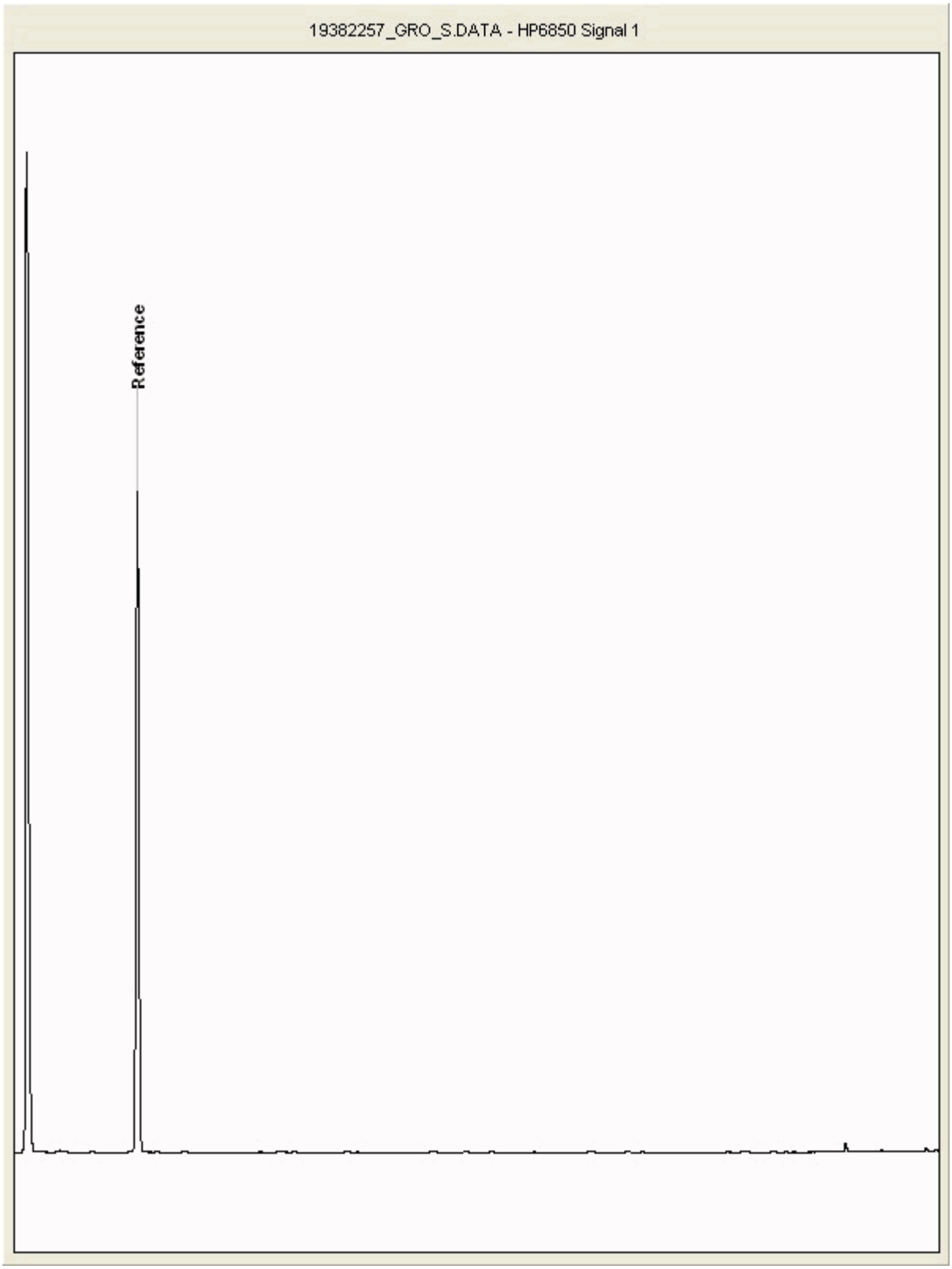
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19382257
Sample ID : WS31

Depth : 1.50



CERTIFICATE OF ANALYSIS

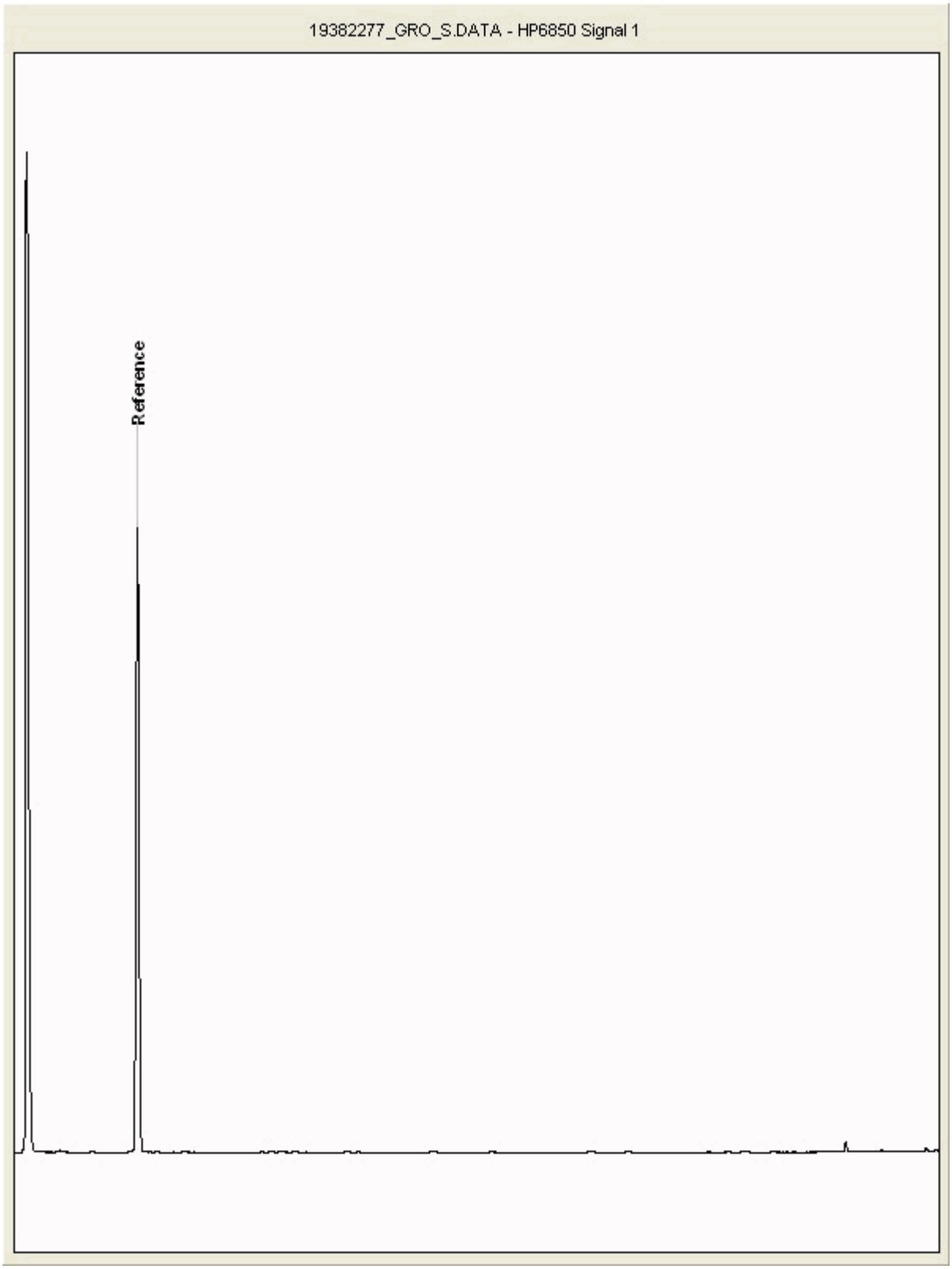
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19382277
Sample ID : WS58A

Depth : 0.10



CERTIFICATE OF ANALYSIS

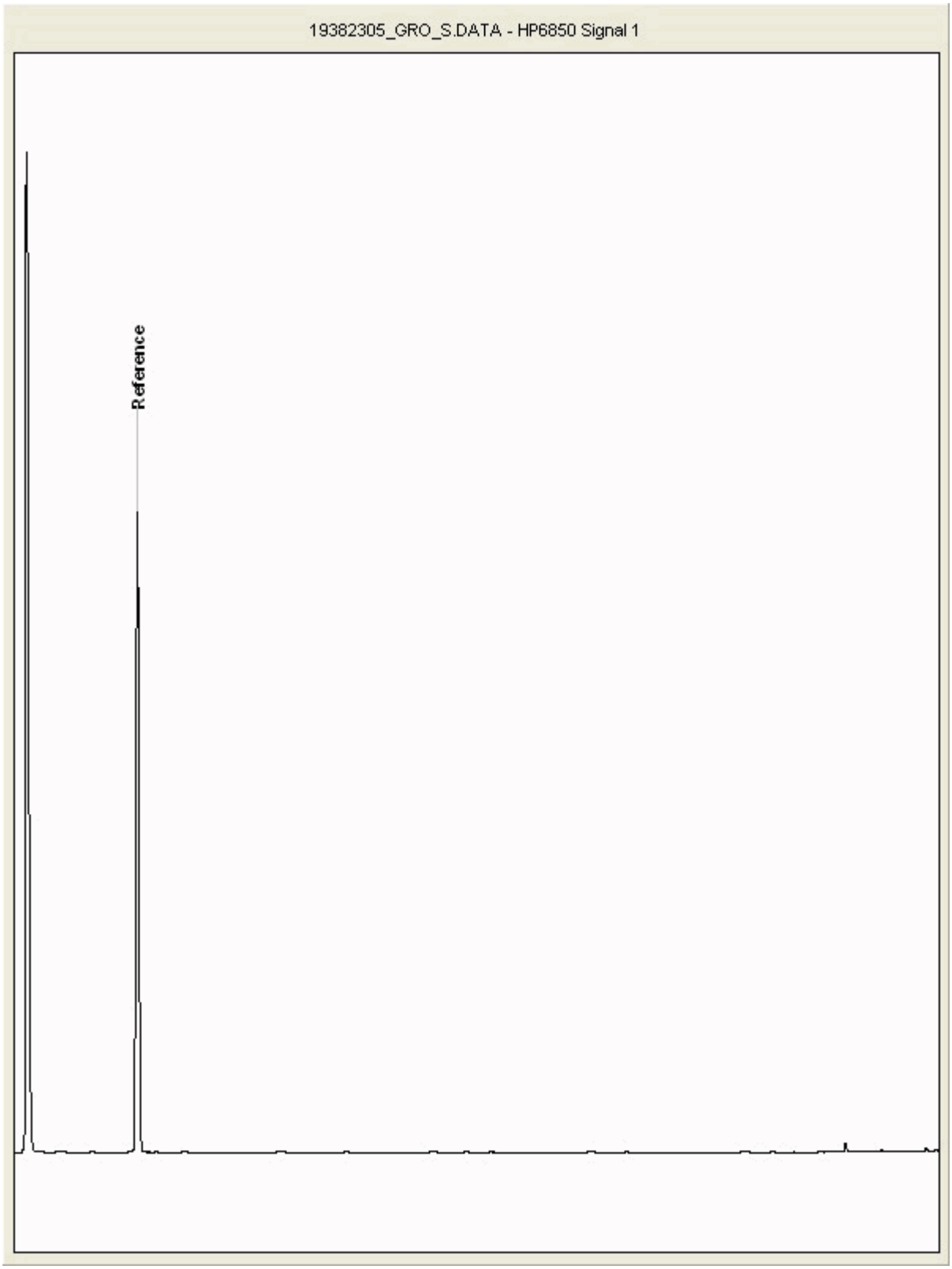
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19382305
Sample ID : WS05

Depth : 0.20



CERTIFICATE OF ANALYSIS

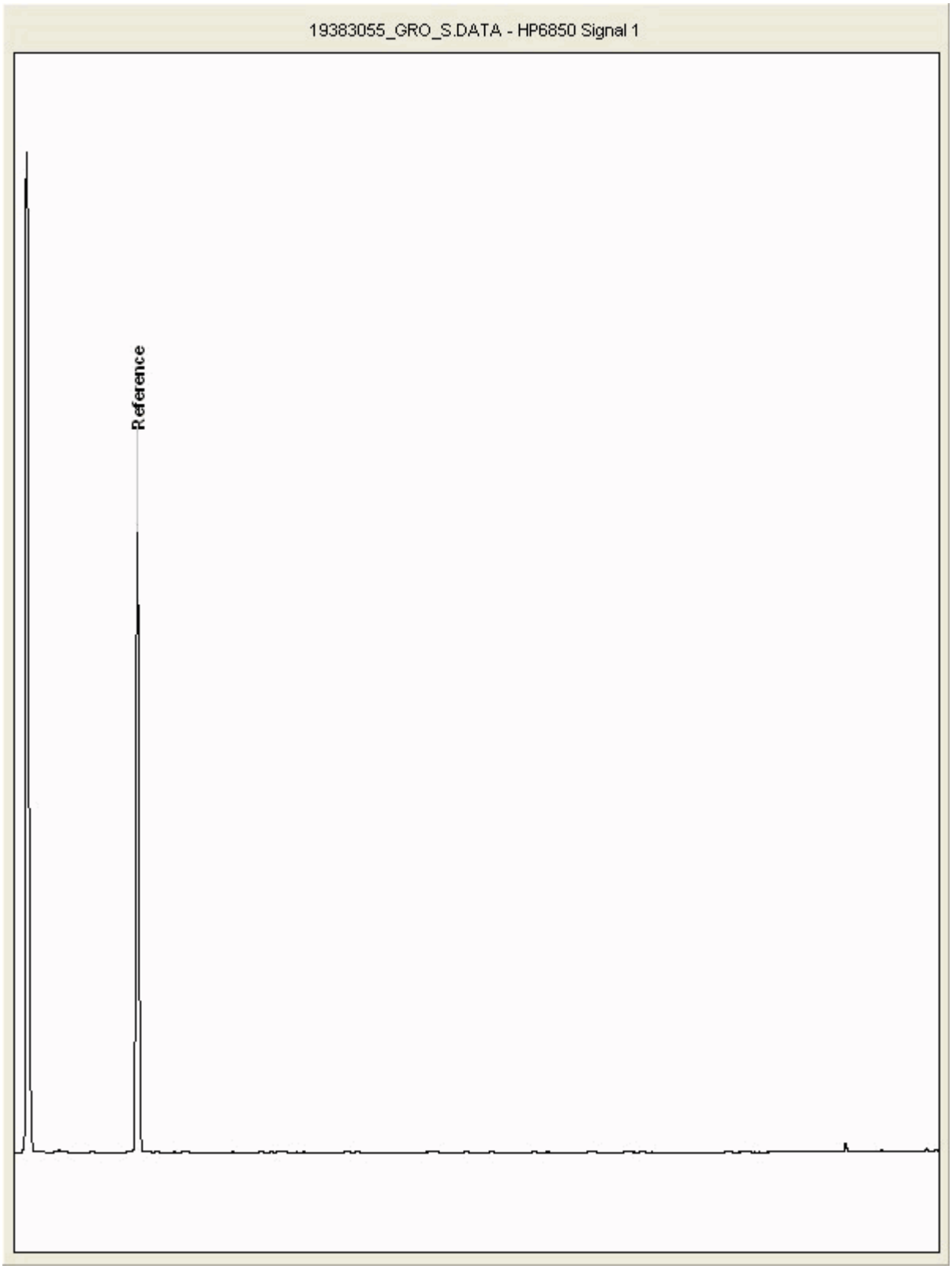
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19383055
Sample ID : WS03

Depth : 0.30



CERTIFICATE OF ANALYSIS

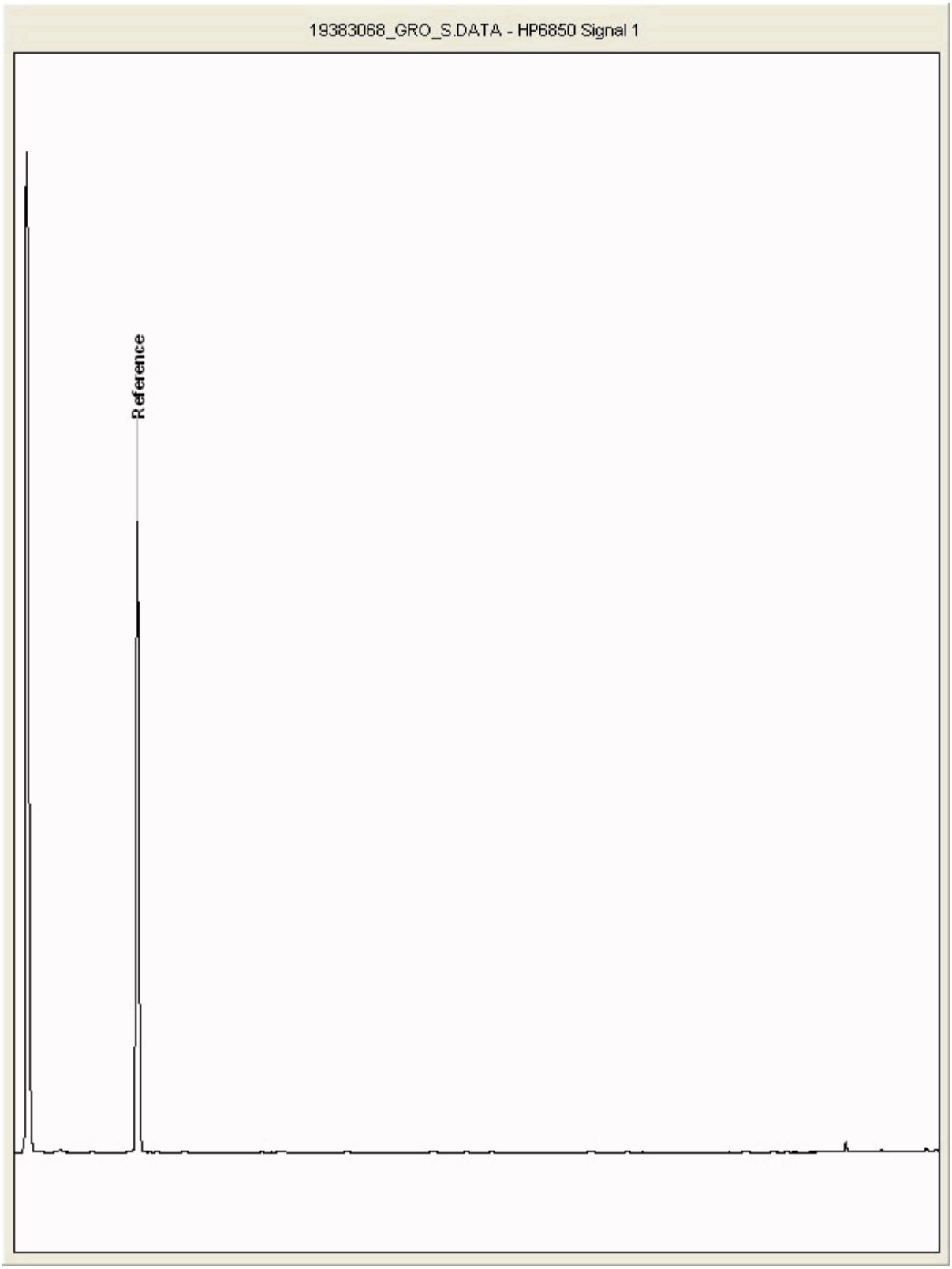
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19383068
Sample ID : WS04

Depth : 0.35



CERTIFICATE OF ANALYSIS

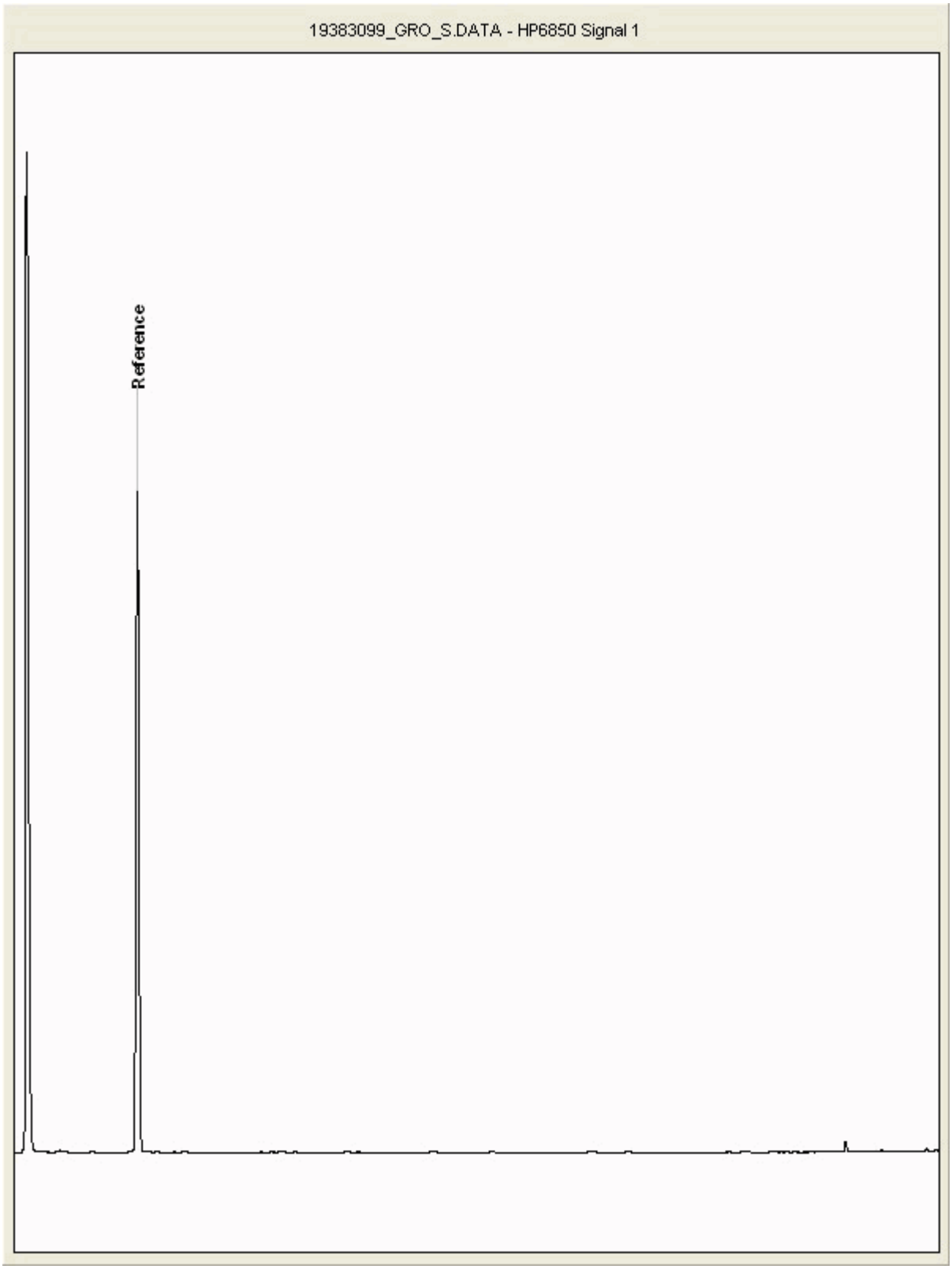
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19383099
Sample ID : WS56

Depth : 0.25



CERTIFICATE OF ANALYSIS

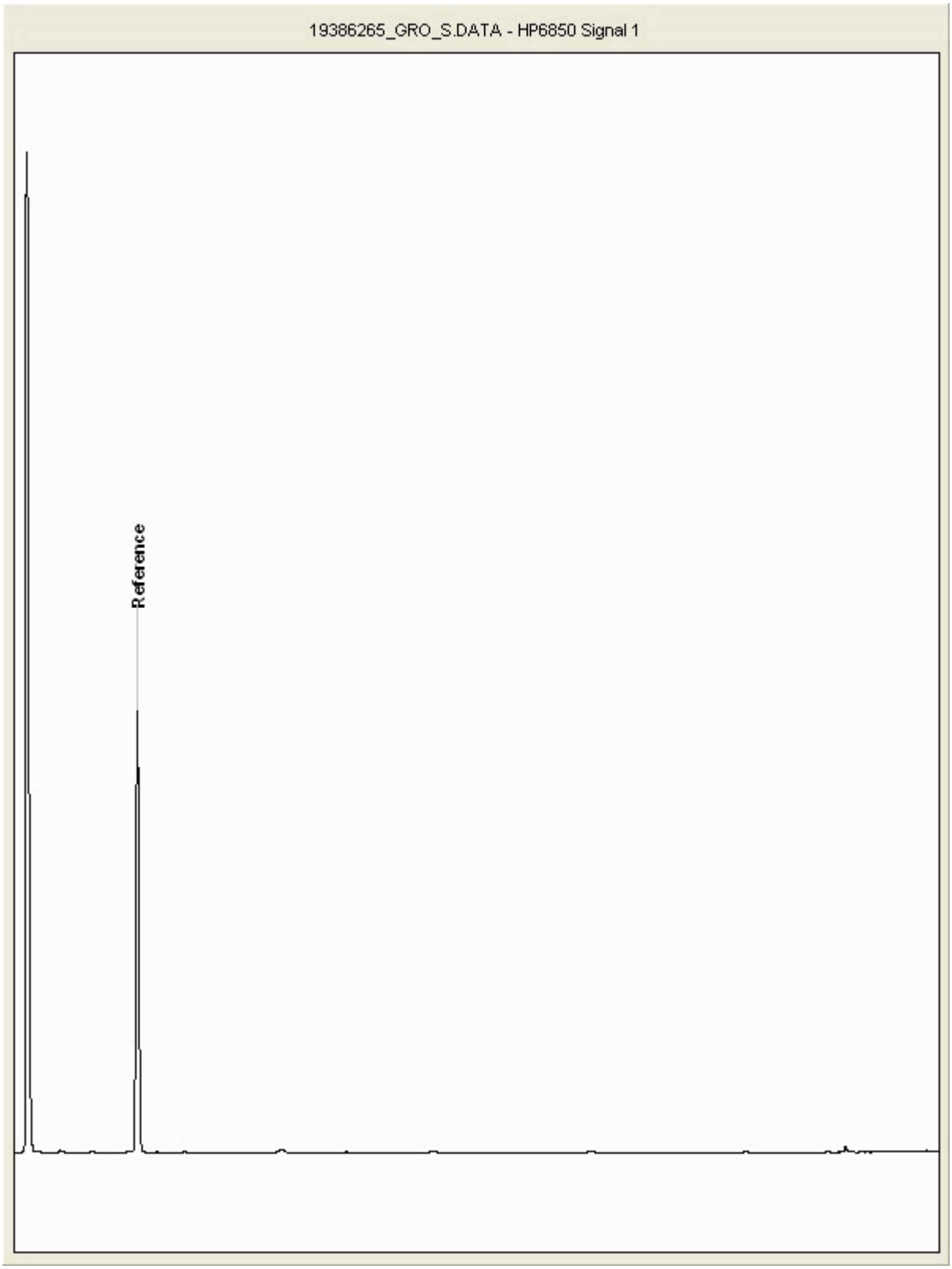
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19386265
Sample ID : WS56A

Depth : 0.65



CERTIFICATE OF ANALYSIS

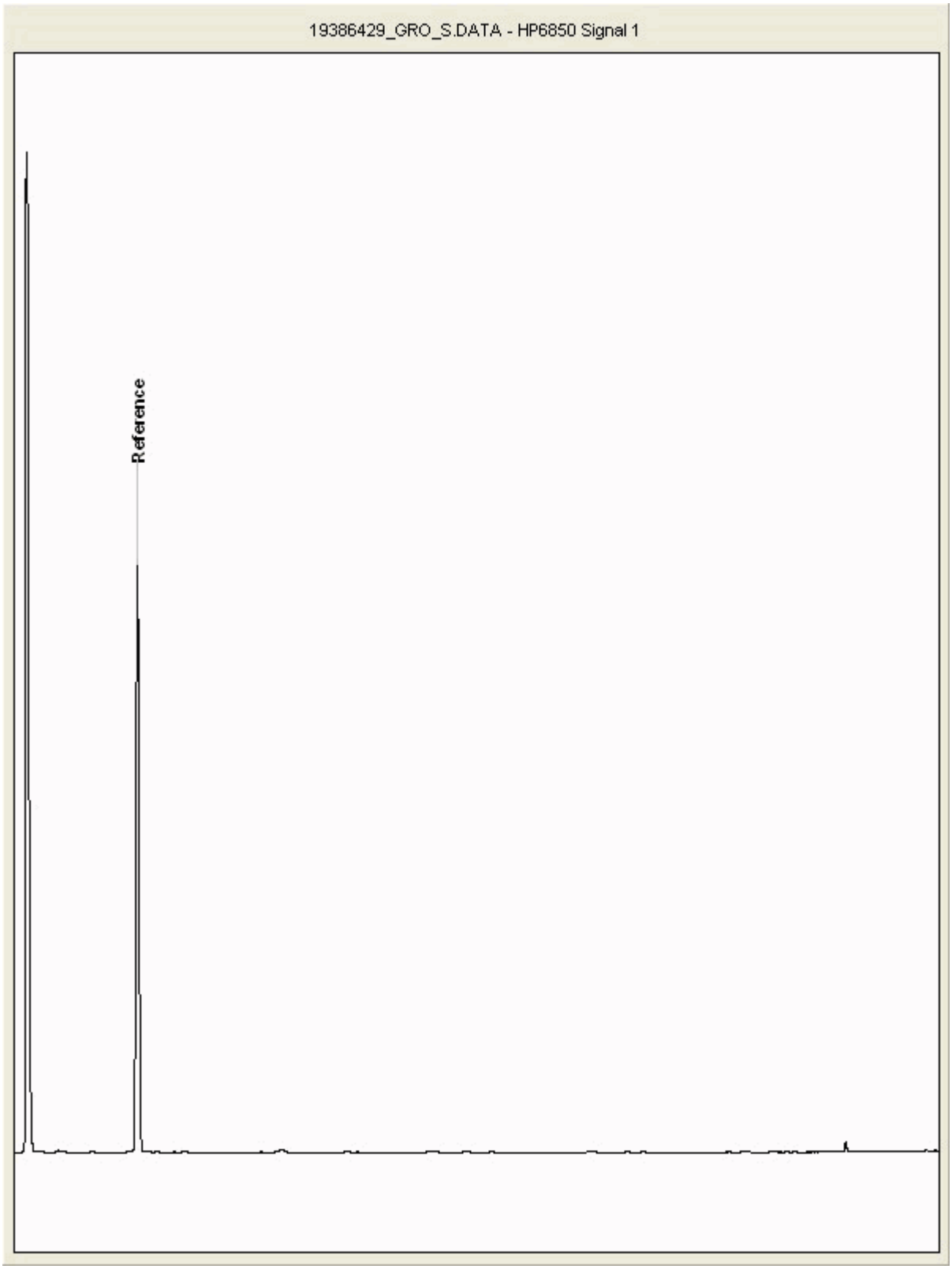
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19386429
Sample ID : WS01

Depth : 0.50



CERTIFICATE OF ANALYSIS

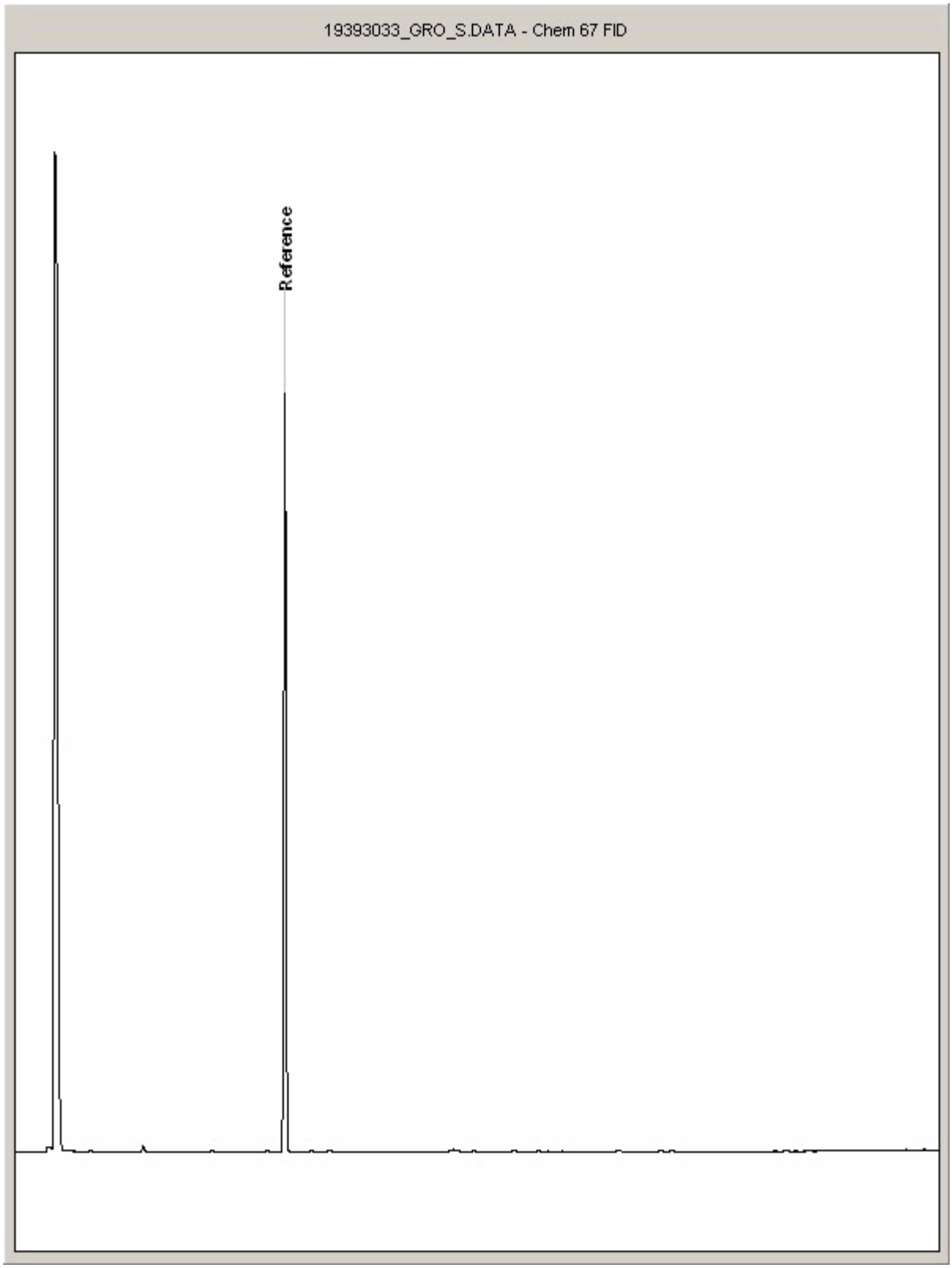
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19393033
Sample ID : WS06

Depth : 0.35



CERTIFICATE OF ANALYSIS

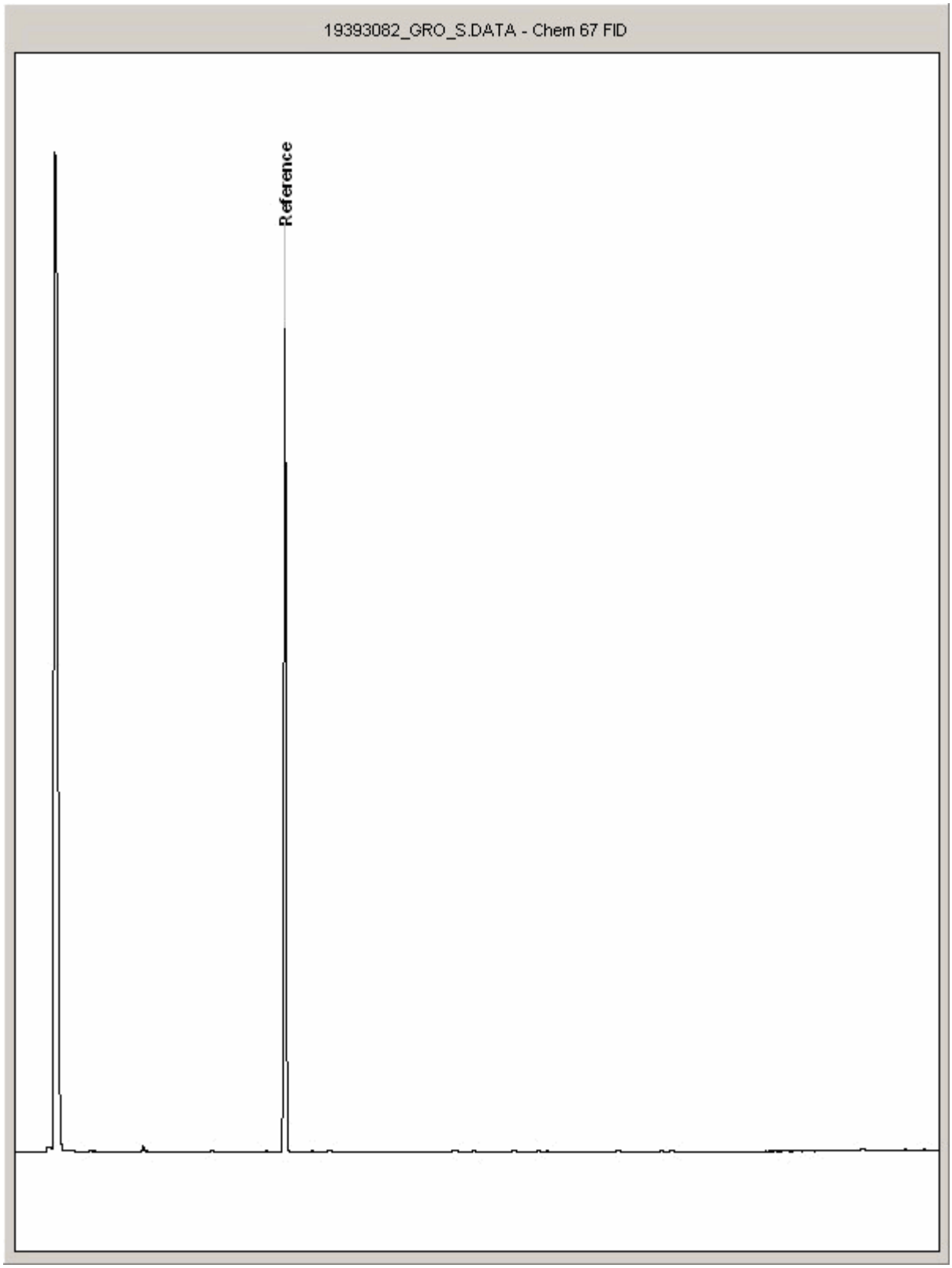
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19393082
Sample ID : WS32

Depth : 1.80



CERTIFICATE OF ANALYSIS

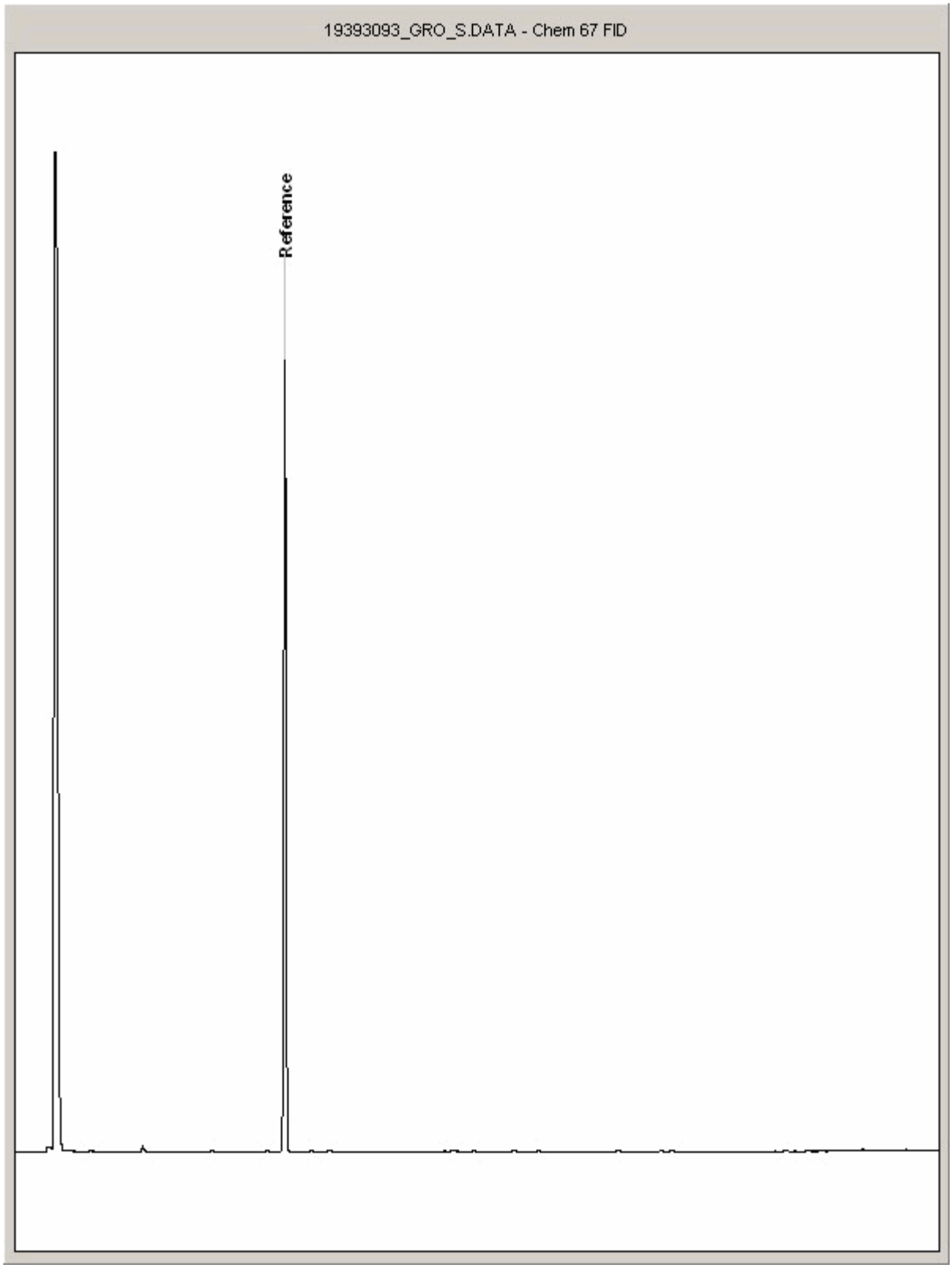
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19393093
Sample ID : WS55

Depth : 0.30



CERTIFICATE OF ANALYSIS

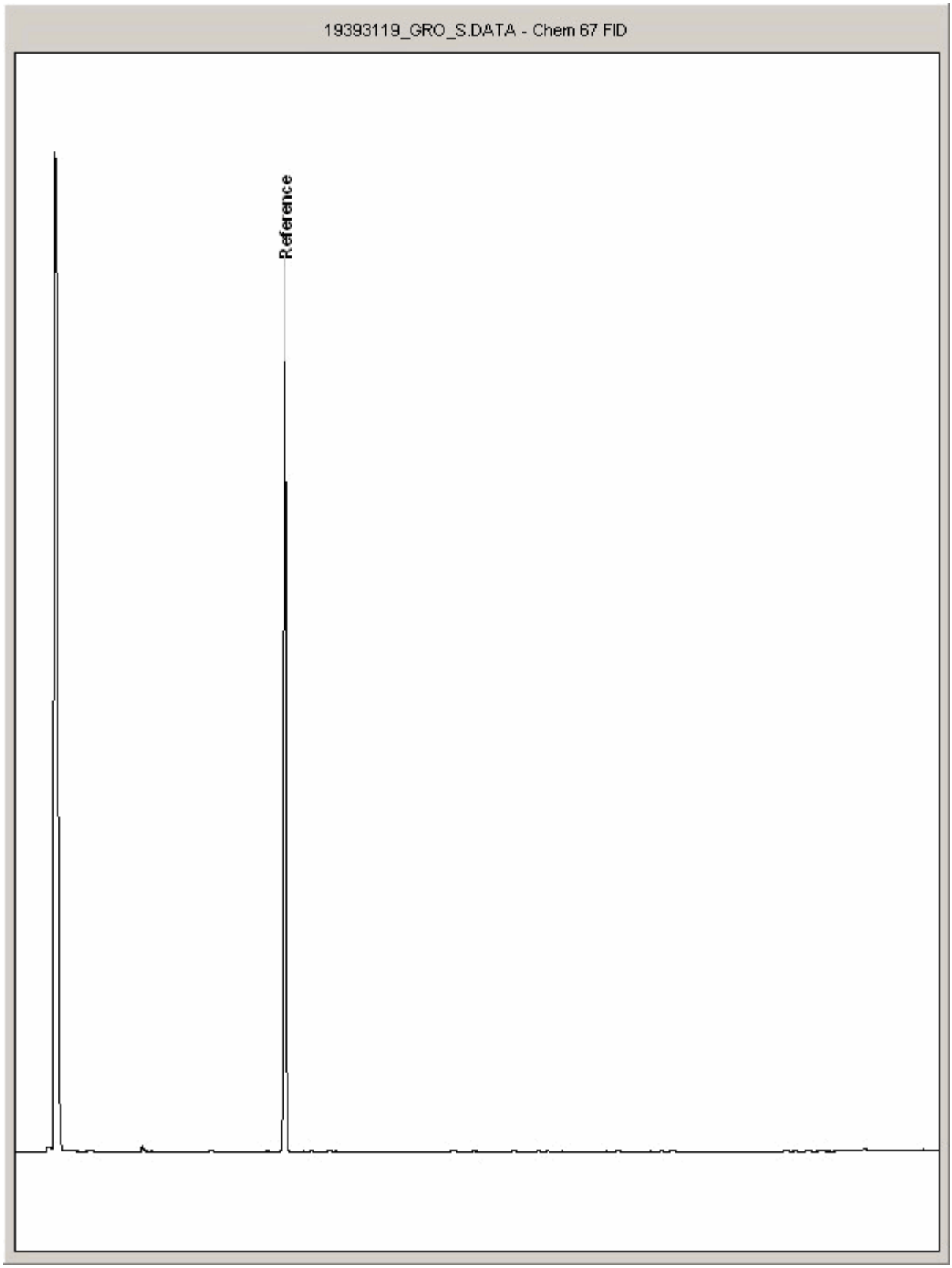
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19393119
Sample ID : WS59

Depth : 0.70



CERTIFICATE OF ANALYSIS

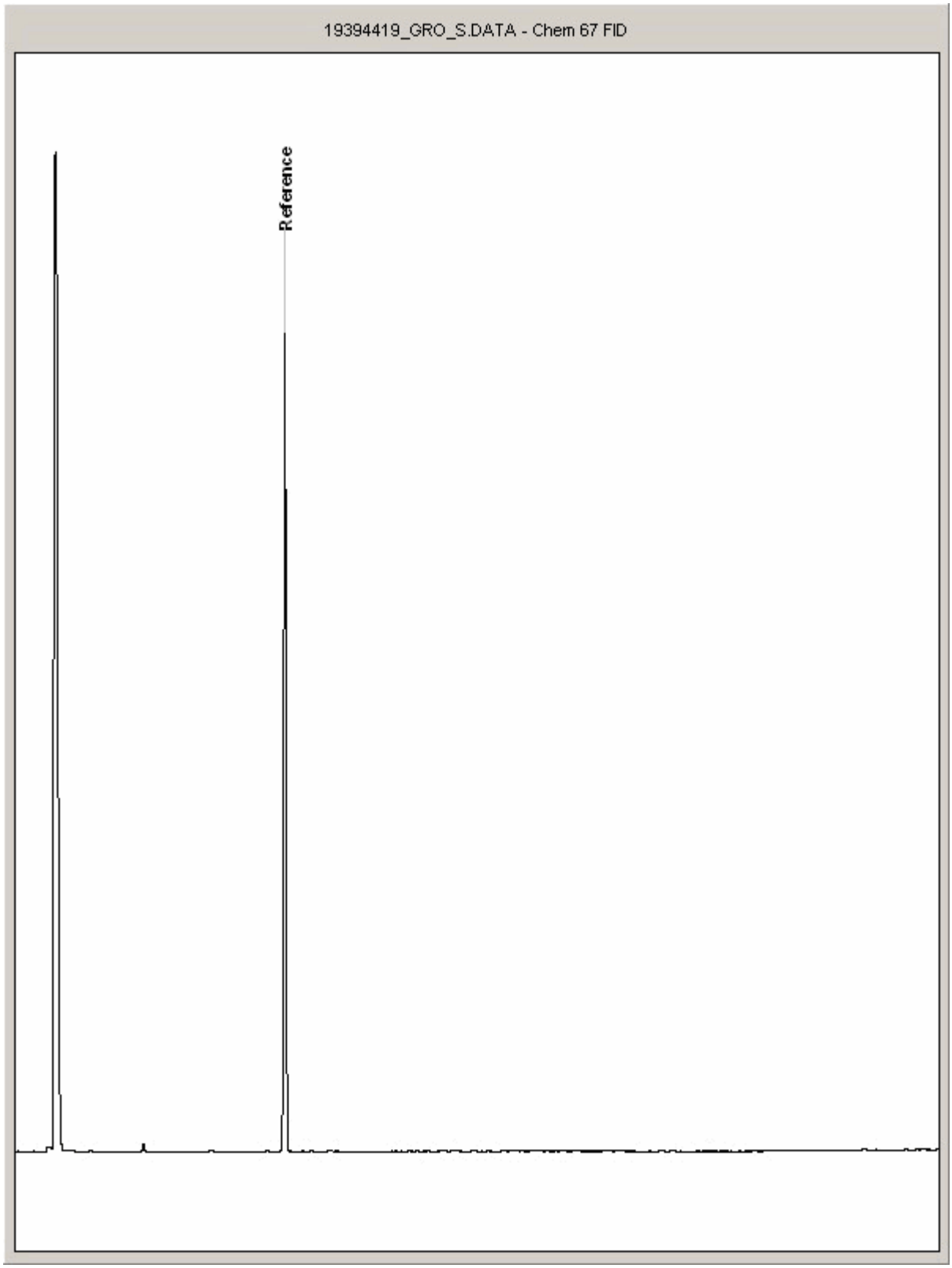
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19394419
Sample ID : WS32

Depth : 0.30



CERTIFICATE OF ANALYSIS

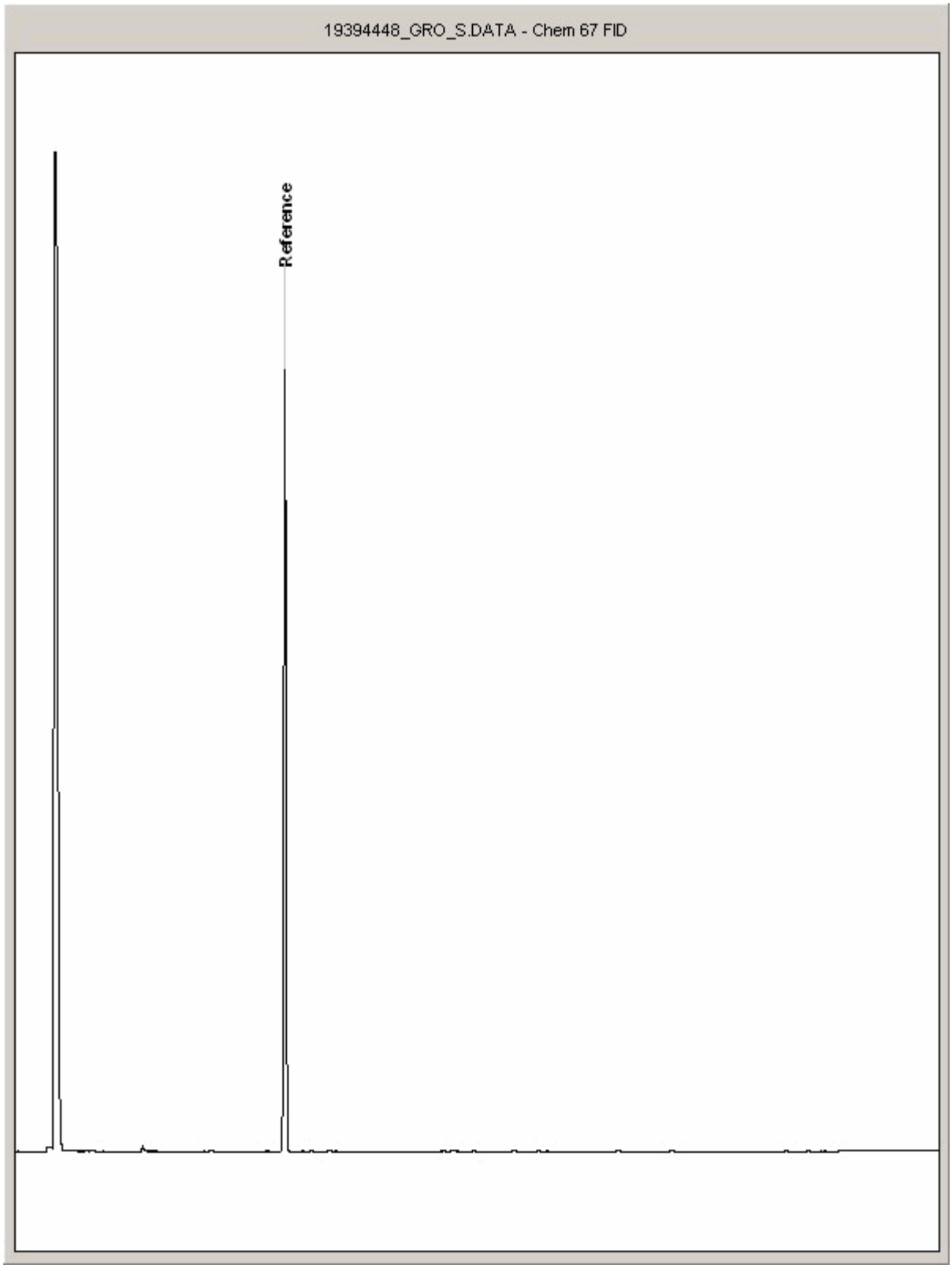
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19394448
Sample ID : WS56

Depth : 0.10



CERTIFICATE OF ANALYSIS

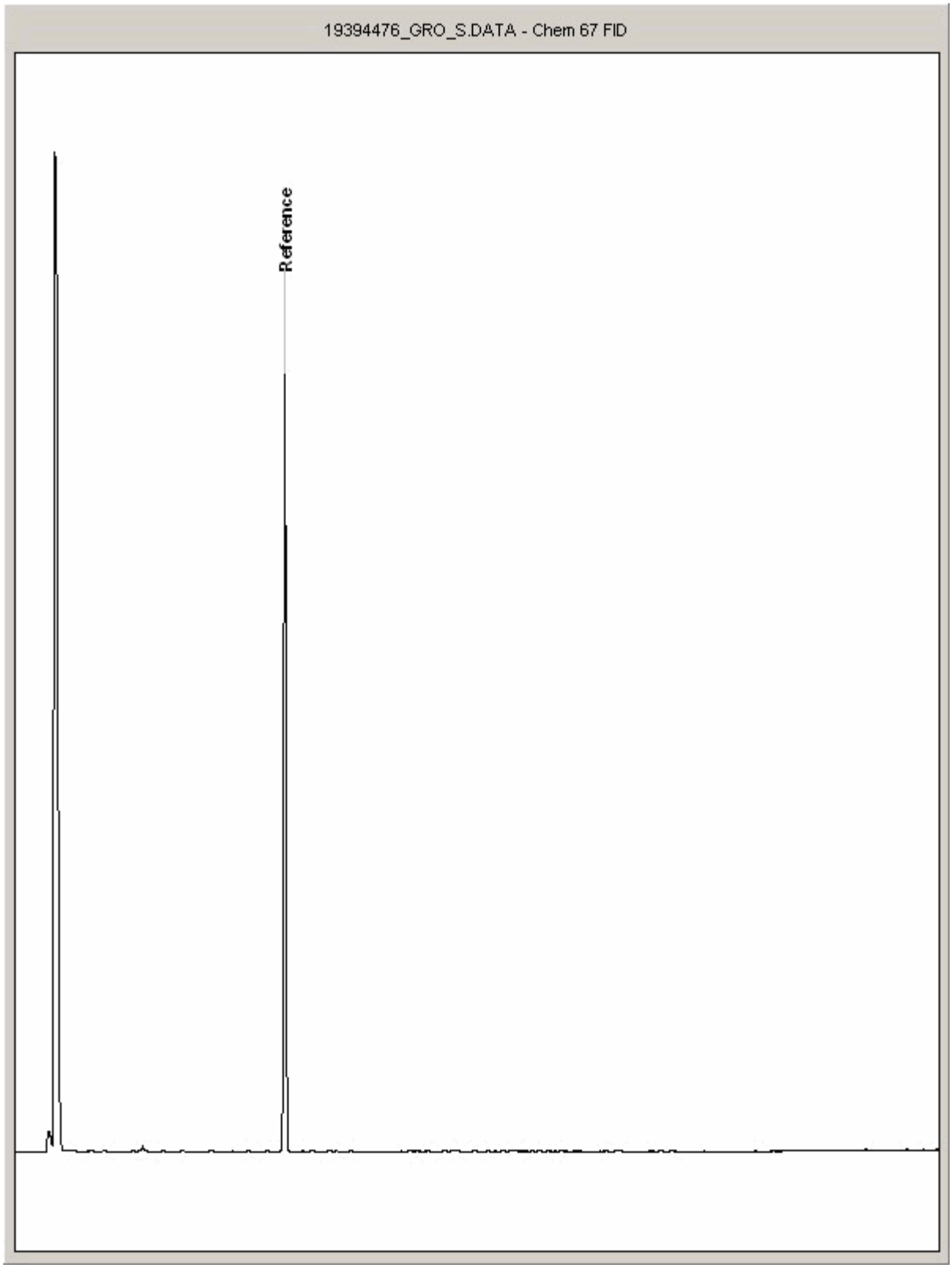
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19394476
Sample ID : WS04

Depth : 0.25



CERTIFICATE OF ANALYSIS

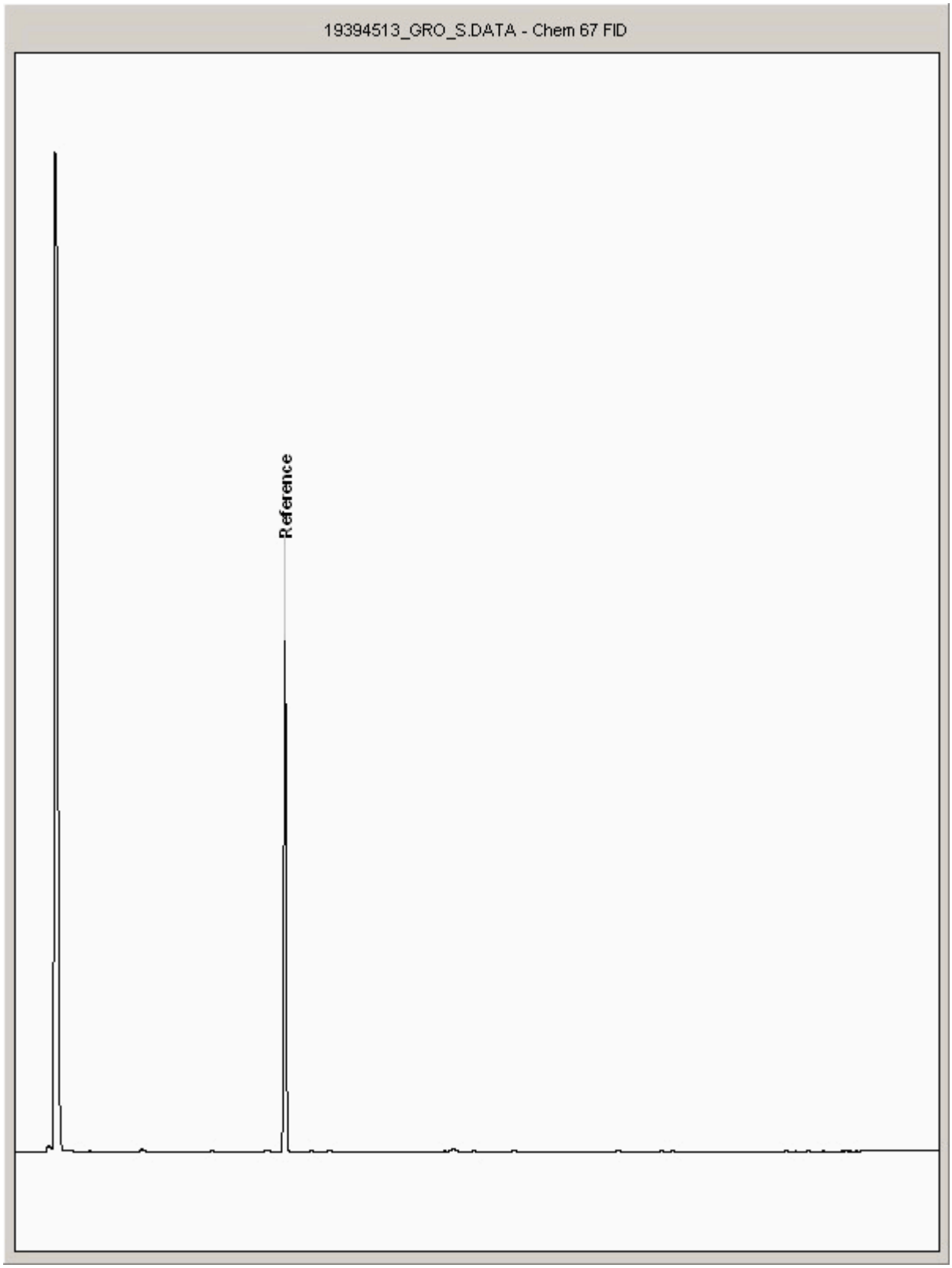
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19394513
Sample ID : WS06

Depth : 0.25



CERTIFICATE OF ANALYSIS

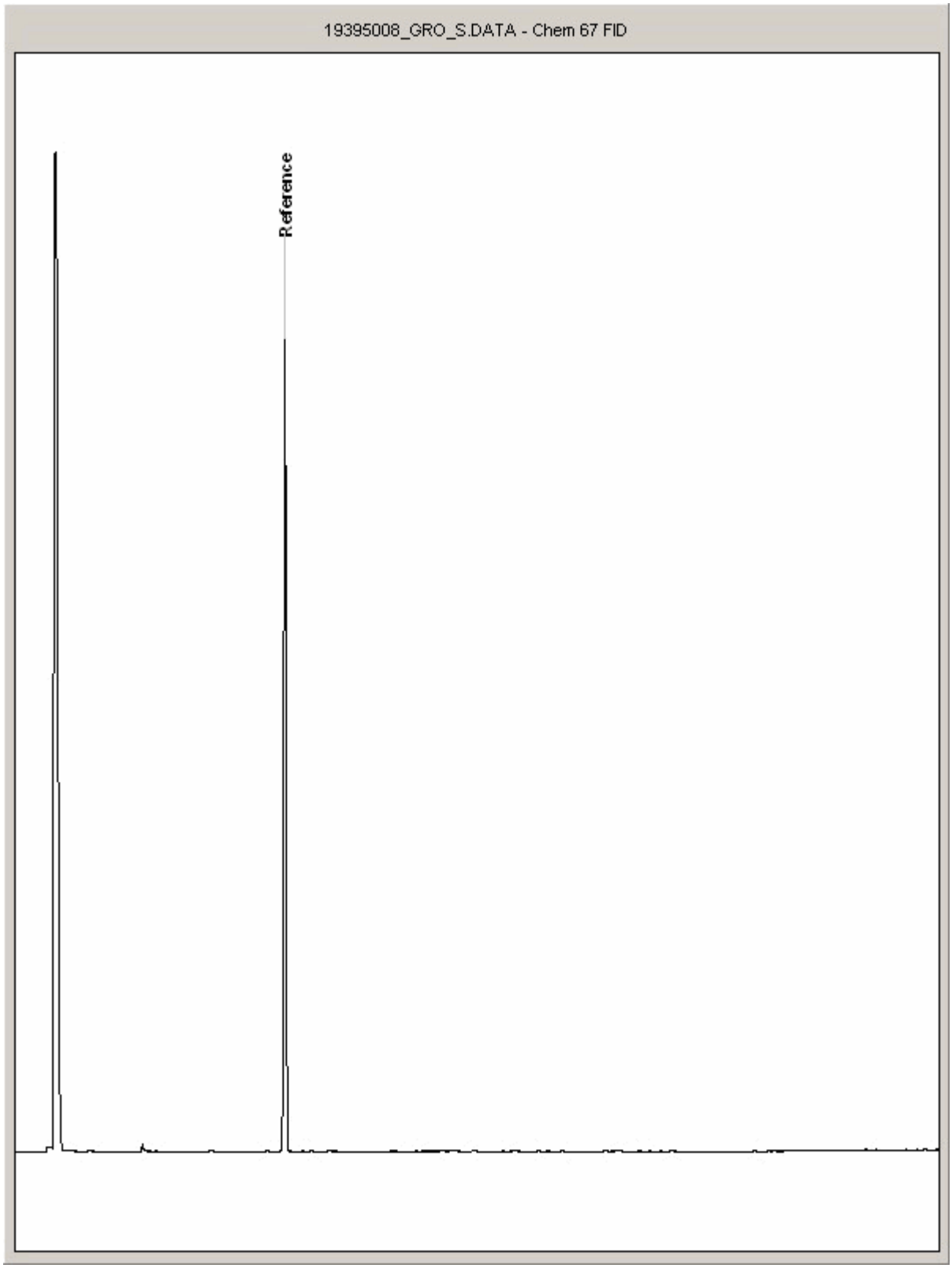
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19395008
Sample ID : WS58A

Depth : 0.30



CERTIFICATE OF ANALYSIS

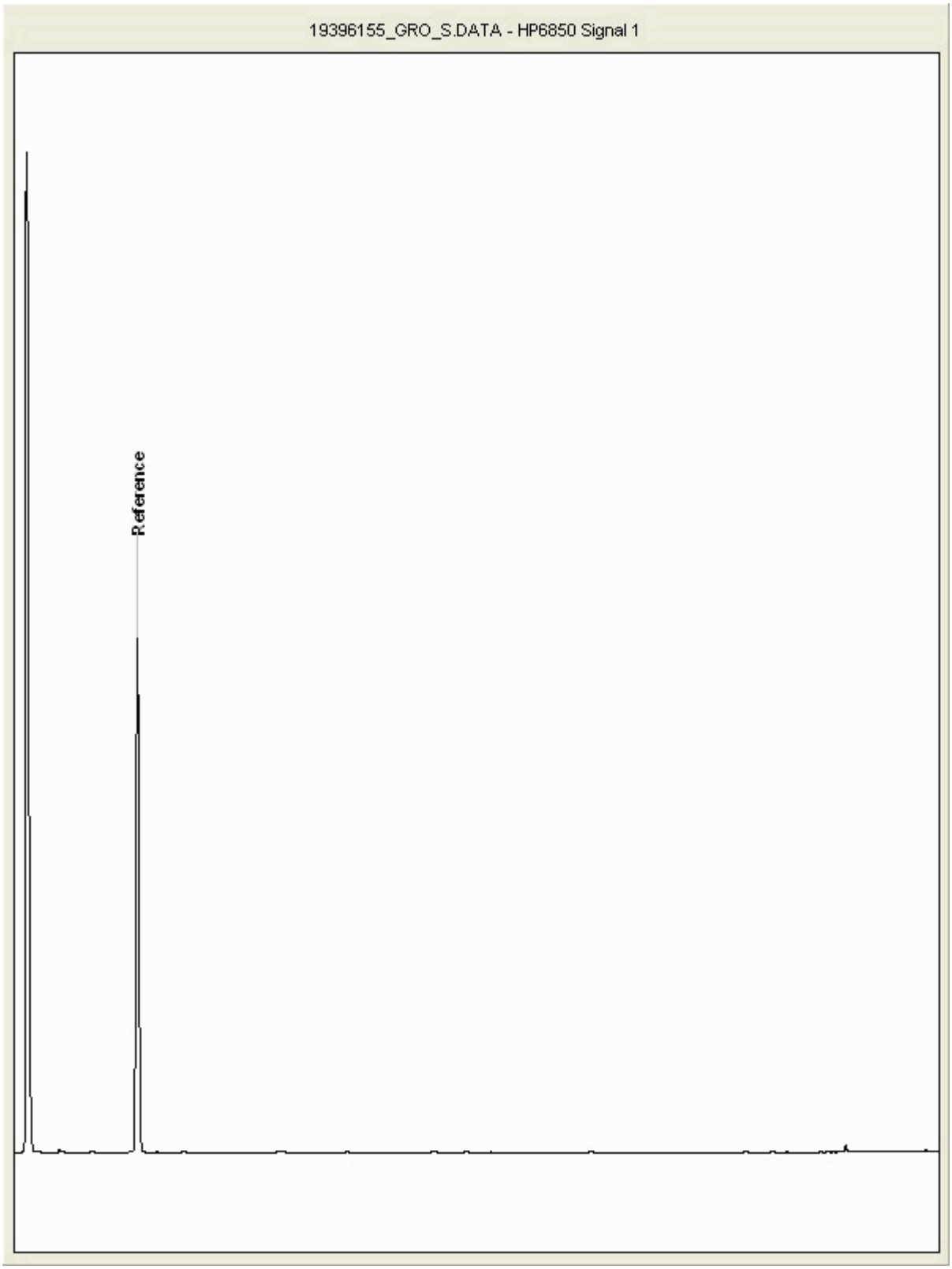
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19396155
Sample ID : WS18

Depth : 0.30



CERTIFICATE OF ANALYSIS

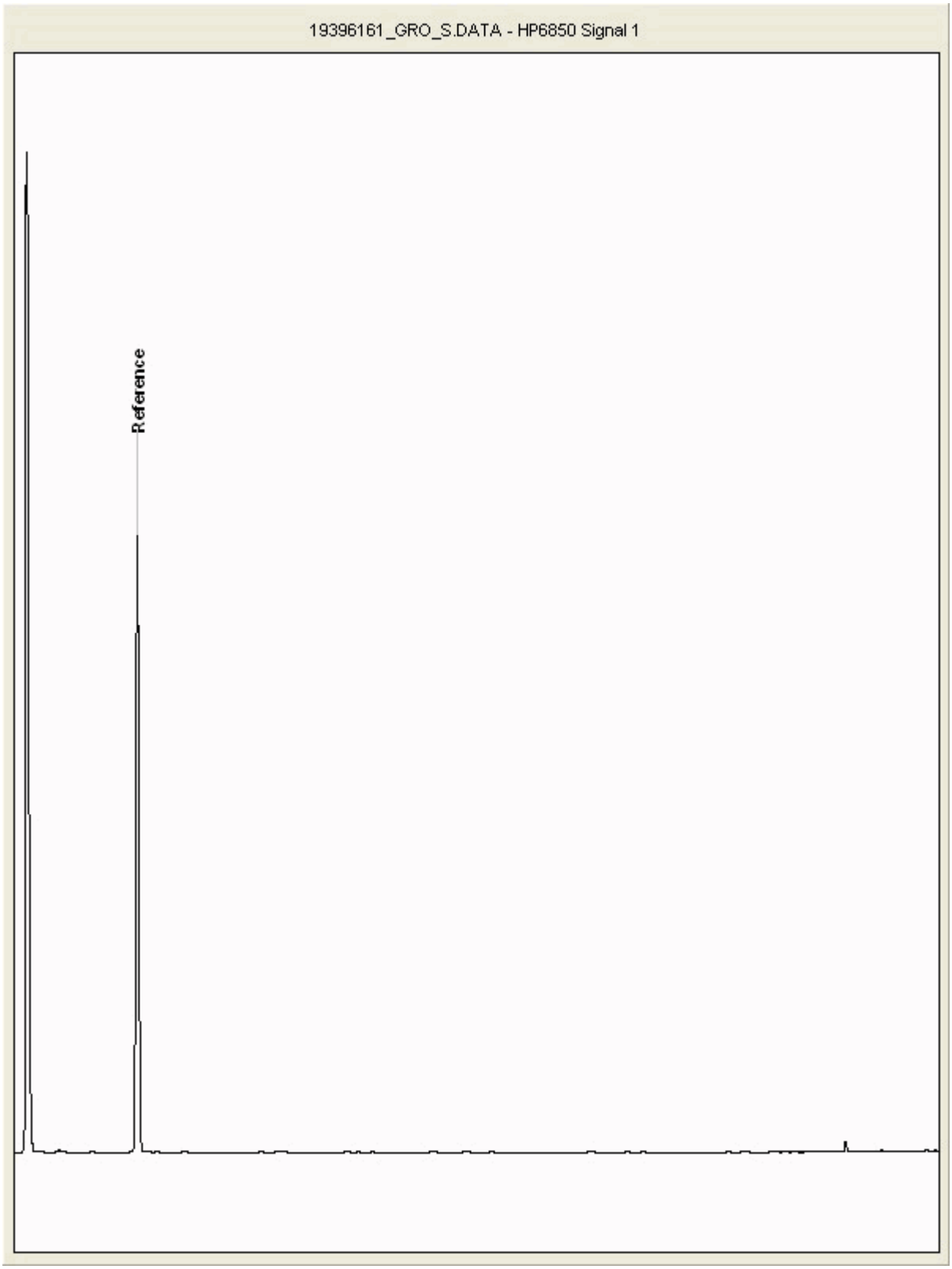
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19396161
Sample ID : WS11

Depth : 0.30



CERTIFICATE OF ANALYSIS

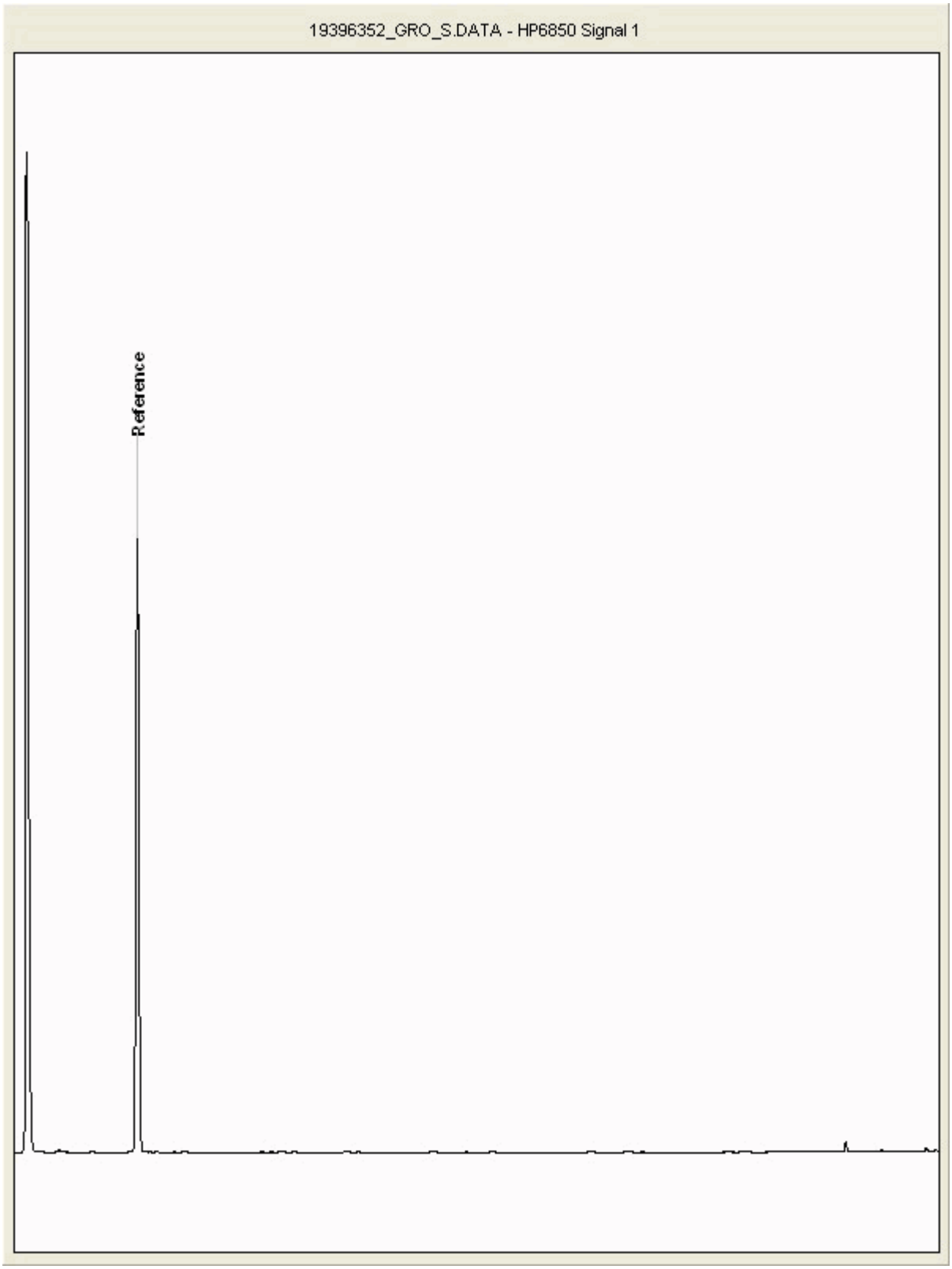
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19396352
Sample ID : WS59

Depth : 0.30



CERTIFICATE OF ANALYSIS

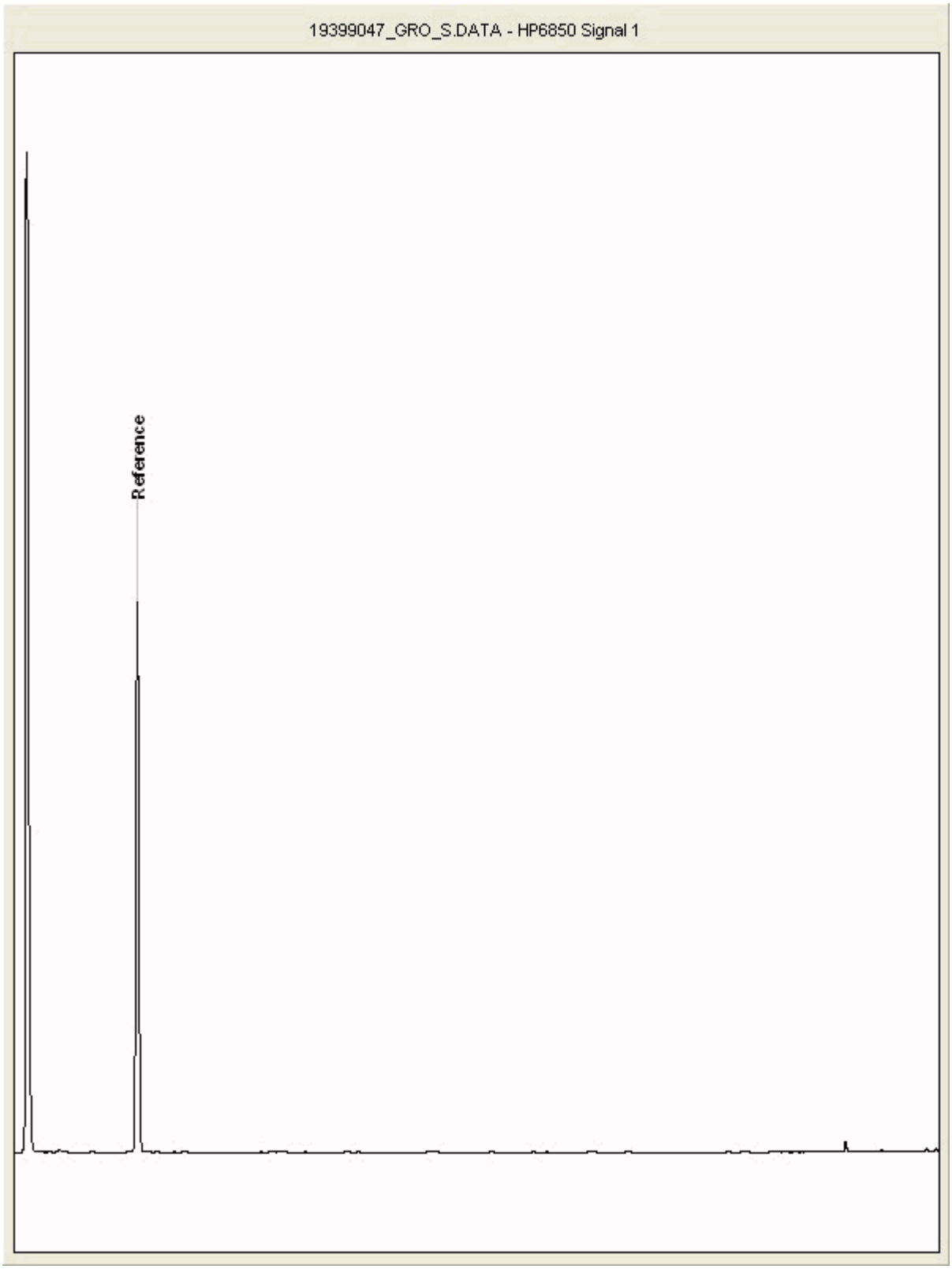
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19399047
Sample ID : WS56A

Depth : 0.10



CERTIFICATE OF ANALYSIS

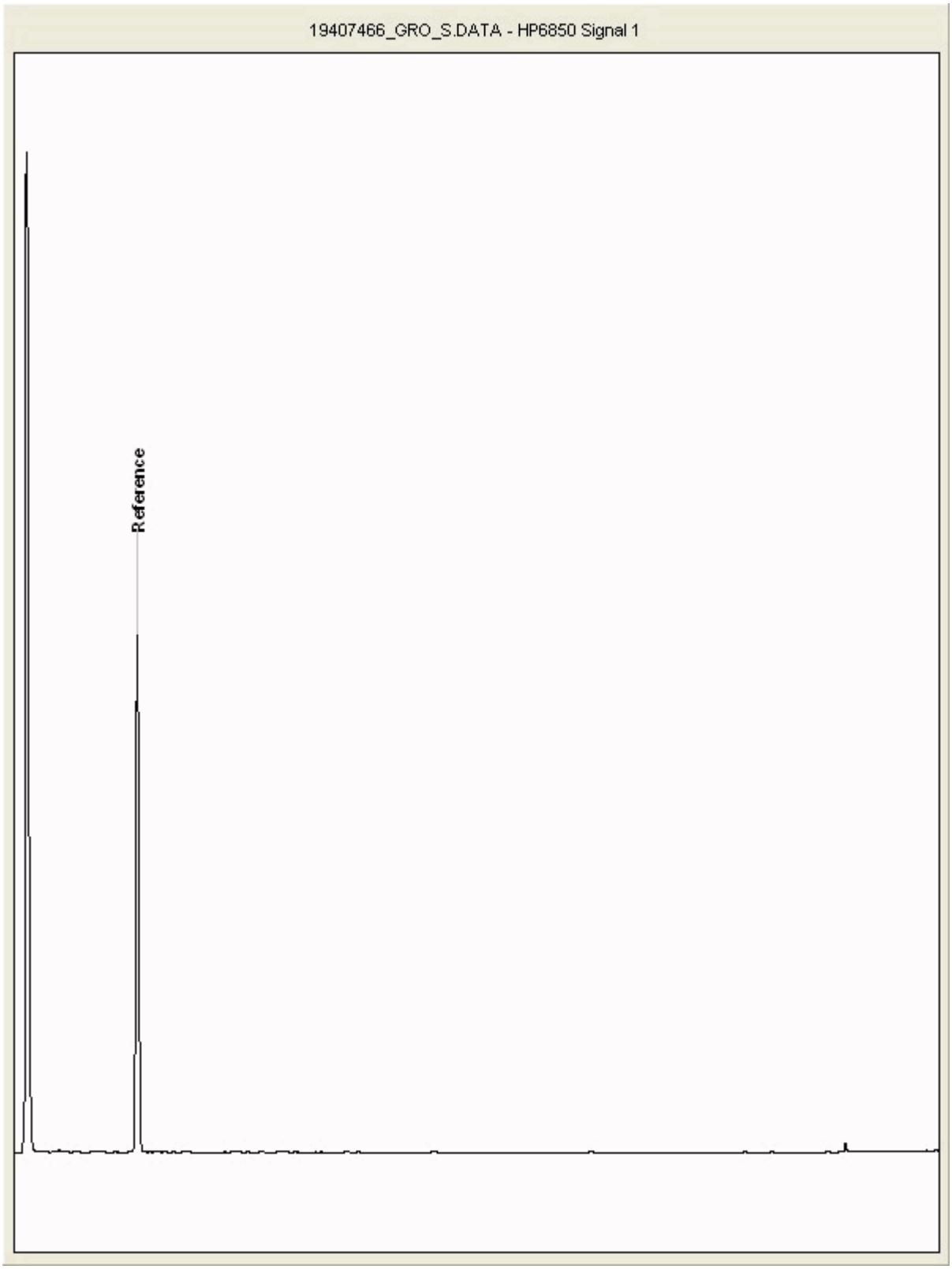
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19407466
Sample ID : WS03

Depth : 0.10



CERTIFICATE OF ANALYSIS

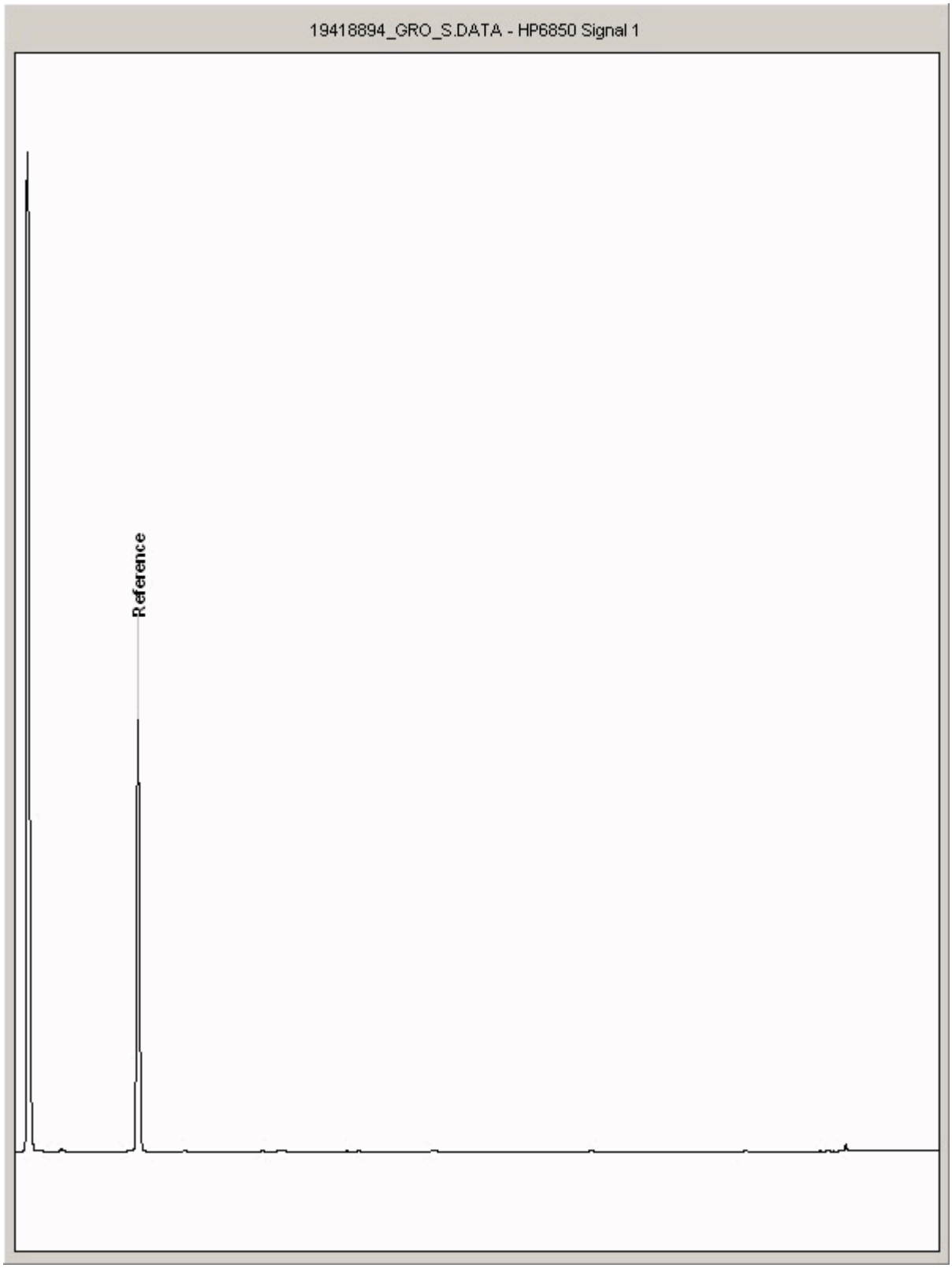
SDG:	190211-18	**Client Reference:**	A090070-474	**Report Number:**	494368
Location:	HE Compton	**Order Number:**	18/COMPO43	**Superseded Report:**	494093

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19418894
Sample ID : WS02

Depth : 0.30



Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. Samples will be run in duplicate upon request, but an additional charge may be incurred.

3. If sufficient sample is received a sub sample will be retained free of charge for 30 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of one month after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

4. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

5. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

6. When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2005), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

7. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised. This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

8. If appropriate preserved bottles are not received preservation will take place on receipt. However, the integrity of the data may be compromised.

9. NDP - No determination possible due to insufficient/unsuitable sample.

10. Metals in water are performed on a filtered sample, and therefore represent dissolved metals - total metals must be requested separately.

11. Results relate only to the items tested.

12. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

13. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

14. **Product analyses** - Organic analyses on products can only be semi-quantitative due to the matrix effects and high dilution factors employed.

15. Phenols monohydric by HPLC include phenol, cresols (2-Methylphenol, 3-Methylphenol and 4-Methylphenol) and Xylenols (2,3 Dimethylphenol, 2,4 Dimethylphenol, 2,5 Dimethylphenol, 2,6 Dimethylphenol, 3,4 Dimethyphenol, 3,5 Dimethylphenol).

16. Total of 5 speciated phenols by HPLC includes Phenol, 2,3,5-Trimethyl Phenol, 2-Isopropylphenol, Cresols and Xylenols (as detailed in 15).

17. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

18. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

19. Mercury results quoted on soils will not include volatile mercury as the analysis is performed on a dried and crushed sample.

20. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

21. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis. The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

22. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

23. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l. Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only. It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

24. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

Sample Deviations

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
§	**Sampled on date not provided**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**

Asbestos

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.

The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

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CH5 3US
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Fax: (01244) 528701
email: hawardencustomerservices@alsglobal.com
Website: www.alsenvironmental.co.uk

WYG Geo-Environment
Arndale Court
Headingley
Leeds
West Yorkshire
LS6 2UJ

Attention: Regulation

CERTIFICATE OF ANALYSIS

Date of report Generation:	08 May 2019
Customer:	H_WYG_LEE
Sample Delivery Group (SDG):	190223-66
Your Reference:	A090070-474
Location:	HE Compton
Report No:	504227

This report has been revised and directly supersedes 504225 in its entirety.

We received 12 samples on Saturday February 23, 2019 and 5 of these samples were scheduled for analysis which was completed on Tuesday May 07, 2019. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Environmental Hawarden (Method codes TM) or ALS Environmental Aberdeen (Method codes S).

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:
Regulation 13

Regulation 13
Operations Manager

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CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
19425321	BH1	ES1	0.20 - 0.20	21/02/2019
19425322	BH1	ES2	1.10 - 1.10	21/02/2019
19425323	BH2	ES1	0.30 - 0.30	19/02/2019
19425324	BH2	ES2	0.75 - 0.75	19/02/2019
19425332	BH3	ES1	0.40 - 0.40	15/02/2019
19425333	BH3	ES	0.50 - 0.50	15/02/2019
19425326	BH3	ES1	1.20 - 1.20	
19425327	BH3	ES2	1.60 - 1.60	
19425328	BH4	ES	0.10 - 0.10	13/02/2019
19425329	BH4	ES	0.30 - 0.30	13/02/2019
19425330	BH4	ES	1.00 - 1.00	13/02/2019
19425331	BH4	ES	2.80 - 2.80	13/02/2019

Maximum Sample/Coolbox Temperature (°C) : **6.4**

ISO5667-3 Water quality - Sampling - Part3 -
During Transportation samples shall be stored in a cooling device capable of maintaining a temperature of (5±3)°C.

ALS have data which show that a cool box with 4 frozen icepacks is capable of maintaining pre-chilled samples at a temperature of (5±3)°C for a period of up to 24hrs.

Only received samples which have had analysis scheduled will be shown on the following pages.

CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Results Legend

X **Test**

N **No Determination Possible**

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

Lab Sample No(s)			19425321			19425323			19425333	19425326			19425330				
Customer Sample Reference			BH1			BH2			BH3	BH3			BH4				
AGS Reference			ES1			ES1			ES	ES1			ES				
Depth (m)			0.20 - 0.20			0.30 - 0.30			0.50 - 0.50	1.20 - 1.20			1.00 - 1.00				
Container			1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)		
Sample Type			S	S	S	S	S	S	S	S	S	S	S	S	S		
Anions by Kone (w)	All	NDPs: 0 Tests: 5	X			X			X	X			X				
Asbestos ID in Solid Samples	All	NDPs: 0 Tests: 1							X								
Asbestos Quantification - Full	All	NDPs: 0 Tests: 1							X								
Boron Water Soluble	All	NDPs: 0 Tests: 5		X			X		X		X			X			
CEN Readings	All	NDPs: 0 Tests: 5	X			X			X	X			X				
Cyanide Comp/Free/Total/Thiocyanate	All	NDPs: 0 Tests: 9	X	X		X	X		X	X	X		X	X			
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 5	X			X			X	X			X				
Dissolved Organic/Inorganic Carbon	All	NDPs: 0 Tests: 5	X			X			X	X			X				
EPH CWG (Aliphatic) Filtered GC (W)	All	NDPs: 0 Tests: 5	X			X			X	X			X				
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 5		X			X		X		X			X			
EPH CWG (Aromatic) Filtered GC (W)	All	NDPs: 0 Tests: 5	X			X			X	X			X				
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 5		X			X		X		X			X			
GRO by GC-FID (S)	All	NDPs: 0 Tests: 5			X			X	X			X			X		
GRO by GC-FID (W)	All	NDPs: 0 Tests: 5	X			X			X	X			X				
Mercury Dissolved	All	NDPs: 0 Tests: 5	X			X			X	X			X				

CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Results Legend

X **Test**

N **No Determination Possible**

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

Lab Sample No(s)			19425321			19425323			19425333		19425326			19425330		
Customer Sample Reference			BH1			BH2			BH3		BH3			BH4		
AGS Reference			ES1			ES1			ES		ES1			ES		
Depth (m)			0.20 - 0.20			0.30 - 0.30			0.50 - 0.50		1.20 - 1.20			1.00 - 1.00		
Container			1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	
Sample Type			S	S	S	S	S	S	S	S	S	S	S	S	S	
Metals in solid samples by OES	All	NDPs: 0 Tests: 5		X			X		X		X			X		
PAH by GCMS	All	NDPs: 0 Tests: 5		X			X		X		X			X		
PAH in waters by GC-MS (diss.filt)	All	NDPs: 0 Tests: 5	X			X			X	X			X			
pH	All	NDPs: 0 Tests: 5		X			X		X		X			X		
pH Value of Filtered Water	All	NDPs: 0 Tests: 5	X			X			X	X			X			
Phenols by ms (w)	All	NDPs: 0 Tests: 5	X			X			X	X			X			
Phenols Spec MS (S)	All	NDPs: 0 Tests: 5		X			X		X		X			X		
Sample description	All	NDPs: 0 Tests: 5		X			X		X		X			X		
Total Organic Carbon	All	NDPs: 0 Tests: 5		X			X		X		X			X		
TPH CWG Filtered (W)	All	NDPs: 0 Tests: 5	X			X			X	X			X			
TPH CWG GC (S)	All	NDPs: 0 Tests: 5		X			X		X		X			X		
VOC MS (S)	All	NDPs: 0 Tests: 5			X			X	X			X			X	

CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Sample Descriptions

Grain Sizes

very fine	<0.063mm	**fine**	0.063mm - 0.1mm	**medium**	0.1mm - 2mm	**coarse**	2mm - 10mm	**very coarse**	>10mm

Lab Sample No(s)	Customer Sample Ref.	Depth (m)	Colour	Description	Inclusions	Inclusions 2
19425321	BH1	0.20 - 0.20	Dark Brown	Sandy Loam	Stones	None
19425323	BH2	0.30 - 0.30	Cream	Sand	Stones	None
19425326	BH3	1.20 - 1.20	Dark Brown	Loamy Sand	Stones	None
19425333	BH3	0.50 - 0.50	Light Brown	Sand	Stones	Crushed Brick
19425330	BH4	1.00 - 1.00	Dark Brown	Clay Loam	Stones	N/A

These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally ocurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.

Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

Validated

CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH1	BH2	BH3	BH3	BH4
			Depth (m)	0.20 - 0.20	0.30 - 0.30	0.50 - 0.50	1.20 - 1.20	1.00 - 1.00
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	21/02/2019	19/02/2019	15/02/2019	-	13/02/2019
			Sampled Time	.	.	.	.	.
			Date Received	23/02/2019	23/02/2019	23/02/2019	23/02/2019	23/02/2019
			SDG Ref	190223-66	190223-66	190223-66	190223-66	190223-66
			Lab Sample No.(s)	19425321	19425323	19425333	19425326	19425330
			AGS Reference	ES1	ES1	ES	ES1	ES
Moisture Content Ratio (% of as received sample)	%	PM024		8.8	14	8.5	15 §	14
Organic Carbon, Total	<0.2 %	TM132		5.48 @ M	0.231 @ M	0.603 @ M	1.15 § M	0.519 @ M
pH	1 pH Units	TM133		11.8 @ M	11.5 @ M	10.6 @ M	8.04 § M	8.72 @ M
Cyanide, Total	<1 mg/kg	TM153		<1 @ M	<1 @ M	<20 @ M	<1 § M	<1 @ M
Arsenic	<0.6 mg/kg	TM181		84.7 M	8.64 M	16.6 M	6.52 § M	5.41 M
Cadmium	<0.02 mg/kg	TM181		<0.02 M	0.133 M	0.288 M	0.25 § M	0.214 M
Chromium	<0.9 mg/kg	TM181		7.48 M	7.03 M	9.16 M	13.9 § M	9.28 M
Copper	<1.4 mg/kg	TM181		50.9 M	6.41 M	10.1 M	11.2 § M	9.25 M
Lead	<0.7 mg/kg	TM181		13.4 M	11.1 M	35 M	19.9 § M	28.7 M
Mercury	<0.14 mg/kg	TM181		<0.14 @ M	<0.14 @ M	<0.14 @ M	<0.14 § M	<0.14 @ M
Nickel	<0.2 mg/kg	TM181		27.4 M	7.87 M	13.1 M	17.9 § M	10.6 M
Selenium	<1 mg/kg	TM181		<1 #	<1 #	<1 #	<1 § #	<1 #
Vanadium	<0.2 mg/kg	TM181		38.3 #	17.7 #	34 #	25.5 § #	17.5 #
Zinc	<1.9 mg/kg	TM181		42.5 M	34.2 M	106 M	57.8 § M	53.9 M
Boron, water soluble	<1 mg/kg	TM222		<1 @ M	<1 @ M	1.38 @ M	<1 § M	<1 @ M
Asbestos Quantification - Gravimetric - %	<0.001 %	TM304				1 #		
Asbestos Quantification - PCOM Evaluation - %	<0.001 %	TM304				<0.001 #		
Additional Asbestos Components (Using TM048)		TM304				None #		
Analysts Comments		TM304				N/C		
Asbestos Quantification - Total - %	<0.001 %	TM304				1 #		

CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH1	BH2	BH3	BH3	BH4
			Depth (m)	0.20 - 0.20	0.30 - 0.30	0.50 - 0.50	1.20 - 1.20	1.00 - 1.00
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	21/02/2019	19/02/2019	15/02/2019	-	13/02/2019
			Sampled Time	.	.	.	.	.
			Date Received	23/02/2019	23/02/2019	23/02/2019	23/02/2019	23/02/2019
			SDG Ref	190223-66	190223-66	190223-66	190223-66	190223-66
			Lab Sample No.(s)	19425321	19425323	19425333	19425326	19425330
			AGS Reference	ES1	ES1	ES	ES1	ES
Naphthalene-d8 % recovery**	%	TM218		91.7	91.4	95	93.1 §	93.1
Acenaphthene-d10 % recovery**	%	TM218		85.9	86.2	90.6	85.1 §	87.2
Phenanthrene-d10 % recovery**	%	TM218		85.2	87.9	91.9	89.8 §	88.2
Chrysene-d12 % recovery**	%	TM218		73.3	82.7	89.2	81.8 §	81.3
Perylene-d12 % recovery**	%	TM218		70.1	81.5	91.1	77.5 §	85.7
Naphthalene	µg/kg	TM218		<45 @ M	<9 @ M	<45 @ M	<9 § M	<45 @ M
Acenaphthylene	µg/kg	TM218		<60 @ M	<12 @ M	<60 @ M	<12 § M	<60 @ M
Acenaphthene	µg/kg	TM218		<40 @ M	<8 @ M	49 @ M	<8 § M	<40 @ M
Fluorene	µg/kg	TM218		<50 @ M	<10 @ M	<50 @ M	<10 § M	<50 @ M
Phenanthrene	µg/kg	TM218		<75 @ M	53.2 @ M	1530 @ M	34.4 § M	<75 @ M
Anthracene	µg/kg	TM218		<80 @ M	<16 @ M	444 @ M	<16 § M	<80 @ M
Fluoranthene	µg/kg	TM218		<85 @ M	146 @ M	4820 @ M	84.3 § M	335 @ M
Pyrene	µg/kg	TM218		<75 @ M	136 @ M	4300 @ M	81.4 § M	323 @ M
Benz(a)anthracene	µg/kg	TM218		<70 @ M	70.7 @ M	2200 @ M	34 § M	191 @ M
Chrysene	µg/kg	TM218		<50 @ M	58.4 @ M	2070 @ M	34.8 § M	191 @ M
Benzo(b)fluoranthene	µg/kg	TM218		<75 @ M	86.6 @ M	3280 @ M	56.4 § M	324 @ M
Benzo(k)fluoranthene	µg/kg	TM218		<70 @ M	39.4 @ M	1120 @ M	19.1 § M	103 @ M
Benzo(a)pyrene	µg/kg	TM218		<75 @ M	66.1 @ M	2090 @ M	34.8 § M	243 @ M
Indeno(1,2,3-cd)pyrene	µg/kg	TM218		<90 @ M	43.4 @ M	1390 @ M	24.6 § M	191 @ M
Dibenzo(a,h)anthracene	µg/kg	TM218		<115 @ M	<23 @ M	350 @ M	<23 § M	<115 @ M
Benzo(g,h,i)perylene	µg/kg	TM218		<120 @ M	47.5 @ M	1400 @ M	<24 § M	207 @ M
PAH, Total Detected USEPA 16	µg/kg	TM218		<590	748	25000	404 §	2110

CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Phenols Spec MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH1	BH2	BH3	BH3	BH4
			Depth (m)	0.20 - 0.20	0.30 - 0.30	0.50 - 0.50	1.20 - 1.20	1.00 - 1.00
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	21/02/2019	19/02/2019	15/02/2019	-	13/02/2019
			Sampled Time	.	.	.	.	.
			Date Received	23/02/2019	23/02/2019	23/02/2019	23/02/2019	23/02/2019
			SDG Ref	190223-66	190223-66	190223-66	190223-66	190223-66
			Lab Sample No.(s)	19425321	19425323	19425333	19425326	19425330
			AGS Reference	ES1	ES1	ES	ES1	ES
4-Nitrophenol	<1 µg/kg	TM072		<1	<1	<5	<1 §	<1
2,4,6-Trichlorophenol	<1 µg/kg	TM072		<1	<1	<5	4.95 §	<1
2-Nitrophenol	<1 µg/kg	TM072		<1	<1	<5	<1 §	<1
2,4-Dichlorophenol	<1 µg/kg	TM072		<1	<1	<5	<1 §	<1
Pentachlorophenol	<1 µg/kg	TM072		<1	<1	<5	<1 §	<1
Phenol	<1 µg/kg	TM072		20.5	18.1	23.6	1.72 §	2.71
4-Chloro-3-methylphenol	<1 µg/kg	TM072		<1	<1	<5	<1 §	<1
2,4-Dimethylphenol	<1 µg/kg	TM072		<1	<1	<5	<1 §	<1
2-Chlorophenol	<1 µg/kg	TM072		<1	<1	<5	<1 §	<1
Sum of Detected Phenols	<9 µg/kg	TM072		20.8	17.6	<45	<9 §	<9

CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH1	BH2	BH3	BH3	BH4
			Depth (m)	0.20 - 0.20	0.30 - 0.30	0.50 - 0.50	1.20 - 1.20	1.00 - 1.00
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	21/02/2019	19/02/2019	15/02/2019	-	13/02/2019
			Sampled Time	.	.	.	.	.
			Date Received	23/02/2019	23/02/2019	23/02/2019	23/02/2019	23/02/2019
			SDG Ref	190223-66	190223-66	190223-66	190223-66	190223-66
			Lab Sample No.(s)	19425321	19425323	19425333	19425326	19425330
			AGS Reference	ES1	ES1	ES	ES1	ES
GRO Surrogate % recovery**	%	TM089		83.2 @	101 @	101 2	93 §	96.6 @
GRO TOT (Moisture Corrected)	<100 µg/kg	TM089		<100 @ M	<100 @ M	<100 2 M	<100 § M	<100 @ M
Aliphatics >C5-C6	<10 µg/kg	TM089		<10 @	<10 @	<10 2	<10 §	<10 @
Aliphatics >C6-C8	<10 µg/kg	TM089		<10 @	<10 @	<10 2	<10 §	<10 @
Aliphatics >C8-C10	<10 µg/kg	TM089		<10 @	<10 @	<10 2	<10 §	<10 @
Aliphatics >C10-C12	<10 µg/kg	TM089		<10 @	<10 @	<10 2	<10 §	<10 @
Aliphatics >C12-C16	<100 µg/kg	TM173		<100	<100	2480	1240 §	202
Aliphatics >C16-C21	<100 µg/kg	TM173		<100	1930	12700	23500 §	1550
Aliphatics >C21-C35	<100 µg/kg	TM173		14400	109000	71400	1180000 §	34700
Aliphatics >C35-C44	<100 µg/kg	TM173		9120	26600	67800	367000 §	33700
Total Aliphatics >C12-C44	<100 µg/kg	TM173		23500	137000	154000	1580000 §	70100
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10 @	<10 @	<10 2	<10 §	<10 @
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10 @	<10 @	<10 2	<10 §	<10 @
Aromatics >EC8-EC10	<10 µg/kg	TM089		<10 @	<10 @	<10 2	<10 §	<10 @
Aromatics >EC10-EC12	<10 µg/kg	TM089		<10 @	<10 @	<10 2	<10 §	<10 @
Aromatics >EC12-EC16	<100 µg/kg	TM173		<100	<100	2520	1280 §	<100
Aromatics >EC16-EC21	<100 µg/kg	TM173		945	<100	24400	11700 §	2090
Aromatics >EC21-EC35	<100 µg/kg	TM173		18300	29200	104000	347000 §	47700
Aromatics >EC35-EC44	<100 µg/kg	TM173		17700	20800	123000	115000 §	56500
Aromatics >EC40-EC44	<100 µg/kg	TM173		7530	6490	59900	36700 §	26300
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		36900	50000	254000	475000 §	106000
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173		60400	187000	409000	2050000 §	176000

CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH1	BH2	BH3	BH3	BH4
			Depth (m)	0.20 - 0.20	0.30 - 0.30	0.50 - 0.50	1.20 - 1.20	1.00 - 1.00
			Sample Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	21/02/2019	19/02/2019	15/02/2019	-	13/02/2019
			Sampled Time	.	.	.	.	.
			Date Received	23/02/2019	23/02/2019	23/02/2019	23/02/2019	23/02/2019
			SDG Ref	190223-66	190223-66	190223-66	190223-66	190223-66
			Lab Sample No.(s)	19425321	19425323	19425333	19425326	19425330
			AGS Reference	ES1	ES1	ES	ES1	ES
Dibromofluoromethane**	%	TM116		122 @	103 @	96.4 2	104 §	103 @
Toluene-d8**	%	TM116		91.3 @	96.9 @	86.8 2	95.6 §	97.3 @
4-Bromofluorobenzene**	%	TM116		70.4 @	94.7 @	85.1 2	78.7 §	89.1 @
Methyl Tertiary Butyl Ether	µg/kg	TM116		<10 @ M	<10 @ M	<10 2 M	<10 § M	<10 @ M
Benzene	µg/kg	TM116		<9 @ M	<9 @ M	<9 2 M	<9 § M	<9 @ M
Toluene	µg/kg	TM116		11.9 @ M	<7 @ M	<7 2 M	<7 § M	<7 @ M
Ethylbenzene	µg/kg	TM116		<4 @ M	<4 @ M	<4 2 M	<4 § M	<4 @ M
p/m-Xylene	µg/kg	TM116		<10 @ #	<10 @ #	<10 2 #	<10 § #	<10 @ #
o-Xylene	µg/kg	TM116		<10 @ M	<10 @ M	<10 2 M	<10 § M	<10 @ M
Sum of Detected Xylenes	mg/kg	TM116		<0.02 @	<0.02 @	<0.02 2	<0.02 §	<0.02 @
Sum of BTEX	µg/kg	TM116		<40 @	<40 @	<40 2	<40 §	<40 @

CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Asbestos Identification - Solid Samples

Results Legend

ISO17025 accredited.
M *m*CERTS accredited.
***** Subcontracted test.
(F) Trigger breach confirmed
1-5&+§@ Sample deviation (see appendix)

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Cust. Sample Ref.	BH3ES	29/04/2019	Marcin Magdziarek	Loose fibres in soil	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Depth (m)	0.50 - 0.50										
Sample Type	SOLID										
Date Sampled	15/02/2019 00:00:00										
Date Receieved	23/02/2019 06:00:00										
SDG	190223-66										
Original Sample	19425333										
Method Number	TM048										

Asbestos Quantification - Full

Results Legend

ISO17025 accredited.
M *m*CERTS accredited.
***** Subcontracted test.
(F) Trigger breach confirmed
1-5&+§@ Sample deviation (see appendix)

		Additional Asbestos Components	Analysts Comments	Asbestos Quantification - Gravimetric - %	Asbestos Quantification - PCOM Evaluation	Asbestos Quantification - Total - %
Cust. Sample Ref.	BH3ES	None (#)	N/C	1.0031 (#)	<0.001 (#)	1.0033 (#)
Depth (m)	0.50 - 0.50					
Sample Type	SOLID					
Date Sampled	15/02/2019 00:00:00					
Date Receieved	23/02/2019 06:00:00					
SDG	190223-66					
Original Sample	19425333					
Method Number	TM304					

CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.203	**Natural Moisture Content (%)**	16.3
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	86
Particle Size <4mm	>95%		

Case				
SDG	190223-66			
Lab Sample Number(s)	19425321			
Sampled Date	21-Feb-2019			
Customer Sample Ref.	BH1 ES1			
Depth (m)	0.20 - 0.20			

Solid Waste Analysis

Total Organic Carbon (%)	5.48	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	11.8	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Conc^n in 2:1 eluate (mg/l)		2:1 conc^n leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
Arsenic	0.00209	<0.0005	0.00418	<0.001	0.5	2	25
Barium	-	-	-	-	20	100	300
Cadmium	<0.00008	<0.00008	<0.00016	<0.00016	0.04	1	5
Chromium	0.0197	<0.001	0.0394	<0.002	0.5	10	70
Copper	0.0344	<0.0003	0.0688	<0.0006	2	50	100
Mercury Dissolved (CVAF)	0.0000104	<0.00001	0.0000208	<0.00002	0.01	0.2	2
Molybdenum	-	-	-	-	0.5	10	30
Nickel	0.00637	<0.0004	0.0127	<0.0008	0.4	10	40
Lead	<0.0002	<0.0002	<0.0004	<0.0004	0.5	10	50
Antimony	-	-	-	-	0.06	0.7	5
Selenium	0.00669	<0.001	0.0134	<0.002	0.1	0.5	7
Zinc	0.0042	<0.001	0.0084	<0.002	4	50	200
Chloride	16.1	<2	32.2	<4	800	15000	25000
Fluoride	-	-	-	-	10	150	500
Sulphate (soluble)	-	-	-	-	1000	20000	50000
Total Dissolved Solids	-	-	-	-	4000	60000	100000
Total Monohydric Phenols (W)	-	-	-	-	1	-	-
Dissolved Organic Carbon	31.4	<3	62.8	<6	500	800	1000

Leach Test Information

Date Prepared	18-Apr-2019
pH (pH Units)	11.63
Conductivity (µS/cm)	1,330.00
Temperature (ºC)	16.80
Volume Leachant (Litres)	0.321
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
08/05/2019 17:39:31

CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.203	**Natural Moisture Content (%)**	16.3
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	86
Particle Size <4mm	>95%		

Case				
SDG	190223-66			
Lab Sample Number(s)	19425321			
Sampled Date	21-Feb-2019			
Customer Sample Ref.	BH1 ES1			
Depth (m)	0.20 - 0.20			

Solid Waste Analysis

Total Organic Carbon (%)	5.48	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	11.8	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Conc^n in 2:1 eluate (mg/l)		2:1 conc^n leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
Aliphatics >C12-C16	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.02	<0.02	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC16-EC35	<0.01	<0.01	<0.02	<0.02	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.02	<0.02	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	0.015	<0.01	0.03	<0.02	-	-	-
pH Value of Filtered Water	12	<0.001	24	<0.002	-	-	-
Naphthalene (diss.filt)	<0.00001	<0.00001	<0.00002	<0.00002	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.1	<0.1	-	-	-
Acenaphthene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
Phenol	0.00151	<0.0005	0.00302	<0.001	-	-	-
2-methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Acenaphthylene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Fluoranthene (diss.filt)	0.0000243	<0.000005	0.0000486	<0.00001	-	-	-
4-methylphenol	0.00065	<0.0005	0.0013	<0.001	-	-	-
Anthracene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2-chlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-

Leach Test Information

Date Prepared	18-Apr-2019
pH (pH Units)	11.63
Conductivity (µS/cm)	1,330.00
Temperature (ºC)	16.80
Volume Leachant (Litres)	0.321
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
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CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.203	**Natural Moisture Content (%)**	16.3
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	86
Particle Size <4mm	>95%		

Case				
SDG	190223-66			
Lab Sample Number(s)	19425321			
Sampled Date	21-Feb-2019			
Customer Sample Ref.	BH1 ES1			
Depth (m)	0.20 - 0.20			

Solid Waste Analysis

Total Organic Carbon (%)	5.48	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	11.8	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
Boron	<0.01	<0.01	<0.02	<0.02	-	-	-
Phenanthrene (diss.filt)	0.0000239	<0.000005	0.0000478	<0.00001	-	-	-
2,4-dimethylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Fluorene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
4-chloro-3-methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Chrysene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Pyrene (diss.filt)	0.0000142	<0.000005	0.0000284	<0.00001	-	-	-
4-chlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(a)anthracene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2,4-dichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(b)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2-nitrophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(k)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2,4,6-trichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(a)pyrene (diss.filt)	<0.000002	<0.000002	<0.000004	<0.000004	-	-	-
2,4,5-trichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
4-nitrophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(g,h,i)perylene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2,3,5,6-tetrachlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-

Leach Test Information

Date Prepared	18-Apr-2019
pH (pH Units)	11.63
Conductivity (µS/cm)	1,330.00
Temperature (ºC)	16.80
Volume Leachant (Litres)	0.321
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
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CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.203	**Natural Moisture Content (%)**	16.3
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	86
Particle Size <4mm	>95%		

Case				
SDG	190223-66			
Lab Sample Number(s)	19425321			
Sampled Date	21-Feb-2019			
Customer Sample Ref.	BH1 ES1			
Depth (m)	0.20 - 0.20			

Solid Waste Analysis

Total Organic Carbon (%)	5.48	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	11.8	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**Concⁿ in 2:1 eluate (mg/l)**		**2:1 concⁿ leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
2,3,4,6-tetrachlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	<0.000082	<0.000082	<0.000164	<0.000164	-	-	-
2,4-Dinitrophenol	<0.0025	<0.0025	<0.005	<0.005	-	-	-
DNOC	<0.003	<0.003	<0.006	<0.006	-	-	-
Pentachlorophenol	<0.002	<0.002	<0.004	<0.004	-	-	-
Dinoseb	<0.004	<0.004	<0.008	<0.008	-	-	-
Vanadium	0.00502	<0.001	0.01	<0.002	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	-	-	-	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.1	<0.1	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.02	<0.02	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.006	<0.006	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.02	<0.02	-	-	-
Benzene by GC	<0.007	<0.007	<0.014	<0.014	-	-	-
Toluene by GC	<0.004	<0.004	<0.008	<0.008	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.01	<0.01	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.016	<0.016	-	-	-

Leach Test Information

Date Prepared	18-Apr-2019
pH (pH Units)	11.63
Conductivity (µS/cm)	1,330.00
Temperature (ºC)	16.80
Volume Leachant (Litres)	0.321
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
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CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.203	**Natural Moisture Content (%)**	16.3
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	86
Particle Size <4mm	>95%		

Case				
SDG	190223-66			
Lab Sample Number(s)	19425321			
Sampled Date	21-Feb-2019			
Customer Sample Ref.	BH1 ES1			
Depth (m)	0.20 - 0.20			

Solid Waste Analysis

Total Organic Carbon (%)	5.48	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	11.8	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
TPH CWG (W)							
o Xylene by GC	<0.003	<0.003	<0.006	<0.006	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.022	<0.022	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.056	<0.056	-	-	-

Leach Test Information

Date Prepared	18-Apr-2019
pH (pH Units)	11.63
Conductivity (µS/cm)	1,330.00
Temperature (ºC)	16.80
Volume Leachant (Litres)	0.321
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
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CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.203	**Natural Moisture Content (%)**	16.3
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	86
Particle Size <4mm	>95%		

Case				
SDG	190223-66			
Lab Sample Number(s)	19425323			
Sampled Date	19-Feb-2019			
Customer Sample Ref.	BH2 ES1			
Depth (m)	0.30 - 0.30			

Solid Waste Analysis

Total Organic Carbon (%)	0.231	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	11.5	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Conc^n in 2:1 eluate (mg/l)		2:1 conc^n leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
Arsenic	0.00108	<0.0005	0.00216	<0.001	0.5	2	25
Barium	-	-	-	-	20	100	300
Cadmium	<0.00008	<0.00008	<0.00016	<0.00016	0.04	1	5
Chromium	0.0488	<0.001	0.0976	<0.002	0.5	10	70
Copper	0.134	<0.0003	0.268	<0.0006	2	50	100
Mercury Dissolved (CVAF)	0.0000333	<0.00001	0.0000666	<0.00002	0.01	0.2	2
Molybdenum	-	-	-	-	0.5	10	30
Nickel	0.00713	<0.0004	0.0143	<0.0008	0.4	10	40
Lead	0.000243	<0.0002	0.000486	<0.0004	0.5	10	50
Antimony	-	-	-	-	0.06	0.7	5
Selenium	0.00174	<0.001	0.00348	<0.002	0.1	0.5	7
Zinc	0.00584	<0.001	0.0117	<0.002	4	50	200
Chloride	3	<2	6	<4	800	15000	25000
Fluoride	-	-	-	-	10	150	500
Sulphate (soluble)	-	-	-	-	1000	20000	50000
Total Dissolved Solids	-	-	-	-	4000	60000	100000
Total Monohydric Phenols (W)	-	-	-	-	1	-	-
Dissolved Organic Carbon	16.4	<3	32.8	<6	500	800	1000

Leach Test Information

Date Prepared	23-Apr-2019
pH (pH Units)	11.84
Conductivity (µS/cm)	935.00
Temperature (ºC)	17.50
Volume Leachant (Litres)	0.321
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
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CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.203	**Natural Moisture Content (%)**	16.3
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	86
Particle Size <4mm	>95%		

Case				
SDG	190223-66			
Lab Sample Number(s)	19425323			
Sampled Date	19-Feb-2019			
Customer Sample Ref.	BH2 ES1			
Depth (m)	0.30 - 0.30			

Solid Waste Analysis

Total Organic Carbon (%)	0.231	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	11.5	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
Aliphatics >C12-C16	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.02	<0.02	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC16-EC35	<0.01	<0.01	<0.02	<0.02	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.02	<0.02	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.02	<0.02	-	-	-
pH Value of Filtered Water	12	<0.001	24	<0.002	-	-	-
Naphthalene (diss.filt)	0.0000222	<0.00001	0.0000444	<0.00002	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.1	<0.1	-	-	-
Acenaphthene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
Phenol	0.00139	<0.0005	0.00278	<0.001	-	-	-
2-methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Acenaphthylene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Fluoranthene (diss.filt)	0.0000478	<0.000005	0.0000956	<0.00001	-	-	-
4-methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Anthracene (diss.filt)	0.0000161	<0.000005	0.0000322	<0.00001	-	-	-
2-chlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-

Leach Test Information

Date Prepared	23-Apr-2019
pH (pH Units)	11.84
Conductivity (µS/cm)	935.00
Temperature (ºC)	17.50
Volume Leachant (Litres)	0.321
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
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CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.203	**Natural Moisture Content (%)**	16.3
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	86
Particle Size <4mm	>95%		

Case				
SDG	190223-66			
Lab Sample Number(s)	19425323			
Sampled Date	19-Feb-2019			
Customer Sample Ref.	BH2 ES1			
Depth (m)	0.30 - 0.30			

Solid Waste Analysis

Total Organic Carbon (%)	0.231	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	11.5	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
Boron	0.011	<0.01	0.022	<0.02	-	-	-
Phenanthrene (diss.filt)	0.0000771	<0.000005	0.000154	<0.00001	-	-	-
2,4-dimethylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Fluorene (diss.filt)	0.00000836	<0.000005	0.0000167	<0.00001	-	-	-
4-chloro-3-methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Chrysene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Pyrene (diss.filt)	0.0000314	<0.000005	0.0000628	<0.00001	-	-	-
4-chlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(a)anthracene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2,4-dichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(b)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2-nitrophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(k)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2,4,6-trichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(a)pyrene (diss.filt)	<0.000002	<0.000002	<0.000004	<0.000004	-	-	-
2,4,5-trichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
4-nitrophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(g,h,i)perylene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2,3,5,6-tetrachlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-

Leach Test Information

Date Prepared	23-Apr-2019
pH (pH Units)	11.84
Conductivity (µS/cm)	935.00
Temperature (ºC)	17.50
Volume Leachant (Litres)	0.321
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
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CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.203	**Natural Moisture Content (%)**	16.3
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	86
Particle Size <4mm	>95%		

Case				
SDG	190223-66			
Lab Sample Number(s)	19425323			
Sampled Date	19-Feb-2019			
Customer Sample Ref.	BH2 ES1			
Depth (m)	0.30 - 0.30			

Solid Waste Analysis

Total Organic Carbon (%)	0.231	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	11.5	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
2,3,4,6-tetrachlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.000203	<0.000082	0.000406	<0.000164	-	-	-
2,4-Dinitrophenol	<0.0025	<0.0025	<0.005	<0.005	-	-	-
DNOC	<0.003	<0.003	<0.006	<0.006	-	-	-
Pentachlorophenol	<0.002	<0.002	<0.004	<0.004	-	-	-
Dinoseb	<0.004	<0.004	<0.008	<0.008	-	-	-
Vanadium	0.00737	<0.001	0.0147	<0.002	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	-	-	-	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.1	<0.1	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.02	<0.02	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.006	<0.006	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.02	<0.02	-	-	-
Benzene by GC	<0.007	<0.007	<0.014	<0.014	-	-	-
Toluene by GC	<0.004	<0.004	<0.008	<0.008	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.01	<0.01	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.016	<0.016	-	-	-

Leach Test Information

Date Prepared	23-Apr-2019
pH (pH Units)	11.84
Conductivity (µS/cm)	935.00
Temperature (ºC)	17.50
Volume Leachant (Litres)	0.321
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
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CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.203	**Natural Moisture Content (%)**	16.3
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	86
Particle Size <4mm	>95%		

Case				
SDG	190223-66			
Lab Sample Number(s)	19425323			
Sampled Date	19-Feb-2019			
Customer Sample Ref.	BH2 ES1			
Depth (m)	0.30 - 0.30			

Solid Waste Analysis

Total Organic Carbon (%)	0.231	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	11.5	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**Concⁿ in 2:1 eluate (mg/l)**		**2:1 concⁿ leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
TPH CWG (W)							
o Xylene by GC	<0.003	<0.003	<0.006	<0.006	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.022	<0.022	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.056	<0.056	-	-	-

Leach Test Information

Date Prepared	23-Apr-2019
pH (pH Units)	11.84
Conductivity (µS/cm)	935.00
Temperature (ºC)	17.50
Volume Leachant (Litres)	0.321
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
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CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.218	**Natural Moisture Content (%)**	24.5
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	80.3
Particle Size <4mm	>95%		

Case				
SDG	190223-66			
Lab Sample Number(s)	19425326			
Sampled Date				
Customer Sample Ref.	BH3 ES1			
Depth (m)	1.20 - 1.20			

Solid Waste Analysis

Total Organic Carbon (%)	1.15	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.04	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
Arsenic	0.000976	<0.0005	0.00195	<0.001	0.5	2	25
Barium	-	-	-	-	20	100	300
Cadmium	<0.00008	<0.00008	<0.00016	<0.00016	0.04	1	5
Chromium	<0.001	<0.001	<0.002	<0.002	0.5	10	70
Copper	0.00738	<0.0003	0.0148	<0.0006	2	50	100
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.00002	<0.00002	0.01	0.2	2
Molybdenum	-	-	-	-	0.5	10	30
Nickel	0.00127	<0.0004	0.00254	<0.0008	0.4	10	40
Lead	<0.0002	<0.0002	<0.0004	<0.0004	0.5	10	50
Antimony	-	-	-	-	0.06	0.7	5
Selenium	0.00166	<0.001	0.00332	<0.002	0.1	0.5	7
Zinc	0.00345	<0.001	0.0069	<0.002	4	50	200
Chloride	28.4	<2	56.8	<4	800	15000	25000
Fluoride	-	-	-	-	10	150	500
Sulphate (soluble)	-	-	-	-	1000	20000	50000
Total Dissolved Solids	-	-	-	-	4000	60000	100000
Total Monohydric Phenols (W)	-	-	-	-	1	-	-
Dissolved Organic Carbon	7.65	<3	15.3	<6	500	800	1000

Leach Test Information

Date Prepared	18-Apr-2019
pH (pH Units)	8.79
Conductivity (µS/cm)	281.00
Temperature (ºC)	19.20
Volume Leachant (Litres)	0.307
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
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CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.218	**Natural Moisture Content (%)**	24.5
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	80.3
Particle Size <4mm	>95%		

Case				
SDG	190223-66			
Lab Sample Number(s)	19425326			
Sampled Date				
Customer Sample Ref.	BH3 ES1			
Depth (m)	1.20 - 1.20			

Solid Waste Analysis

Total Organic Carbon (%)	1.15	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.04	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
Aliphatics >C12-C16	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.02	<0.02	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC16-EC35	<0.01	<0.01	<0.02	<0.02	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.02	<0.02	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.02	<0.02	-	-	-
pH Value of Filtered Water	8.4	<0.001	17	<0.002	-	-	-
Naphthalene (diss.filt)	<0.00001	<0.00001	<0.00002	<0.00002	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.1	<0.1	-	-	-
Acenaphthene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
Phenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
2-methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Acenaphthylene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Fluoranthene (diss.filt)	0.000045	<0.000005	0.00009	<0.00001	-	-	-
4-methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Anthracene (diss.filt)	0.000005	<0.000005	0.00001	<0.00001	-	-	-
2-chlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-

Leach Test Information

Date Prepared	18-Apr-2019
pH (pH Units)	8.79
Conductivity (µS/cm)	281.00
Temperature (ºC)	19.20
Volume Leachant (Litres)	0.307
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
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CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.218	**Natural Moisture Content (%)**	24.5
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	80.3
Particle Size <4mm	>95%		

Case				
SDG	190223-66			
Lab Sample Number(s)	19425326			
Sampled Date				
Customer Sample Ref.	BH3 ES1			
Depth (m)	1.20 - 1.20			

Solid Waste Analysis

Total Organic Carbon (%)	1.15	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.04	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
Boron	0.049	<0.01	0.098	<0.02	-	-	-
Phenanthrene (diss.filt)	0.000043	<0.000005	0.000086	<0.00001	-	-	-
2,4-dimethylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Fluorene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
4-chloro-3-methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Chrysene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Pyrene (diss.filt)	0.0000269	<0.000005	0.0000538	<0.00001	-	-	-
4-chlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(a)anthracene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2,4-dichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(b)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2-nitrophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(k)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2,4,6-trichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(a)pyrene (diss.filt)	<0.000002	<0.000002	<0.000004	<0.000004	-	-	-
2,4,5-trichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
4-nitrophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(g,h,i)perylene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2,3,5,6-tetrachlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-

Leach Test Information

Date Prepared	18-Apr-2019
pH (pH Units)	8.79
Conductivity (µS/cm)	281.00
Temperature (ºC)	19.20
Volume Leachant (Litres)	0.307
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
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CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.218	**Natural Moisture Content (%)**	24.5
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	80.3
Particle Size <4mm	>95%		

Case				
SDG	190223-66			
Lab Sample Number(s)	19425326			
Sampled Date				
Customer Sample Ref.	BH3 ES1			
Depth (m)	1.20 - 1.20			

Solid Waste Analysis

Total Organic Carbon (%)	1.15	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.04	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
2,3,4,6-tetrachlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.00012	<0.000082	0.00024	<0.000164	-	-	-
2,4-Dinitrophenol	<0.0025	<0.0025	<0.005	<0.005	-	-	-
DNOC	<0.003	<0.003	<0.006	<0.006	-	-	-
Pentachlorophenol	<0.002	<0.002	<0.004	<0.004	-	-	-
Dinoseb	<0.004	<0.004	<0.008	<0.008	-	-	-
Vanadium	0.00123	<0.001	0.00246	<0.002	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	-	-	-	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.1	<0.1	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.02	<0.02	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.006	<0.006	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.02	<0.02	-	-	-
Benzene by GC	<0.007	<0.007	<0.014	<0.014	-	-	-
Toluene by GC	<0.004	<0.004	<0.008	<0.008	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.01	<0.01	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.016	<0.016	-	-	-

Leach Test Information

Date Prepared	18-Apr-2019
pH (pH Units)	8.79
Conductivity (µS/cm)	281.00
Temperature (ºC)	19.20
Volume Leachant (Litres)	0.307
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
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Mcerts Certification does not apply to leachates
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CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.218	**Natural Moisture Content (%)**	24.5
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	80.3
Particle Size <4mm	>95%		

Case				
SDG	190223-66			
Lab Sample Number(s)	19425326			
Sampled Date				
Customer Sample Ref.	BH3 ES1			
Depth (m)	1.20 - 1.20			

Solid Waste Analysis

Total Organic Carbon (%)	1.15	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.04	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**Concⁿ in 2:1 eluate (mg/l)**		**2:1 concⁿ leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
TPH CWG (W)							
o Xylene by GC	<0.003	<0.003	<0.006	<0.006	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.022	<0.022	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.056	<0.056	-	-	-

Leach Test Information

Date Prepared	18-Apr-2019
pH (pH Units)	8.79
Conductivity (µS/cm)	281.00
Temperature (ºC)	19.20
Volume Leachant (Litres)	0.307
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
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CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.212	**Natural Moisture Content (%)**	21
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	82.6
Particle Size <4mm	>95%		

Case				
SDG	190223-66			
Lab Sample Number(s)	19425330			
Sampled Date	13-Feb-2019			
Customer Sample Ref.	BH4 ESZ			
Depth (m)	1.00 - 1.00			

Solid Waste Analysis

Total Organic Carbon (%)	0.519	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.72	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Conc^n in 2:1 eluate (mg/l)		2:1 conc^n leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
Arsenic	0.0125	<0.0005	0.025	<0.001	0.5	2	25
Barium	-	-	-	-	20	100	300
Cadmium	<0.00008	<0.00008	<0.00016	<0.00016	0.04	1	5
Chromium	0.00707	<0.001	0.0141	<0.002	0.5	10	70
Copper	0.0395	<0.0003	0.079	<0.0006	2	50	100
Mercury Dissolved (CVAF)	0.000039	<0.00001	0.000078	<0.00002	0.01	0.2	2
Molybdenum	-	-	-	-	0.5	10	30
Nickel	0.0029	<0.0004	0.0058	<0.0008	0.4	10	40
Lead	<0.0002	<0.0002	<0.0004	<0.0004	0.5	10	50
Antimony	-	-	-	-	0.06	0.7	5
Selenium	0.00249	<0.001	0.00498	<0.002	0.1	0.5	7
Zinc	0.00352	<0.001	0.00704	<0.002	4	50	200
Chloride	<2	<2	<4	<4	800	15000	25000
Fluoride	-	-	-	-	10	150	500
Sulphate (soluble)	-	-	-	-	1000	20000	50000
Total Dissolved Solids	-	-	-	-	4000	60000	100000
Total Monohydric Phenols (W)	-	-	-	-	1	-	-
Dissolved Organic Carbon	18.5	<3	37	<6	500	800	1000

Leach Test Information

Date Prepared	18-Apr-2019
pH (pH Units)	10.39
Conductivity (µS/cm)	158.00
Temperature (ºC)	18.50
Volume Leachant (Litres)	0.313
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
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CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.212	**Natural Moisture Content (%)**	21
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	82.6
Particle Size <4mm	>95%		

Case				
SDG	190223-66			
Lab Sample Number(s)	19425330			
Sampled Date	13-Feb-2019			
Customer Sample Ref.	BH4 ESZ			
Depth (m)	1.00 - 1.00			

Solid Waste Analysis

Total Organic Carbon (%)	0.519	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.72	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Conc^n in 2:1 eluate (mg/l)		2:1 conc^n leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
Aliphatics >C12-C16	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.02	<0.02	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC16-EC35	<0.01	<0.01	<0.02	<0.02	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.02	<0.02	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.02	<0.02	-	-	-
pH Value of Filtered Water	10	<0.001	20	<0.002	-	-	-
Naphthalene (diss.filt)	<0.00001	<0.00001	<0.00002	<0.00002	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.1	<0.1	-	-	-
Acenaphthene (diss.filt)	0.0000145	<0.000005	0.000029	<0.00001	-	-	-
Phenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
2-methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Acenaphthylene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Fluoranthene (diss.filt)	0.0000508	<0.000005	0.000102	<0.00001	-	-	-
4-methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Anthracene (diss.filt)	0.0000177	<0.000005	0.0000354	<0.00001	-	-	-
2-chlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-

Leach Test Information

Date Prepared	18-Apr-2019
pH (pH Units)	10.39
Conductivity (µS/cm)	158.00
Temperature (ºC)	18.50
Volume Leachant (Litres)	0.313
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
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CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.212	**Natural Moisture Content (%)**	21
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	82.6
Particle Size <4mm	>95%		

Case				
SDG	190223-66			
Lab Sample Number(s)	19425330			
Sampled Date	13-Feb-2019			
Customer Sample Ref.	BH4 ESZ			
Depth (m)	1.00 - 1.00			

Solid Waste Analysis

Total Organic Carbon (%)	0.519	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.72	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
Boron	0.0159	<0.01	0.0318	<0.02	-	-	-
Phenanthrene (diss.filt)	0.0000649	<0.000005	0.00013	<0.00001	-	-	-
2,4-dimethylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Fluorene (diss.filt)	0.00000854	<0.000005	0.0000171	<0.00001	-	-	-
4-chloro-3-methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Chrysene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Pyrene (diss.filt)	0.0000311	<0.000005	0.0000622	<0.00001	-	-	-
4-chlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(a)anthracene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2,4-dichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(b)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2-nitrophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(k)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2,4,6-trichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(a)pyrene (diss.filt)	<0.000002	<0.000002	<0.000004	<0.000004	-	-	-
2,4,5-trichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
4-nitrophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(g,h,i)perylene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2,3,5,6-tetrachlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-

Leach Test Information

Date Prepared	18-Apr-2019
pH (pH Units)	10.39
Conductivity (µS/cm)	158.00
Temperature (ºC)	18.50
Volume Leachant (Litres)	0.313
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
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CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.212	**Natural Moisture Content (%)**	21
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	82.6
Particle Size <4mm	>95%		

Case				
SDG	190223-66			
Lab Sample Number(s)	19425330			
Sampled Date	13-Feb-2019			
Customer Sample Ref.	BH4 ESZ			
Depth (m)	1.00 - 1.00			

Solid Waste Analysis

Total Organic Carbon (%)	0.519	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.72	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**Concⁿ in 2:1 eluate (mg/l)**		**2:1 concⁿ leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
2,3,4,6-tetrachlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.000188	<0.000082	0.000376	<0.000164	-	-	-
2,4-Dinitrophenol	<0.0025	<0.0025	<0.005	<0.005	-	-	-
DNOC	<0.003	<0.003	<0.006	<0.006	-	-	-
Pentachlorophenol	<0.002	<0.002	<0.004	<0.004	-	-	-
Dinoseb	<0.004	<0.004	<0.008	<0.008	-	-	-
Vanadium	0.0552	<0.001	0.11	<0.002	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	-	-	-	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.1	<0.1	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.02	<0.02	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.006	<0.006	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.02	<0.02	-	-	-
Benzene by GC	<0.007	<0.007	<0.014	<0.014	-	-	-
Toluene by GC	<0.004	<0.004	<0.008	<0.008	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.01	<0.01	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.016	<0.016	-	-	-

Leach Test Information

Date Prepared	18-Apr-2019
pH (pH Units)	10.39
Conductivity (µS/cm)	158.00
Temperature (ºC)	18.50
Volume Leachant (Litres)	0.313
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
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CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.212	**Natural Moisture Content (%)**	21
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	82.6
Particle Size <4mm	>95%		

Case				
SDG	190223-66			
Lab Sample Number(s)	19425330			
Sampled Date	13-Feb-2019			
Customer Sample Ref.	BH4 ESZ			
Depth (m)	1.00 - 1.00			
Solid Waste Analysis				
Total Organic Carbon (%)	0.519	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	8.72	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**Conc^n in 2:1 eluate (mg/l)**		**2:1 conc^n leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
TPH CWG (W)							
o Xylene by GC	<0.003	<0.003	<0.006	<0.006	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.022	<0.022	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.056	<0.056	-	-	-

Leach Test Information

Date Prepared	18-Apr-2019
pH (pH Units)	10.39
Conductivity (µS/cm)	158.00
Temperature (ºC)	18.50
Volume Leachant (Litres)	0.313
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
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CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.191	**Natural Moisture Content (%)**	9.29
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	91.5
Particle Size <4mm	>95%		

Case				
SDG	190223-66			
Lab Sample Number(s)	19425333			
Sampled Date	15-Feb-2019			
Customer Sample Ref.	BH3 ESZ			
Depth (m)	0.50 - 0.50			

Solid Waste Analysis

Total Organic Carbon (%)	0.603	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	10.6	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
Arsenic	0.00148	<0.0005	0.00296	<0.001	0.5	2	25
Barium	-	-	-	-	20	100	300
Cadmium	<0.00008	<0.00008	<0.00016	<0.00016	0.04	1	5
Chromium	0.0297	<0.001	0.0594	<0.002	0.5	10	70
Copper	0.0308	<0.0003	0.0616	<0.0006	2	50	100
Mercury Dissolved (CVAF)	0.0000153	<0.00001	0.0000306	<0.00002	0.01	0.2	2
Molybdenum	-	-	-	-	0.5	10	30
Nickel	0.00371	<0.0004	0.00742	<0.0008	0.4	10	40
Lead	0.000304	<0.0002	0.000608	<0.0004	0.5	10	50
Antimony	-	-	-	-	0.06	0.7	5
Selenium	0.00125	<0.001	0.0025	<0.002	0.1	0.5	7
Zinc	0.00481	<0.001	0.00962	<0.002	4	50	200
Chloride	51.8	<2	104	<4	800	15000	25000
Fluoride	-	-	-	-	10	150	500
Sulphate (soluble)	-	-	-	-	1000	20000	50000
Total Dissolved Solids	-	-	-	-	4000	60000	100000
Total Monohydric Phenols (W)	-	-	-	-	1	-	-
Dissolved Organic Carbon	10.4	<3	20.8	<6	500	800	1000

Leach Test Information

Date Prepared	23-Apr-2019
pH (pH Units)	11.69
Conductivity (µS/cm)	1,020.00
Temperature (ºC)	17.70
Volume Leachant (Litres)	0.334
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and ALS Environmental cannot be held responsible for any discrepancies with current legislation
Mcerts Certification does not apply to leachates
08/05/2019 17:39:31

CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.191	**Natural Moisture Content (%)**	9.29
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	91.5
Particle Size <4mm	>95%		

Case				
SDG	190223-66			
Lab Sample Number(s)	19425333			
Sampled Date	15-Feb-2019			
Customer Sample Ref.	BH3 ESZ			
Depth (m)	0.50 - 0.50			

Solid Waste Analysis

Total Organic Carbon (%)	0.603	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	10.6	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Conc^n in 2:1 eluate (mg/l)		2:1 conc^n leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
Aliphatics >C12-C16	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.02	<0.02	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC12-EC16	0.021	<0.01	0.042	<0.02	-	-	-
Aromatics >EC16-EC21	0.037	<0.01	0.074	<0.02	-	-	-
Aromatics >EC21-EC35	0.01	<0.01	0.02	<0.02	-	-	-
Aromatics >EC16-EC35	0.047	<0.01	0.094	<0.02	-	-	-
Total Aromatics >EC12-EC35	0.068	<0.01	0.136	<0.02	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	0.088	<0.01	0.176	<0.02	-	-	-
pH Value of Filtered Water	12	<0.001	24	<0.002	-	-	-
Naphthalene (diss.filt)	0.0000825	<0.00001	0.000165	<0.00002	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.1	<0.1	-	-	-
Acenaphthene (diss.filt)	0.000229	<0.000005	0.000458	<0.00001	-	-	-
Phenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
2-methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Acenaphthylene (diss.filt)	0.0000218	<0.000005	0.0000436	<0.00001	-	-	-
3-methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Fluoranthene (diss.filt)	0.00103	<0.000005	0.00206	<0.00001	-	-	-
4-methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Anthracene (diss.filt)	0.000235	<0.000005	0.00047	<0.00001	-	-	-
2-chlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-

Leach Test Information

Date Prepared	23-Apr-2019
pH (pH Units)	11.69
Conductivity (µS/cm)	1,020.00
Temperature (ºC)	17.70
Volume Leachant (Litres)	0.334
Volume of Eluate VE1 (Litres)	

Solid Results are expressed on a dry weight basis, after correction for moisture content where applicable
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Mcerts Certification does not apply to leachates
08/05/2019 17:39:31

CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.191	**Natural Moisture Content (%)**	9.29
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	91.5
Particle Size <4mm	>95%		

Case				
SDG	190223-66			
Lab Sample Number(s)	19425333			
Sampled Date	15-Feb-2019			
Customer Sample Ref.	BH3 ESZ			
Depth (m)	0.50 - 0.50			

Solid Waste Analysis

Total Organic Carbon (%)	0.603	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	10.6	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
Boron	0.0177	<0.01	0.0354	<0.02	-	-	-
Phenanthrene (diss.filt)	0.00114	<0.000005	0.00228	<0.00001	-	-	-
2,4-dimethylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Fluorene (diss.filt)	0.000116	<0.000005	0.000232	<0.00001	-	-	-
4-chloro-3-methylphenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Chrysene (diss.filt)	0.0000704	<0.000005	0.000141	<0.00001	-	-	-
2,6-dichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Pyrene (diss.filt)	0.000911	<0.000005	0.00182	<0.00001	-	-	-
4-chlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(a)anthracene (diss.filt)	0.0000591	<0.000005	0.000118	<0.00001	-	-	-
2,4-dichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(b)fluoranthene (diss.filt)	0.0000162	<0.000005	0.0000324	<0.00001	-	-	-
2-nitrophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(k)fluoranthene (diss.filt)	0.00000845	<0.000005	0.0000169	<0.00001	-	-	-
2,4,6-trichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(a)pyrene (diss.filt)	0.00000717	<0.000002	0.0000143	<0.000004	-	-	-
2,4,5-trichlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
4-nitrophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Benzo(g,h,i)perylene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-
2,3,5,6-tetrachlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	<0.000005	<0.000005	<0.00001	<0.00001	-	-	-

Leach Test Information

Date Prepared	23-Apr-2019
pH (pH Units)	11.69
Conductivity (µS/cm)	1,020.00
Temperature (ºC)	17.70
Volume Leachant (Litres)	0.334
Volume of Eluate VE1 (Litres)	

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CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
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Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	91.5
Particle Size <4mm	>95%		

Case				
SDG	190223-66			
Lab Sample Number(s)	19425333			
Sampled Date	15-Feb-2019			
Customer Sample Ref.	BH3 ESZ			
Depth (m)	0.50 - 0.50			

Solid Waste Analysis

Total Organic Carbon (%)	0.603	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	10.6	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis	**Concⁿ in 2:1 eluate (mg/l)**		**2:1 concⁿ leached (mg/kg)**		**Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg**		
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
2,3,4,6-tetrachlorophenol	<0.0005	<0.0005	<0.001	<0.001	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.00393	<0.000082	0.00786	<0.000164	-	-	-
2,4-Dinitrophenol	<0.0025	<0.0025	<0.005	<0.005	-	-	-
DNOC	<0.003	<0.003	<0.006	<0.006	-	-	-
Pentachlorophenol	<0.002	<0.002	<0.004	<0.004	-	-	-
Dinoseb	<0.004	<0.004	<0.008	<0.008	-	-	-
Vanadium	0.0149	<0.001	0.0298	<0.002	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	-	-	-	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.1	<0.1	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.02	<0.02	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.02	<0.02	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.006	<0.006	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.02	<0.02	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.02	<0.02	-	-	-
Benzene by GC	<0.007	<0.007	<0.014	<0.014	-	-	-
Toluene by GC	<0.004	<0.004	<0.008	<0.008	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.01	<0.01	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.016	<0.016	-	-	-

Leach Test Information

Date Prepared	23-Apr-2019
pH (pH Units)	11.69
Conductivity (µS/cm)	1,020.00
Temperature (ºC)	17.70
Volume Leachant (Litres)	0.334
Volume of Eluate VE1 (Litres)	

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CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

CEN 2:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/1

Client Reference		**Site Location**	HE Compton
Mass Sample taken (kg)	0.191	**Natural Moisture Content (%)**	9.29
Mass of dry sample (kg)	0.175	**Dry Matter Content (%)**	91.5
Particle Size <4mm	>95%		

Case				
SDG	190223-66			
Lab Sample Number(s)	19425333			
Sampled Date	15-Feb-2019			
Customer Sample Ref.	BH3 ESZ			
Depth (m)	0.50 - 0.50			

Solid Waste Analysis

Total Organic Carbon (%)	0.603	-	-	-
Loss on Ignition (%)	-	-	-	-
Sum of BTEX (mg/kg)	<0.04	-	-	-
Sum of 7 PCBs (mg/kg)	-	-	-	-
Mineral Oil (mg/kg)	-	-	-	-
PAH Sum of 17 (mg/kg)	-	-	-	-
pH (pH Units)	10.6	-	-	-
ANC to pH 6 (mol/kg)	-	-	-	-
ANC to pH 4 (mol/kg)	-	-	-	-

Eluate Analysis

	Concⁿ in 2:1 eluate (mg/l)		2:1 concⁿ leached (mg/kg)		Limit values for compliance leaching test using BS EN 12457-3 at L/S 10 l/kg		
	Result	Limit of Detection	Result	Limit of Detection			
TPH CWG (W)							
o Xylene by GC	<0.003	<0.003	<0.006	<0.006	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.022	<0.022	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.056	<0.056	-	-	-

Leach Test Information

Date Prepared	23-Apr-2019
pH (pH Units)	11.69
Conductivity (µS/cm)	1,020.00
Temperature (ºC)	17.70
Volume Leachant (Litres)	0.334
Volume of Eluate VE1 (Litres)	

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Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Table of Results - Appendix

Method No	Reference	Description
ASB_PREP		
PM001		Preparation of Samples for Metals Analysis
PM024	Modified BS 1377	Soil preparation including homogenisation, moisture screens of soils for Asbestos Containing Material
PM115		Leaching Procedure for CEN One Stage Leach Test 2:1 & 10:1 1 Step
TM048	HSG 248, Asbestos: The analysts' guide for sampling, analysis and clearance procedures	Identification of Asbestos in Bulk Material
TM061	Method for the Determination of EPH,Massachusetts Dept.of EP, 1998	Determination of Extractable Petroleum Hydrocarbons by GC-FID (C10-C40)
TM072	Modified: US EPA Method 8141A	Determination of Phenols by GC-MS
TM089	Modified: US EPA Methods 8020 & 602	Determination of Gasoline Range Hydrocarbons (GRO) by Headspace GC-FID (C4-C12)
TM090	Method 5310, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 415.1 & 9060	Determination of Total Organic Carbon/Total Inorganic Carbon in Water and Waste Water
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS
TM132	In - house Method	ELTRA CS800 Operators Guide
TM133	BS 1377: Part 3 1990;BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter
TM152	Method 3125B, AWWA/APHA, 20th Ed., 1999	Analysis of Aqueous Samples by ICP-MS
TM153	Method 4500A,B,C, I, M AWWA/APHA, 20th Ed., 1999	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate using the Skalar SANS+ System Segmented Flow Analyser
TM173	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Determination of Speciated Extractable Petroleum Hydrocarbons in Soils by GC-FID
TM174	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Determination of Speciated Extractable Petroleum Hydrocarbons in Waters by GC-FID
TM178	Modified: US EPA Method 8100	Determination of Polynuclear Aromatic Hydrocarbons (PAH) by GC-MS in Waters
TM181	US EPA Method 6010B	Determination of Routine Metals in Soil by iCap 6500 Duo ICP-OES
TM183	BS EN 23506:2002, (BS 6068-2.74:2002) ISBN 0 580 38924 3	Determination of Trace Level Mercury in Waters and Leachates by PSA Cold Vapour Atomic Fluorescence Spectrometry
TM184	EPA Methods 325.1 & 325.2,	The Determination of Anions in Aqueous Matrices using the Kone Spectrophotometric Analysers
TM205		Determination of Phenols in Waste Waters using Solid Phase Extraction, Acetylation, Gas Chromatography and Mass Selective Detection
TM218	Shaker extraction - EPA method 3546.	The determination of PAH in soil samples by GC-MS
TM222	In-House Method	Determination of Hot Water Soluble Boron in Soils (10:1 Water:soil) by IRIS Emission Spectrometer
TM227	Standard methods for the examination of waters and wastewaters 20th Edition, AWWA/APHA Method 4500.	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate
TM245	By GC-FID	Determination of GRO by Headspace in waters
TM256	The measurement of Electrical Conductivity and the Laboratory determination of pH Value of Natural, Treated and Wastewaters. HMSO, 1978. ISBN 011 751428 4.	Determination of pH in Water and Leachate using the GLpH pH Meter
TM304	HSE Contract research Report no 83/1996	Asbestos Quantification in Soil: Fibres identified by morphology only

NA = not applicable.

Chemical testing (unless subcontracted) performed at ALS Environmental Hawarden (Method codes TM) or ALS Environmental Aberdeen (Method codes S).

CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Test Completion Dates

Lab Sample No(s)	19425321	19425323	19425326	19425333	19425330
Customer Sample Ref.	BH1	BH2	BH3	BH3	BH4
AGS Ref.	ES1	ES1	ES1	ES	ES
Depth	0.20 - 0.20	0.30 - 0.30	1.20 - 1.20	0.50 - 0.50	1.00 - 1.00
Type	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)	Soil/Solid (S)
Anions by Kone (w)	25-Apr-2019	25-Apr-2019	25-Apr-2019	25-Apr-2019	25-Apr-2019
Asbestos ID in Solid Samples				29-Apr-2019	
Asbestos Quantification - Full				07-May-2019	
Boron Water Soluble	24-Apr-2019	24-Apr-2019	24-Apr-2019	25-Apr-2019	25-Apr-2019
CEN 2:1 Leachate (1 Stage)	23-Apr-2019	23-Apr-2019	18-Apr-2019	23-Apr-2019	23-Apr-2019
CEN Readings	24-Apr-2019	24-Apr-2019	24-Apr-2019	24-Apr-2019	24-Apr-2019
Cyanide Comp/Free/Total/Thiocyanate	29-Apr-2019	29-Apr-2019	29-Apr-2019	29-Apr-2019	29-Apr-2019
Dissolved Metals by ICP-MS	26-Apr-2019	26-Apr-2019	26-Apr-2019	26-Apr-2019	26-Apr-2019
Dissolved Organic/Inorganic Carbon	27-Apr-2019	27-Apr-2019	27-Apr-2019	27-Apr-2019	27-Apr-2019
EPH CWG (Aliphatic) Filtered GC (W)	27-Apr-2019	27-Apr-2019	27-Apr-2019	27-Apr-2019	27-Apr-2019
EPH CWG (Aliphatic) GC (S)	26-Apr-2019	25-Apr-2019	26-Apr-2019	25-Apr-2019	26-Apr-2019
EPH CWG (Aromatic) Filtered GC (W)	27-Apr-2019	27-Apr-2019	27-Apr-2019	27-Apr-2019	27-Apr-2019
EPH CWG (Aromatic) GC (S)	26-Apr-2019	25-Apr-2019	26-Apr-2019	25-Apr-2019	26-Apr-2019
GRO by GC-FID (S)	25-Apr-2019	25-Apr-2019	25-Apr-2019	25-Apr-2019	25-Apr-2019
GRO by GC-FID (W)	26-Apr-2019	26-Apr-2019	26-Apr-2019	26-Apr-2019	26-Apr-2019
Mercury Dissolved	26-Apr-2019	26-Apr-2019	26-Apr-2019	26-Apr-2019	26-Apr-2019
Metals in solid samples by OES	24-Apr-2019	24-Apr-2019	24-Apr-2019	26-Apr-2019	25-Apr-2019
PAH by GCMS	29-Apr-2019	29-Apr-2019	29-Apr-2019	29-Apr-2019	29-Apr-2019
PAH in waters by GC-MS (diss.filt)	26-Apr-2019	26-Apr-2019	26-Apr-2019	26-Apr-2019	26-Apr-2019
pH	25-Apr-2019	25-Apr-2019	25-Apr-2019	26-Apr-2019	25-Apr-2019
pH Value of Filtered Water	29-Apr-2019	25-Apr-2019	25-Apr-2019	29-Apr-2019	29-Apr-2019
Phenols by ms (w)	29-Apr-2019	29-Apr-2019	29-Apr-2019	29-Apr-2019	29-Apr-2019
Phenols Spec MS (S)	29-Apr-2019	29-Apr-2019	29-Apr-2019	29-Apr-2019	29-Apr-2019
Sample description	18-Apr-2019	18-Apr-2019	18-Apr-2019	18-Apr-2019	18-Apr-2019
Total Organic Carbon	24-Apr-2019	24-Apr-2019	24-Apr-2019	25-Apr-2019	25-Apr-2019
TPH CWG Filtered (W)	27-Apr-2019	27-Apr-2019	27-Apr-2019	27-Apr-2019	27-Apr-2019
TPH CWG GC (S)	26-Apr-2019	25-Apr-2019	26-Apr-2019	25-Apr-2019	26-Apr-2019
VOC MS (S)	24-Apr-2019	24-Apr-2019	24-Apr-2019	25-Apr-2019	24-Apr-2019

ASSOCIATED AQC DATA

Anions by Kone (w)

Component	Method Code	QC 1934	QC 1997
Chloride	TM184	**107.0** 92.93 : 115.43	**107.0** 92.93 : 115.43
Phosphate (Ortho as PO4)	TM184	 96.40 : 108.40	 96.40 : 108.40
Sulphate (soluble)	TM184	**102.0** 90.53 : 113.03	**102.0** 90.53 : 113.03
TON as NO3	TM184	 96.26 : 111.21	 96.26 : 111.21

Boron Water Soluble

Component	Method Code	QC 1917	QC 1945
Water Soluble Boron	TM222	**107.5** 86.05 : 109.75	**103.0** 86.05 : 109.75

Cyanide Comp/Free/Total/Thiocyanate

Component	Method Code	QC 1982	QC 1938	QC 1982	QC 1970	QC 1919	QC 1903
Free Cyanide	TM153	**99.7** 87.60 : 108.63	**99.4** 87.60 : 108.63	**95.8** 87.60 : 108.63	**95.6** 87.60 : 108.63		
Free Cyanide (W)	TM227					**109.5** 92.00 : 113.00	**99.5** 93.25 : 112.75
Thiocyanate	TM153	**95.21** 92.90 : 108.39	**94.61** 92.90 : 108.39	**94.01** 92.90 : 108.39	**93.41** 92.90 : 108.39		
Thiocyanate (W)	TM227					**103.5** 95.50 : 107.50	**106.5** 96.25 : 111.25
Total Cyanide	TM153	**102.14** 87.00 : 103.00	**100.71** 87.00 : 103.00	**100.71** 87.00 : 103.00	**100.71** 87.00 : 103.00		
Total Cyanide (W)	TM227					**101.25** 95.50 : 110.50	**105.5** 92.25 : 111.75

Dissolved Metals by ICP-MS

Component	Method Code	QC 1915	QC 1947
Aluminium	TM152	**99.0** 88.00 : 112.00	**105.67** 94.19 : 114.31
Antimony	TM152	**105.83** 88.00 : 112.00	**106.17** 79.80 : 122.00
Arsenic	TM152	**103.33** 88.00 : 112.00	**101.67** 90.42 : 111.32
Barium	TM152	**107.17** 88.00 : 112.00	**102.0** 90.79 : 113.16
Beryllium	TM152	**101.83** 88.00 : 112.00	**105.83** 93.25 : 120.04
Bismuth	TM152	**103.33** 91.90 : 112.20	**106.0** 94.65 : 117.05
Borate	TM152	**97.53** 88.00 : 112.00	
Boron	TM152	**97.67** 88.00 : 112.00	**105.67** 86.68 : 117.66

CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
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Dissolved Metals by ICP-MS

		QC 1915	QC 1947
Cadmium	TM152	**103.0** 88.00 : 112.00	**104.67** 94.60 : 112.40
Calcium	TM152	**104.0** 81.38 : 119.09	**104.67** 83.40 : 121.11
Chromium	TM152	**99.0** 88.00 : 112.00	**103.67** 93.28 : 110.91
Cobalt	TM152	**99.5** 88.00 : 112.00	**103.67** 84.39 : 114.26
Copper	TM152	**101.33** 85.52 : 115.00	**105.33** 88.86 : 118.72
Iron	TM152	**99.33** 92.00 : 113.00	**102.67** 92.05 : 112.89
Lead	TM152	**101.33** 88.00 : 112.00	**106.0** 89.25 : 115.12
Lithium	TM152	**96.0** 88.00 : 112.00	**105.17** 89.26 : 119.04
Magnesium	TM152	**94.67** 90.25 : 114.53	**104.67** 86.35 : 113.36
Manganese	TM152	**99.5** 88.00 : 112.00	**102.67** 94.24 : 112.74
Molybdenum	TM152	**97.83** 88.00 : 112.00	**102.5** 87.00 : 108.89
Nickel	TM152	**101.5** 88.00 : 112.00	**103.83** 92.11 : 110.56
Niobium	TM152	 88.00 : 112.00	 96.38 : 128.85
Phosphorus	TM152	**99.83** 88.00 : 112.00	**103.5** 90.52 : 115.47
Potassium	TM152	**103.33** 91.13 : 112.48	**104.0** 95.57 : 114.99
Selenium	TM152	**103.67** 88.00 : 112.00	**102.67** 88.44 : 113.86
Silver	TM152	**100.83** 89.40 : 108.90	**104.5** 87.04 : 107.38
Sodium	TM152	**92.0** 92.03 : 108.97	**104.67** 97.63 : 110.31
Strontium	TM152	**102.67** 88.00 : 112.00	**102.33** 90.72 : 114.82
Tellurium	TM152	**105.33** 93.32 : 114.66	**100.0** 90.72 : 112.62
Thallium	TM152	**101.33** 88.00 : 112.00	**104.5** 86.08 : 122.48
Tin	TM152	**102.67** 91.00 : 109.00	**104.17** 91.00 : 109.00
Titanium	TM152	**93.67** 85.48 : 103.18	**96.83** 91.87 : 102.47
Tungsten	TM152	**98.33** 88.00 : 112.00	**105.17** 78.12 : 132.82
Uranium	TM152	**98.17** 88.00 : 112.00	**104.83** 90.58 : 113.28
Vanadium	TM152	**103.17** 88.00 : 112.00	**107.5** 88.43 : 114.30

CERTIFICATE OF ANALYSIS

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Dissolved Metals by ICP-MS

		QC 1915	QC 1947
Zinc	TM152	**100.33** 88.00 : 112.00	**105.0** 86.52 : 115.27
Zirconium	TM152	 88.00 : 112.00	 85.51 : 109.42

Dissolved Organic/Inorganic Carbon

Component	Method Code	QC 1970	QC 1980	QC 1911
Dissolved Inorganic Carbon	TM090	**102.67** 91.27 : 109.87	**109.33** 91.27 : 109.87	**106.0** 93.58 : 112.28
Dissolved Organic Carbon	TM090	**105.33** 97.87 : 108.77	**103.67** 97.87 : 108.77	**101.33** 96.28 : 110.58

EPH CWG (Aliphatic) GC (S)

Component	Method Code	QC 1909	QC 1942
Total Aliphatics >C12-C35	TM173	**93.13** 70.76 : 104.69	**95.42** 66.17 : 105.28

EPH CWG (Aromatic) Filtered GC (W)

Component	Method Code	QC 1926
Total Aromatics >EC10-EC40	TM174	**82.68** 73.75 : 120.32

EPH CWG (Aromatic) GC (S)

Component	Method Code	QC 1909	QC 1942
Total Aromatics >EC12-EC35	TM173	**88.67** 68.16 : 102.29	**92.67** 65.78 : 102.90

GRO by GC-FID (S)

Component	Method Code	QC 1924	QC 1934
QC	TM089	**87.28** 74.55 : 125.46	**96.19** 70.34 : 111.95

GRO by GC-FID (W)

GRO by GC-FID (W)

Component	Method Code	QC 1932
Benzene by GC	TM245	**99.0** 77.76 : 121.54
Ethylbenzene by GC	TM245	**99.0** 76.04 : 121.93
m & p Xylene by GC	TM245	**98.5** 75.79 : 121.81
MTBE GC-FID	TM245	**99.0** 78.56 : 122.20
o Xylene by GC	TM245	**100.5** 76.38 : 121.51
QC	TM245	**101.58** 66.08 : 129.83
Toluene by GC	TM245	**99.0** 76.66 : 123.55

Mercury Dissolved

Component	Method Code	QC 1933	QC 1906
Mercury Dissolved (CVAF)	TM183	**98.2** 75.00 : 111.00	**101.0** 76.80 : 117.12

Metals in solid samples by OES

Component	Method Code	QC 1944	QC 1956	QC 1918	QC 1912
Aluminium	TM181	**101.77** 77.84 : 119.01	**89.38** 77.84 : 119.01	**97.35** 77.84 : 119.01	**103.54** 77.84 : 119.01
Antimony	TM181	**97.15** 84.28 : 107.67	**100.41** 84.28 : 107.67	**97.15** 84.28 : 107.67	**108.94** 84.28 : 107.67
Arsenic	TM181	**100.58** 87.05 : 109.36	**96.22** 87.05 : 109.36	**99.42** 87.05 : 109.36	**97.97** 87.05 : 109.36
Barium	TM181	**93.58** 82.49 : 109.34	**87.06** 82.49 : 109.34	**95.41** 82.49 : 109.34	**100.0** 82.49 : 109.34
Beryllium	TM181	**99.63** 85.44 : 109.61	**87.69** 85.44 : 109.61	**100.37** 85.44 : 109.61	**99.63** 85.44 : 109.61
Boron	TM181	**92.26** 73.51 : 104.66	**78.22** 73.51 : 104.66	**87.68** 73.51 : 104.66	**93.12** 73.51 : 104.66
Cadmium	TM181	**91.36** 81.46 : 106.43	**88.07** 81.46 : 106.43	**92.18** 81.46 : 106.43	**93.42** 81.46 : 106.43
Chromium	TM181	**96.55** 82.26 : 104.55	**89.25** 82.26 : 104.55	**93.91** 82.26 : 104.55	**100.61** 82.26 : 104.55
Cobalt	TM181	**91.19** 80.74 : 99.26	**86.79** 80.74 : 99.26	**89.94** 80.74 : 99.26	**88.68** 80.74 : 99.26
Copper	TM181	**98.24** 82.40 : 105.45	**89.44** 82.40 : 105.45	**96.3** 82.40 : 105.45	**104.75** 82.40 : 105.45
Iron	TM181	**100.0** 82.95 : 110.58	**93.65** 82.95 : 110.58	**98.41** 82.95 : 110.58	**96.83** 82.95 : 110.58
Lead	TM181	**90.54** 78.24 : 104.05	**91.67** 78.24 : 104.05	**91.67** 78.24 : 104.05	**88.06** 78.24 : 104.05
Manganese	TM181	**109.72** 94.29 : 119.51	**95.56** 94.29 : 119.51	**108.61** 94.29 : 119.51	**109.44** 94.29 : 119.51

CERTIFICATE OF ANALYSIS

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Metals in solid samples by OES

		QC 1944	QC 1956	QC 1918	QC 1912
Mercury	TM181	**97.34** 83.74 : 105.34	**92.51** 83.74 : 105.34	**96.86** 83.74 : 105.34	**95.65** 83.74 : 105.34
Molybdenum	TM181	**96.71** 87.11 : 106.87	**92.59** 87.11 : 106.87	**95.88** 87.11 : 106.87	**100.41** 87.11 : 106.87
Nickel	TM181	**93.15** 81.92 : 102.18	**86.31** 81.92 : 102.18	**91.2** 81.92 : 102.18	**95.84** 81.92 : 102.18
Phosphorus	TM181	**110.1** 94.56 : 124.28	**110.71** 94.56 : 124.28	**108.89** 94.56 : 124.28	**120.2** 94.56 : 124.28
Selenium	TM181	**102.35** 86.28 : 110.48	**96.08** 86.28 : 110.48	**99.22** 86.28 : 110.48	**106.67** 86.28 : 110.48
Strontium	TM181	**94.43** 79.13 : 102.79	**83.96** 79.13 : 102.79	**93.54** 79.13 : 102.79	**97.33** 79.13 : 102.79
Thallium	TM181	**61.06** 82.94 : 111.86	**97.35** 82.94 : 111.86	**99.12** 82.94 : 111.86	**90.27** 82.94 : 111.86
Tin	TM181	**99.62** 90.25 : 108.86	**93.92** 90.25 : 108.86	**98.86** 90.25 : 108.86	**100.76** 90.25 : 108.86
Titanium	TM181	**83.97** 66.23 : 102.06	**78.63** 66.23 : 102.06	**85.5** 66.23 : 102.06	**87.79** 66.23 : 102.06
Vanadium	TM181	**99.63** 86.37 : 107.94	**89.38** 86.37 : 107.94	**96.7** 86.37 : 107.94	**104.76** 86.37 : 107.94
Zinc	TM181	**101.64** 84.68 : 113.99	**90.97** 84.68 : 113.99	**98.36** 84.68 : 113.99	**107.19** 84.68 : 113.99

PAH by GCMS

Component	Method Code	QC 1950
Acenaphthene	TM218	**89.0** 76.82 : 113.72
Acenaphthylene	TM218	**88.0** 75.95 : 108.85
Anthracene	TM218	**85.5** 76.67 : 109.58
Benz(a)anthracene	TM218	**95.5** 70.05 : 119.30
Benzo(a)pyrene	TM218	**94.0** 68.22 : 116.60
Benzo(b)fluoranthene	TM218	**93.0** 75.44 : 113.45
Benzo(ghi)perylene	TM218	**97.5** 70.79 : 114.76
Benzo(k)fluoranthene	TM218	**101.0** 81.43 : 115.17
Chrysene	TM218	**96.0** 75.94 : 114.39
Dibenzo(ah)anthracene	TM218	**94.0** 71.87 : 118.97
Fluoranthene	TM218	**92.5** 77.92 : 113.69
Fluorene	TM218	**90.5** 82.02 : 108.34
Indeno(123cd)pyrene	TM218	**80.5** 67.80 : 113.60
Naphthalene	TM218	**100.5** 88.41 : 116.04

CERTIFICATE OF ANALYSIS

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PAH by GCMS

		QC 1950
Phenanthrene	TM218	**94.0** 78.26 : 113.22
Pyrene	TM218	**94.5** 74.86 : 116.81

PAH in waters by GC-MS (diss.filt)

Component	Method Code	QC 1927
Acenaphthene (diss.filt)	TM178	**107.6** 94.40 : 118.40
Acenaphthylene (diss.filt)	TM178	**105.2** 92.00 : 116.00
Anthracene (diss.filt)	TM178	**101.6** 88.80 : 115.20
Benzo(a)anthracene (diss.filt)	TM178	**104.0** 85.20 : 118.80
Benzo(a)pyrene (diss.filt)	TM178	**107.2** 90.40 : 119.20
Benzo(b)fluoranthene (diss.filt)	TM178	**108.8** 86.40 : 122.40
Benzo(g,h,i)perylene (diss.filt)	TM178	**107.6** 92.00 : 116.00
Benzo(k)fluoranthene (diss.filt)	TM178	**110.4** 92.00 : 125.60
Chrysene (diss.filt)	TM178	**109.6** 95.20 : 121.60
Dibenzo(a,h)anthracene (diss.filt)	TM178	**107.6** 88.80 : 112.80
Fluoranthene (diss.filt)	TM178	**106.4** 87.60 : 118.80
Fluorene (diss.filt)	TM178	**108.8** 93.60 : 117.60
Indeno(1,2,3-cd)pyrene (diss.filt)	TM178	**108.8** 85.60 : 114.40
Naphthalene (diss.filt)	TM178	**105.6** 87.20 : 123.20
Phenanthrene (diss.filt)	TM178	**109.2** 94.00 : 118.00
Pyrene (diss.filt)	TM178	**106.8** 87.20 : 120.80

pH

Component	Method Code	QC 1951	QC 1979	QC 1949
pH	TM133	**99.53** 98.34 : 101.39	**99.07** 98.34 : 101.39	**99.3** 98.34 : 101.39

pH Value of Filtered Water

CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
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pH Value of Filtered Water

Component	Method Code	QC 1933	QC 1965	QC 1921
pH Value of Filtered Water	TM256	**101.21** 99.73 : 102.16	**101.62** 99.73 : 102.16	**101.21** 99.73 : 102.16

Phenols by ms (w)

Component	Method Code	QC 1957
2,3,4,6-tetrachlorophenol	TM205	**94.13** 67.00 : 128.50
2,4,5-trichlorophenol	TM205	**96.75** 70.75 : 134.50
2,4,6-trichlorophenol	TM205	**97.75** 69.88 : 134.38
2,4-dichlorophenol	TM205	**102.37** 69.88 : 134.38
2,4-dimethylphenol	TM205	**106.0** 67.50 : 138.00
2,6-dichlorophenol	TM205	**99.0** 70.13 : 133.13
2-chlorophenol	TM205	**105.0** 68.50 : 133.00
2-methylphenol	TM205	**111.13** 70.63 : 137.38
2-nitrophenol	TM205	**85.63** 58.88 : 126.38
3-methylphenol	TM205	**110.88** 71.25 : 138.75
4-chloro-3-methylphenol	TM205	**104.88** 74.25 : 138.00
4-methylphenol	TM205	**110.75** 74.13 : 137.13
4-nitrophenol	TM205	**98.75** 68.50 : 136.75
Pentachlorophenol	TM205	**70.63** 47.74 : 105.49
Phenol	TM205	**115.0** 67.27 : 72.73

Total Organic Carbon

Component	Method Code	QC 1999	QC 1962	QC 1959	QC 1920
Total Organic Carbon	TM132	**92.97** 88.47 : 112.82	**94.53** 88.47 : 112.82	**95.31** 88.47 : 112.82	**94.92** 88.47 : 112.82

VOC MS (S)

CERTIFICATE OF ANALYSIS

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VOC MS (S)

Component	Method Code	QC 1923	QC 1939
1,1,1,2-tetrachloroethane	TM116	**106.2** 79.10 : 119.66	**104.4** 77.56 : 115.55
1,1,1-Trichloroethane	TM116	**101.8** 87.51 : 115.37	**102.6** 73.73 : 118.05
1,1,2-Trichloroethane	TM116	**99.8** 75.16 : 112.70	**101.0** 77.12 : 116.04
1,1-Dichloroethane	TM116	**109.8** 89.44 : 121.71	**107.6** 74.46 : 129.15
1,2-Dichloroethane	TM116	**108.0** 86.58 : 129.62	**108.8** 87.98 : 127.86
1,4-Dichlorobenzene	TM116	**100.0** 71.61 : 124.63	**111.6** 72.76 : 126.34
2-Chlorotoluene	TM116	**97.8** 66.81 : 118.43	**95.8** 72.40 : 116.20
4-Chlorotoluene	TM116	**94.8** 65.88 : 114.76	**93.8** 66.90 : 112.46
Benzene	TM116	**102.0** 88.66 : 121.07	**99.8** 91.01 : 117.67
Carbon Disulphide	TM116	**101.0** 75.11 : 124.81	**105.0** 74.91 : 122.14
Carbontetrachloride	TM116	**100.6** 82.35 : 126.46	**102.8** 80.31 : 124.50
Chlorobenzene	TM116	**105.4** 82.88 : 122.42	**108.2** 75.00 : 115.53
Chloroform	TM116	**104.6** 93.02 : 122.86	**108.2** 87.40 : 122.49
Chloromethane	TM116	**124.8** 52.88 : 131.36	**117.6** 65.05 : 142.63
Cis-1,2-Dichloroethene	TM116	**108.4** 78.27 : 128.90	**107.2** 80.67 : 126.72
Dibromomethane	TM116	**93.8** 71.69 : 119.43	**98.6** 67.80 : 121.75
Dichloromethane	TM116	**117.6** 89.49 : 128.89	**117.8** 81.11 : 133.25
Ethylbenzene	TM116	**96.8** 70.95 : 113.07	**94.0** 75.92 : 110.41
Hexachlorobutadiene	TM116	**59.2** 7.32 : 139.00	**116.8** 12.82 : 152.73
Isopropylbenzene	TM116	**99.2** 52.15 : 132.52	**87.4** 54.21 : 117.17
Naphthalene	TM116	**99.8** 80.29 : 135.77	**102.0** 80.86 : 128.81
o-Xylene	TM116	**96.0** 68.16 : 107.61	**93.4** 82.80 : 107.93
p/m-Xylene	TM116	**93.1** 73.52 : 108.71	**92.9** 68.32 : 108.91
Sec-Butylbenzene	TM116	**86.8** 44.71 : 117.87	**89.6** 44.91 : 118.40
Tetrachloroethene	TM116	**104.6** 81.43 : 126.65	**105.0** 76.95 : 121.02
Toluene	TM116	**93.6** 85.50 : 114.89	**93.8** 74.24 : 107.42

VOC MS (S)

		QC 1923	QC 1939
Trichloroethene	TM116	**100.4** 79.80 : 112.33	**96.0** 77.61 : 111.54
Trichlorofluoromethane	TM116	**105.4** 88.86 : 128.82	**107.0** 71.31 : 128.41
Vinyl Chloride	TM116	**115.0** 64.90 : 133.10	**106.8** 68.26 : 133.45

The above information details the reference name of the analytical quality control sample (AQC) that has been run with the samples contained in this report for the different methods of analysis.
The figure detailed is the percentage recovery result for the AQC.
The subscript numbers below are the percentage recovery lower control limit (LCL) and the upper control limit (UCL). The percentage recovery result for the AQC should be between these limits to be statistically in control.

CERTIFICATE OF ANALYSIS

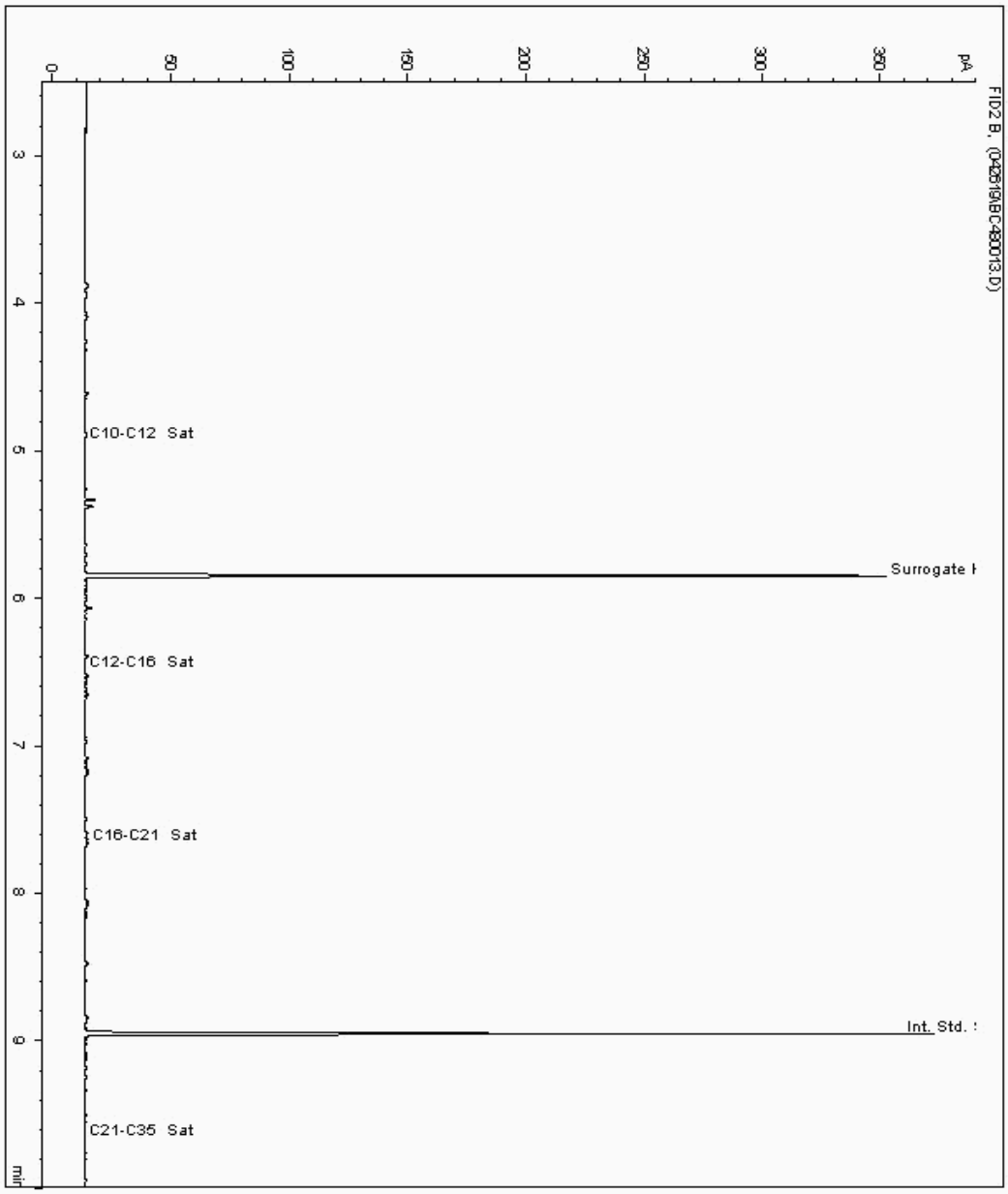
SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19839855 **Depth :** 1.20 - 1.20
Sample ID : BH3

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18611581-
Date Acquired : 26/04/2019 18:43:41 PM
Units : ppb
Dilution : BH3 [1.20 - 1.20] CEN 2 1 ->
CF : 1
Multiplier : 0.029



CERTIFICATE OF ANALYSIS

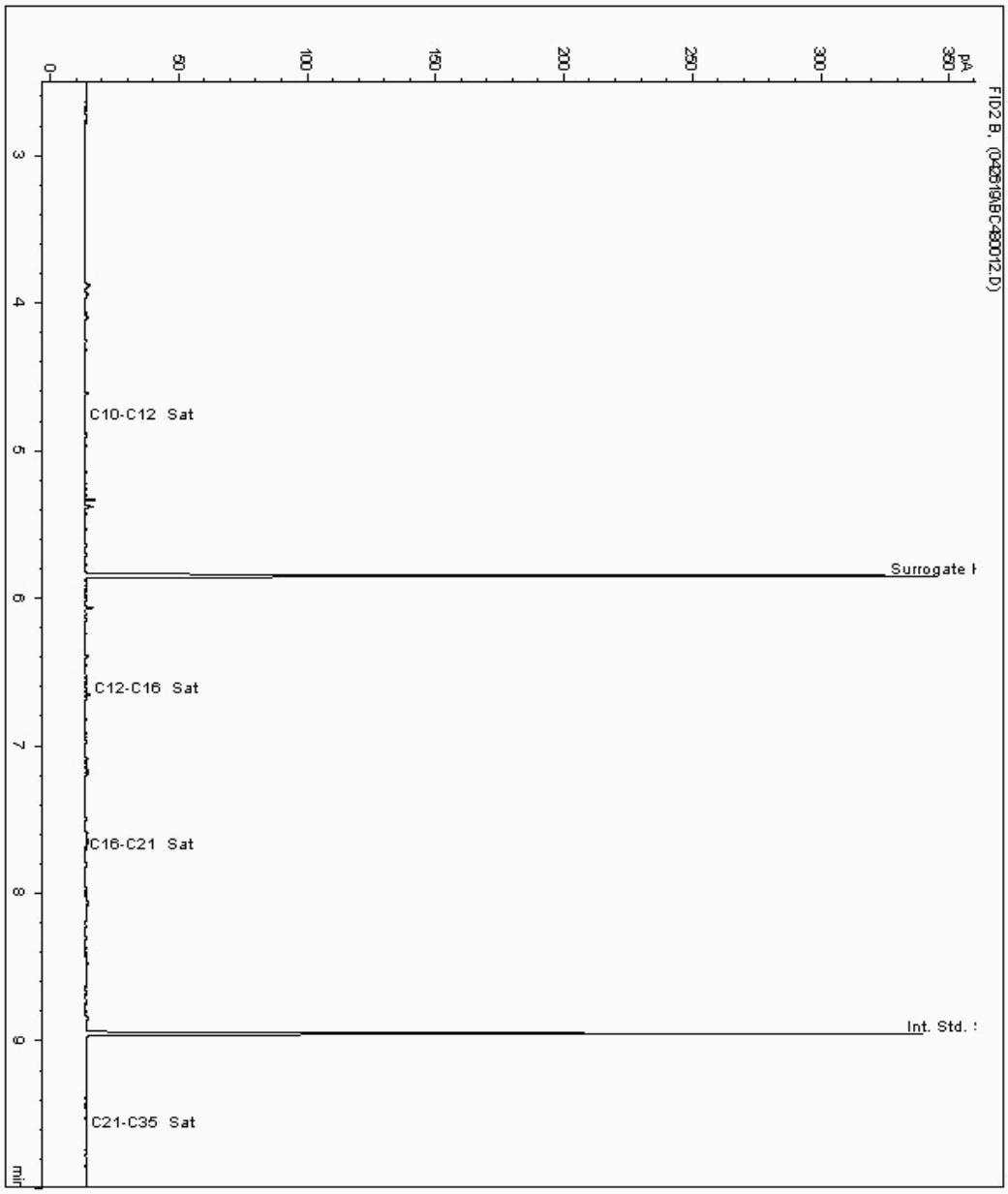
SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19840871 **Depth :** 1.00 - 1.00
Sample ID : BH4

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18611627-
Date Acquired : 26/04/2019 18:20:28 PM
Units : ppb
Dilution : BH4 [1.00 - 1.00] CEN 2 1 ->
CF : 1
Multiplier : 0.030



CERTIFICATE OF ANALYSIS

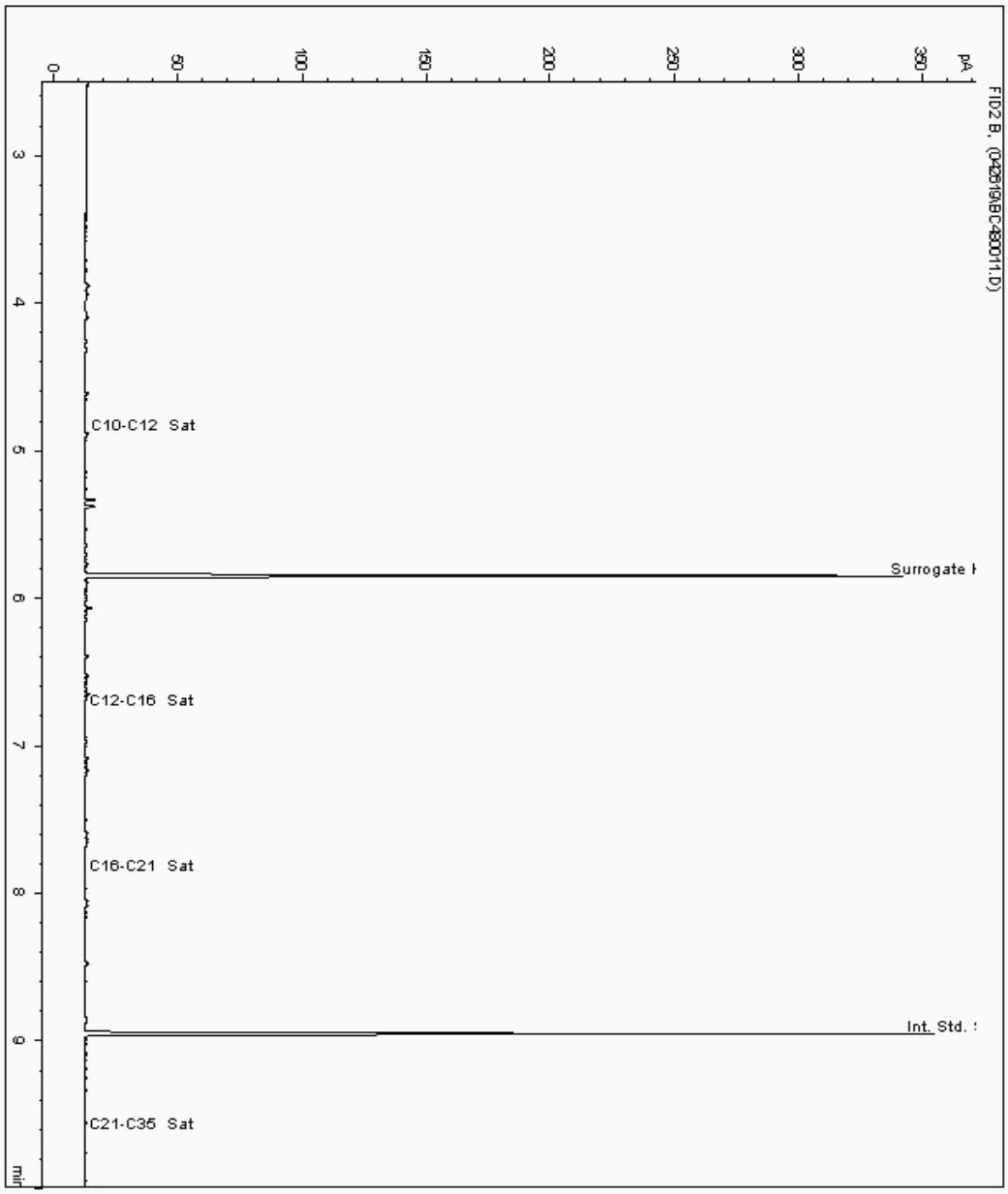
SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19840873 **Depth :** 0.50 - 0.50
Sample ID : BH3

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18611598-
Date Acquired : 26/04/2019 17:56:56 PM
Units : ppb
Dilution : BH3 D [0.50 - 0.50] CEN 2 ->
CF : 1
Multiplier : 0.029



CERTIFICATE OF ANALYSIS

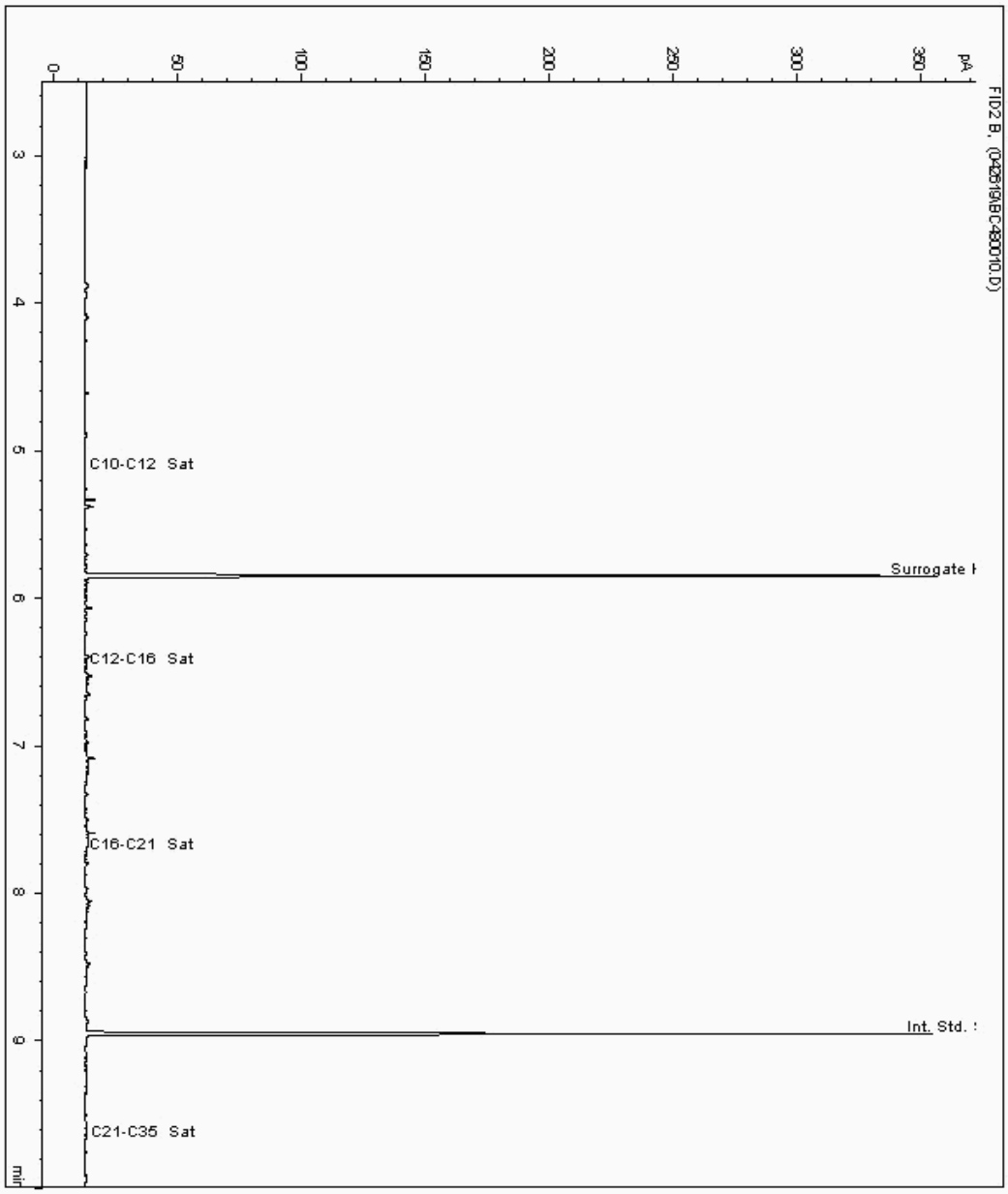
SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19840876 **Depth :** 0.30 - 0.30
Sample ID : BH2

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18611554-
Date Acquired : 26/04/2019 17:33:29 PM
Units : ppb
Dilution : BH2 [0.30 - 0.30] CEN 2 1 ->
CF : 1
Multiplier : 0.029



CERTIFICATE OF ANALYSIS

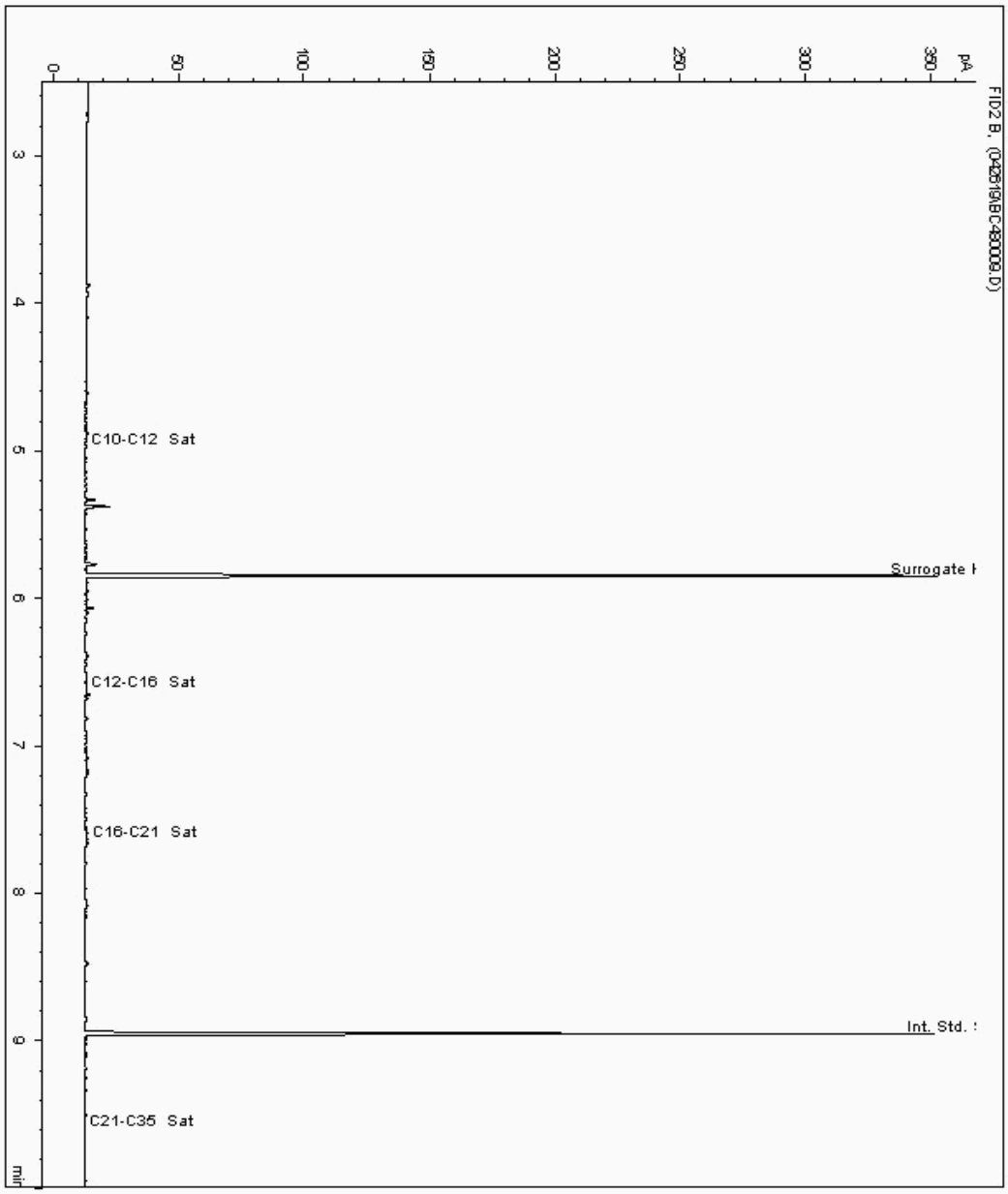
SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19840878 **Depth :** 0.20 - 0.20
Sample ID : BH1

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18611527-
Date Acquired : 26/04/2019 17:09:42 PM
Units : ppb
Dilution : BH1 [0.20 - 0.20] CEN 2 1 ->
CF : 1
Multiplier : 0.028



CERTIFICATE OF ANALYSIS

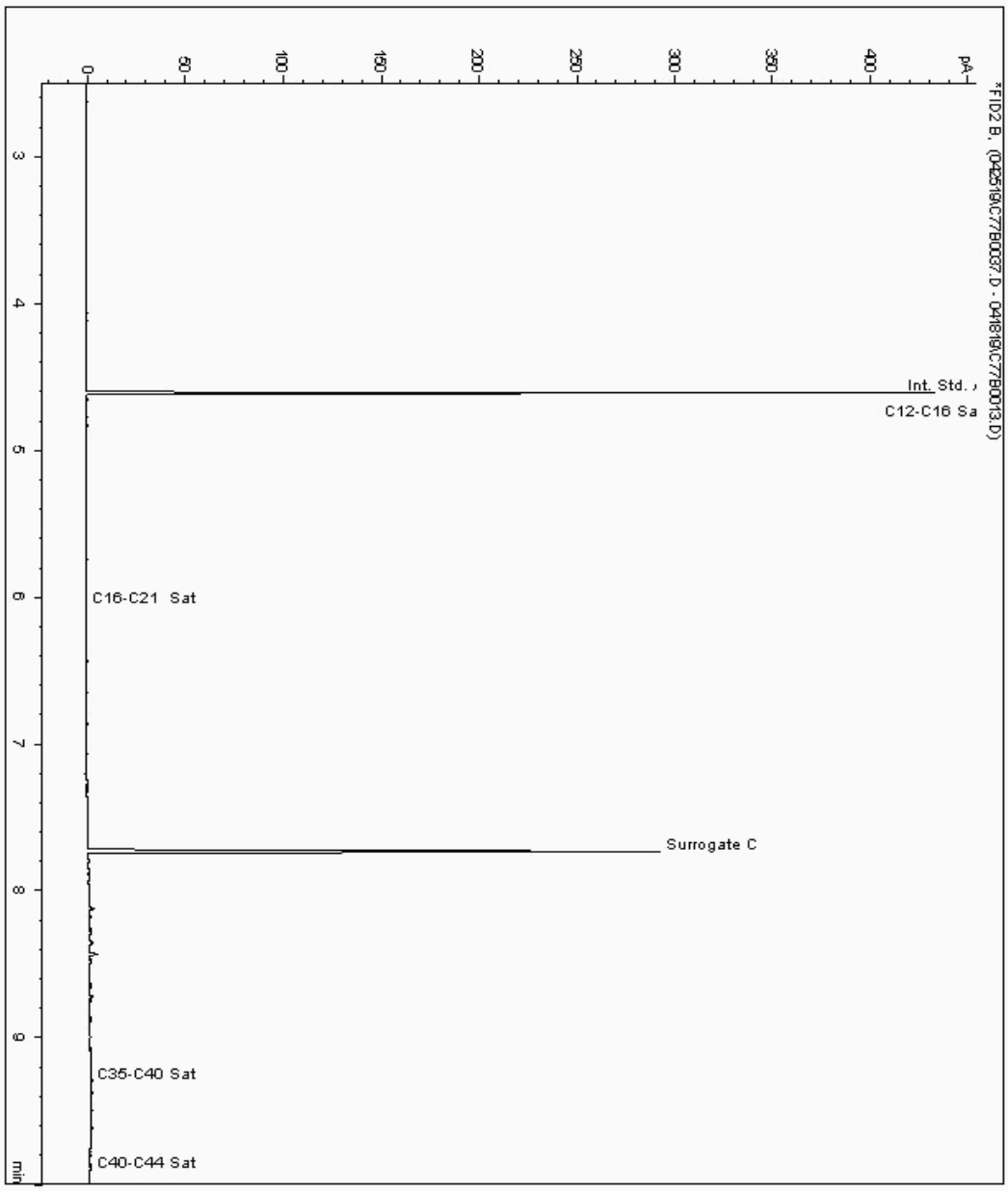
SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19815865 **Depth :** 1.00 - 1.00
Sample ID : BH4

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18611444-
Date Acquired : 4/25/2019 3:40:37 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.960



CERTIFICATE OF ANALYSIS

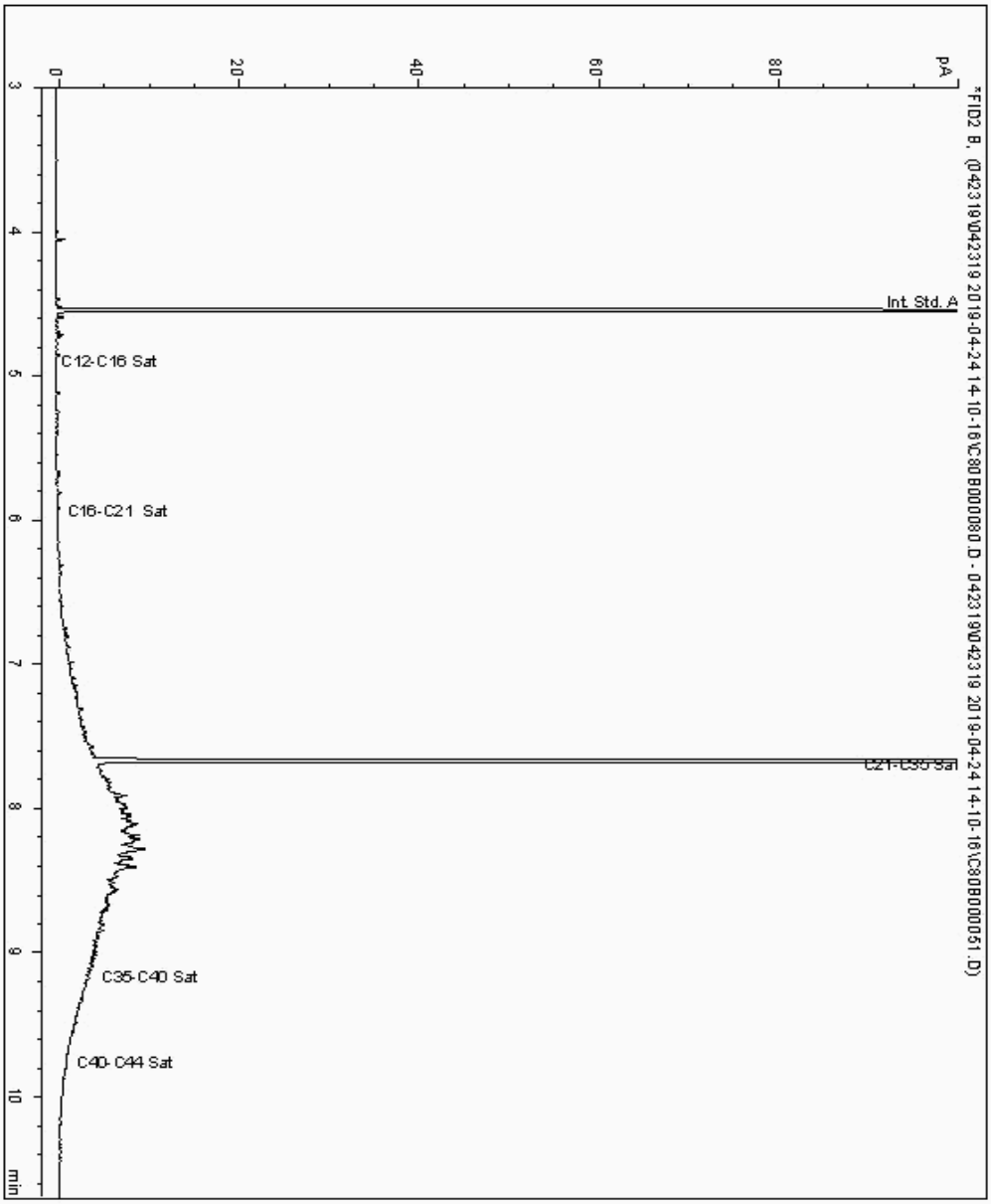
SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19815897 **Depth :** 0.30 - 0.30
Sample ID : BH2

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18611405-
Date Acquired : 25/04/19 00:11:10
Units : ppb
Dilution :
CF : 1
Multiplier : 1.020



CERTIFICATE OF ANALYSIS

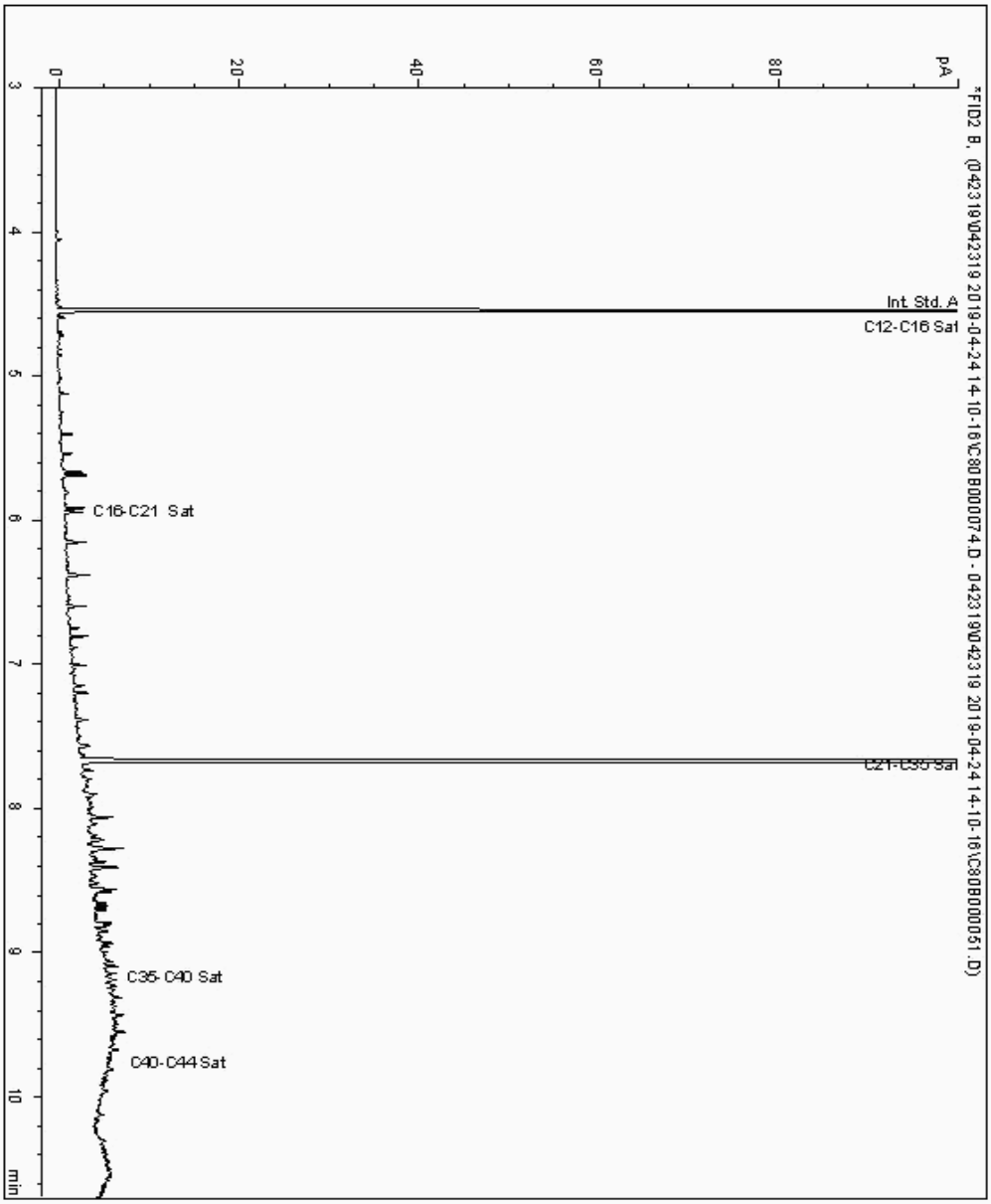
SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19816074 **Depth :** 0.50 - 0.50
Sample ID : BH3

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18611468-
Date Acquired : 24/04/19 22:33:28
Units : ppb
Dilution :
CF : 1
Multiplier : 0.980



CERTIFICATE OF ANALYSIS

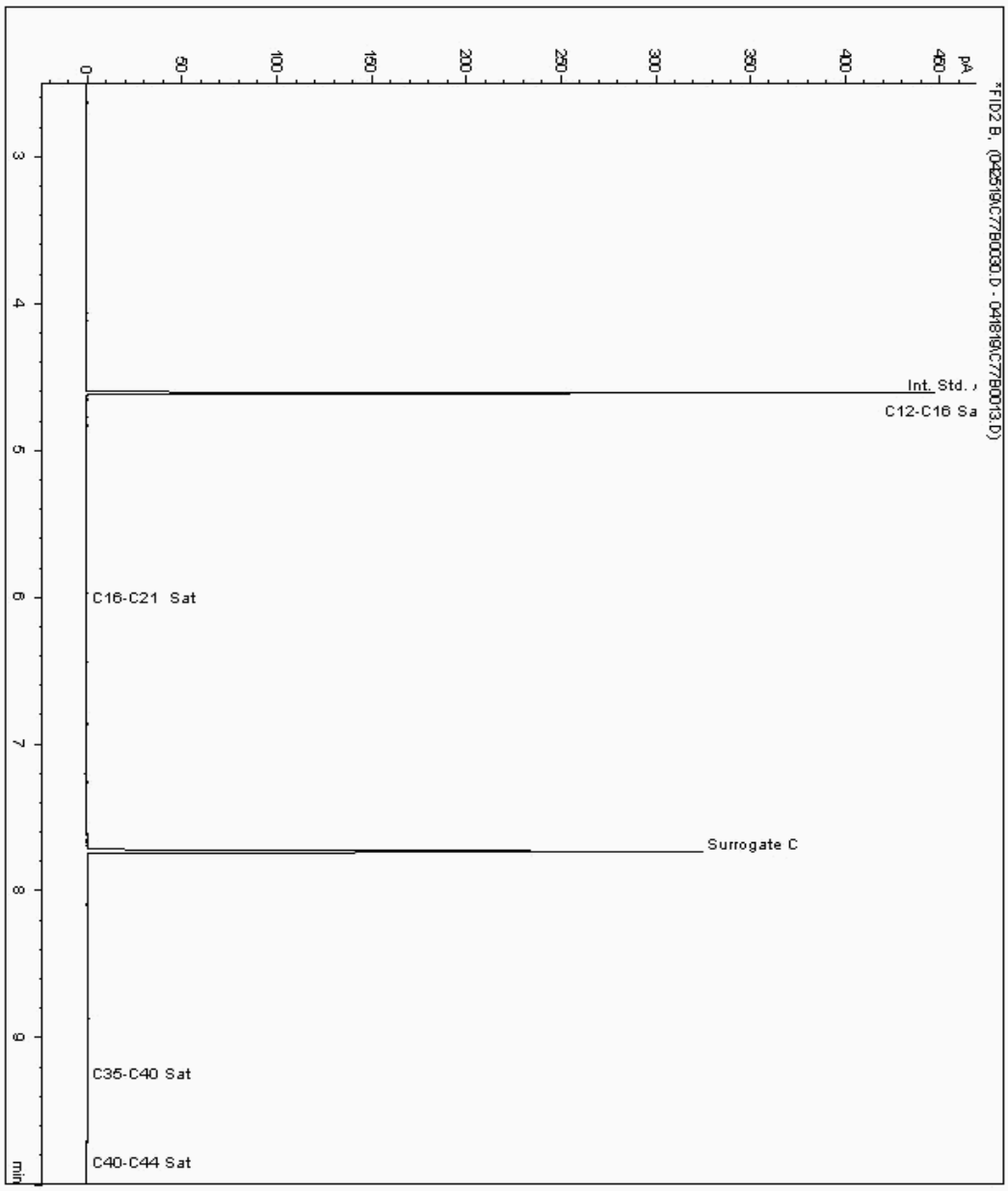
SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19816441 **Depth :** 0.20 - 0.20
Sample ID : BH1

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18611381-
Date Acquired : 4/25/2019 1:51:44 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 1.000



CERTIFICATE OF ANALYSIS

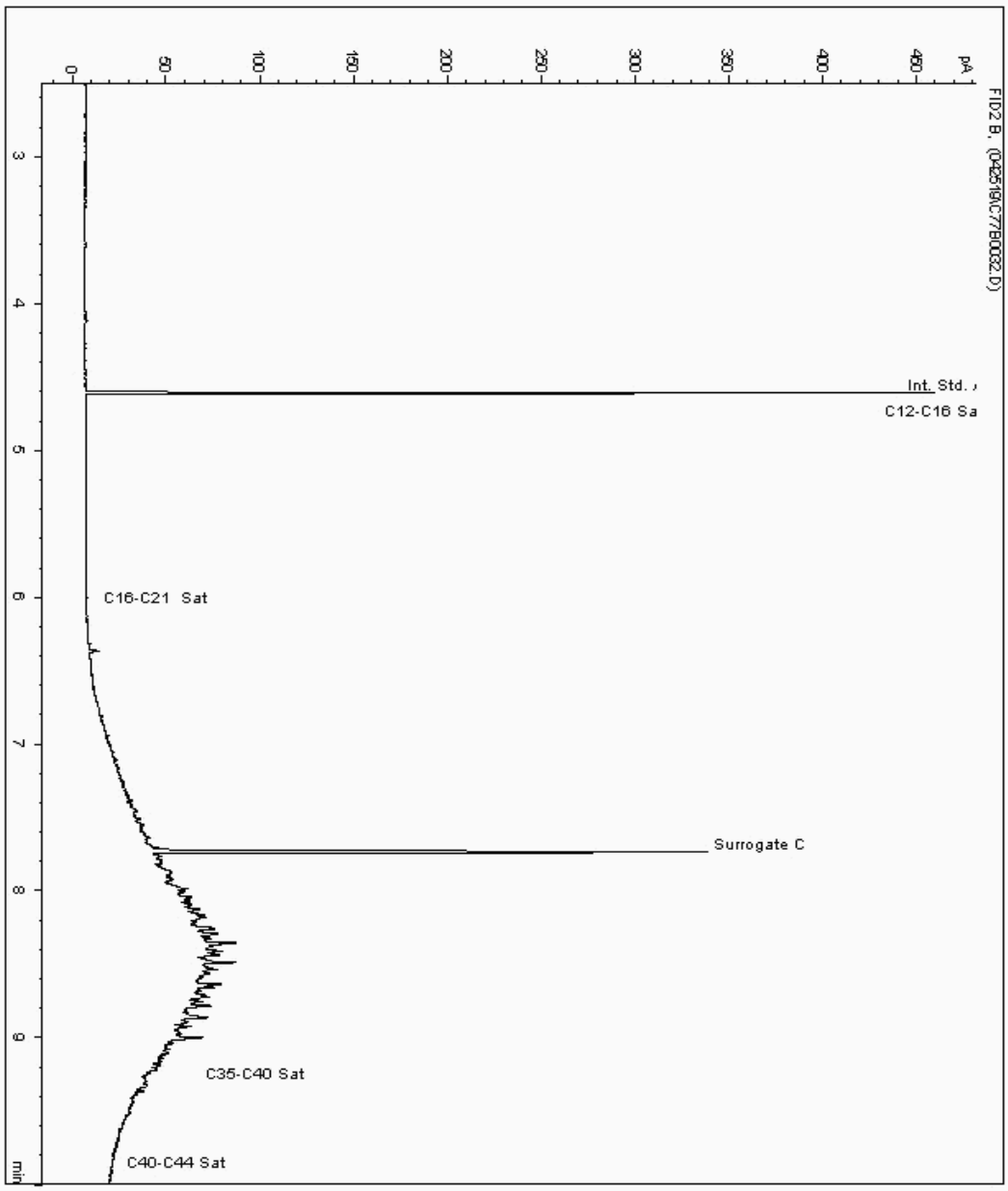
SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19816635 **Depth :** 1.20 - 1.20
Sample ID : BH3

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18611424-
Date Acquired : 4/25/2019 2:24:20 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.990



CERTIFICATE OF ANALYSIS

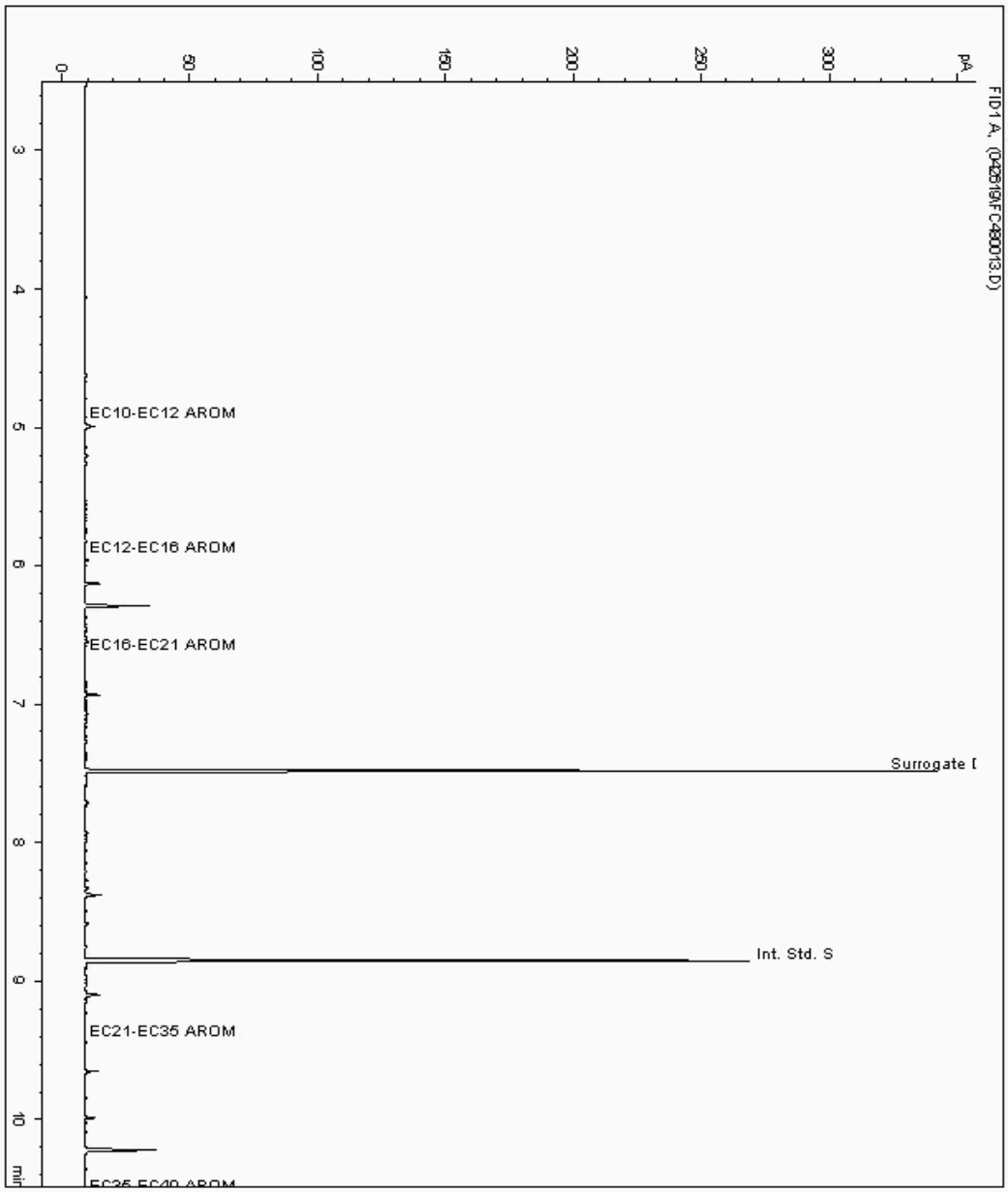
SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19839855 **Depth :** 1.20 - 1.20
Sample ID : BH3

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18611582-
Date Acquired : 26/04/2019 18:43:41 PM
Units : ppb
Dilution : BH3 [1.20 - 1.20] CEN 2 1 ->
CF : 1
Multiplier : 0.029



CERTIFICATE OF ANALYSIS

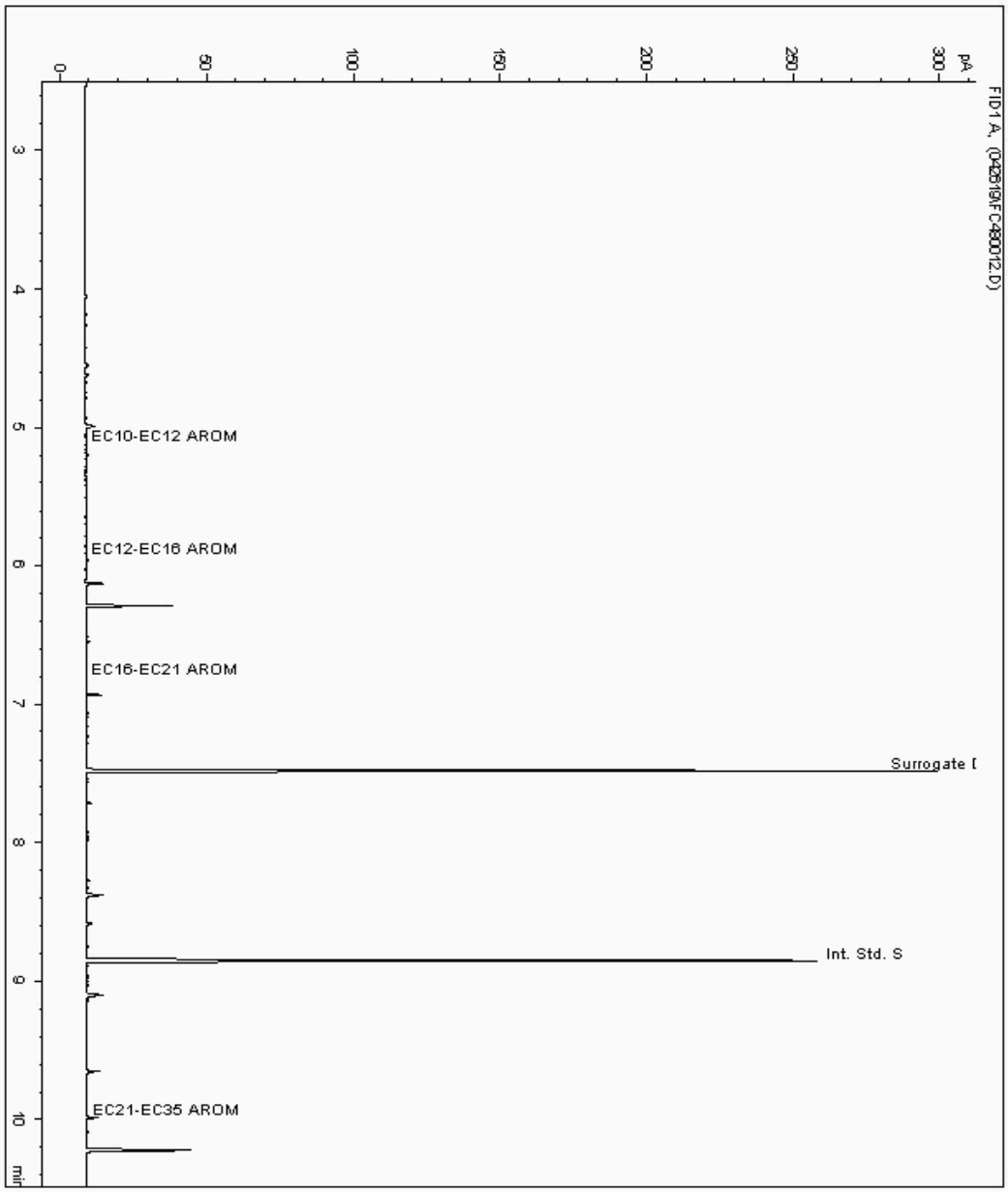
SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19840871 **Depth :** 1.00 - 1.00
Sample ID : BH4

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18611628-
Date Acquired : 26/04/2019 18:20:28 PM
Units : ppb
Dilution : BH4 [1.00 - 1.00] CEN 2 1 ->
CF : 1
Multiplier : 0.030



CERTIFICATE OF ANALYSIS

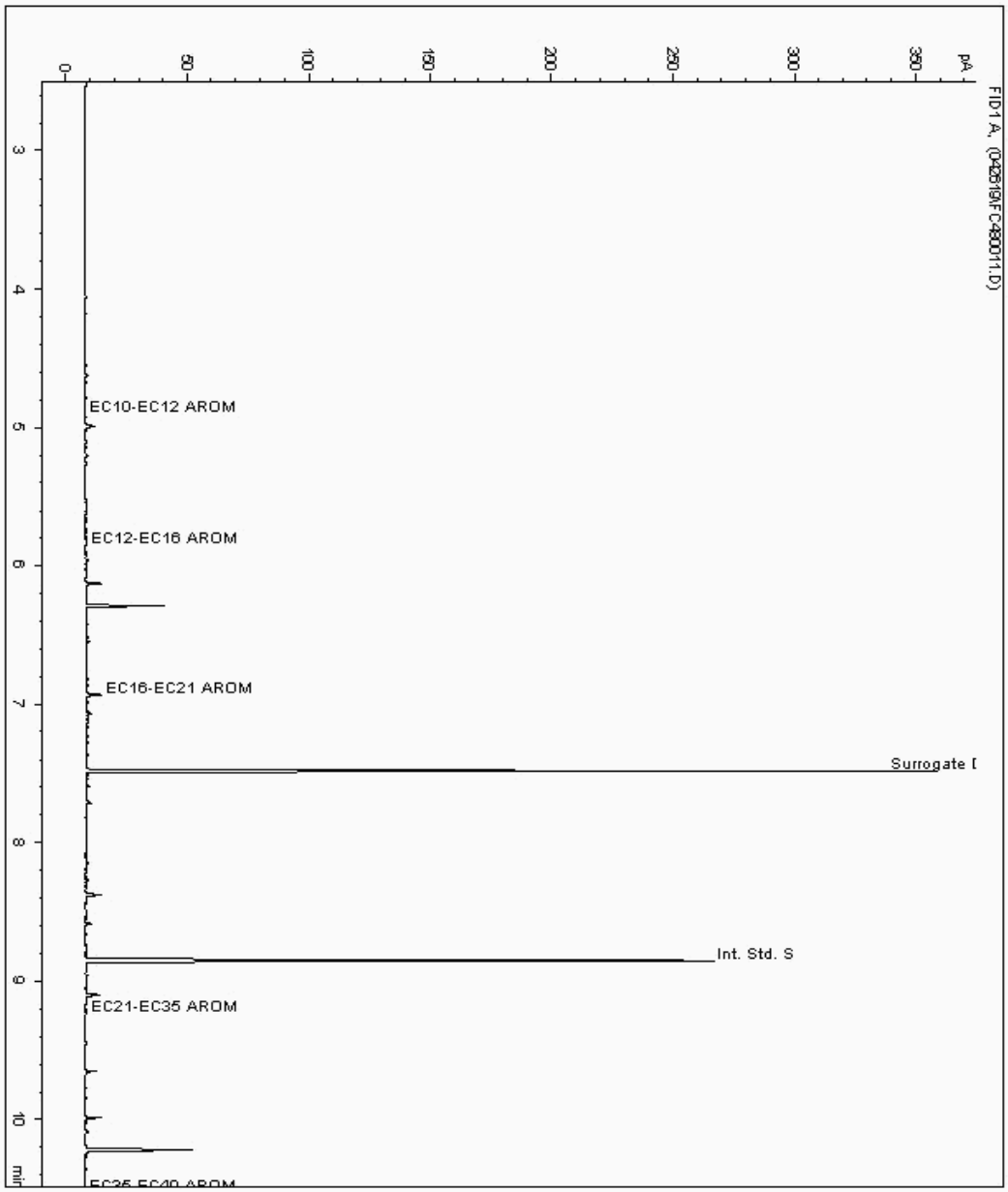
SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19840873 **Depth :** 0.50 - 0.50
Sample ID : BH3

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18611599-
Date Acquired : 26/04/2019 17:56:56 PM
Units : ppb
Dilution : BH3 D [0.50 - 0.50] CEN 2 ->
CF : 1
Multiplier : 0.029



CERTIFICATE OF ANALYSIS

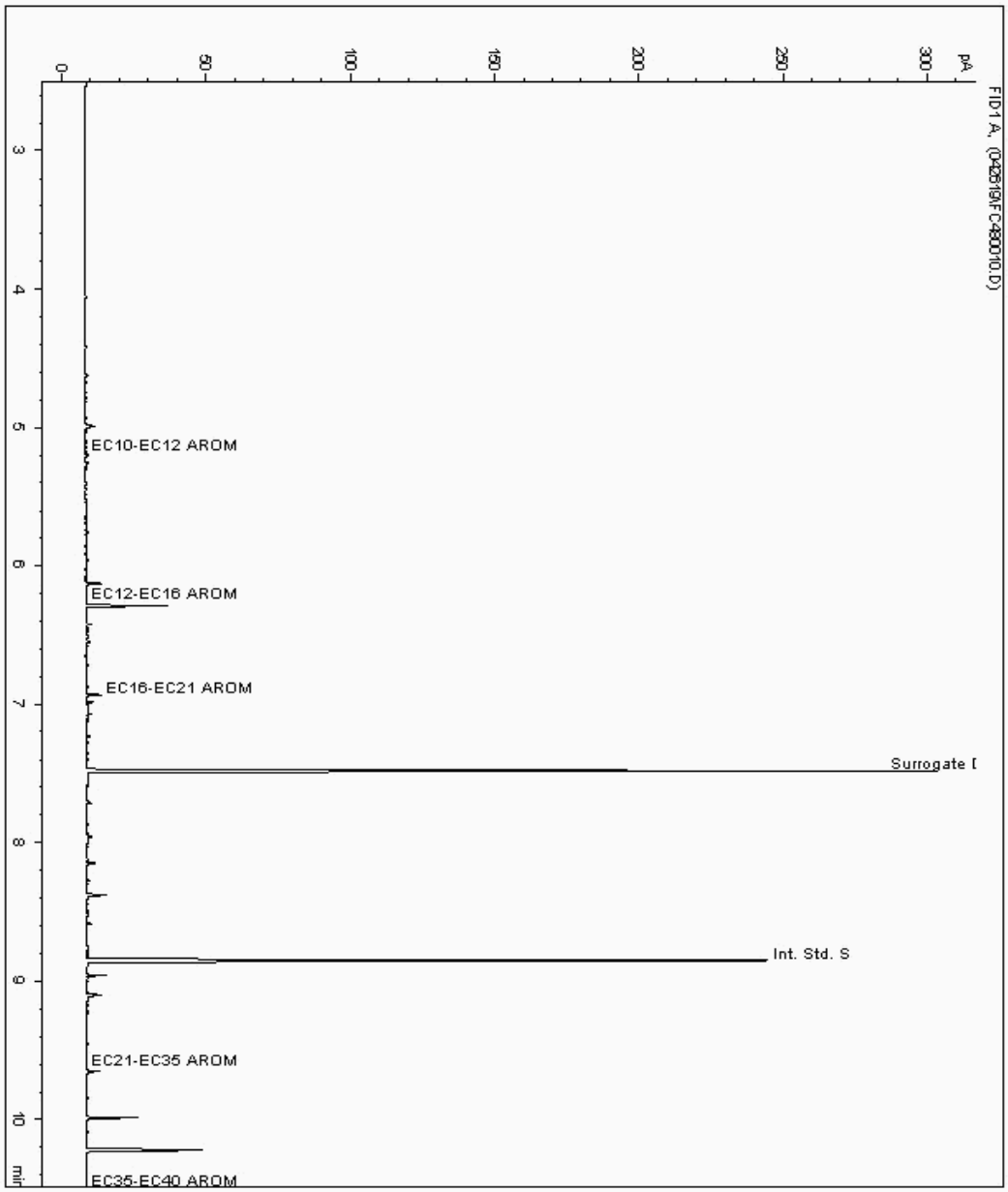
SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19840876 **Depth :** 0.30 - 0.30
Sample ID : BH2

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18611555-
Date Acquired : 26/04/2019 17:33:29 PM
Units : ppb
Dilution : BH2 [0.30 - 0.30] CEN 2 1 ->
CF : 1
Multiplier : 0.029



CERTIFICATE OF ANALYSIS

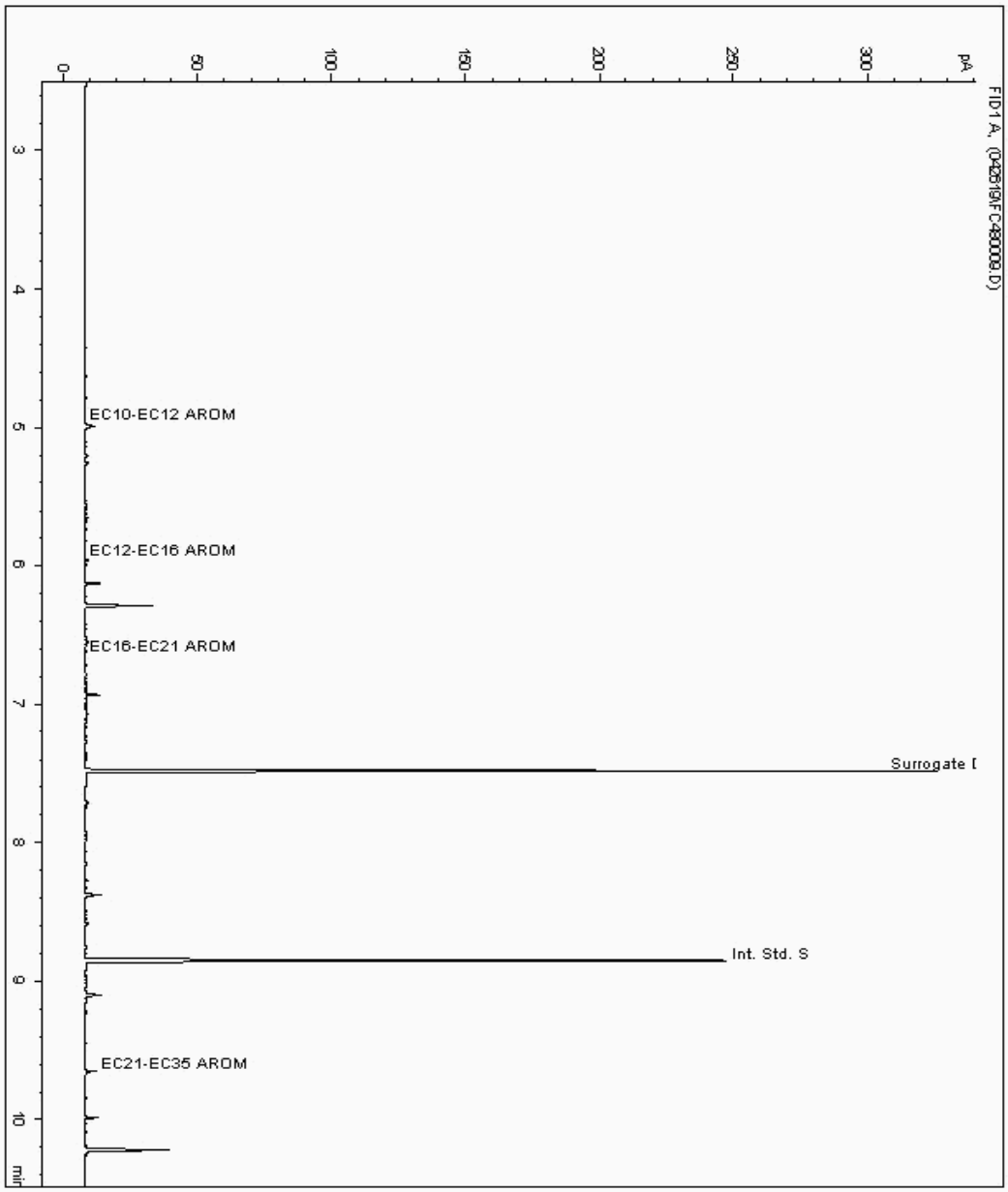
SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19840878 **Depth :** 0.20 - 0.20
Sample ID : BH1

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18611528-
Date Acquired : 26/04/2019 17:09:42 PM
Units : ppb
Dilution : BH1 [0.20 - 0.20] CEN 2 1 ->
CF : 1
Multiplier : 0.028



CERTIFICATE OF ANALYSIS

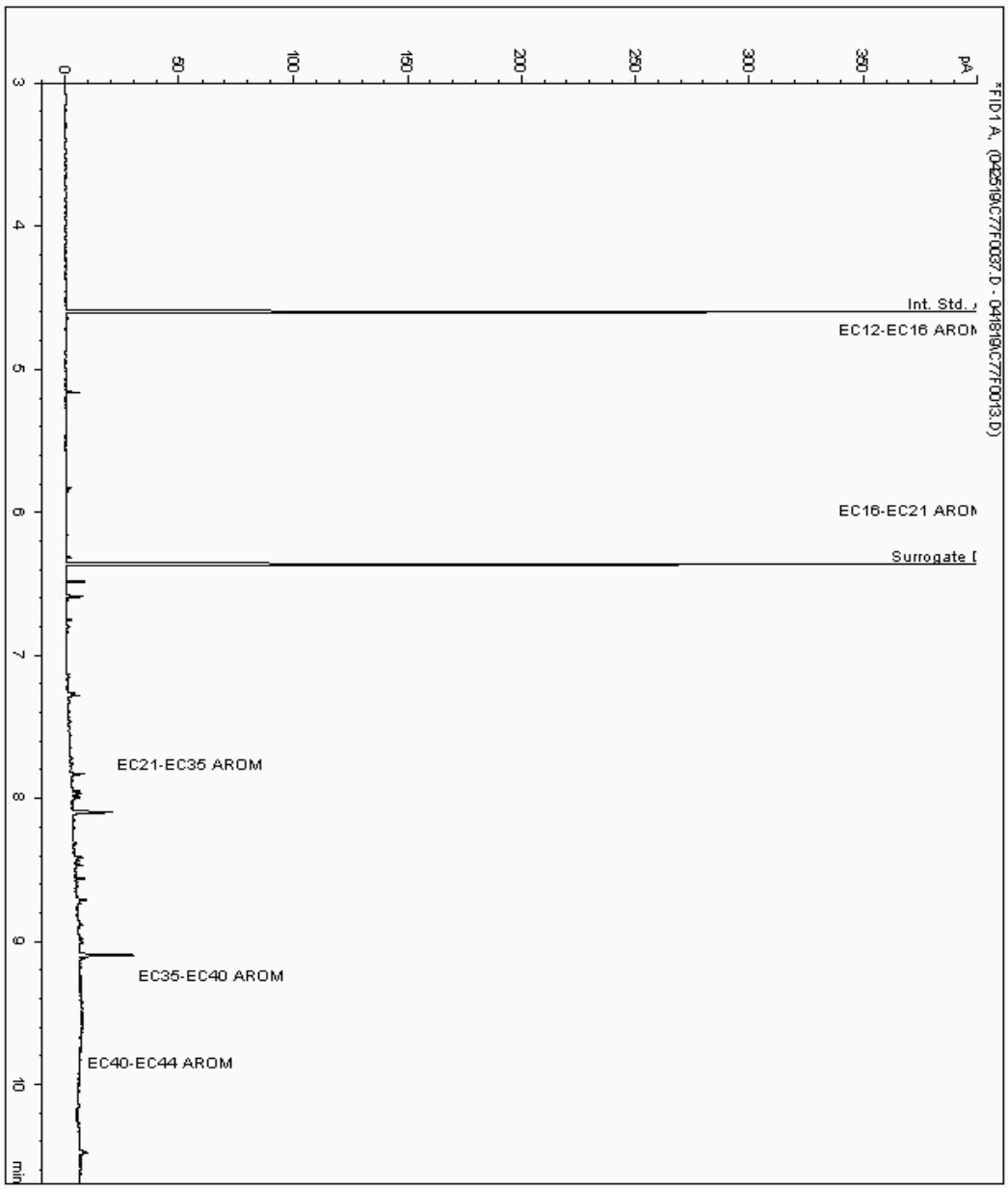
SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19815865 **Depth :** 1.00 - 1.00
Sample ID : BH4

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18611445-
Date Acquired : 4/25/2019 3:40:37 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

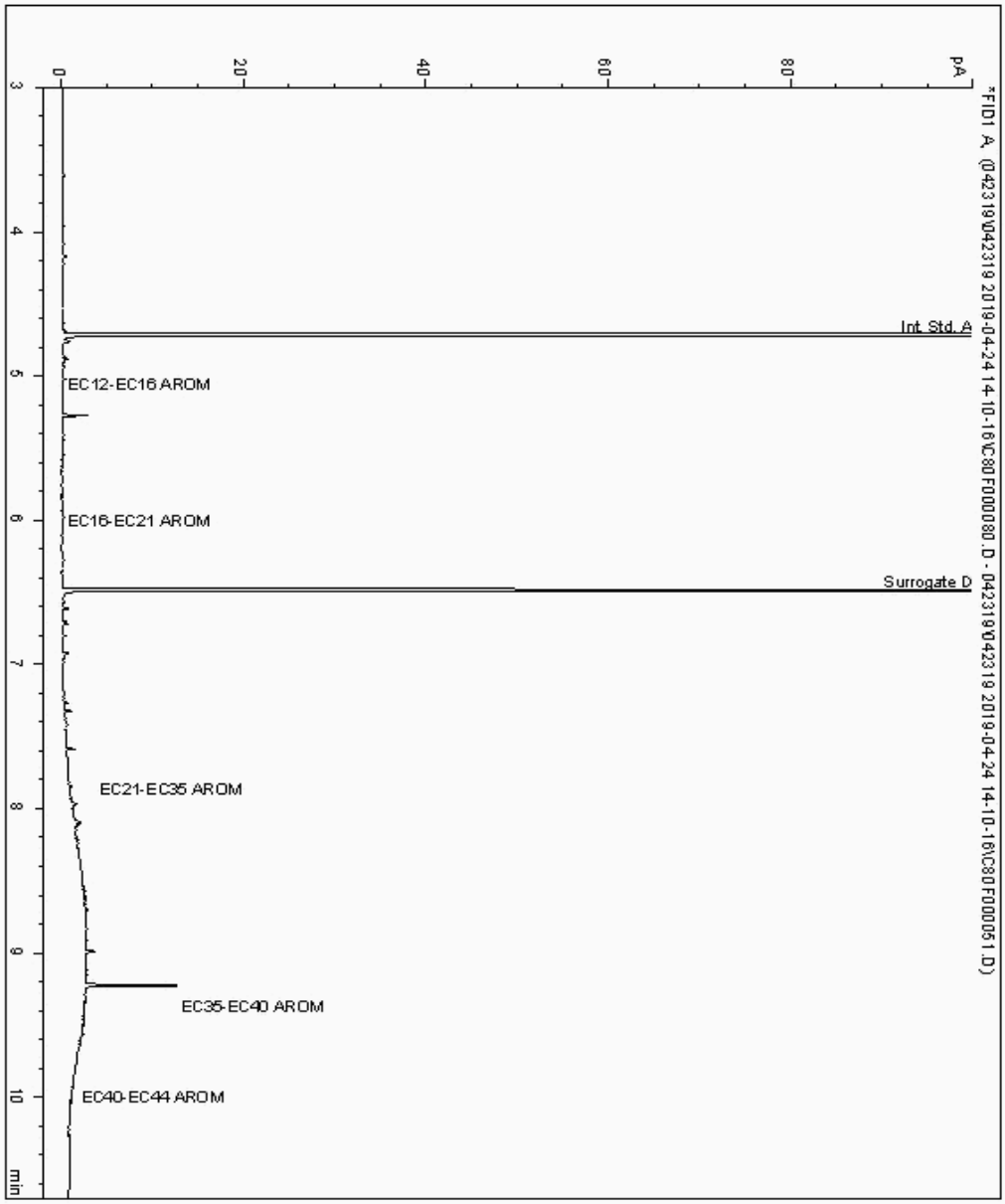
SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19815897 **Depth :** 0.30 - 0.30
Sample ID : BH2

Speciated TPH - AROMS (C12 - C44)

Sample Identity: 18611406-
Date Acquired : 25/04/19 00:11:09
Units : ppb
Dilution :
CF : 1
Multiplier : 1.020



CERTIFICATE OF ANALYSIS

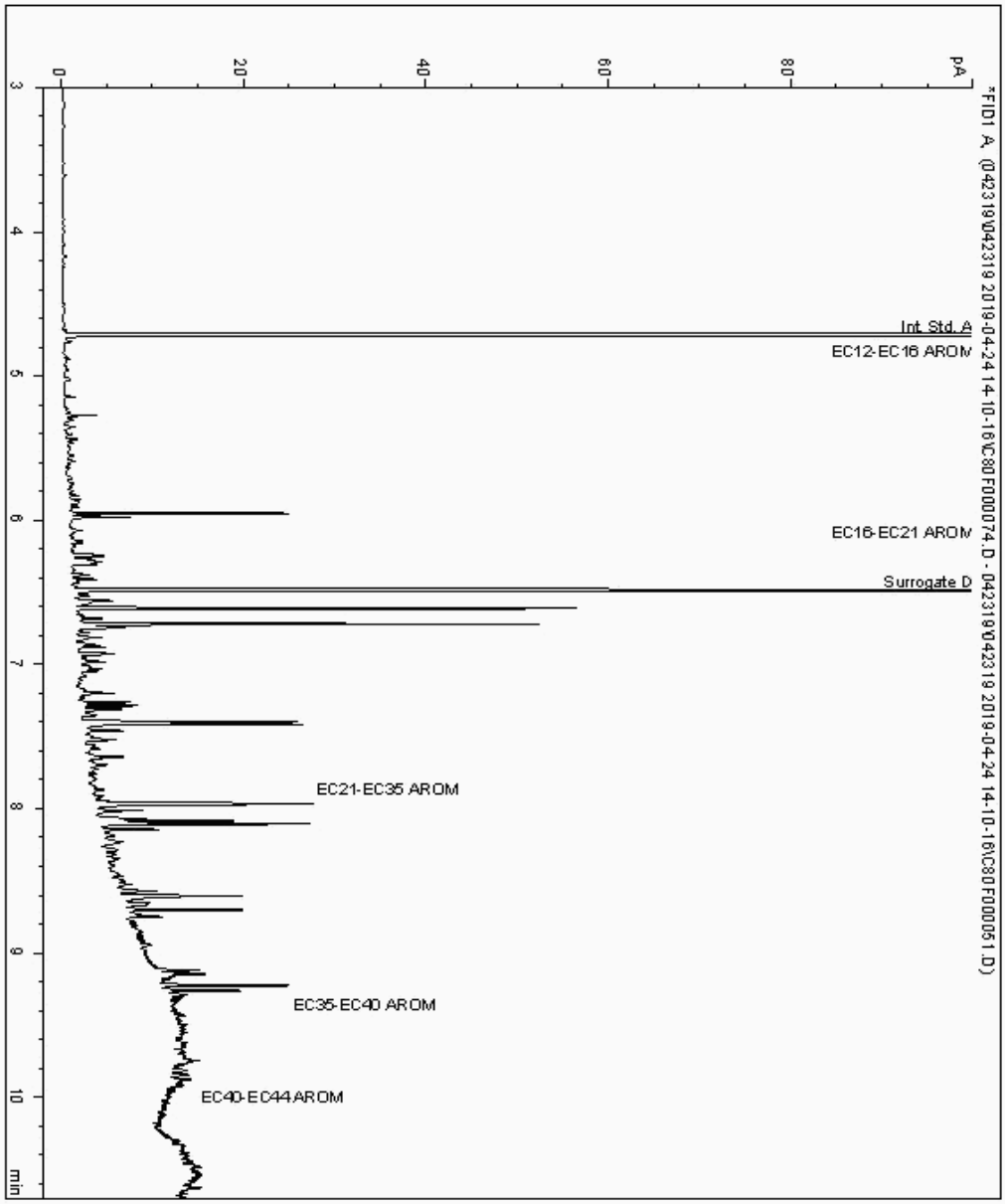
SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19816074 **Depth :** 0.50 - 0.50
Sample ID : BH3

Speciated TPH - AROMS (C12 - C44)

Sample Identity: 18611469-
Date Acquired : 24/04/19 22:33:29
Units : ppb
Dilution :
CF : 1
Multiplier : 0.980



CERTIFICATE OF ANALYSIS

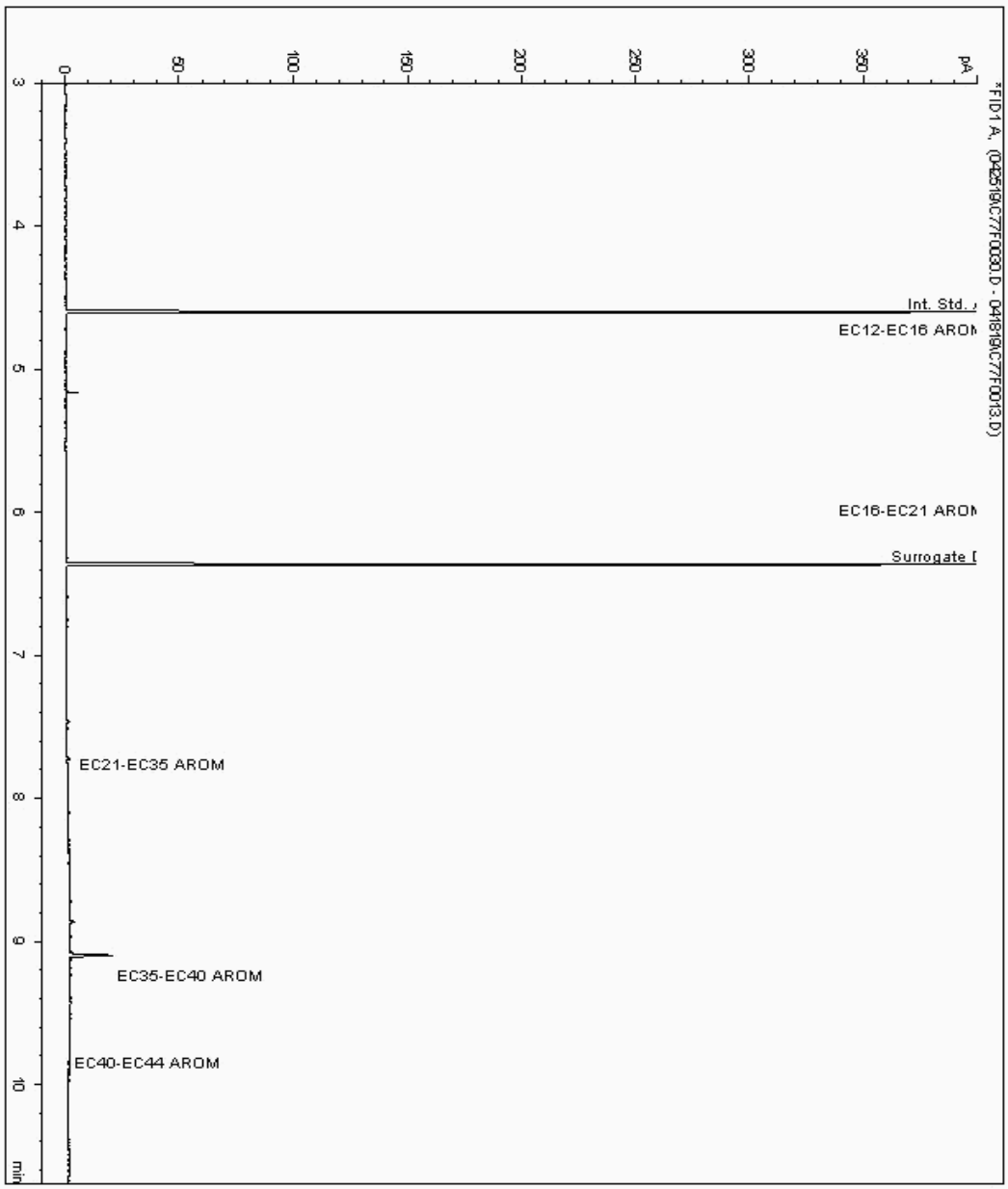
SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19816441 **Depth :** 0.20 - 0.20
Sample ID : BH1

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18611382-
Date Acquired : 4/25/2019 1:51:44 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

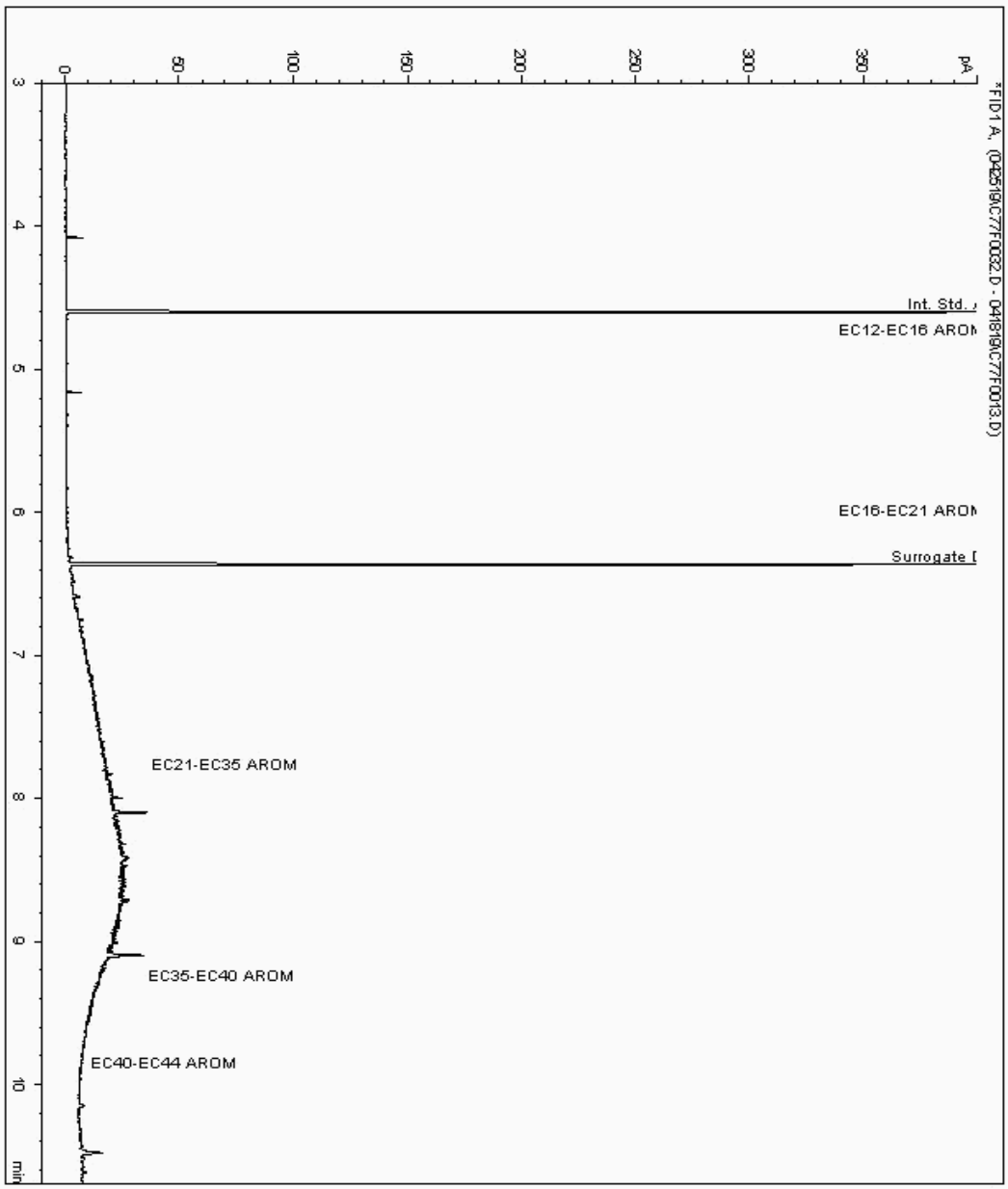
SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19816635 **Depth :** 1.20 - 1.20
Sample ID : BH3

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18611425-
Date Acquired : 4/25/2019 2:24:20 PM
Units : ppb
Dilution:



CERTIFICATE OF ANALYSIS

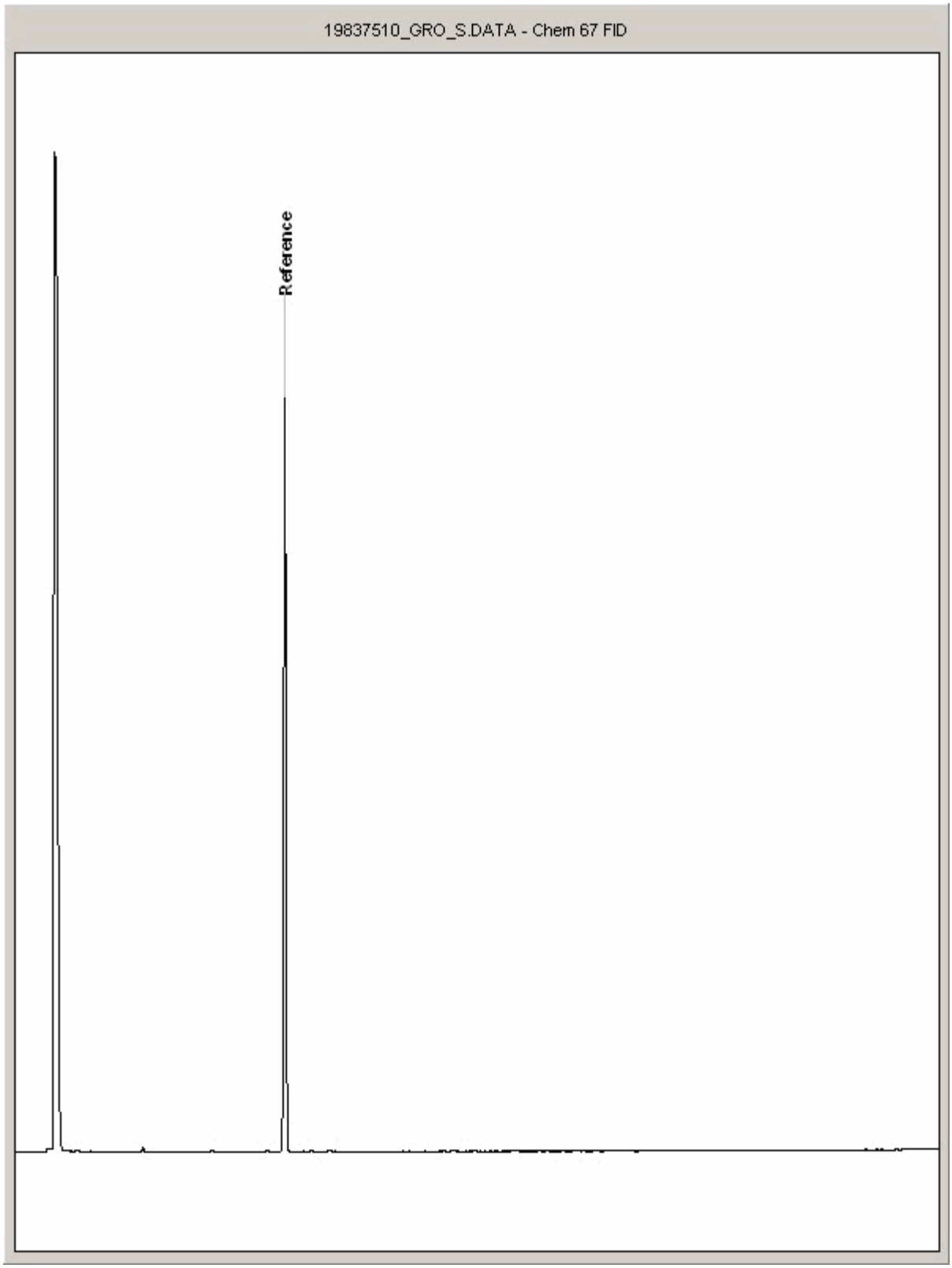
SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19837510
Sample ID : BH3

Depth : 1.20 - 1.20



CERTIFICATE OF ANALYSIS

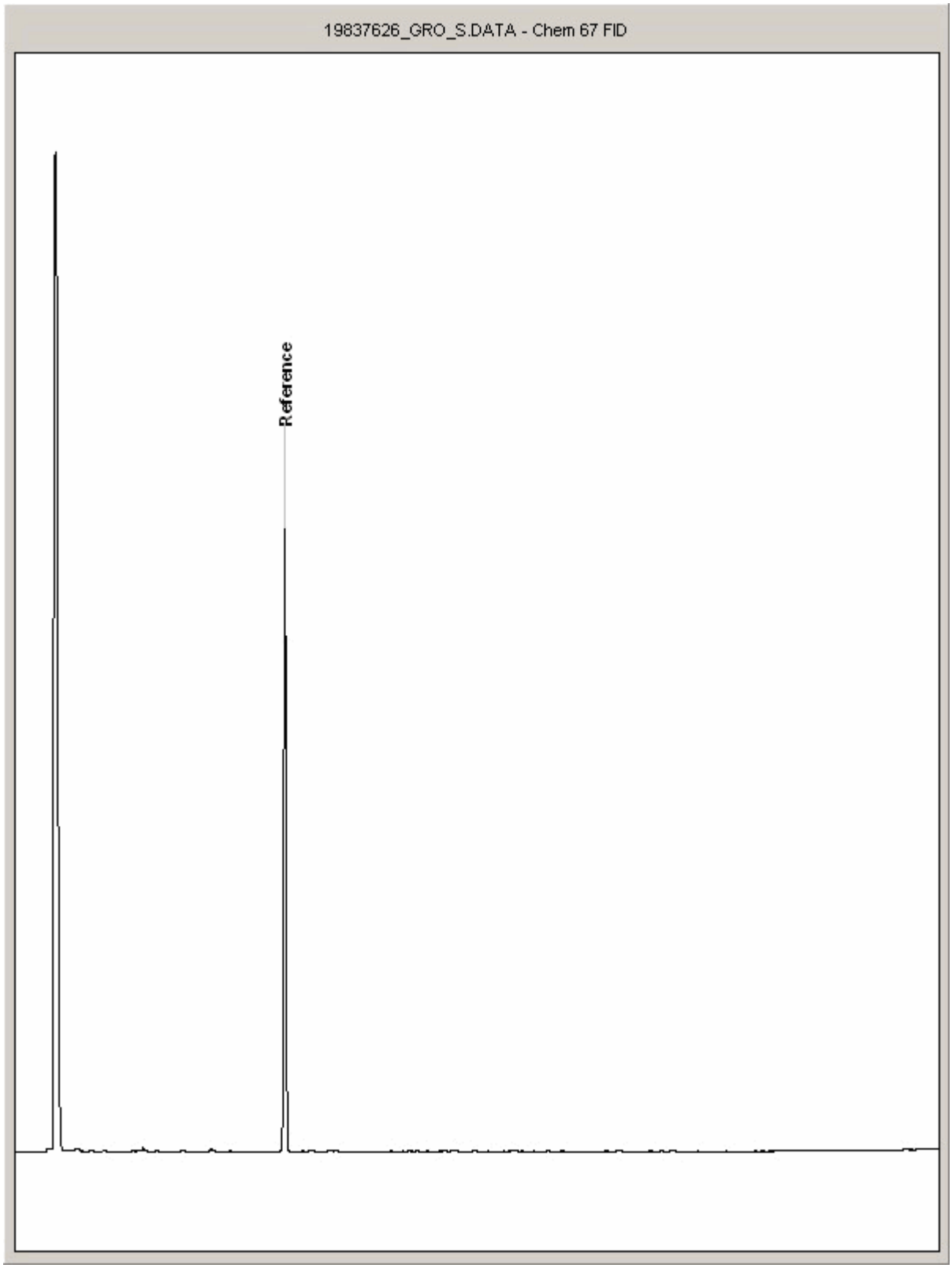
SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19837626
Sample ID : BH1

Depth : 0.20 - 0.20



CERTIFICATE OF ANALYSIS

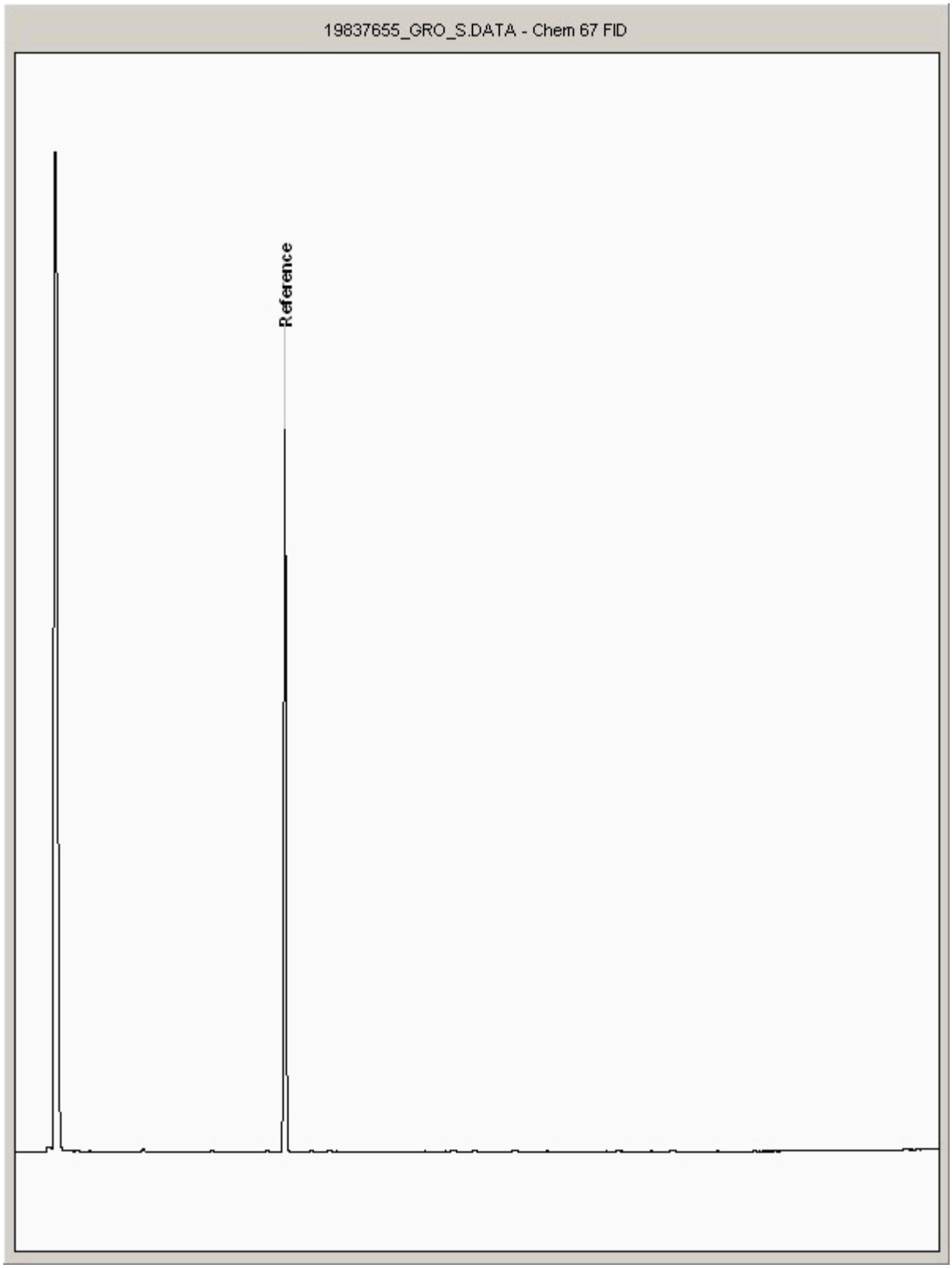
SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19837655
Sample ID : BH4

Depth : 1.00 - 1.00



CERTIFICATE OF ANALYSIS

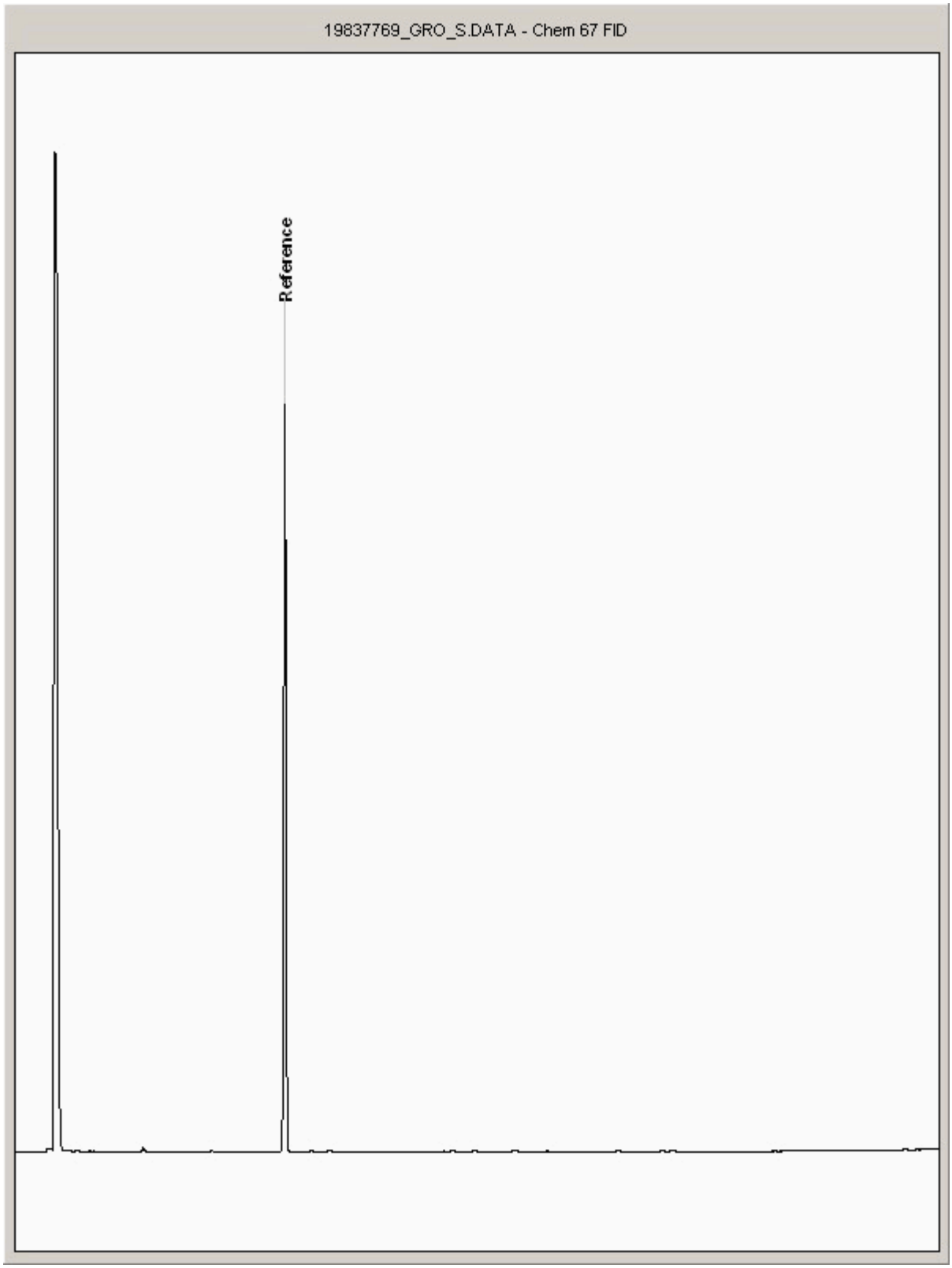
SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19837769
Sample ID : BH2

Depth : 0.30 - 0.30



CERTIFICATE OF ANALYSIS

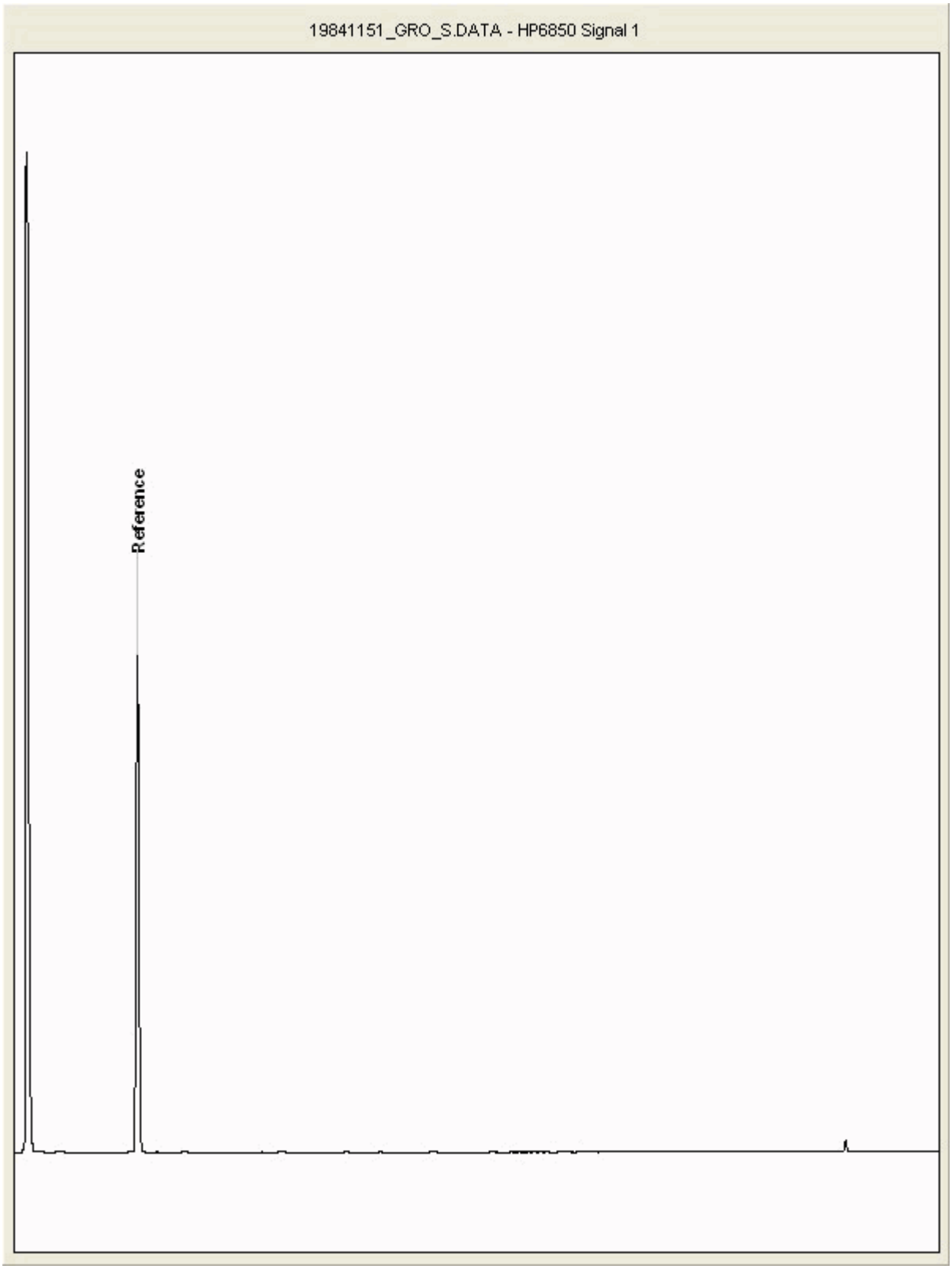
SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19841151
Sample ID : BH3

Depth : 0.50 - 0.50

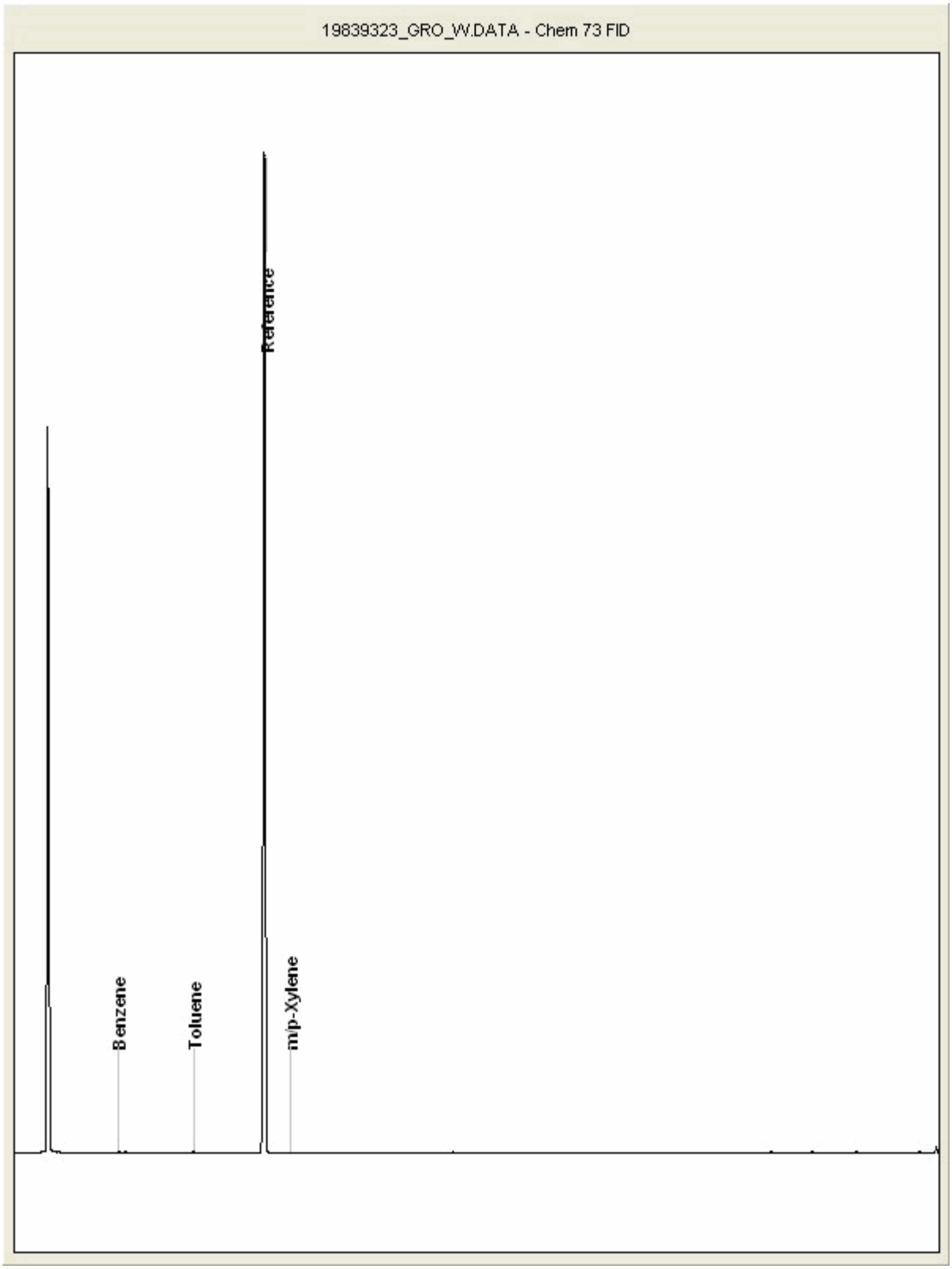


CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: GRO by GC-FID (W) **Sample No :** 19839323 **Depth :** 0.20 - 0.20
Sample ID : BH1



CERTIFICATE OF ANALYSIS

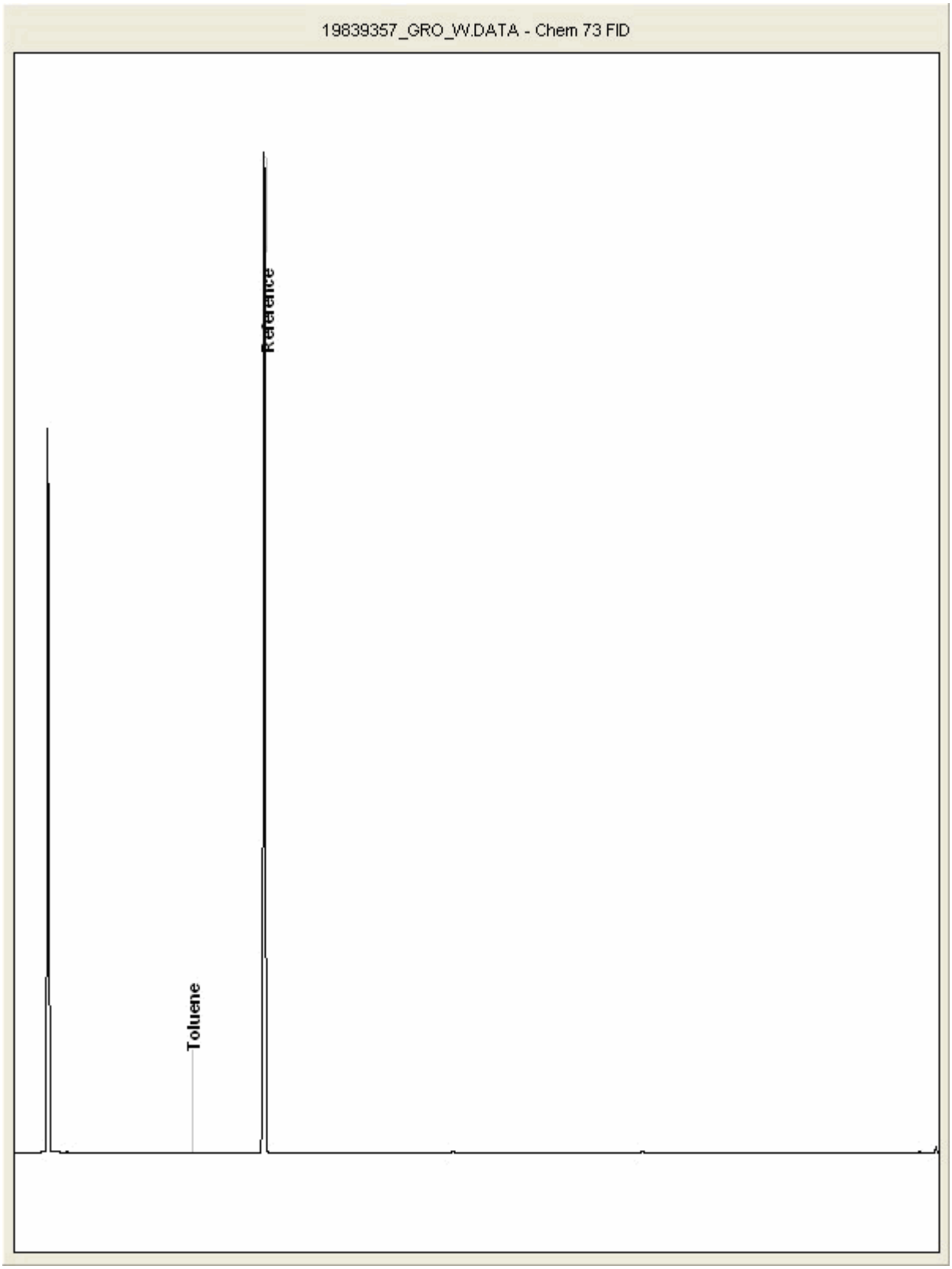
SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19839357
Sample ID : BH2

Depth : 0.30 - 0.30

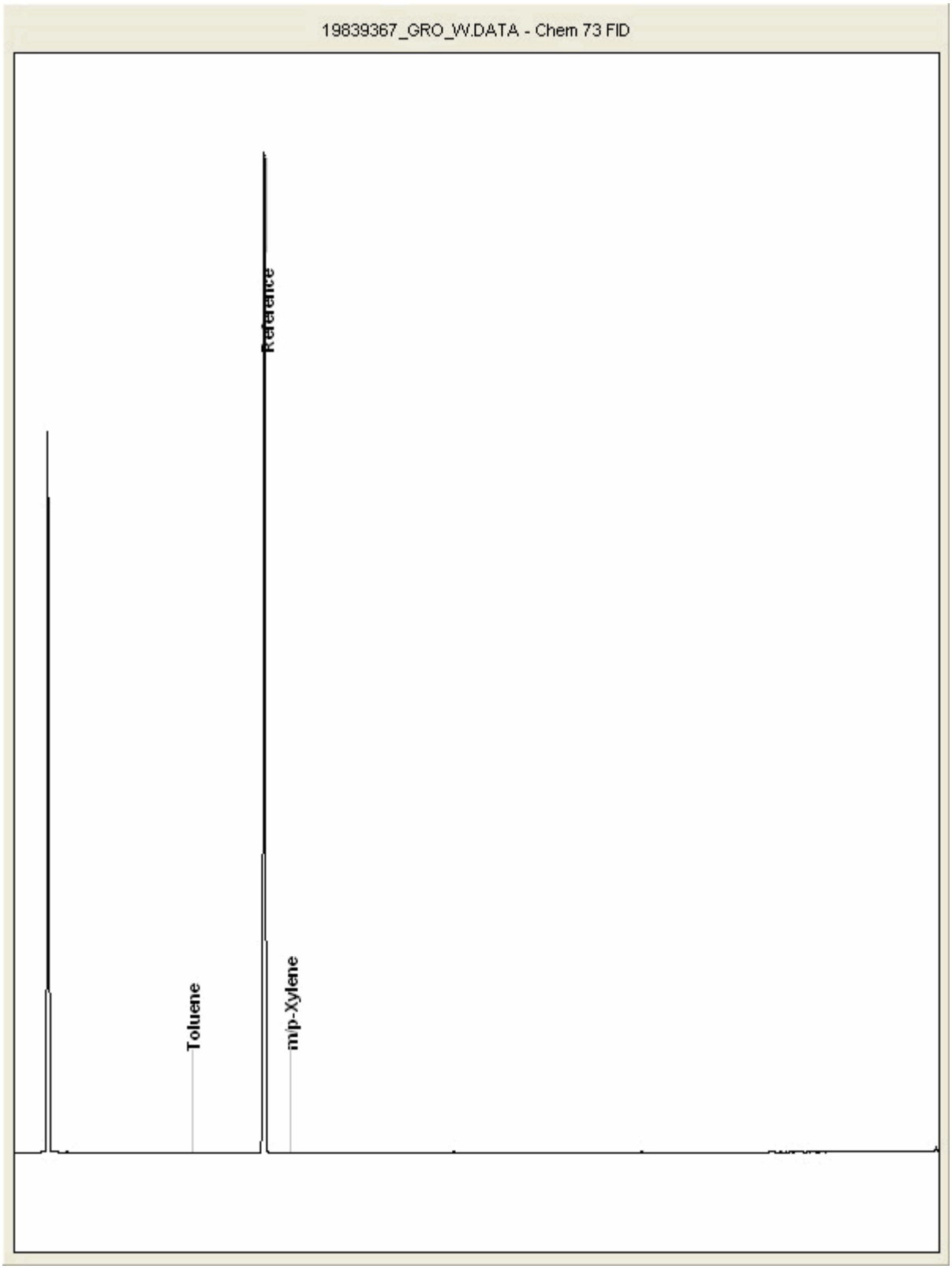


CERTIFICATE OF ANALYSIS

SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: GRO by GC-FID (W) **Sample No :** 19839367 **Depth :** 0.50 - 0.50
Sample ID : BH3



CERTIFICATE OF ANALYSIS

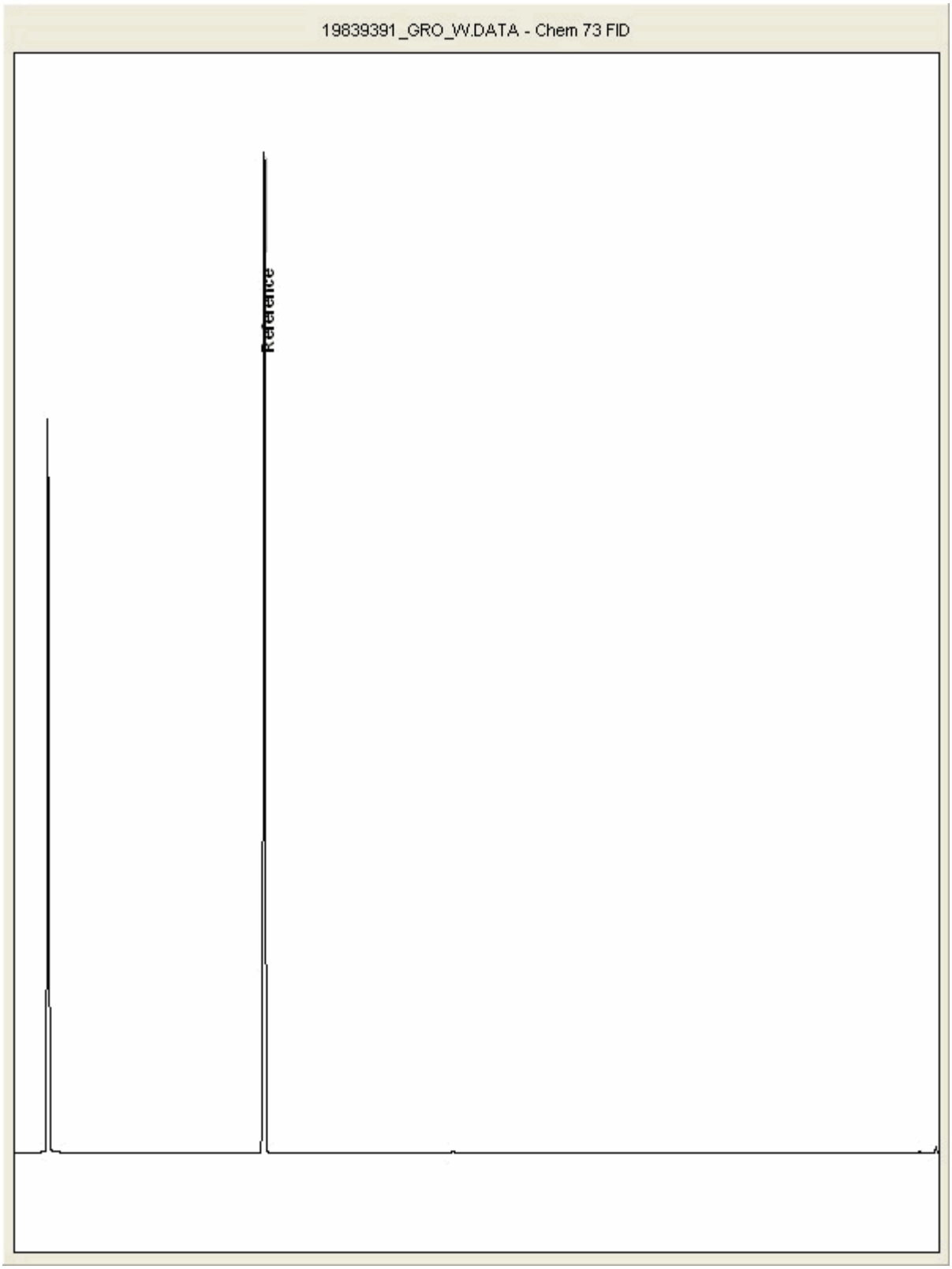
SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19839391
Sample ID : BH4

Depth : 1.00 - 1.00



CERTIFICATE OF ANALYSIS

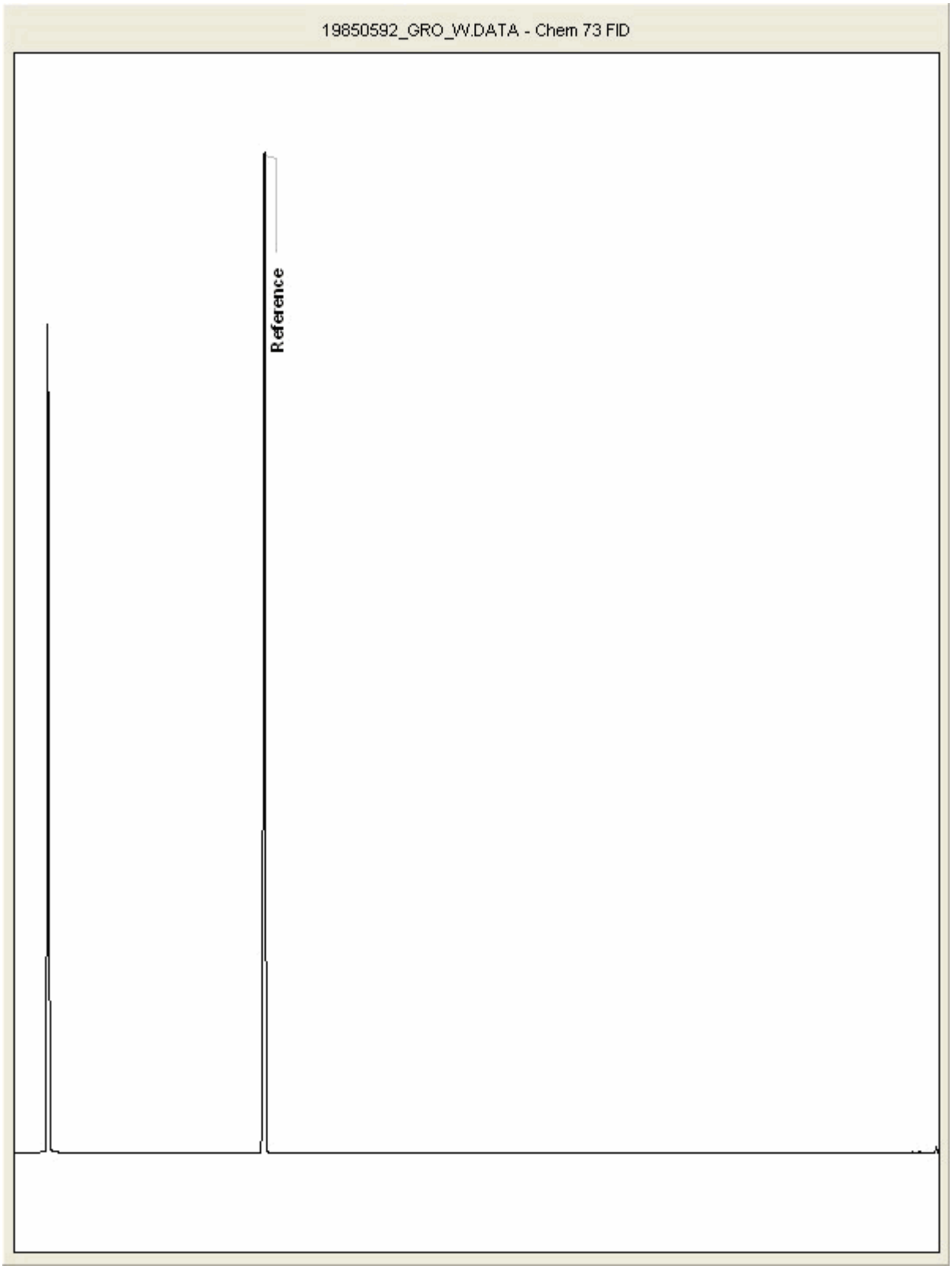
SDG:	190223-66	**Client Reference:**	A090070-474	**Report Number:**	504227
Location:	HE Compton	**Order Number:**	19/COMP066/8116/4016	**Superseded Report:**	504225

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19850592
Sample ID : BH3

Depth : 1.20 - 1.20



Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. Samples will be run in duplicate upon request, but an additional charge may be incurred.

3. If sufficient sample is received a sub sample will be retained free of charge for 30 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of one month after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

4. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

5. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

6. When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2005), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

7. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised. This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

8. If appropriate preserved bottles are not received preservation will take place on receipt. However, the integrity of the data may be compromised.

9. NDP - No determination possible due to insufficient/unsuitable sample.

10. Metals in water are performed on a filtered sample, and therefore represent dissolved metals - total metals must be requested separately.

11. Results relate only to the items tested.

12. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

13. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

14. **Product analyses** - Organic analyses on products can only be semi-quantitative due to the matrix effects and high dilution factors employed.

15. Phenols monohydric by HPLC include phenol, cresols (2-Methylphenol, 3-Methylphenol and 4-Methylphenol) and Xylenols (2,3 Dimethylphenol, 2,4 Dimethylphenol, 2,5 Dimethylphenol, 2,6 Dimethylphenol, 3,4 Dimethyphenol, 3,5 Dimethylphenol).

16. Total of 5 speciated phenols by HPLC includes Phenol, 2,3,5-Trimethyl Phenol, 2-Isopropylphenol, Cresols and Xylenols (as detailed in 15).

17. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

18. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

19. Mercury results quoted on soils will not include volatile mercury as the analysis is performed on a dried and crushed sample.

20. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

21. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis. The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

22. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

23. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l. Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only. It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

24. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

Sample Deviations

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
§	**Sampled on date not provided**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**

Asbestos

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.

The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

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Manor Road (off Manor Lane)
Hawarden
Deeside
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Website: www.alsenvironmental.co.uk

WYG Geo-Environment
11th Floor
1 Angel Court
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Attention: Regulation 13

CERTIFICATE OF ANALYSIS

Date of report Generation:	04 April 2019
Customer:	H_WYG_LON
Sample Delivery Group (SDG):	190316-55
Your Reference:	A090070-474
Location:	HE COMPTON
Report No:	499673

This report has been revised and directly supersedes 499207 in its entirety.

We received 2 samples on Saturday March 16, 2019 and 2 of these samples were scheduled for analysis which was completed on Monday April 01, 2019. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Environmental Hawarden (Method codes TM) or ALS Environmental Aberdeen (Method codes S).

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:
Regulation 13

Regulation 13
Operations Manager

CERTIFICATE OF ANALYSIS

SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
19561963	TP17		0.10	06/02/2019
19561964	TP17		1.00	06/02/2019

Maximum Sample/Coolbox Temperature (°C) : 8.8

ISO5667-3 Water quality - Sampling - Part3 -
During Transportation samples shall be stored in a cooling device capable of maintaining a temperature of (5±3)°C.

ALS have data which show that a cool box with 4 frozen icepacks is capable of maintaining pre-chilled samples at a temperature of (5±3)°C for a period of up to 24hrs.

Only received samples which have had analysis scheduled will be shown on the following pages.

CERTIFICATE OF ANALYSIS

SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water
Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)			19561963			19561964		
			Customer Sample Reference			TP17			TP17		
			AGS Reference								
			Depth (m)			0.10			1.00		
			Container			1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)
			Sample Type			S	S	S	S	S	S
Ammoniacal Nitrogen	All	NDPs: 0 Tests: 2				X			X		
Anions by Kone (soil)	All	NDPs: 0 Tests: 2					X			X	
Anions by Kone (w)	All	NDPs: 0 Tests: 2				X			X		
Asbestos ID in Solid Samples	All	NDPs: 0 Tests: 2				X			X		
Boron Water Soluble	All	NDPs: 0 Tests: 2					X			X	
CEN Readings	All	NDPs: 0 Tests: 2				X			X		
Conductivity (at 20 deg.C)	All	NDPs: 0 Tests: 2				X			X		
Cyanide Comp/Free/Total/Thiocyanate	All	NDPs: 0 Tests: 4				X	X		X	X	
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 2				X			X		
Dissolved Organic/Inorganic Carbon	All	NDPs: 0 Tests: 2				X			X		
Easily Liberated Sulphide	All	NDPs: 0 Tests: 2					X			X	
EPH CWG (Aliphatic) Filtered GC (W)	All	NDPs: 0 Tests: 2				X			X		
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 2					X			X	
EPH CWG (Aromatic) Filtered GC (W)	All	NDPs: 0 Tests: 2				X			X		
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 2					X			X	

CERTIFICATE OF ANALYSIS

SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water
Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)			19561963			19561964		
			Customer Sample Reference			TP17			TP17		
			AGS Reference								
			Depth (m)			0.10			1.00		
			Container			1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)
			Sample Type			S	S	S	S	S	S
Fluoride	All	NDPs: 0 Tests: 2				X			X		
GRO by GC-FID (S)	All	NDPs: 0 Tests: 2						X			X
GRO by GC-FID (W)	All	NDPs: 0 Tests: 2				X			X		
Low Level Phenols by HPLC (W)	All	NDPs: 0 Tests: 2				X			X		
Mercury Dissolved	All	NDPs: 0 Tests: 2				X			X		
Metals in solid samples by OES	All	NDPs: 0 Tests: 2					X			X	
PAH by GCMS	All	NDPs: 0 Tests: 2					X			X	
PAH in waters by GC-MS (diss.filt)	All	NDPs: 0 Tests: 2				X			X		
PCB Congeners - Aqueous (W)	All	NDPs: 0 Tests: 2				X			X		
PCBs by GCMS	All	NDPs: 0 Tests: 2					X			X	
pH	All	NDPs: 0 Tests: 2					X			X	
pH Value	All	NDPs: 0 Tests: 2				X			X		
Phenols Spec MS (S)	All	NDPs: 0 Tests: 2					X			X	
Phosphate by Kone (w)	All	NDPs: 0 Tests: 2				X			X		
Sample description	All	NDPs: 0 Tests: 2					X			X	

CERTIFICATE OF ANALYSIS

Validated

SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water
Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	19561963			19561964		
			Customer Sample Reference	TP17			TP17		
			AGS Reference						
			Depth (m)	0.10			1.00		
			Container	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)	1kg TUB	250g Amber Jar (ALE210)	60g VOC (ALE215)
			Sample Type	S	S	S	S	S	S
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 2			X			X	
Sulphide	All	NDPs: 0 Tests: 2		X			X		
SVOC MS (W) - Aqueous	All	NDPs: 0 Tests: 2		X			X		
Total Organic Carbon	All	NDPs: 0 Tests: 2			X			X	
Total Sulphate	All	NDPs: 0 Tests: 2			X			X	
TPH CWG Filtered (W)	All	NDPs: 0 Tests: 2		X			X		
TPH CWG GC (S)	All	NDPs: 0 Tests: 2			X			X	
VOC MS (S)	All	NDPs: 0 Tests: 2				X			X
VOC MS (W)	All	NDPs: 0 Tests: 2		X			X		

Sample Descriptions

Grain Sizes

very fine	<0.063mm	**fine**	0.063mm - 0.1mm	**medium**	0.1mm - 2mm	**coarse**	2mm - 10mm	**very coarse**	>10mm

Lab Sample No(s)	Customer Sample Ref.	Depth (m)	Colour	Description	Inclusions	Inclusions 2
19561963	TP17	0.10	Dark Brown	Silt Loam	Stones	None
19561964	TP17	1.00	White	Chalk	Stones	None

These descriptions are only intended to act as a cross check if sample identities are questioned, and to provide a log of sample matrices with respect to MCERTS validation. They are not intended as full geological descriptions.

We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally ocurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample.

Other coarse granular materials such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

CERTIFICATE OF ANALYSIS

SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	TP17	TP17				
			Depth (m)	0.10	1.00				
			Sample Type	Soil/Solid (S)	Soil/Solid (S)				
			Date Sampled	06/02/2019	06/02/2019				
			Sampled Time	.	.				
			Date Received	16/03/2019	16/03/2019				
			SDG Ref	190316-55	190316-55				
			Lab Sample No.(s)	19561963	19561964				
			AGS Reference						
Moisture Content Ratio (% of as received sample)	%	PM024		26	8.8				
Organic Carbon, Total	<0.2 %	TM132		1.05 @ M	<0.2 @ #				
pH	1 pH Units	TM133		8.41 @ M	8.9 @ #				
Cyanide, Total	<1 mg/kg	TM153		<1 @ M	<1 @ #				
PCB congener 28	<3 µg/kg	TM168		<3 @ M	<3 @ #				
PCB congener 52	<3 µg/kg	TM168		<3 @ M	<3 @ #				
PCB congener 101	<3 µg/kg	TM168		<3 @ M	<3 @ #				
PCB congener 118	<3 µg/kg	TM168		<3 @ M	<3 @ #				
PCB congener 138	<3 µg/kg	TM168		<3 @ M	<3 @ #				
PCB congener 153	<3 µg/kg	TM168		<3 @ M	<3 @ #				
PCB congener 180	<3 µg/kg	TM168		<3 @ M	<3 @ #				
Sum of detected PCB 7 Congeners	<21 µg/kg	TM168		<21	<21				
Sulphide, Easily liberated	<15 mg/kg	TM180		<15 @ M	<15 @ #				
Arsenic	<0.6 mg/kg	TM181		5 M	<0.6 #				
Barium	<0.6 mg/kg	TM181		59.1 #	7.82 #				
Beryllium	<0.01 mg/kg	TM181		0.353 M	0.0718 #				
Cadmium	<0.02 mg/kg	TM181		0.327 M	0.109 #				
Chromium	<0.9 mg/kg	TM181		9.68 M	1.59 #				
Copper	<1.4 mg/kg	TM181		6.96 M	<1.4 #				
Lead	<0.7 mg/kg	TM181		10.6 M	<0.7 #				
Mercury	<0.14 mg/kg	TM181		<0.14 @ M	<0.14 @ #				
Nickel	<0.2 mg/kg	TM181		10.2 M	1.72 #				
Selenium	<1 mg/kg	TM181		<1 #	<1 #				
Vanadium	<0.2 mg/kg	TM181		19.4 #	2.77 #				
Zinc	<1.9 mg/kg	TM181		54.9 M	11.2 #				
Sulphate, Total	<48 mg/kg	TM221		537 M	255 #				
Total Sulphur (ASB)	<0.0016 %	TM221		0.0179	0.00851				
Boron, water soluble	<1 mg/kg	TM222		1.01 @ M	<1 @ #				
Chloride (soluble)	<5 mg/kg	TM243		19.1 @ M	6.17 @ #				

CERTIFICATE OF ANALYSIS

SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

PAH by GCMS

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	TP17	TP17				
			Depth (m)	0.10	1.00				
			Sample Type	Soil/Solid (S)	Soil/Solid (S)				
			Date Sampled	06/02/2019	06/02/2019				
			Sampled Time	.	.				
			Date Received	16/03/2019	16/03/2019				
			SDG Ref	190316-55	190316-55				
			Lab Sample No.(s)	19561963	19561964				
			AGS Reference						
Naphthalene-d8 % recovery**	%	TM218		91	91.2				
Acenaphthene-d10 % recovery**	%	TM218		91.9	91.9				
Phenanthrene-d10 % recovery**	%	TM218		94.3	91.8				
Chrysene-d12 % recovery**	%	TM218		100	91.3				
Perylene-d12 % recovery**	%	TM218		102	93.4				
Naphthalene	<9 µg/kg	TM218		<9 @ M	<9 @ #				
Acenaphthylene	<12 µg/kg	TM218		<12 @ M	<12 @ #				
Acenaphthene	<8 µg/kg	TM218		<8 @ M	<8 @ #				
Fluorene	<10 µg/kg	TM218		<10 @ M	<10 @ #				
Phenanthrene	<15 µg/kg	TM218		44.8 @ M	<15 @ #				
Anthracene	<16 µg/kg	TM218		<16 @ M	<16 @ #				
Fluoranthene	<17 µg/kg	TM218		96.6 @ M	<17 @ #				
Pyrene	<15 µg/kg	TM218		87.2 @ M	<15 @ #				
Benz(a)anthracene	<14 µg/kg	TM218		63.9 @ M	<14 @ #				
Chrysene	<10 µg/kg	TM218		58.9 @ M	<10 @ #				
Benzo(b)fluoranthene	<15 µg/kg	TM218		88 @ M	<15 @ #				
Benzo(k)fluoranthene	<14 µg/kg	TM218		33.7 @ M	<14 @ #				
Benzo(a)pyrene	<15 µg/kg	TM218		101 @ M	<15 @ #				
Indeno(1,2,3-cd)pyrene	<18 µg/kg	TM218		70.4 @ M	<18 @ #				
Dibenzo(a,h)anthracene	<23 µg/kg	TM218		<23 @ M	<23 @ #				
Benzo(g,h,i)perylene	<24 µg/kg	TM218		101 @ M	<24 @ #				
PAH, Total Detected USEPA 16	<118 µg/kg	TM218		746	<118				

CERTIFICATE OF ANALYSIS

SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

Phenols Spec MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	TP17	TP17				
			Depth (m)	0.10	1.00				
			Sample Type	Soil/Solid (S)	Soil/Solid (S)				
			Date Sampled	06/02/2019	06/02/2019				
			Sampled Time	.	.				
			Date Received	16/03/2019	16/03/2019				
			SDG Ref	190316-55	190316-55				
			Lab Sample No.(s)	19561963	19561964				
			AGS Reference						
4-Nitrophenol	<1 µg/kg	TM072		<1	<1				
2,4,6-Trichlorophenol	<1 µg/kg	TM072		1.65	<1				
2-Nitrophenol	<1 µg/kg	TM072		<1	<1				
2,4-Dichlorophenol	<1 µg/kg	TM072		1.66	1.12				
Pentachlorophenol	<1 µg/kg	TM072		<1	<1				
Phenol	<1 µg/kg	TM072		2.93	5.7				
4-Chloro-3-methylphenol	<1 µg/kg	TM072		<1	<1				
2,4-Dimethylphenol	<1 µg/kg	TM072		<1	<1				
2-Chlorophenol	<1 µg/kg	TM072		<1	<1				
Sum of Detected Phenols	<9 µg/kg	TM072		<9	<9				

CERTIFICATE OF ANALYSIS

SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

Semi Volatile Organic Compounds

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	TP17	TP17				
			Depth (m)	0.10	1.00				
			Sample Type	Soil/Solid (S)	Soil/Solid (S)				
			Date Sampled	06/02/2019	06/02/2019				
			Sampled Time	.	.				
			Date Received	16/03/2019	16/03/2019				
			SDG Ref	190316-55	190316-55				
			Lab Sample No.(s)	19561963	19561964				
			AGS Reference						
Phenol	<100 µg/kg	TM157		<100	<100				
Pentachlorophenol	<100 µg/kg	TM157		<100	<100				
n-Nitroso-n-dipropylamine	<100 µg/kg	TM157		<100	<100				
Nitrobenzene	<100 µg/kg	TM157		<100	<100				
Isophorone	<100 µg/kg	TM157		<100	<100				
Hexachloroethane	<100 µg/kg	TM157		<100	<100				
Hexachlorocyclopentadiene	<100 µg/kg	TM157		<100	<100				
Hexachlorobutadiene	<100 µg/kg	TM157		<100	<100				
Hexachlorobenzene	<100 µg/kg	TM157		<100	<100				
n-Dioctyl phthalate	<100 µg/kg	TM157		<100	<100				
Dimethyl phthalate	<100 µg/kg	TM157		<100	<100				
Diethyl phthalate	<100 µg/kg	TM157		<100	<100				
n-Dibutyl phthalate	<100 µg/kg	TM157		<100	<100				
Dibenzofuran	<100 µg/kg	TM157		<100	<100				
Carbazole	<100 µg/kg	TM157		<100	<100				
Butylbenzyl phthalate	<100 µg/kg	TM157		<100	<100				
bis(2-Ethylhexyl) phthalate	<100 µg/kg	TM157		<100	<100				
bis(2-Chloroethoxy)methane	<100 µg/kg	TM157		<100	<100				
bis(2-Chloroethyl)ether	<100 µg/kg	TM157		<100	<100				
Azobenzene	<100 µg/kg	TM157		<100	<100				
4-Nitrophenol	<100 µg/kg	TM157		<100	<100				
4-Nitroaniline	<100 µg/kg	TM157		<100	<100				
4-Methylphenol	<100 µg/kg	TM157		<100	<100				
4-Chlorophenylphenylether	<100 µg/kg	TM157		<100	<100				
4-Chloroaniline	<100 µg/kg	TM157		<100	<100				
4-Chloro-3-methylphenol	<100 µg/kg	TM157		<100	<100				
4-Bromophenylphenylether	<100 µg/kg	TM157		<100	<100				
3-Nitroaniline	<100 µg/kg	TM157		<100	<100				
2-Nitrophenol	<100 µg/kg	TM157		<100	<100				
2-Nitroaniline	<100 µg/kg	TM157		<100	<100				
2-Methylphenol	<100 µg/kg	TM157		<100	<100				
1,2,4-Trichlorobenzene	<100 µg/kg	TM157		<100	<100				

CERTIFICATE OF ANALYSIS

SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

Semi Volatile Organic Compounds

Results Legend	
#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	TP17	TP17				
			Depth (m)	0.10	1.00				
			Sample Type	Soil/Solid (S)	Soil/Solid (S)				
			Date Sampled	06/02/2019	06/02/2019				
			Sampled Time	.	.				
			Date Received	16/03/2019	16/03/2019				
			SDG Ref	190316-55	190316-55				
			Lab Sample No.(s)	19561963	19561964				
			AGS Reference						
2-Chlorophenol	<100 µg/kg	TM157		<100	<100				
2,6-Dinitrotoluene	<100 µg/kg	TM157		<100	<100				
2,4-Dinitrotoluene	<100 µg/kg	TM157		<100	<100				
2,4-Dimethylphenol	<100 µg/kg	TM157		<100	<100				
2,4-Dichlorophenol	<100 µg/kg	TM157		<100	<100				
2,4,6-Trichlorophenol	<100 µg/kg	TM157		<100	<100				
2,4,5-Trichlorophenol	<100 µg/kg	TM157		<100	<100				
1,4-Dichlorobenzene	<100 µg/kg	TM157		<100	<100				
1,3-Dichlorobenzene	<100 µg/kg	TM157		<100	<100				
1,2-Dichlorobenzene	<100 µg/kg	TM157		<100	<100				
2-Chloronaphthalene	<100 µg/kg	TM157		<100	<100				
2-Methylnaphthalene	<100 µg/kg	TM157		<100	<100				
Acenaphthylene	<100 µg/kg	TM157		<100	<100				
Acenaphthene	<100 µg/kg	TM157		<100	<100				
Anthracene	<100 µg/kg	TM157		<100	<100				
Benzo(a)anthracene	<100 µg/kg	TM157		<100	<100				
Benzo(b)fluoranthene	<100 µg/kg	TM157		<100	<100				
Benzo(k)fluoranthene	<100 µg/kg	TM157		<100	<100				
Benzo(a)pyrene	<100 µg/kg	TM157		<100	<100				
Benzo(g,h,i)perylene	<100 µg/kg	TM157		<100	<100				
Chrysene	<100 µg/kg	TM157		<100	<100				
Fluoranthene	<100 µg/kg	TM157		<100	<100				
Fluorene	<100 µg/kg	TM157		<100	<100				
Indeno(1,2,3-cd)pyrene	<100 µg/kg	TM157		<100	<100				
Phenanthrene	<100 µg/kg	TM157		<100	<100				
Pyrene	<100 µg/kg	TM157		<100	<100				
Naphthalene	<100 µg/kg	TM157		<100	<100				
Dibenzo(a,h)anthracene	<100 µg/kg	TM157		<100	<100				
Bis(2-chloroisopropyl) ether	<100 µg/kg	TM157		<100	<100				

CERTIFICATE OF ANALYSIS

SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

TPH CWG (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	TP17	TP17
			Depth (m)	0.10	1.00
			Sample Type	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	06/02/2019	06/02/2019
			Sampled Time	.	.
			Date Received	16/03/2019	16/03/2019
			SDG Ref	190316-55	190316-55
			Lab Sample No.(s)	19561963	19561964
			AGS Reference		
GRO Surrogate % recovery**	%	TM089		104 @	101 @
GRO TOT (Moisture Corrected)	<100 µg/kg	TM089		<100 @ M	<100 @ #
Aliphatics >C5-C6	<10 µg/kg	TM089		<10 @	<10 @
Aliphatics >C6-C8	<10 µg/kg	TM089		<10 @	<10 @
Aliphatics >C8-C10	<10 µg/kg	TM089		<10 @	<10 @
Aliphatics >C10-C12	<10 µg/kg	TM089		<10 @	<10 @
Aliphatics >C12-C16	<100 µg/kg	TM173		<100	<100
Aliphatics >C16-C21	<100 µg/kg	TM173		<100	1910
Aliphatics >C21-C35	<100 µg/kg	TM173		2140	<100
Aliphatics >C35-C44	<100 µg/kg	TM173		1560	106
Total Aliphatics >C12-C44	<100 µg/kg	TM173		3700	2020
Aromatics >EC5-EC7	<10 µg/kg	TM089		<10 @	<10 @
Aromatics >EC7-EC8	<10 µg/kg	TM089		<10 @	<10 @
Aromatics >EC8-EC10	<10 µg/kg	TM089		<10 @	<10 @
Aromatics >EC10-EC12	<10 µg/kg	TM089		<10 @	<10 @
Aromatics >EC12-EC16	<100 µg/kg	TM173		<100	<100
Aromatics >EC16-EC21	<100 µg/kg	TM173		<100	<100
Aromatics >EC21-EC35	<100 µg/kg	TM173		<100	<100
Aromatics >EC35-EC44	<100 µg/kg	TM173		2660	2410
Aromatics >EC40-EC44	<100 µg/kg	TM173		1400	1280
Total Aromatics >EC12-EC44	<100 µg/kg	TM173		2660	2410
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173		6360	4420

CERTIFICATE OF ANALYSIS

SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	TP17	TP17
			Depth (m)	0.10	1.00
			Sample Type	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	06/02/2019	06/02/2019
			Sampled Time	.	.
			Date Received	16/03/2019	16/03/2019
			SDG Ref	190316-55	190316-55
			Lab Sample No.(s)	19561963	19561964
			AGS Reference		
Dibromofluoromethane**	%	TM116		116 @	110 @
Toluene-d8**	%	TM116		99.6 @	101 @
4-Bromofluorobenzene**	%	TM116		77.4 @	87.5 @
Dichlorodifluoromethane	µg/kg	TM116		<6 @ M	<6 @ #
Chloromethane	µg/kg	TM116		<7 @ #	<7 @ #
Vinyl Chloride	µg/kg	TM116		<6 @ M	<6 @ #
Bromomethane	µg/kg	TM116		<10 @ M	<10 @ #
Chloroethane	µg/kg	TM116		<10 @ M	<10 @ #
Trichlorofluorormethane	µg/kg	TM116		<6 @ M	<6 @ #
1,1-Dichloroethene	µg/kg	TM116		<10 @ #	<10 @ #
Carbon Disulphide	µg/kg	TM116		<7 @ M	<7 @ #
Dichloromethane	µg/kg	TM116		<10 @ #	<10 @ #
Methyl Tertiary Butyl Ether	µg/kg	TM116		<10 @ M	<10 @ #
trans-1,2-Dichloroethene	µg/kg	TM116		<10 @ M	<10 @ #
1,1-Dichloroethane	µg/kg	TM116		<8 @ M	<8 @ #
cis-1,2-Dichloroethene	µg/kg	TM116		<6 @ M	<6 @ #
2,2-Dichloropropane	µg/kg	TM116		<10 @	<10 @
Bromochloromethane	µg/kg	TM116		<10 @ M	<10 @ #
Chloroform	µg/kg	TM116		<8 @ M	<8 @ #
1,1,1-Trichloroethane	µg/kg	TM116		<7 @ M	<7 @ #
1,1-Dichloropropene	µg/kg	TM116		<10 @ M	<10 @ #
Carbontetrachloride	µg/kg	TM116		<10 @ M	<10 @ #
1,2-Dichloroethane	µg/kg	TM116		<5 @ M	<5 @ #
Benzene	µg/kg	TM116		<9 @ M	<9 @ #
Trichloroethene	µg/kg	TM116		<9 @ #	<9 @ #
1,2-Dichloropropane	µg/kg	TM116		<10 @ M	<10 @ #
Dibromomethane	µg/kg	TM116		<9 @ M	<9 @ #
Bromodichloromethane	µg/kg	TM116		<7 @ M	<7 @ #
cis-1,3-Dichloropropene	µg/kg	TM116		<10 @ M	<10 @ #
Toluene	µg/kg	TM116		<7 @ M	<7 @ #
trans-1,3-Dichloropropene	µg/kg	TM116		<10 @	<10 @
1,1,2-Trichloroethane	µg/kg	TM116		<10 @ M	<10 @ #

CERTIFICATE OF ANALYSIS

SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	TP17	TP17				
			Depth (m)	0.10	1.00				
			Sample Type	Soil/Solid (S)	Soil/Solid (S)				
			Date Sampled	06/02/2019	06/02/2019				
			Sampled Time	.	.				
			Date Received	16/03/2019	16/03/2019				
			SDG Ref	190316-55	190316-55				
			Lab Sample No.(s)	19561963	19561964				
			AGS Reference						
1,3-Dichloropropane	<7 µg/kg	TM116		<7 @ M	<7 @ #				
Tetrachloroethene	<5 µg/kg	TM116		<5 @ M	<5 @ #				
Dibromochloromethane	<10 µg/kg	TM116		<10 @ M	<10 @ #				
1,2-Dibromoethane	<10 µg/kg	TM116		<10 @ M	<10 @ #				
Chlorobenzene	<5 µg/kg	TM116		<5 @ M	<5 @ #				
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116		<10 @ M	<10 @ #				
Ethylbenzene	<4 µg/kg	TM116		<4 @ M	<4 @ #				
p/m-Xylene	<10 µg/kg	TM116		<10 @ #	<10 @ #				
o-Xylene	<10 µg/kg	TM116		<10 @ M	<10 @ #				
Styrene	<10 µg/kg	TM116		<10 @ #	<10 @ #				
Bromoform	<10 µg/kg	TM116		<10 @ M	<10 @ #				
Isopropylbenzene	<5 µg/kg	TM116		<5 @ #	<5 @ #				
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116		<10 @ #	<10 @ #				
1,2,3-Trichloropropane	<16 µg/kg	TM116		<16 @ M	<16 @ #				
Bromobenzene	<10 µg/kg	TM116		<10 @ M	<10 @ #				
Propylbenzene	<10 µg/kg	TM116		<10 @ M	<10 @ #				
2-Chlorotoluene	<9 µg/kg	TM116		<9 @ M	<9 @ #				
1,3,5-Trimethylbenzene	<8 µg/kg	TM116		<8 @ M	<8 @ #				
4-Chlorotoluene	<10 µg/kg	TM116		<10 @ M	<10 @ #				
tert-Butylbenzene	<14 µg/kg	TM116		<14 @ M	<14 @ #				
1,2,4-Trimethylbenzene	<9 µg/kg	TM116		<9 @ #	<9 @ #				
sec-Butylbenzene	<10 µg/kg	TM116		<10 @	<10 @				
4-Isopropyltoluene	<10 µg/kg	TM116		<10 @ M	<10 @ #				
1,3-Dichlorobenzene	<8 µg/kg	TM116		<8 @ M	<8 @ #				
1,4-Dichlorobenzene	<5 µg/kg	TM116		<5 @ M	<5 @ #				
n-Butylbenzene	<11 µg/kg	TM116		<11 @	<11 @				
1,2-Dichlorobenzene	<10 µg/kg	TM116		<10 @ M	<10 @ #				
1,2-Dibromo-3-chloropropane	<14 µg/kg	TM116		<14 @ M	<14 @ #				
Tert-amyl methyl ether	<10 µg/kg	TM116		<10 @ #	<10 @ #				
1,2,4-Trichlorobenzene	<20 µg/kg	TM116		<20 @	<20 @				
Hexachlorobutadiene	<20 µg/kg	TM116		<20 @	<20 @				
Naphthalene	<13 µg/kg	TM116		<13 @ M	<13 @ #				

CERTIFICATE OF ANALYSIS

SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

VOC MS (S)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	TP17	TP17
			Depth (m)	0.10	1.00
			Sample Type	Soil/Solid (S)	Soil/Solid (S)
			Date Sampled	06/02/2019	06/02/2019
			Sampled Time	.	.
			Date Received	16/03/2019	16/03/2019
			SDG Ref	190316-55	190316-55
			Lab Sample No.(s)	19561963	19561964
			AGS Reference		
1,2,3-Trichlorobenzene	<20 µg/kg	TM116		<20 @ #	<20 @ #
Sum of Detected Xylenes	<0.02 mg/kg	TM116		<0.02 @	<0.02 @
Sum of BTEX	<40 µg/kg	TM116		<40 @	<40 @

CERTIFICATE OF ANALYSIS

SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

Asbestos Identification - Solid Samples

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
*	Subcontracted test.
(F)	Trigger breach confirmed
1-5&♦§@	Sample deviation (see appendix)

		Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	TP17 0.10 SOLID 06/02/2019 00:00:00 16/03/2019 06:00:00 190316-55 19561963 TM048	21/03/19	Andrzej Ferfecki	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Receieved SDG Original Sample Method Number	TP17 1.00 SOLID 06/02/2019 00:00:00 16/03/2019 06:00:00 190316-55 19561964 TM048	21/03/2019	Renata Bozhkov	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected

CERTIFICATE OF ANALYSIS

SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE COMPTON
Mass Sample taken (kg)	0.122	**Natural Moisture Content (%)**	35.1
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	74
Particle Size <4mm	>95%		

Case	
SDG	190316-55
Lab Sample Number(s)	19561963
Sampled Date	06-Feb-2019
Customer Sample Ref.	TP17
Depth (m)	0.10

Eluate Analysis	**C_2 Conc^n in 10:1 eluate (mg/l)**		**A_2 10:1 conc^n leached (mg/kg)**				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
Conductivity (at 20 deg.C)	0.125	<0.000005	1.25	<0.00005	-	-	-
Fluoride	<0.5	<0.5	<5	<5	-	-	-
Sulphate (soluble)	<2	<2	<20	<20	-	-	-
Sulphide	<0.01	<0.01	<0.1	<0.1	-	-	-
Chloride	<2	<2	<20	<20	-	-	-
Dissolved Organic Carbon	6.2	<3	62	<30	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Phosphate (Ortho as P)	0.119	<0.02	1.19	<0.2	-	-	-
Resorcinol HPLC (W)	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Catechol by HPLC (W)	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Naphthalene (diss.filt)	0.0000192	<0.00001	0.000192	<0.0001	-	-	-
PCB congener 28	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Acenaphthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Arsenic	0.00239	<0.0005	0.0239	<0.005	-	-	-
PCB congener 52	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenol by HPLC (W)	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Acenaphthylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Barium	0.00715	<0.0002	0.0715	<0.002	-	-	-
Cresols by HPLC (W)	<0.0005	<0.0005	<0.005	<0.005	-	-	-
PCB congener 101	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Beryllium	<0.0001	<0.0001	<0.001	<0.001	-	-	-
Fluoranthene (diss.filt)	0.000092	<0.000005	0.00092	<0.00005	-	-	-
Nitrate as N	2.29	<0.0677	22.9	<0.677	-	-	-

Leach Test Information

Date Prepared	22-Mar-2019
pH (pH Units)	8.21
Conductivity (µS/cm)	119.00
Temperature (°C)	10.00
Volume Leachant (Litres)	0.868

Mcerts Certification does not apply to leachates

04/04/2019 10:30:07

CERTIFICATE OF ANALYSIS

SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE COMPTON
Mass Sample taken (kg)	0.122	**Natural Moisture Content (%)**	35.1
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	74
Particle Size <4mm	>95%		

Case	
SDG	190316-55
Lab Sample Number(s)	19561963
Sampled Date	06-Feb-2019
Customer Sample Ref.	TP17
Depth (m)	0.10

Eluate Analysis	**C_2 Concⁿ in 10:1 eluate (mg/l)**		**A_2 10:1 concⁿ leached (mg/kg)**				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
PCB congener 118	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Xylenols by HPLC (W)	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Anthracene (diss.filt)	0.0000378	<0.000005	0.000378	<0.00005	-	-	-
Napthol by HPLC (W)	<0.0005	<0.0005	<0.005	<0.005	-	-	-
PCB congener 138	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
2.3.5 Trimethyl-Phenol by HPLC (W)	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Boron	0.0193	<0.01	0.193	<0.1	-	-	-
PCB congener 153	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenanthrene (diss.filt)	0.000154	<0.000005	0.00154	<0.00005	-	-	-
2-Isopropyl Phenol by HPLC (W)	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Fluorene (diss.filt)	0.0000236	<0.000005	0.000236	<0.00005	-	-	-
PCB congener 180	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Chrysene (diss.filt)	0.0000113	<0.000005	0.000113	<0.00005	-	-	-
Total of 7 Congener PCBs	<0.000105	<0.000105	<0.00105	<0.00105	-	-	-
Pyrene (diss.filt)	0.0000573	<0.000005	0.000573	<0.00005	-	-	-
Benzo(a)anthracene (diss.filt)	0.00000621	<0.000005	0.0000621	<0.00005	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(b)fluoranthene (diss.filt)	0.0000137	<0.000005	0.000137	<0.00005	-	-	-
Benzo(k)fluoranthene (diss.filt)	0.00000565	<0.000005	0.0000565	<0.00005	-	-	-
Benzo(a)pyrene (diss.filt)	0.00000595	<0.000002	0.0000595	<0.00002	-	-	-
Copper	0.00199	<0.0003	0.0199	<0.003	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Lead	<0.0002	<0.0002	<0.002	<0.002	-	-	-
Benzo(g,h,i)perylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.000427	<0.000082	0.00427	<0.00082	-	-	-
Nickel	0.00101	<0.0004	0.0101	<0.004	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Vanadium	0.00398	<0.001	0.0398	<0.01	-	-	-
Zinc	0.00225	<0.001	0.0225	<0.01	-	-	-
SVOC MS (W) - Aqueous							
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	22-Mar-2019
pH (pH Units)	8.21
Conductivity (µS/cm)	119.00
Temperature (°C)	10.00
Volume Leachant (Litres)	0.868

Mcerts Certification does not apply to leachates

04/04/2019 10:30:07

CERTIFICATE OF ANALYSIS

SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE COMPTON
Mass Sample taken (kg)	0.122	**Natural Moisture Content (%)**	35.1
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	74
Particle Size <4mm	>95%		

Case	
SDG	190316-55
Lab Sample Number(s)	19561963
Sampled Date	06-Feb-2019
Customer Sample Ref.	TP17
Depth (m)	0.10

Eluate Analysis	**C_2 Concⁿ in 10:1 eluate (mg/l)**		**A_2 10:1 concⁿ leached (mg/kg)**				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
2,4,5-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	22-Mar-2019
pH (pH Units)	8.21
Conductivity (µS/cm)	119.00
Temperature (°C)	10.00
Volume Leachant (Litres)	0.868

Mcerts Certification does not apply to leachates

04/04/2019 10:30:07

CERTIFICATE OF ANALYSIS

SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE COMPTON
Mass Sample taken (kg)	0.122	**Natural Moisture Content (%)**	35.1
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	74
Particle Size <4mm	>95%		

Case	
SDG	190316-55
Lab Sample Number(s)	19561963
Sampled Date	06-Feb-2019
Customer Sample Ref.	TP17
Depth (m)	0.10

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.03	<0.03	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Benzene by GC	<0.007	<0.007	<0.07	<0.07	-	-	-
Toluene by GC	<0.004	<0.004	<0.04	<0.04	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.05	<0.05	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.08	<0.08	-	-	-
o Xylene by GC	<0.003	<0.003	<0.03	<0.03	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.11	<0.11	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.28	<0.28	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	<0	-	<0	-	-	-
Toluene-d8	-	<0	-	<0	-	-	-
4-Bromofluorobenzene	-	<0	-	<0	-	-	-
Dichlorodifluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.01	<0.01	-	-	-
Dichloromethane	<0.003	<0.003	<0.03	<0.03	-	-	-

Leach Test Information

Date Prepared	22-Mar-2019
pH (pH Units)	8.21
Conductivity (µS/cm)	119.00
Temperature (°C)	10.00
Volume Leachant (Litres)	0.868

Mcerts Certification does not apply to leachates

04/04/2019 10:30:07

CERTIFICATE OF ANALYSIS

SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE COMPTON
Mass Sample taken (kg)	0.122	**Natural Moisture Content (%)**	35.1
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	74
Particle Size <4mm	>95%		

Case	
SDG	190316-55
Lab Sample Number(s)	19561963
Sampled Date	06-Feb-2019
Customer Sample Ref.	TP17
Depth (m)	0.10

Eluate Analysis	**C_2** Conc^n in 10:1 eluate (mg/l)		**A_2** 10:1 conc^n leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroform	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Styrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromoform	<0.001	<0.001	<0.01	<0.01	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	22-Mar-2019
pH (pH Units)	8.21
Conductivity (µS/cm)	119.00
Temperature (°C)	10.00
Volume Leachant (Litres)	0.868

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE COMPTON
Mass Sample taken (kg)	0.122	**Natural Moisture Content (%)**	35.1
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	74
Particle Size <4mm	>95%		

Case	
SDG	190316-55
Lab Sample Number(s)	19561963
Sampled Date	06-Feb-2019
Customer Sample Ref.	TP17
Depth (m)	0.10

Eluate Analysis	**C_2 Concⁿ in 10:1 eluate (mg/l)**		**A_2 10:1 concⁿ leached (mg/kg)**				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
Propylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	22-Mar-2019
pH (pH Units)	8.21
Conductivity (µS/cm)	119.00
Temperature (°C)	10.00
Volume Leachant (Litres)	0.868

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE COMPTON
Mass Sample taken (kg)	0.099	**Natural Moisture Content (%)**	9.65
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	91.2
Particle Size <4mm	>95%		

Case	
SDG	190316-55
Lab Sample Number(s)	19561964
Sampled Date	06-Feb-2019
Customer Sample Ref.	TP17
Depth (m)	1.00

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
Aliphatics >C12-C16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C16-C21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C21-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aliphatics >C12-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC12-EC16	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC21	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC21-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC16-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
Total Aromatics >EC12-EC35	<0.01	<0.01	<0.1	<0.1	-	-	-
TPH (Total Aliphatics + Total Aromatics) >C5-C35	<0.01	<0.01	<0.1	<0.1	-	-	-
Ammoniacal Nitrogen as N	<0.2	<0.2	<2	<2	-	-	-
Conductivity (at 20 deg.C)	0.045	<0.000005	0.45	<0.00005	-	-	-
Fluoride	<0.5	<0.5	<5	<5	-	-	-
Sulphate (soluble)	<2	<2	<20	<20	-	-	-
Sulphide	<0.01	<0.01	<0.1	<0.1	-	-	-
Chloride	<2	<2	<20	<20	-	-	-
Dissolved Organic Carbon	3.21	<3	32.1	<30	-	-	-
Mercury Dissolved (CVAF)	<0.00001	<0.00001	<0.0001	<0.0001	-	-	-
Phosphate (Ortho as P)	0.0228	<0.02	0.228	<0.2	-	-	-
Resorcinol HPLC (W)	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Catechol by HPLC (W)	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Naphthalene (diss.filt)	0.000136	<0.00001	0.00136	<0.0001	-	-	-
PCB congener 28	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Total Cyanide (W)	<0.05	<0.05	<0.5	<0.5	-	-	-
Acenaphthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Arsenic	<0.0005	<0.0005	<0.005	<0.005	-	-	-
PCB congener 52	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenol by HPLC (W)	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Acenaphthylene (diss.filt)	0.00000694	<0.000005	0.0000694	<0.00005	-	-	-
Barium	0.00353	<0.0002	0.0353	<0.002	-	-	-
Cresols by HPLC (W)	<0.004	<0.0005	<0.04	<0.005	-	-	-
PCB congener 101	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Beryllium	<0.0001	<0.0001	<0.001	<0.001	-	-	-
Fluoranthene (diss.filt)	0.0000403	<0.000005	0.000403	<0.00005	-	-	-
Nitrate as N	0.421	<0.0677	4.21	<0.677	-	-	-

Leach Test Information

Date Prepared	22-Mar-2019
pH (pH Units)	8.87
Conductivity (µS/cm)	45.70
Temperature (°C)	17.80
Volume Leachant (Litres)	0.891

Mcerts Certification does not apply to leachates

04/04/2019 10:30:07

CERTIFICATE OF ANALYSIS

SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE COMPTON
Mass Sample taken (kg)	0.099	**Natural Moisture Content (%)**	9.65
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	91.2
Particle Size <4mm	>95%		

Case	
SDG	190316-55
Lab Sample Number(s)	19561964
Sampled Date	06-Feb-2019
Customer Sample Ref.	TP17
Depth (m)	1.00

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
PCB congener 118	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Xylenols by HPLC (W)	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Anthracene (diss.filt)	0.0000116	<0.000005	0.000116	<0.00005	-	-	-
Napthol by HPLC (W)	<0.0005	<0.0005	<0.005	<0.005	-	-	-
PCB congener 138	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
2.3.5 Trimethyl-Phenol by HPLC (W)	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Boron	<0.01	<0.01	<0.1	<0.1	-	-	-
PCB congener 153	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Phenanthrene (diss.filt)	0.0000548	<0.000005	0.000548	<0.00005	-	-	-
2-Isopropyl Phenol by HPLC (W)	<0.0005	<0.0005	<0.005	<0.005	-	-	-
Cadmium	<0.00008	<0.00008	<0.0008	<0.0008	-	-	-
Fluorene (diss.filt)	0.00000893	<0.000005	0.0000893	<0.00005	-	-	-
PCB congener 180	<0.000015	<0.000015	<0.00015	<0.00015	-	-	-
Chrysene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Total of 7 Congener PCBs	<0.000105	<0.000105	<0.00105	<0.00105	-	-	-
Pyrene (diss.filt)	0.0000272	<0.000005	0.000272	<0.00005	-	-	-
Benzo(a)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Chromium	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzo(b)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Benzo(k)fluoranthene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Benzo(a)pyrene (diss.filt)	<0.000002	<0.000002	<0.00002	<0.00002	-	-	-
Copper	<0.0003	<0.0003	<0.003	<0.003	-	-	-
Dibenzo(a,h)anthracene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Lead	<0.0002	<0.0002	<0.002	<0.002	-	-	-
Benzo(g,h,i)perylene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
Indeno(1,2,3-cd)pyrene (diss.filt)	<0.000005	<0.000005	<0.00005	<0.00005	-	-	-
PAH 16 EPA Total by GCMS (diss.filt)	0.000286	<0.000082	0.00286	<0.00082	-	-	-
Nickel	0.00053	<0.0004	0.0053	<0.004	-	-	-
Selenium	<0.001	<0.001	<0.01	<0.01	-	-	-
Vanadium	0.00115	<0.001	0.0115	<0.01	-	-	-
Zinc	<0.001	<0.001	<0.01	<0.01	-	-	-
SVOC MS (W) - Aqueous							
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	22-Mar-2019
pH (pH Units)	8.87
Conductivity (µS/cm)	45.70
Temperature (°C)	17.80
Volume Leachant (Litres)	0.891

Mcerts Certification does not apply to leachates

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CERTIFICATE OF ANALYSIS

SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE COMPTON
Mass Sample taken (kg)	0.099	**Natural Moisture Content (%)**	9.65
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	91.2
Particle Size <4mm	>95%		

Case	
SDG	190316-55
Lab Sample Number(s)	19561964
Sampled Date	06-Feb-2019
Customer Sample Ref.	TP17
Depth (m)	1.00

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
2,4,5-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4,6-Trichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dichlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dimethylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2,4-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,6-Dinitrotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chloronaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylnaphthalene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
3-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Bromophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloro-3-methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chloroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorophenylphenylether	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Methylphenol	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitroaniline	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Nitrophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Azobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethyl)ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-chloroethoxy)methane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bis(2-ethylhexyl) phthalate	<0.002	<0.002	<0.02	<0.02	-	-	-
Butylbenzyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbazole	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibenzofuran	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-butyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Diethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Dimethyl phthalate	<0.001	<0.001	<0.01	<0.01	-	-	-
Di-n-Octyl phthalate	<0.005	<0.005	<0.05	<0.05	-	-	-
Hexachlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Pentachlorophenol	<0.001	<0.001	<0.01	<0.01	-	-	-
Phenol	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	22-Mar-2019
pH (pH Units)	8.87
Conductivity (µS/cm)	45.70
Temperature (°C)	17.80
Volume Leachant (Litres)	0.891

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CERTIFICATE OF ANALYSIS

SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE COMPTON
Mass Sample taken (kg)	0.099	**Natural Moisture Content (%)**	9.65
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	91.2
Particle Size <4mm	>95%		

Case	
SDG	190316-55
Lab Sample Number(s)	19561964
Sampled Date	06-Feb-2019
Customer Sample Ref.	TP17
Depth (m)	1.00

Eluate Analysis	**C_2** Concⁿ in 10:1 eluate (mg/l)		**A_2** 10:1 concⁿ leached (mg/kg)				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
SVOC MS (W) - Aqueous							
N-nitrosodi-n-propylamine	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Nitrobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Isophorone	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorocyclopentadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
TPH CWG (W)							
Surrogate Recovery	-	<0	-	<0	-	-	-
GRO TOT (C5-C12)	<0.05	<0.05	<0.5	<0.5	-	-	-
Aliphatics C5-C6	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C6-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C8-C10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aliphatics >C10-C12	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics C6-C7	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >C7-C8	<0.01	<0.01	<0.1	<0.1	-	-	-
MTBE GC-FID	<0.003	<0.003	<0.03	<0.03	-	-	-
Aromatics >EC8 -EC10	<0.01	<0.01	<0.1	<0.1	-	-	-
Aromatics >EC10-EC12	<0.01	<0.01	<0.1	<0.1	-	-	-
Benzene by GC	<0.007	<0.007	<0.07	<0.07	-	-	-
Toluene by GC	<0.004	<0.004	<0.04	<0.04	-	-	-
Ethylbenzene by GC	<0.005	<0.005	<0.05	<0.05	-	-	-
m & p Xylene by GC	<0.008	<0.008	<0.08	<0.08	-	-	-
o Xylene by GC	<0.003	<0.003	<0.03	<0.03	-	-	-
Sum m&p and o Xylene by GC	<0.011	<0.011	<0.11	<0.11	-	-	-
Sum of BTEX by GC	<0.028	<0.028	<0.28	<0.28	-	-	-
VOC MS (W)							
Dibromofluoromethane	-	<0	-	<0	-	-	-
Toluene-d8	-	<0	-	<0	-	-	-
4-Bromofluorobenzene	-	<0	-	<0	-	-	-
Dichlorodifluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Vinyl Chloride	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Trichlorofluoromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbon Disulphide	<0.001	<0.001	<0.01	<0.01	-	-	-
Dichloromethane	<0.003	<0.003	<0.03	<0.03	-	-	-

Leach Test Information

Date Prepared	22-Mar-2019
pH (pH Units)	8.87
Conductivity (µS/cm)	45.70
Temperature (°C)	17.80
Volume Leachant (Litres)	0.891

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CERTIFICATE OF ANALYSIS

SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE COMPTON
Mass Sample taken (kg)	0.099	**Natural Moisture Content (%)**	9.65
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	91.2
Particle Size <4mm	>95%		

Case	
SDG	190316-55
Lab Sample Number(s)	19561964
Sampled Date	06-Feb-2019
Customer Sample Ref.	TP17
Depth (m)	1.00

Eluate Analysis	**C_2 Conc^n in 10:1 eluate (mg/l)**		**A_2 10:1 conc^n leached (mg/kg)**				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
Tert-butyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,2-Dichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
2,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chloroform	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Carbontetrachloride	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Benzene	0.00127	<0.001	0.0127	<0.01	-	-	-
Trichloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromomethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromodichloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Cis-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
Toluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Trans-1,3-Dichloropropene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2-Trichloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Tetrachloroethene	<0.001	<0.001	<0.01	<0.01	-	-	-
Dibromochloromethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromoethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Chlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,1,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
Ethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
p/m-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
o-Xylene	<0.001	<0.001	<0.01	<0.01	-	-	-
Styrene	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromoform	<0.001	<0.001	<0.01	<0.01	-	-	-
Isopropylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,1,2,2-Tetrachloroethane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,3-Trichloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
Bromobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	22-Mar-2019
pH (pH Units)	8.87
Conductivity (µS/cm)	45.70
Temperature (°C)	17.80
Volume Leachant (Litres)	0.891

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CERTIFICATE OF ANALYSIS

SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

CEN 10:1 SINGLE STAGE LEACHATE TEST

CEN ANALYTICAL RESULTS

REF : BS EN 12457/2

Client Reference		**Site Location**	HE COMPTON
Mass Sample taken (kg)	0.099	**Natural Moisture Content (%)**	9.65
Mass of dry sample (kg)	0.090	**Dry Matter Content (%)**	91.2
Particle Size <4mm	>95%		

Case	
SDG	190316-55
Lab Sample Number(s)	19561964
Sampled Date	06-Feb-2019
Customer Sample Ref.	TP17
Depth (m)	1.00

Eluate Analysis	**C_2 Concⁿ in 10:1 eluate (mg/l)**		**A_2 10:1 concⁿ leached (mg/kg)**				
	Result	**Limit of Detection**	**Result**	**Limit of Detection**			
VOC MS (W)							
Propylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
2-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Chlorotoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trimethylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Sec-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
4-Isopropyltoluene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,4-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
n-Butylbenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2-Dibromo-3-Chloropropane	<0.001	<0.001	<0.01	<0.01	-	-	-
1,2,4-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
Hexachlorobutadiene	<0.001	<0.001	<0.01	<0.01	-	-	-
Tert-amyl methyl ether	<0.001	<0.001	<0.01	<0.01	-	-	-
Naphthalene	0.00135	<0.001	0.0135	<0.01	-	-	-
1,2,3-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-
1,3,5-Trichlorobenzene	<0.001	<0.001	<0.01	<0.01	-	-	-

Leach Test Information

Date Prepared	22-Mar-2019
pH (pH Units)	8.87
Conductivity (µS/cm)	45.70
Temperature (°C)	17.80
Volume Leachant (Litres)	0.891

Mcerts Certification does not apply to leachates

04/04/2019 10:30:07

Table of Results - Appendix

Method No	Reference	Description
PM001		Preparation of Samples for Metals Analysis
PM024	Modified BS 1377	Soil preparation including homogenisation, moisture screens of soils for Asbestos Containing Material
PM115		Leaching Procedure for CEN One Stage Leach Test 2:1 & 10:1 1 Step
TM048	HSG 248, Asbestos: The analysts' guide for sampling, analysis and clearance procedures	Identification of Asbestos in Bulk Material
TM061	Method for the Determination of EPH,Massachusetts Dept.of EP, 1998	Determination of Extractable Petroleum Hydrocarbons by GC-FID (C10-C40)
TM072	Modified: US EPA Method 8141A	Determination of Phenols by GC-MS
TM089	Modified: US EPA Methods 8020 & 602	Determination of Gasoline Range Hydrocarbons (GRO) by Headspace GC-FID (C4-C12)
TM090	Method 5310, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 415.1 & 9060	Determination of Total Organic Carbon/Total Inorganic Carbon in Water and Waste Water
TM099	BS 2690: Part 7:1968 / BS 6068: Part2.11:1984	Determination of Ammonium in Water Samples using the Kone Analyser
TM101	Method 4500B & C, AWWA/APHA, 20th Ed., 1999	Determination of Sulphide in soil and water samples using the Kone Analyser
TM104	Method 4500F, AWWA/APHA, 20th Ed., 1999	Determination of Fluoride using the Kone Analyser
TM116	Modified: US EPA Method 8260, 8120, 8020, 624, 610 & 602	Determination of Volatile Organic Compounds by Headspace / GC-MS
TM120	Method 2510B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part 9:1970	Determination of Electrical Conductivity using a Conductivity Meter
TM132	In - house Method	ELTRA CS800 Operators Guide
TM133	BS 1377: Part 3 1990;BS 6068-2.5	Determination of pH in Soil and Water using the GLpH pH Meter
TM152	Method 3125B, AWWA/APHA, 20th Ed., 1999	Analysis of Aqueous Samples by ICP-MS
TM153	Method 4500A,B,C, I, M AWWA/APHA, 20th Ed., 1999	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate using the Skalar SANS+ System Segmented Flow Analyser
TM157	HP 6890 Gas Chromatograph (GC) system and HP 5973 Mass Selective Detector (MSD).	Determination of SVOC in Soils by GC-MS extracted by sonication in DCM/Acetone
TM168	EPA Method 8082, Polychlorinated Biphenyls by Gas Chromatography	Determination of WHO12 and EC7 Polychlorinated Biphenyl Congeners by GC-MS in Soils
TM173	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Determination of Speciated Extractable Petroleum Hydrocarbons in Soils by GC-FID
TM174	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Determination of Speciated Extractable Petroleum Hydrocarbons in Waters by GC-FID
TM176	EPA 8270D Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of SVOCs in Water by GCMS
TM178	Modified: US EPA Method 8100	Determination of Polynuclear Aromatic Hydrocarbons (PAH) by GC-MS in Waters
TM180	Sulphide in waters and waste waters 1991 ISBN 01 175 7186 SCA rec. 2007 (unpublished)'	The Determination Of Easily Liberated Sulphide In Soil Samples by Ion Selective Electrode Technique
TM181	US EPA Method 6010B	Determination of Routine Metals in Soil by iCap 6500 Duo ICP-OES
TM183	BS EN 23506:2002, (BS 6068-2.74:2002) ISBN 0 580 38924 3	Determination of Trace Level Mercury in Waters and Leachates by PSA Cold Vapour Atomic Fluorescence Spectrometry
TM184	EPA Methods 325.1 & 325.2,	The Determination of Anions in Aqueous Matrices using the Kone Spectrophotometric Analysers
TM197	Modified: US EPA Method 8082.EA Method 174 and 5109631	Determination of WHO12 and EC7 Polychlorinated Biphenyl Congeners by GC-MS in Waters
TM208	Modified: US EPA Method 8260b & 624	Determination of Volatile Organic Compounds by Headspace / GC-MS in Waters
TM218	Shaker extraction - EPA method 3546.	The determination of PAH in soil samples by GC-MS
TM221	Inductively Coupled Plasma - Atomic Emission Spectroscopy. An Atlas of Spectral Information: Winge, Fassel, Peterson and Floyd	Determination of Acid extractable Sulphate in Soils by IRIS Emission Spectrometer
TM222	In-House Method	Determination of Hot Water Soluble Boron in Soils (10:1 Water:soil) by IRIS Emission Spectrometer
TM227	Standard methods for the examination of waters and wastewaters 20th Edition, AWWA/APHA Method 4500.	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate
TM243		Mixed Anions In Soils By Kone
TM245	By GC-FID	Determination of GRO by Headspace in waters
TM255		Determination of Low Level Phenols in Waters and Leachates by HPLC
TM256	The measurement of Electrical Conductivity and the Laboratory determination of pH Value of Natural, Treated and Wastewaters. HMSO, 1978. ISBN 011 751428 4.	Determination of pH in Water and Leachate using the GLpH pH Meter

NA = not applicable.

Chemical testing (unless subcontracted) performed at ALS Environmental Hawarden (Method codes TM) or ALS Environmental Aberdeen (Method codes S).

Test Completion Dates

Lab Sample No(s)	19561963	19561964
Customer Sample Ref.	TP17	TP17
AGS Ref.		
Depth	0.10	1.00
Type	Soil/Solid (S)	Soil/Solid (S)
Ammoniacal Nitrogen	26-Mar-2019	26-Mar-2019
Anions by Kone (soil)	22-Mar-2019	21-Mar-2019
Anions by Kone (w)	27-Mar-2019	27-Mar-2019
Asbestos ID in Solid Samples	21-Mar-2019	21-Mar-2019
Boron Water Soluble	25-Mar-2019	22-Mar-2019
CEN 10:1 Leachate (1 Stage)	22-Mar-2019	22-Mar-2019
CEN Readings	23-Mar-2019	25-Mar-2019
Conductivity (at 20 deg.C)	26-Mar-2019	26-Mar-2019
Cyanide Comp/Free/Total/Thiocyanate	27-Mar-2019	27-Mar-2019
Dissolved Metals by ICP-MS	27-Mar-2019	27-Mar-2019
Dissolved Organic/Inorganic Carbon	27-Mar-2019	27-Mar-2019
Easily Liberated Sulphide	25-Mar-2019	25-Mar-2019
EPH CWG (Aliphatic) Filtered GC (W)	28-Mar-2019	28-Mar-2019
EPH CWG (Aliphatic) GC (S)	25-Mar-2019	25-Mar-2019
EPH CWG (Aromatic) Filtered GC (W)	28-Mar-2019	28-Mar-2019
EPH CWG (Aromatic) GC (S)	25-Mar-2019	25-Mar-2019
Fluoride	26-Mar-2019	26-Mar-2019
GRO by GC-FID (S)	20-Mar-2019	20-Mar-2019
GRO by GC-FID (W)	27-Mar-2019	27-Mar-2019
Low Level Phenols by HPLC (W)	29-Mar-2019	01-Apr-2019
Mercury Dissolved	27-Mar-2019	27-Mar-2019
Metals in solid samples by OES	22-Mar-2019	25-Mar-2019
Nitrite by Kone (w)	25-Mar-2019	25-Mar-2019
PAH by GCMS	22-Mar-2019	22-Mar-2019
PAH in waters by GC-MS (diss.filt)	28-Mar-2019	28-Mar-2019
PCB Congeners - Aqueous (W)	28-Mar-2019	28-Mar-2019
PCBs by GCMS	21-Mar-2019	22-Mar-2019
pH	20-Mar-2019	20-Mar-2019
pH Value	27-Mar-2019	27-Mar-2019
Phenols Spec MS (S)	25-Mar-2019	25-Mar-2019
Phosphate by Kone (w)	25-Mar-2019	25-Mar-2019
Sample description	19-Mar-2019	19-Mar-2019
Semi Volatile Organic Compounds	22-Mar-2019	22-Mar-2019
Sulphide	26-Mar-2019	26-Mar-2019
SVOC MS (W) - Aqueous	28-Mar-2019	28-Mar-2019
Total Organic Carbon	25-Mar-2019	21-Mar-2019
Total Sulphate	25-Mar-2019	21-Mar-2019
TPH CWG Filtered (W)	28-Mar-2019	28-Mar-2019
TPH CWG GC (S)	25-Mar-2019	25-Mar-2019
VOC MS (S)	20-Mar-2019	20-Mar-2019
VOC MS (W)	27-Mar-2019	27-Mar-2019

ASSOCIATED AQC DATA

Ammoniacal Nitrogen

Component	Method Code	QC 1939
Ammoniacal Nitrogen as N	TM099	**100.4** 93.14 : 108.60

Anions by Kone (soil)

Component	Method Code	QC 1976	QC 1929
Chloride (soluble)	TM243	78.01 : 122.19	**87.62** 78.01 : 122.19
Water Soluble Sulphate as SO4 2:1 Extract	TM243	75.60 : 131.10	**94.97** 75.60 : 131.10

Anions by Kone (w)

Component	Method Code	QC 1992
Chloride	TM184	**109.0** 92.93 : 115.43
Phosphate (Ortho as PO4)	TM184	96.40 : 108.40
Sulphate (soluble)	TM184	**102.0** 90.53 : 113.03
TON as NO3	TM184	**104.0** 96.26 : 111.21

Boron Water Soluble

Component	Method Code	QC 1950	QC 1906
Water Soluble Boron	TM222	**103.5** 86.05 : 109.75	**100.5** 86.05 : 109.75

Conductivity (at 20 deg.C)

Component	Method Code	QC 1902
Conductivity (at 20 deg.C)	TM120	**103.01** 100.75 : 105.26

Cyanide Comp/Free/Total/Thiocyanate

Cyanide Comp/Free/Total/Thiocyanate

Component	Method Code	QC 1910	QC 1916
Free Cyanide	TM153	**101.0** 87.60 : 108.63	
Free Cyanide (W)	TM227		**110.75** 93.25 : 112.75
Thiocyanate	TM153	**98.2** 92.90 : 108.39	
Thiocyanate (W)	TM227		**109.75** 96.25 : 111.25
Total Cyanide	TM153	**103.57** 87.00 : 103.00	
Total Cyanide (W)	TM227		**104.0** 92.25 : 111.75

Dissolved Metals by ICP-MS

Component	Method Code	QC 1990
Aluminium	TM152	**103.0** 94.19 : 114.31
Antimony	TM152	**105.67** 79.80 : 122.00
Arsenic	TM152	**103.83** 90.42 : 111.32
Barium	TM152	**105.0** 90.79 : 113.16
Beryllium	TM152	**102.83** 93.25 : 120.04
Bismuth	TM152	**105.33** 94.65 : 117.05
Borate	TM152	**98.77** 88.00 : 112.00
Boron	TM152	**99.0** 86.68 : 117.67
Cadmium	TM152	**105.5** 94.60 : 112.40
Calcium	TM152	**106.0** 83.40 : 121.11
Chromium	TM152	**104.5** 93.28 : 110.91
Cobalt	TM152	**105.0** 84.39 : 114.26
Copper	TM152	**105.83** 88.86 : 118.72
Iron	TM152	**105.33** 92.00 : 113.00
Lead	TM152	**105.5** 89.25 : 115.12
Lithium	TM152	**99.67** 89.26 : 119.04
Magnesium	TM152	**107.33** 86.35 : 113.36
Manganese	TM152	**104.5** 94.24 : 112.74
Molybdenum	TM152	**102.83** 87.00 : 108.89

Dissolved Metals by ICP-MS

		QC 1990
Nickel	TM152	**105.67** 92.11 : 110.56
Phosphorus	TM152	**105.83** 90.52 : 115.47
Potassium	TM152	**104.67** 98.63 : 110.48
Selenium	TM152	**104.83** 88.44 : 113.86
Silver	TM152	**106.33** 94.40 : 114.74
Sodium	TM152	**107.33** 97.63 : 110.31
Strontium	TM152	**103.33** 90.72 : 114.82
Tellurium	TM152	**103.67** 90.72 : 112.62
Thallium	TM152	**106.17** 86.08 : 122.48
Tin	TM152	**103.83** 91.00 : 109.00
Titanium	TM152	**93.83** 91.87 : 102.47
Tungsten	TM152	**101.0** 78.12 : 132.82
Uranium	TM152	**105.0** 90.58 : 113.28
Vanadium	TM152	**105.33** 88.43 : 114.30
Zinc	TM152	**106.67** 86.52 : 115.27

Dissolved Organic/Inorganic Carbon

Component	Method Code	QC 1909
Dissolved Inorganic Carbon	TM090	**98.0** 94.43 : 110.53
Dissolved Organic Carbon	TM090	**104.33** 99.25 : 108.95

Easily Liberated Sulphide

Component	Method Code	QC 1928
Easily Liberated Sulphide	TM180	**102.67** 51.10 : 121.66

EPH CWG (Aliphatic) GC (S)

EPH CWG (Aliphatic) GC (S)

Component	Method Code	QC 1990
Total Aliphatics >C12-C35	TM173	**90.83** 70.61 : 106.16

EPH CWG (Aromatic) Filtered GC (W)

Component	Method Code	QC 1920
Total Aromatics >EC10-EC40	TM174	**91.22** 73.75 : 120.32

EPH CWG (Aromatic) GC (S)

Component	Method Code	QC 1990
Total Aromatics >EC12-EC35	TM173	**91.33** 67.75 : 104.04

Fluoride

Component	Method Code	QC 1987
Fluoride	TM104	**101.33** 95.51 : 107.24

GRO by GC-FID (S)

Component	Method Code	QC 1983
QC	TM089	**88.91** 70.34 : 111.95

GRO by GC-FID (W)

Component	Method Code	QC 1943	QC 1946
Benzene by GC	TM245	**99.5** 83.02 : 111.90	**102.5** 81.54 : 119.70
Ethylbenzene by GC	TM245	**98.5** 84.11 : 114.89	**104.0** 80.99 : 121.09
m & p Xylene by GC	TM245	**97.5** 83.73 : 116.33	**103.25** 82.77 : 123.19

GRO by GC-FID (W)

		QC 1943	QC 1946
MTBE GC-FID	TM245	**100.0** 84.42 : 117.50	**103.0** 80.06 : 123.27
o Xylene by GC	TM245	**99.0** 84.33 : 114.72	**104.0** 84.26 : 121.50
QC	TM245	**103.96** 60.71 : 137.65	**98.0** 76.13 : 145.89
Toluene by GC	TM245	**97.5** 84.73 : 116.85	**102.0** 82.78 : 121.99

Mercury Dissolved

Component	Method Code	QC 1961
Mercury Dissolved (CVAF)	TM183	**93.5** 75.00 : 111.00

Metals in solid samples by OES

Component	Method Code	QC 1994	QC 1994
Aluminium	TM181	**87.35** 77.84 : 119.01	**92.04** 77.84 : 119.01
Antimony	TM181	**96.34** 84.28 : 107.67	**99.59** 84.28 : 107.67
Arsenic	TM181	**97.97** 87.05 : 109.36	**100.0** 87.05 : 109.36
Barium	TM181	**90.64** 82.49 : 109.34	**95.41** 82.49 : 109.34
Beryllium	TM181	**95.52** 85.44 : 109.61	**95.52** 85.44 : 109.61
Boron	TM181	**85.1** 73.51 : 104.66	**89.68** 73.51 : 104.66
Cadmium	TM181	**90.53** 81.46 : 106.43	**92.18** 81.46 : 106.43
Chromium	TM181	**90.06** 79.78 : 102.80	**92.9** 79.78 : 102.80
Cobalt	TM181	**89.31** 80.74 : 99.26	**89.94** 80.74 : 99.26
Copper	TM181	**90.32** 82.40 : 105.45	**94.72** 82.40 : 105.45
Iron	TM181	**93.65** 82.95 : 110.58	**94.44** 82.95 : 110.58
Lead	TM181	**103.6** 78.24 : 104.05	**95.5** 78.24 : 104.05
Manganese	TM181	**103.89** 94.29 : 119.51	**105.28** 94.29 : 119.51
Mercury	TM181	**94.69** 83.74 : 105.34	**95.41** 83.74 : 105.34
Molybdenum	TM181	**97.94** 87.11 : 106.87	**98.77** 87.11 : 106.87
Nickel	TM181	**89.98** 81.92 : 102.18	**91.2** 81.92 : 102.18

Metals in solid samples by OES

		QC 1994	QC 1994
Phosphorus	TM181	**103.64** 94.56 : 124.28	**113.54** 94.56 : 124.28
Selenium	TM181	**97.65** 86.28 : 110.48	**95.69** 86.28 : 110.48
Strontium	TM181	**87.97** 79.13 : 102.79	**91.54** 79.13 : 102.79
Thallium	TM181	**95.58** 82.94 : 111.86	**97.79** 82.94 : 111.86
Tin	TM181	**98.1** 90.25 : 108.86	**98.48** 90.25 : 108.86
Titanium	TM181	**77.86** 66.23 : 102.06	**83.97** 66.23 : 102.06
Vanadium	TM181	**92.31** 86.37 : 107.94	**97.44** 86.37 : 107.94
Zinc	TM181	**94.87** 84.68 : 113.99	**98.77** 84.68 : 113.99

PAH by GCMS

Component	Method Code	QC 1988	QC 1966
Acenaphthene	TM218	**91.0** 80.97 : 105.99	**95.0** 80.97 : 105.99
Acenaphthylene	TM218	**91.0** 80.24 : 105.29	**95.0** 80.24 : 105.29
Anthracene	TM218	**92.0** 79.32 : 108.94	**99.0** 79.32 : 108.94
Benz(a)anthracene	TM218	**95.0** 79.72 : 116.84	**105.0** 79.72 : 116.84
Benzo(a)pyrene	TM218	**97.0** 79.52 : 108.45	**105.5** 79.52 : 108.45
Benzo(b)fluoranthene	TM218	**94.0** 77.35 : 112.97	**91.0** 77.35 : 112.97
Benzo(ghi)perylene	TM218	**95.0** 77.68 : 107.38	**103.0** 77.68 : 107.38
Benzo(k)fluoranthene	TM218	**93.5** 82.61 : 111.93	**102.5** 82.61 : 111.93
Chrysene	TM218	**93.5** 80.28 : 111.42	**102.0** 80.28 : 111.42
Dibenzo(ah)anthracene	TM218	**95.0** 79.17 : 106.41	**104.5** 79.17 : 106.41
Fluoranthene	TM218	**91.0** 79.07 : 112.75	**95.5** 79.07 : 112.75
Fluorene	TM218	**92.5** 80.52 : 110.90	**99.0** 80.52 : 110.90
Indeno(123cd)pyrene	TM218	**85.0** 76.97 : 113.36	**95.0** 76.97 : 113.36
Naphthalene	TM218	**96.5** 79.37 : 105.57	**93.5** 79.37 : 105.57
Phenanthrene	TM218	**91.5** 79.34 : 111.91	**98.0** 79.34 : 111.91
Pyrene	TM218	**92.5** 78.80 : 115.76	**98.0** 78.80 : 115.76

PAH in waters by GC-MS (diss.filt)

PAH in waters by GC-MS (diss.filt)

Component	Method Code	QC 1933
Acenaphthene (diss.filt)	TM178	**109.6** 94.40 : 118.40
Acenaphthylene (diss.filt)	TM178	**105.2** 92.00 : 116.00
Anthracene (diss.filt)	TM178	**110.0** 88.80 : 115.20
Benzo(a)anthracene (diss.filt)	TM178	**106.4** 85.20 : 118.80
Benzo(a)pyrene (diss.filt)	TM178	**108.0** 90.40 : 119.20
Benzo(b)fluoranthene (diss.filt)	TM178	**107.2** 86.40 : 122.40
Benzo(g,h,i)perylene (diss.filt)	TM178	**110.4** 92.00 : 116.00
Benzo(k)fluoranthene (diss.filt)	TM178	**112.0** 92.00 : 125.60
Chrysene (diss.filt)	TM178	**113.2** 95.20 : 121.60
Dibenzo(a,h)anthracene (diss.filt)	TM178	**109.6** 88.80 : 112.80
Fluoranthene (diss.filt)	TM178	**110.8** 87.60 : 118.80
Fluorene (diss.filt)	TM178	**111.2** 93.60 : 117.60
Indeno(1,2,3-cd)pyrene (diss.filt)	TM178	**101.2** 85.60 : 114.40
Naphthalene (diss.filt)	TM178	**112.0** 87.20 : 123.20
Phenanthrene (diss.filt)	TM178	**111.6** 94.00 : 118.00
Pyrene (diss.filt)	TM178	**110.4** 87.20 : 120.80

PCB Congeners - Aqueous (W)

Component	Method Code	QC 1979
PCB congener 101	TM197	**110.4** 85.28 : 119.60
PCB congener 105	TM197	**108.0** 81.16 : 119.80
PCB congener 114	TM197	**107.2** 88.32 : 118.08
PCB congener 118	TM197	**103.2** 87.76 : 117.04
PCB congener 123	TM197	**100.8** 86.80 : 117.28
PCB congener 126	TM197	**107.6** 84.56 : 116.00
PCB congener 138	TM197	**106.8** 83.00 : 117.80
PCB congener 153	TM197	**109.6** 84.12 : 117.00
PCB congener 156	TM197	**109.6** 82.24 : 119.20

PCB Congeners - Aqueous (W)

		QC 1979
PCB congener 157	TM197	**110.8** 84.96 : 116.40
PCB congener 167	TM197	**108.4** 81.64 : 119.32
PCB congener 169	TM197	**106.8** 84.60 : 117.96
PCB congener 180	TM197	**108.8** 80.40 : 119.04
PCB congener 189	TM197	**107.6** 81.56 : 119.00
PCB congener 28	TM197	**107.6** 83.20 : 117.04
PCB congener 52	TM197	**105.6** 81.84 : 119.52
PCB congener 77	TM197	**110.8** 81.96 : 117.24
PCB congener 81	TM197	**104.4** 82.28 : 120.20

PCBs by GCMS

Component	Method Code	QC 1958	QC 1941
PCB congener 101	TM168	**94.7** 73.09 : 112.63	**84.7** 73.09 : 112.63
PCB congener 105	TM168	**93.7** 70.08 : 112.92	**85.9** 70.08 : 112.92
PCB congener 114	TM168	**95.1** 71.45 : 111.53	**85.2** 71.45 : 111.53
PCB congener 118	TM168	**94.9** 70.76 : 113.78	**86.4** 70.76 : 113.78
PCB congener 123	TM168	**83.7** 69.96 : 112.50	**80.7** 69.96 : 112.50
PCB congener 126	TM168	**91.1** 70.61 : 116.15	**82.6** 70.61 : 116.15
PCB congener 138	TM168	**92.9** 69.88 : 115.78	**83.1** 69.88 : 115.78
PCB congener 153	TM168	**94.6** 73.32 : 111.54	**83.7** 73.32 : 111.54
PCB congener 156	TM168	**97.0** 73.48 : 118.60	**86.6** 73.48 : 118.60
PCB congener 157	TM168	**91.2** 70.22 : 115.22	**80.3** 70.22 : 115.22
PCB congener 167	TM168	**94.4** 70.04 : 118.16	**83.2** 70.04 : 118.16
PCB congener 169	TM168	**96.6** 64.01 : 129.89	**87.2** 64.01 : 129.89
PCB congener 180	TM168	**96.4** 67.10 : 120.80	**85.6** 67.10 : 120.80
PCB congener 189	TM168	**93.2** 65.53 : 126.07	**84.1** 65.53 : 126.07
PCB congener 28	TM168	**97.0** 73.86 : 116.94	**90.2** 73.86 : 116.94
PCB congener 52	TM168	**95.6** 78.72 : 119.28	**87.6** 78.72 : 119.28

PCBs by GCMS

		QC 1958	QC 1941
PCB congener 77	TM168	**100.0** 74.04 : 120.60	**90.2** 74.04 : 120.60
PCB congener 81	TM168	**95.3** 71.38 : 116.14	**87.4** 71.38 : 116.14

pH

Component	Method Code	QC 1934
pH	TM133	**100.57** 98.63 : 101.37

pH Value

Component	Method Code	QC 1992
pH	TM256	**101.35** 99.73 : 102.16

Phosphate by Kone (w)

Component	Method Code	QC 1993
Phosphate (Ortho as PO4)	TM184	**102.8** 96.40 : 109.60

Semi Volatile Organic Compounds

Component	Method Code	QC 1950
4-Bromophenylphenylether (Soil)	TM157	**76.5** 63.50 : 114.50
Benzo(a)anthracene (Soil)	TM157	**81.0** 71.89 : 120.91
Hexachlorobutadiene (Soil)	TM157	**82.0** 69.80 : 117.77
Naphthalene (Soil)	TM157	**78.5** 70.00 : 115.00
Nitrobenzene (Soil)	TM157	**80.0** 70.00 : 118.00
Phenol (Soil)	TM157	**82.0** 72.00 : 117.00

Sulphide

Sulphide

Component	Method Code	QC 1964
Sulphide	TM101	**98.0** 88.90 : 112.50

SVOC MS (W) - Aqueous

Component	Method Code	QC 1955
4-Bromophenylphenylether	TM176	**75.52** 58.88 : 100.16
Benzo(a)anthracene	TM176	**72.24** 58.56 : 106.08
Benzo(a)pyrene	TM176	**67.04** 55.84 : 106.24
Butylbenzyl phthalate	TM176	**90.4** 45.10 : 118.90
Hexachlorobutadiene	TM176	**66.24** 49.76 : 92.00
Naphthalene	TM176	**75.76** 65.68 : 110.32
Nitrobenzene	TM176	**74.96** 60.56 : 102.80
Phenol	TM176	**46.08** 39.44 : 60.56

Total Organic Carbon

Component	Method Code	QC 1941
Total Organic Carbon	TM132	**100.0** 88.47 : 112.82

Total Sulphate

Component	Method Code	QC 1908	QC 1995
Total Sulphate	TM221	**88.64** 69.68 : 114.84	**90.91** 69.68 : 114.84

VOC MS (S)

Component	Method Code	QC 1985
1,1,1,2-tetrachloroethane	TM116	**104.4** 77.56 : 115.55
1,1,1-Trichloroethane	TM116	**102.4** 73.73 : 118.05
1,1,2-Trichloroethane	TM116	**99.2** 77.12 : 116.04

VOC MS (S)

		QC 1985
1,1-Dichloroethane	TM116	**106.8** 74.46 : 129.15
1,2-Dichloroethane	TM116	**115.8** 87.98 : 127.86
1,4-Dichlorobenzene	TM116	**105.2** 72.76 : 126.34
2-Chlorotoluene	TM116	**100.8** 72.40 : 116.20
4-Chlorotoluene	TM116	**93.0** 66.90 : 112.46
Benzene	TM116	**104.0** 91.01 : 117.67
Carbon Disulphide	TM116	**93.6** 74.91 : 122.14
Carbontetrachloride	TM116	**100.0** 80.31 : 124.50
Chlorobenzene	TM116	**104.2** 75.00 : 115.53
Chloroform	TM116	**110.4** 87.40 : 122.49
Chloromethane	TM116	**99.4** 65.05 : 142.63
Cis-1,2-Dichloroethene	TM116	**110.4** 80.67 : 126.72
Dibromomethane	TM116	**94.8** 67.80 : 121.75
Dichloromethane	TM116	**118.2** 81.11 : 133.25
Ethylbenzene	TM116	**98.4** 75.92 : 110.41
Hexachlorobutadiene	TM116	**68.0** 12.82 : 152.73
Isopropylbenzene	TM116	**93.6** 54.21 : 117.17
Naphthalene	TM116	**111.4** 80.86 : 128.81
o-Xylene	TM116	**94.6** 82.80 : 107.93
p/m-Xylene	TM116	**95.8** 68.32 : 108.91
Sec-Butylbenzene	TM116	**82.4** 44.91 : 118.40
Tetrachloroethene	TM116	**99.0** 76.95 : 121.02
Toluene	TM116	**94.8** 74.24 : 107.42
Trichloroethene	TM116	**100.8** 77.61 : 111.54
Trichlorofluoromethane	TM116	**97.8** 71.31 : 128.41
Vinyl Chloride	TM116	**90.8** 68.26 : 133.45

VOC MS (W)

Component	Method Code	QC 1972	QC 1912
1,1,1,2-Tetrachloroethane	TM208	**103.5** 78.82 : 115.90	**100.5** 81.85 : 113.65
1,1,1-Trichloroethane	TM208	**103.5** 79.61 : 114.35	**97.0** 81.48 : 111.75
1,1-Dichloroethane	TM208	**107.0** 79.99 : 118.57	**98.0** 79.60 : 118.57
1,2-Dichloroethane	TM208	**109.0** 79.35 : 124.02	**101.5** 77.72 : 133.33
2-Chlorotoluene	TM208	**108.5** 79.67 : 114.74	**103.5** 82.89 : 116.61
4-Chlorotoluene	TM208	**107.5** 80.15 : 113.42	**102.5** 79.46 : 115.88
Benzene	TM208	**107.5** 84.37 : 119.68	**99.5** 81.22 : 118.60
Bromomethane	TM208	**103.5** 68.41 : 115.99	**95.0** 68.25 : 113.64
Carbontetrachloride	TM208	**103.5** 79.73 : 118.91	**96.5** 86.16 : 119.10
Chlorobenzene	TM208	**109.5** 89.49 : 115.83	**104.5** 87.25 : 116.65
Chloroform	TM208	**105.0** 82.31 : 120.71	**100.0** 83.01 : 121.64
Chloromethane	TM208	**111.0** 62.46 : 124.98	**98.5** 65.28 : 130.05
Cis-1,2-Dichloroethene	TM208	**107.0** 84.04 : 126.19	**100.0** 82.23 : 124.89
Dichloromethane	TM208	**107.0** 81.20 : 120.83	**103.5** 78.23 : 120.65
Ethylbenzene	TM208	**101.0** 80.54 : 112.31	**96.5** 79.55 : 110.51
Hexachlorobutadiene	TM208	**92.5** 59.76 : 107.25	**92.5** 67.63 : 111.28
o-Xylene	TM208	**107.5** 79.22 : 112.31	**104.0** 90.42 : 112.27
p/m-Xylene	TM208	**103.0** 79.85 : 111.06	**100.0** 84.45 : 113.50
Tert-butyl methyl ether	TM208	**98.0** 70.94 : 119.66	**95.5** 70.18 : 125.95
Tetrachloroethene	TM208	**100.0** 87.13 : 116.26	**96.0** 80.43 : 115.53
Toluene	TM208	**106.5** 81.59 : 111.56	**97.5** 79.88 : 116.83
Trichloroethene	TM208	**107.5** 79.53 : 112.32	**97.0** 82.30 : 112.45
Vinyl Chloride	TM208	**98.0** 68.68 : 119.35	**87.0** 66.89 : 111.22

The above information details the reference name of the analytical quality control sample (AQC) that has been run with the samples contained in this report for the different methods of analysis.
The figure detailed is the percentage recovery result for the AQC.
The subscript numbers below are the percentage recovery lower control limit (LCL) and the upper control limit (UCL). The percentage recovery result for the AQC should be between these limits to be statistically in control.

CERTIFICATE OF ANALYSIS

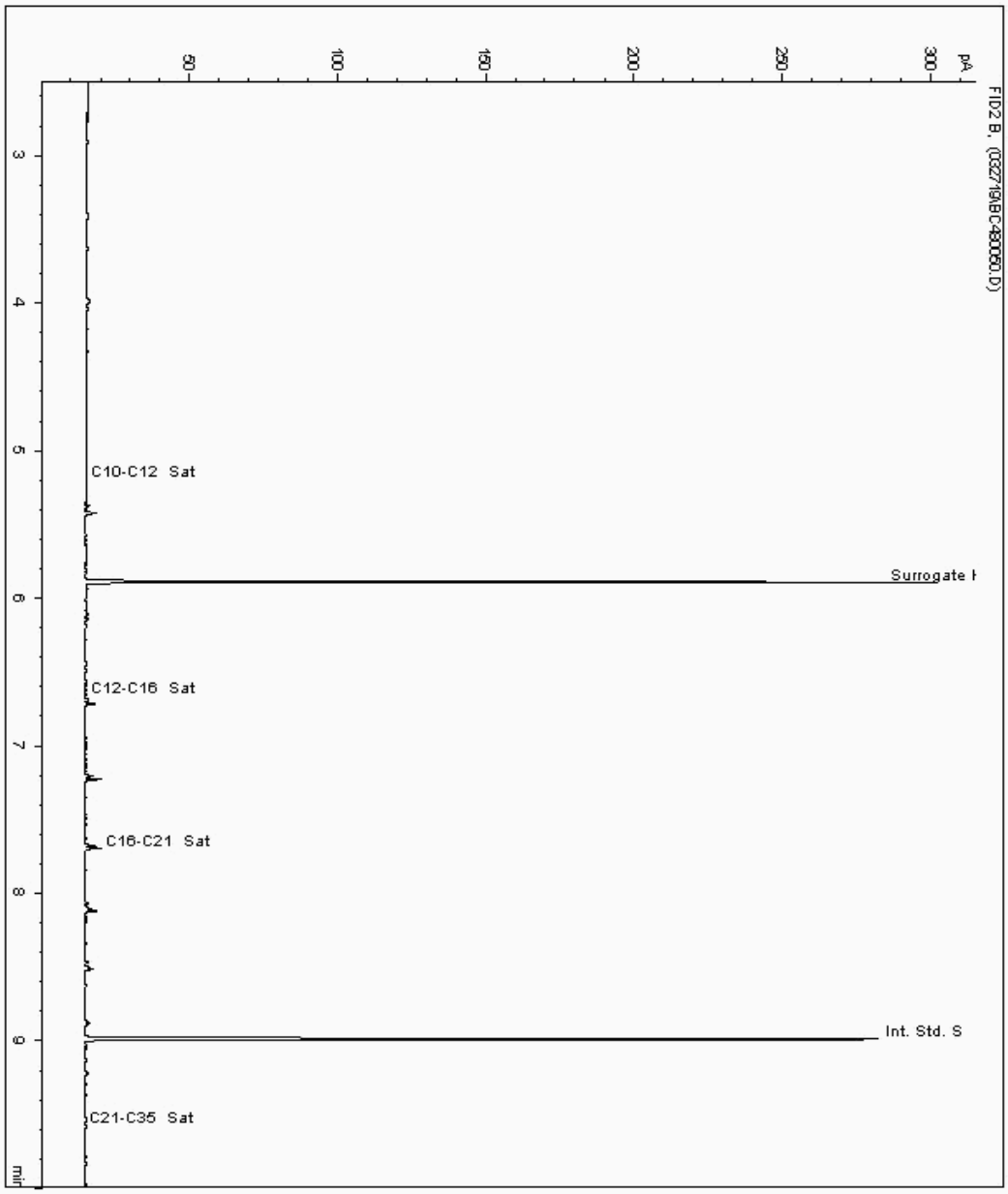
SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19619957 **Depth :** 1.00
Sample ID : TP17

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18416427-
Date Acquired : 28/03/2019 11:22:25 PM
Units : ppb
Dilution : TP17 [1.00] CEN 10 1 ->
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

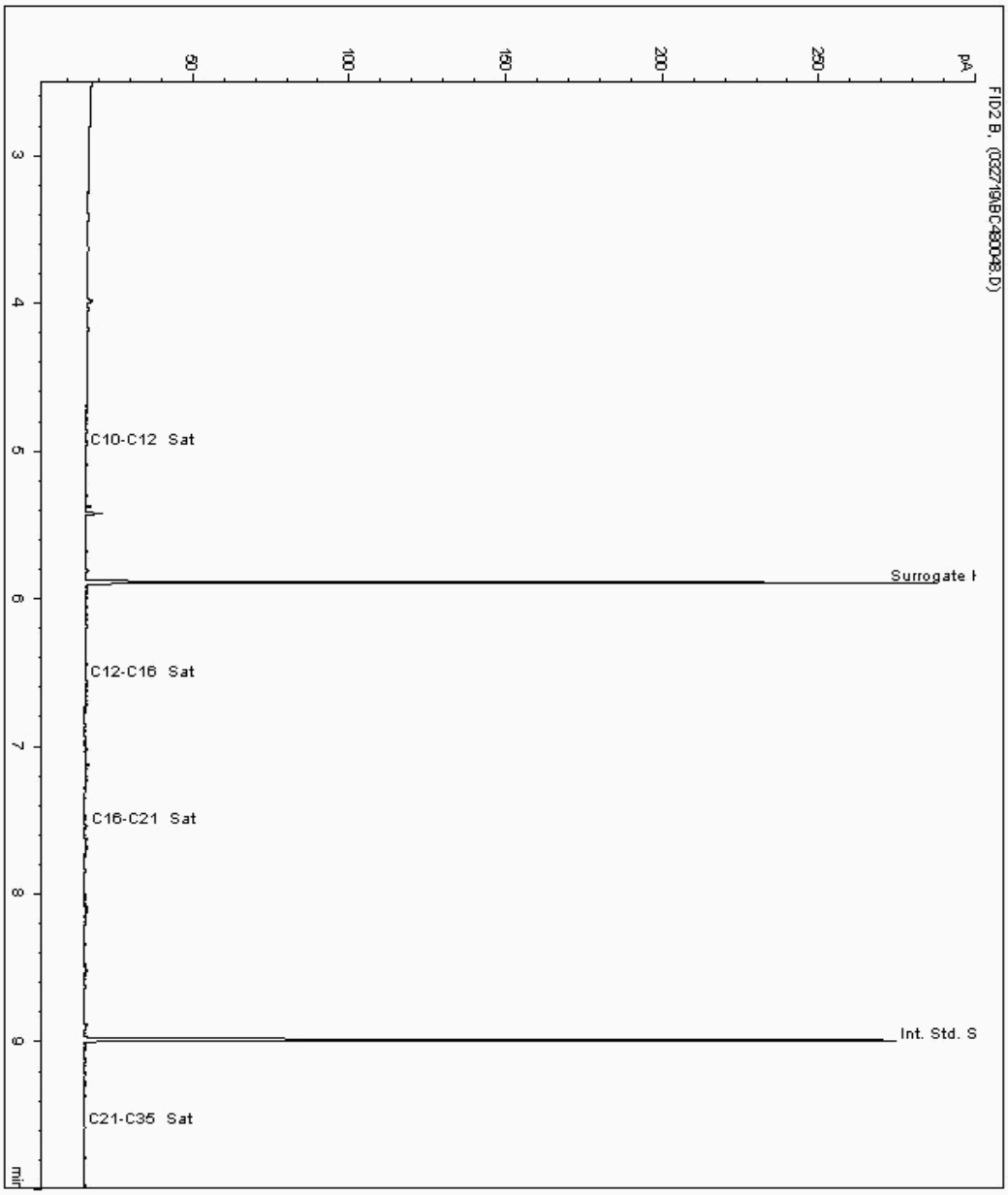
SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

Chromatogram

Analysis: EPH CWG (Aliphatic) Filtered GC (W) **Sample No :** 19619976 **Depth :** 0.10
Sample ID : TP17

Alcontrol/Geochem Analytical Services
Speciated TPH - SATS (C12 - C40)

Sample Identity: 18416405-
Date Acquired : 28/03/2019 10:35:40 PM
Units : ppb
Dilution : TP17 [0.10] CEN 10 1 ->
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

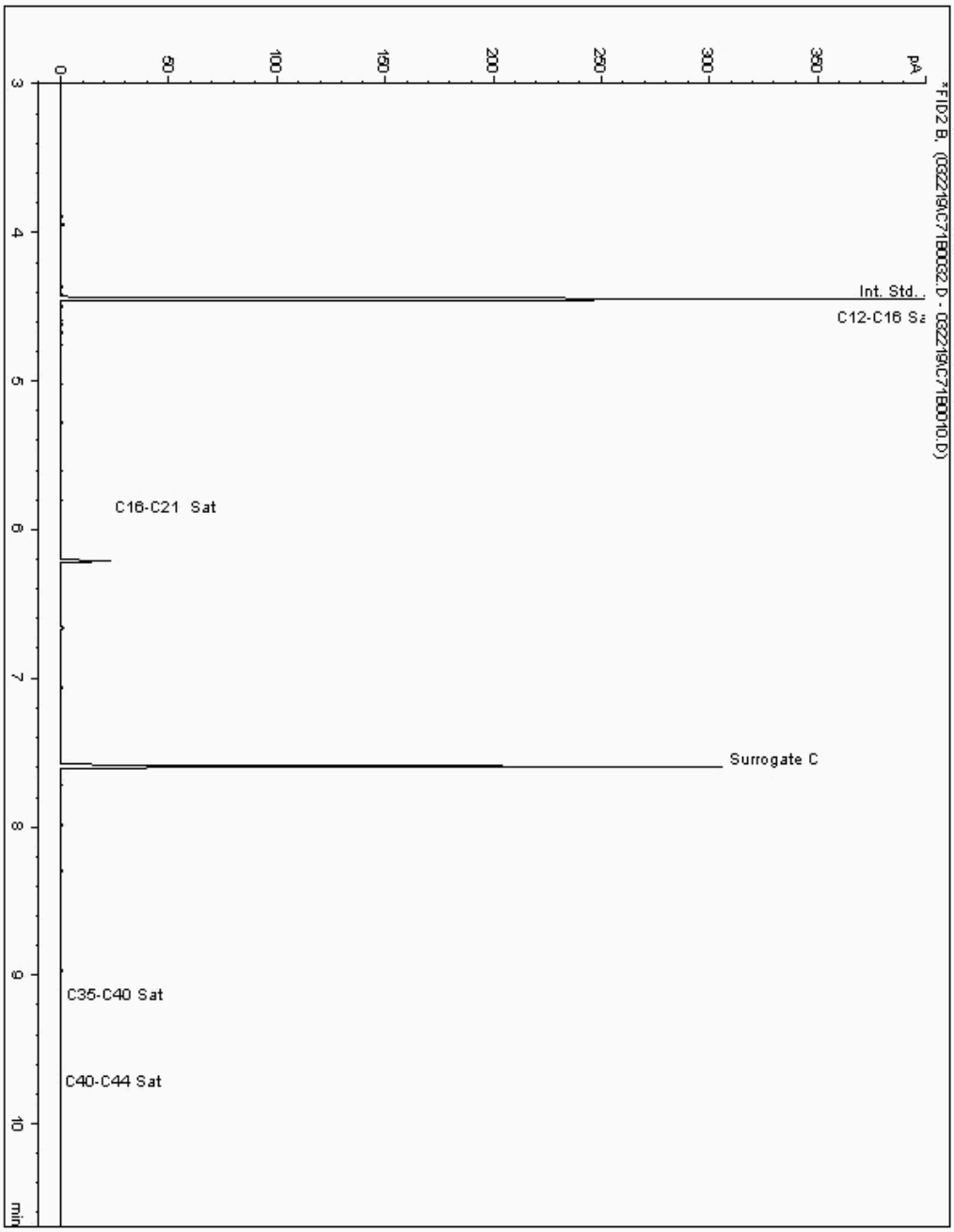
SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19573452 **Depth :** 1.00
Sample ID : TP17

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18388944-
Date Acquired : 22/03/2019 19:58:46 PM
Units : ppb
Dilution: TP17[1.00] ->



CERTIFICATE OF ANALYSIS

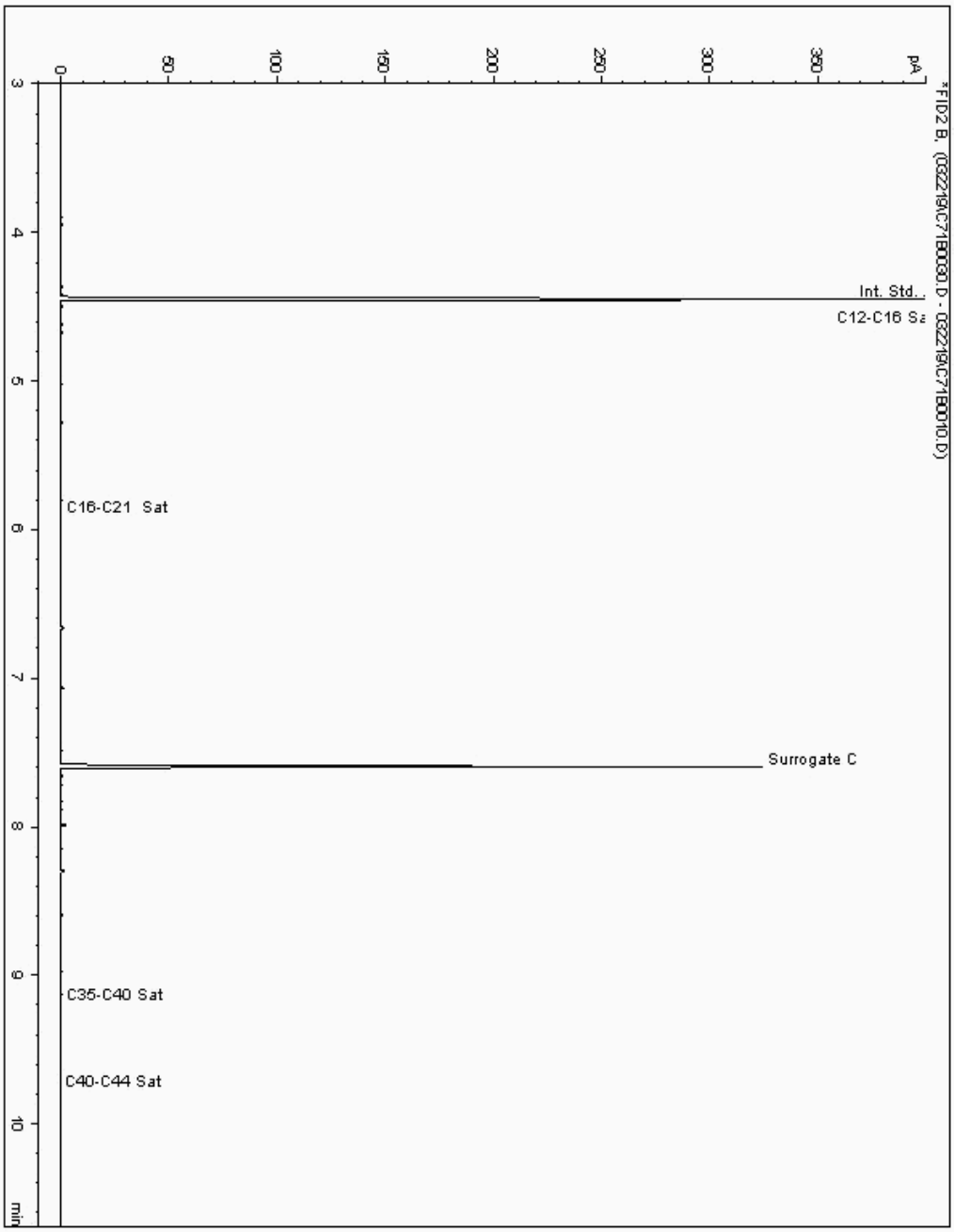
SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

Chromatogram

Analysis: EPH CWG (Aliphatic) GC (S) **Sample No :** 19573549 **Depth :** 0.10
Sample ID : TP17

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18388913-
Date Acquired : 22/03/2019 19:18:21 PM
Units : ppb
Dilution: TP17[0.10] ->



CERTIFICATE OF ANALYSIS

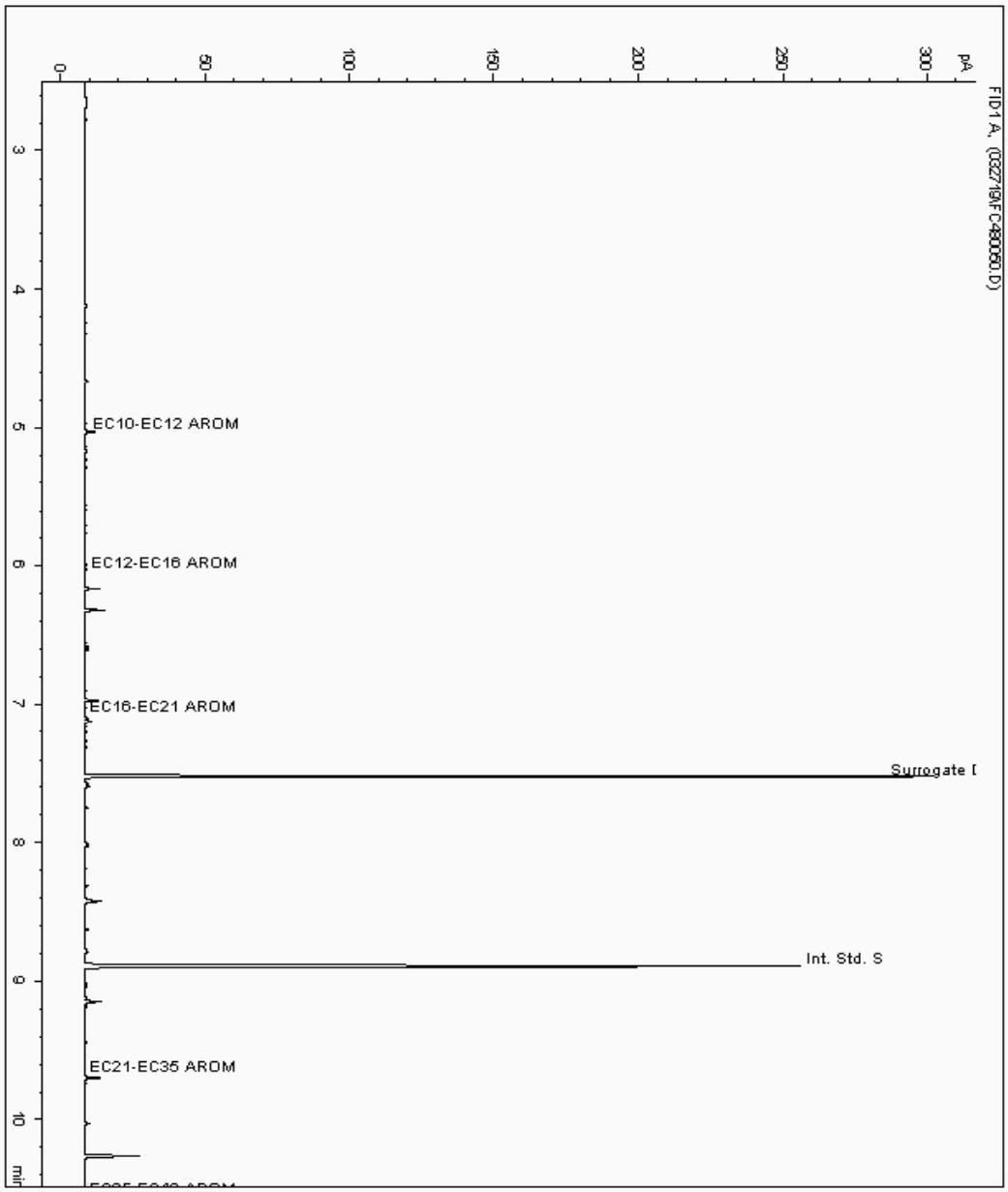
SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19619957 **Depth :** 1.00
Sample ID : TP17

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18416428-
Date Acquired : 28/03/2019 11:22:26 PM
Units : ppb
Dilution : TP17 [1.00] CEN 10 1 ->
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

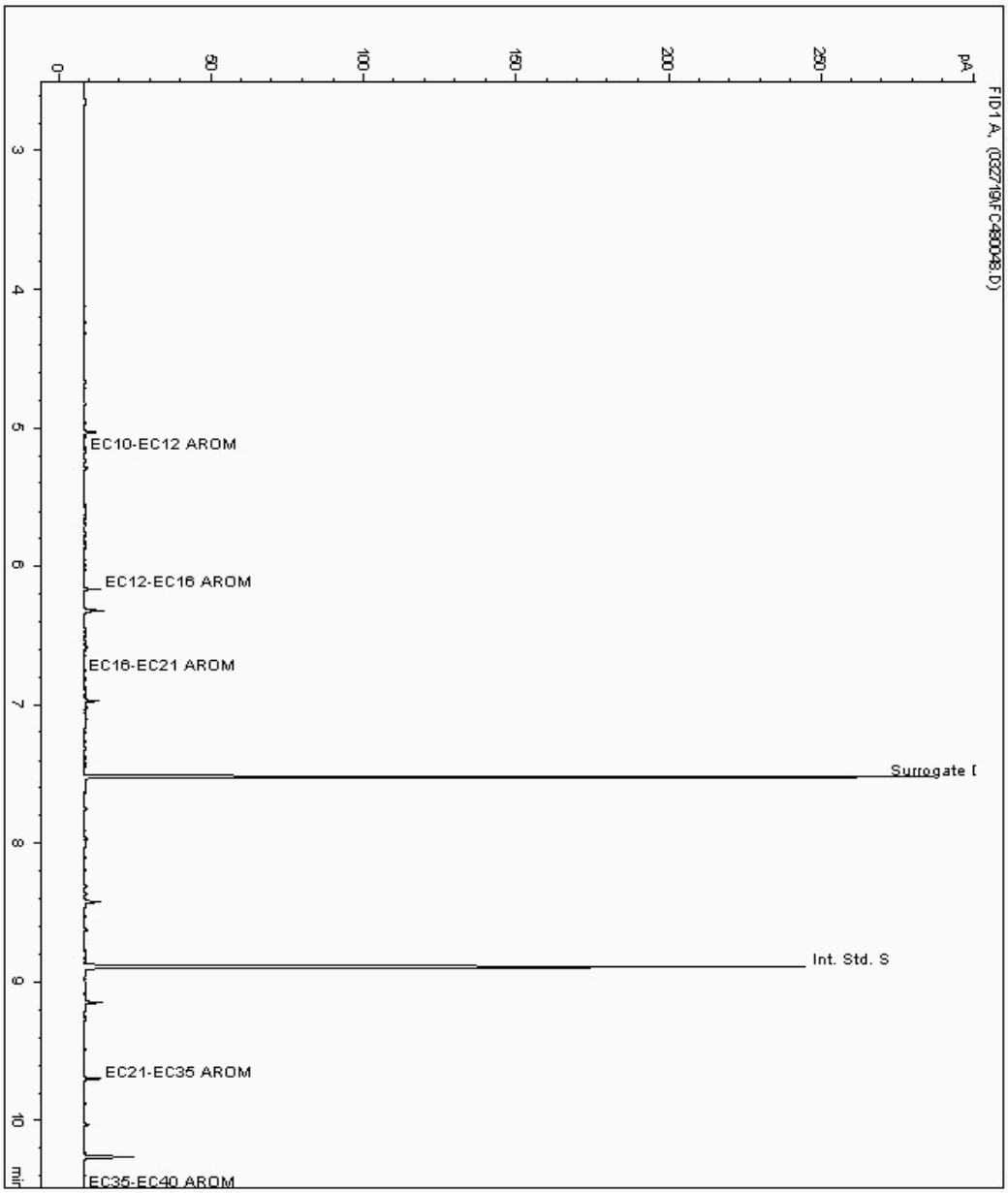
SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

Chromatogram

Analysis: EPH CWG (Aromatic) Filtered GC (W) **Sample No :** 19619976 **Depth :** 0.10
Sample ID : TP17

Alcontrol/Geochem Analytical Services
Speciated TPH - AROM (C12 - C40)

Sample Identity: 18416406-
Date Acquired : 28/03/2019 10:35:39 PM
Units : ppb
Dilution : TP17 [0.10] CEN 10 1 ->
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

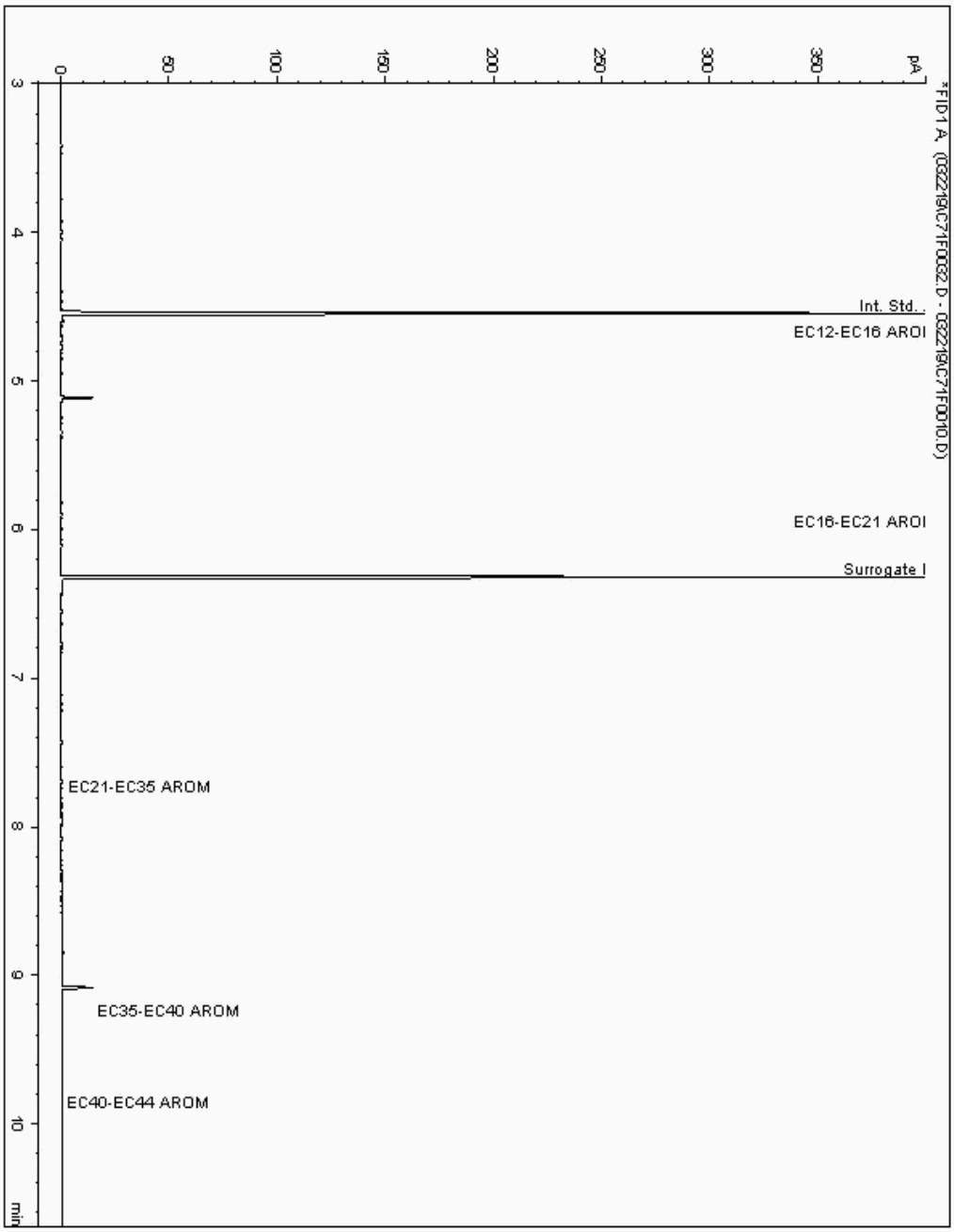
SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19573452 **Depth :** 1.00
Sample ID : TP17

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18388945-
Date Acquired : 22/03/2019 19:58:46 PM
Units : ppb
Dilution: TP17[1.00] ->



CERTIFICATE OF ANALYSIS

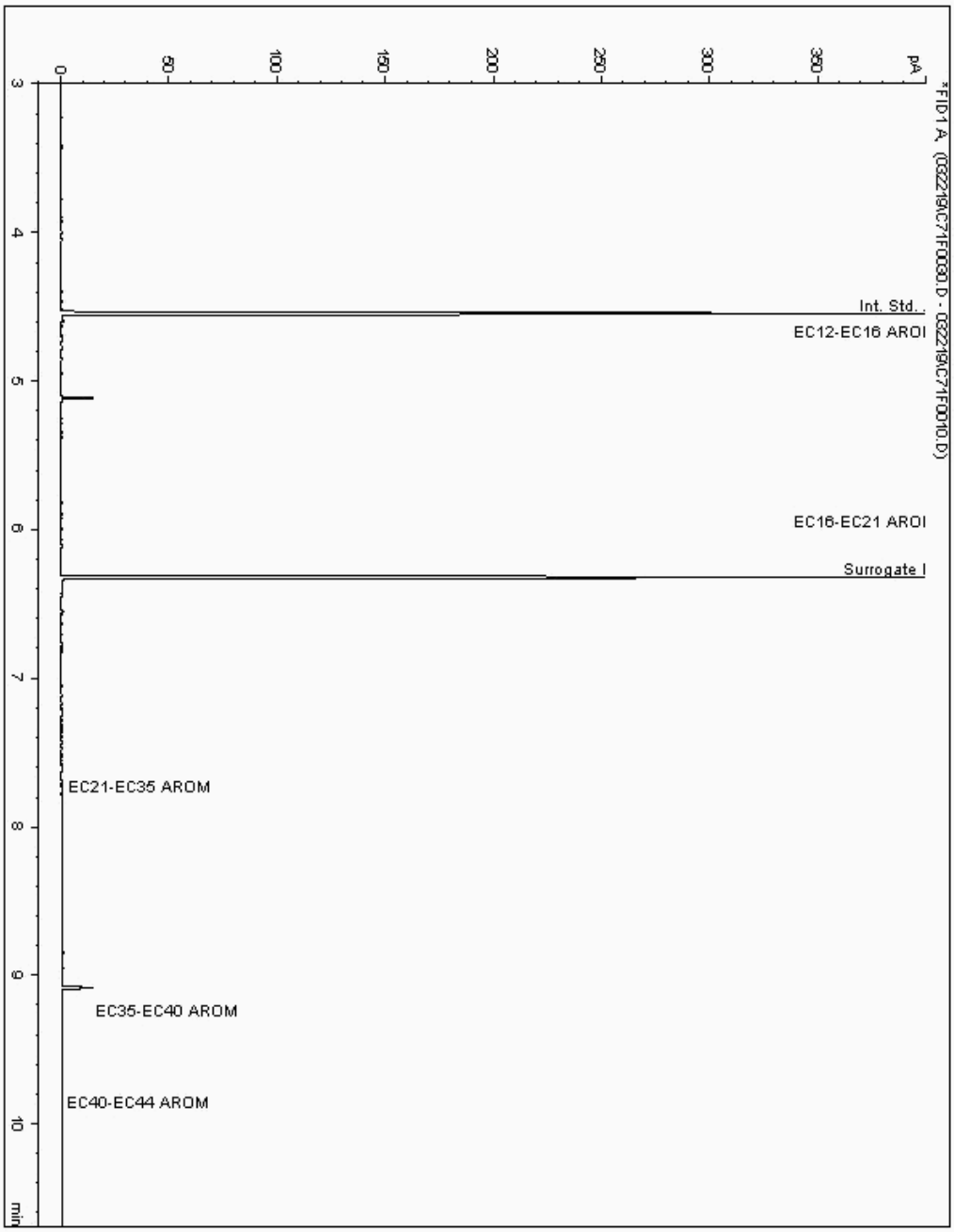
SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

Chromatogram

Analysis: EPH CWG (Aromatic) GC (S) **Sample No :** 19573549 **Depth :** 0.10
Sample ID : TP17

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18388914-
Date Acquired : 22/03/2019 19:18:21 PM
Units : ppb
Dilution: TP17[0.10] ->



CERTIFICATE OF ANALYSIS

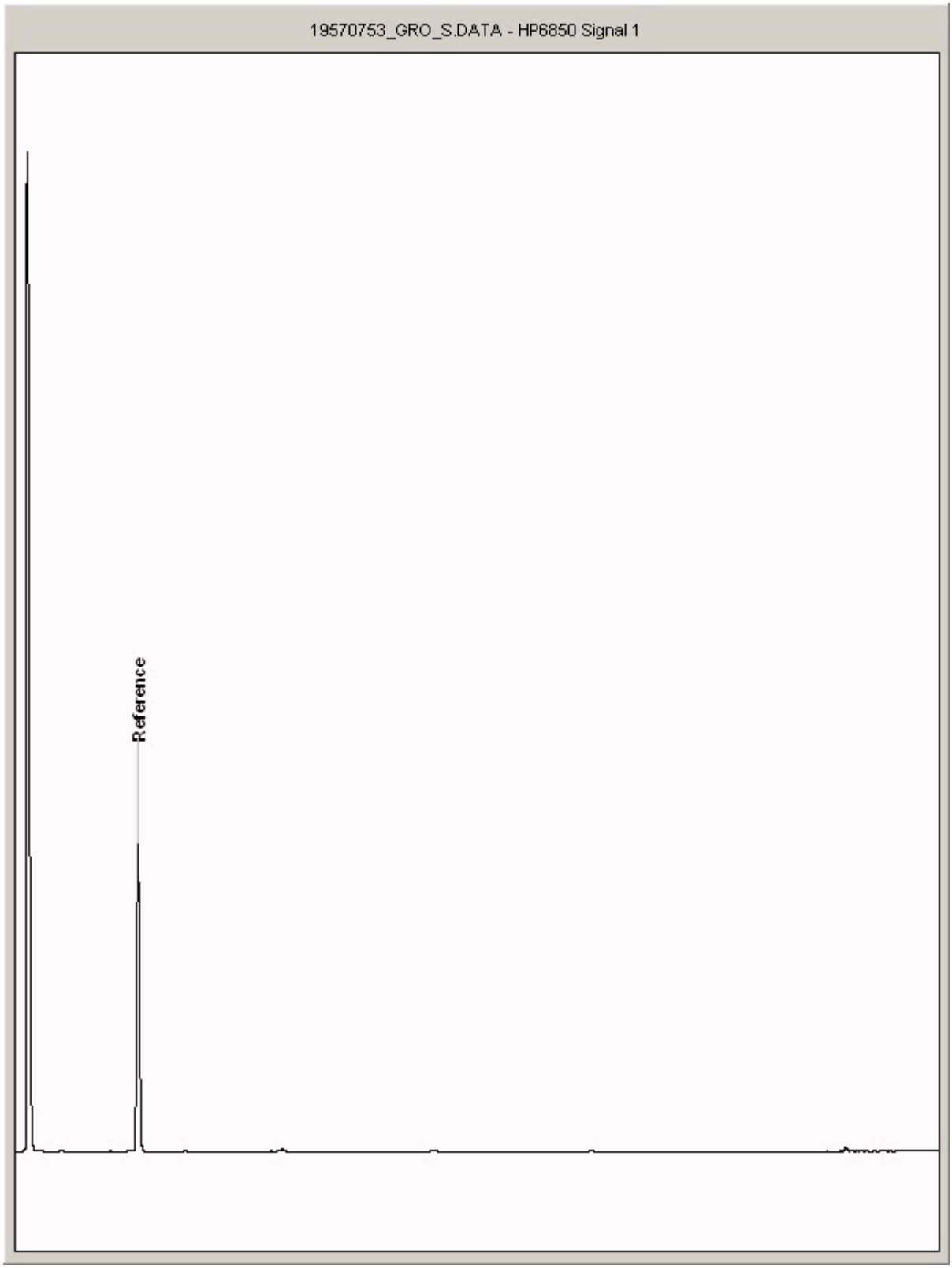
SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19570753
Sample ID : TP17

Depth : 0.10



CERTIFICATE OF ANALYSIS

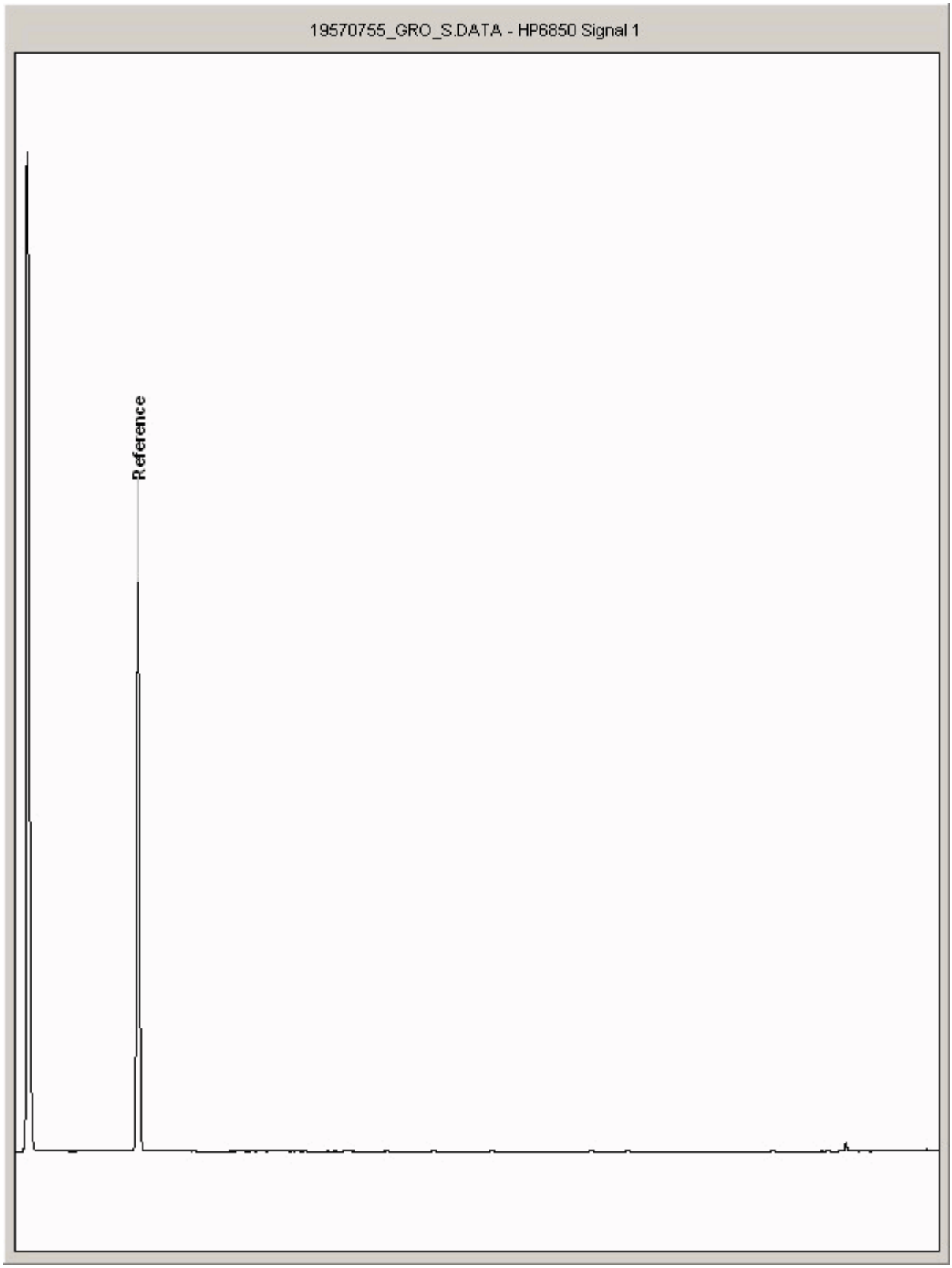
SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

Chromatogram

Analysis: GRO by GC-FID (S)

Sample No : 19570755
Sample ID : TP17

Depth : 1.00



CERTIFICATE OF ANALYSIS

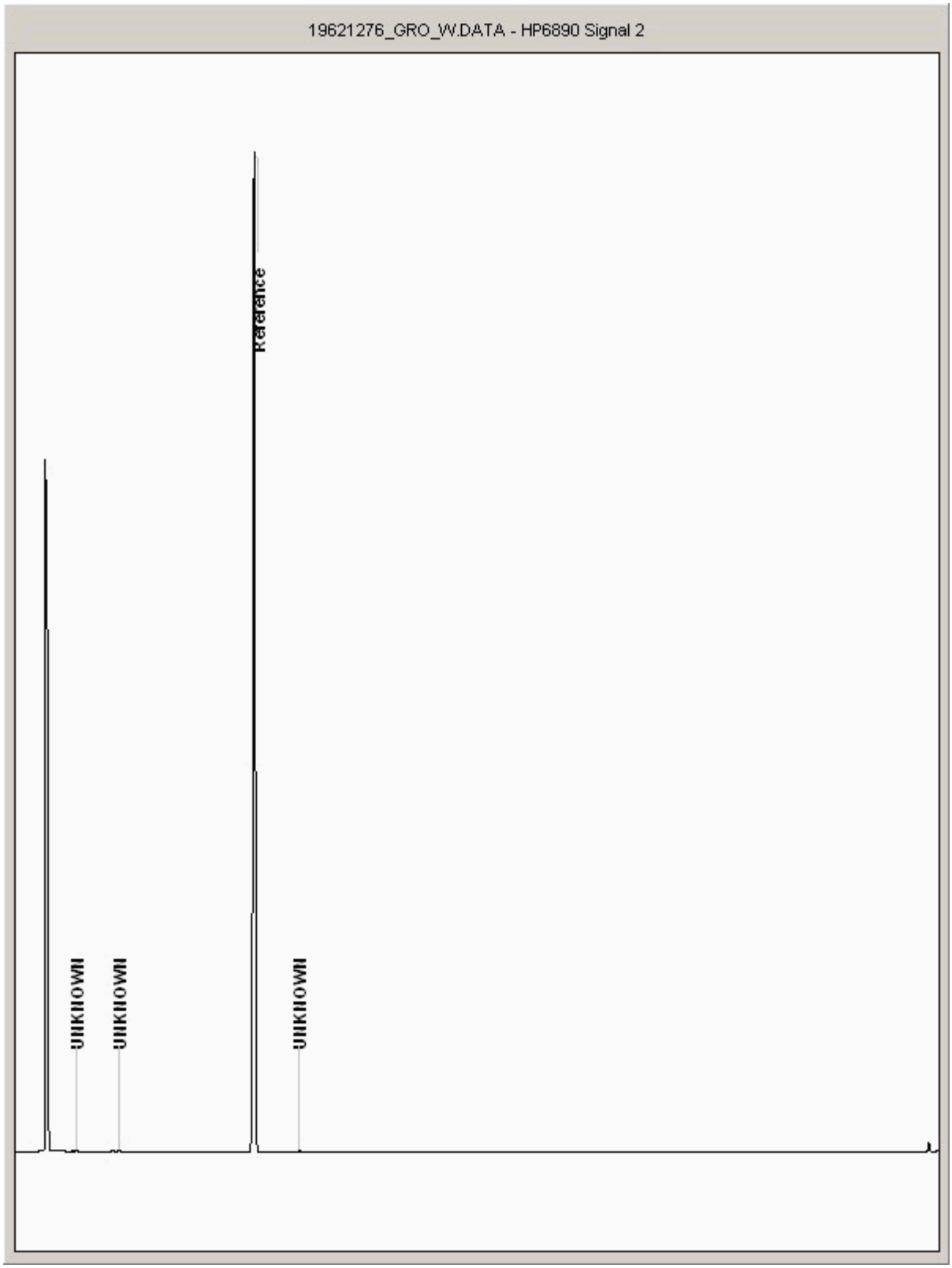
SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19621276
Sample ID : TP17

Depth : 1.00



CERTIFICATE OF ANALYSIS

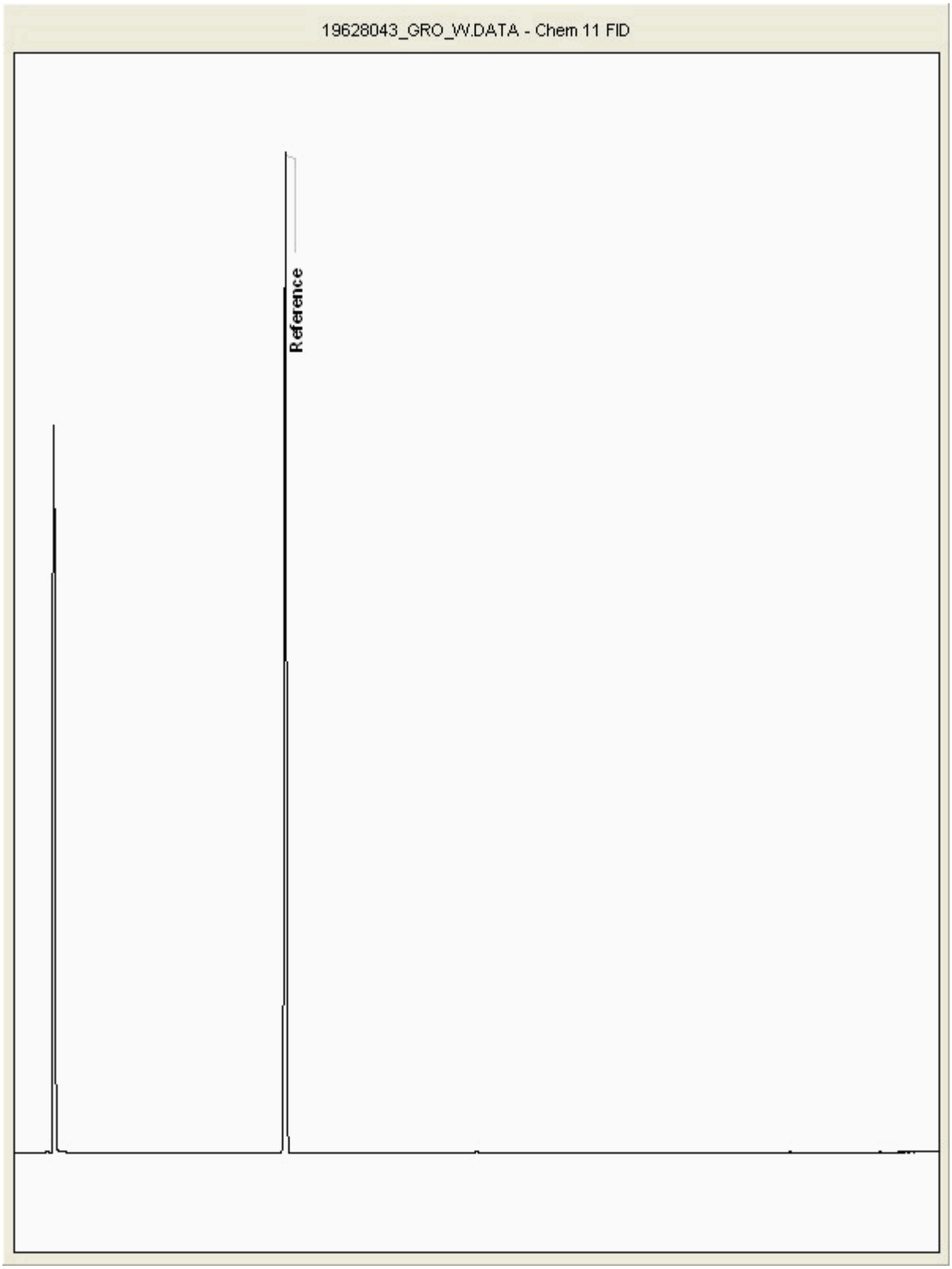
SDG:	190316-55	**Client Reference:**	A090070-474	**Report Number:**	499673
Location:	HE COMPTON	**Order Number:**	18/COMP061	**Superseded Report:**	499207

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19628043
Sample ID : TP17

Depth : 0.10



Appendix

General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. Samples will be run in duplicate upon request, but an additional charge may be incurred

3. If sufficient sample is received a sub sample will be retained free of charge for 30 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of one month after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

4. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

5. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

6. When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2005), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

7. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised. This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

8. If appropriate preserved bottles are not received preservation will take place on receipt. However, the integrity of the data may be compromised.

9. NDP - No determination possible due to insufficient/unsuitable sample.

10. Metals in water are performed on a filtered sample, and therefore represent dissolved metals - total metals must be requested separately.

11. Results relate only to the items tested.

12. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

13. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

14. **Product analyses** - Organic analyses on products can only be semi-quantitative due to the matrix effects and high dilution factors employed.

15. Phenols monohydric by HPLC include phenol, cresols (2-Methylphenol, 3-Methylphenol and 4-Methylphenol) and Xylenols (2,3 Dimethylphenol, 2,4 Dimethylphenol, 2,5 Dimethylphenol, 2,6 Dimethylphenol, 3,4 Dimethyphenol, 3,5 Dimethylphenol).

16. Total of 5 speciated phenols by HPLC includes Phenol, 2,3,5-Trimethyl Phenol, 2-Isopropylphenol, Cresols and Xylenols (as detailed in 15).

17. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

18. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

19. Mercury results quoted on soils will not include volatile mercury as the analysis is performed on a dried and crushed sample.

20. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

21. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis. The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

22. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

23. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l. Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only. It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

24. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjecte to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

Sample Deviations

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
§	**Sampled on date not provided**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**

Asbestos

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.

The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

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Attention: Regulation

CERTIFICATE OF ANALYSIS

Date of report Generation:	15 April 2019
Customer:	H_WYG_LON
Sample Delivery Group (SDG):	190405-72
Your Reference:	A090070-474
Location:	HE COMPTON
Report No:	501239

We received 4 samples on Thursday April 04, 2019 and 4 of these samples were scheduled for analysis which was completed on Monday April 15, 2019. Accredited laboratory tests are defined within the report, but opinions, interpretations and on-site data expressed herein are outside the scope of ISO 17025 accreditation.

Should this report require incorporation into client reports, it must be used in its entirety and not simply with the data sections alone.

Chemical testing (unless subcontracted) performed at ALS Environmental Hawarden (Method codes TM) or ALS Environmental Aberdeen (Method codes S).

All sample data is provided by the customer. The reported results relate to the sample supplied, and on the basis that this data is correct.
Incorrect sampling dates and/or sample information will affect the validity of results.
The customer is not permitted to reproduce this report except in full without the approval of the laboratory.

Approved By:
Regulation 13

Regulation 13
Operations Manager

ALS Life Sciences Limited. ALS Life Sciences Limited registered Office: Units 7 & 8 Hawarden Business Park, Manor Road, Hawarden, Deeside, CH5 3US. Registered in England and Wales No. 4057291.

CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
19709277	BH01			04/04/2019
19709278	BH02			04/04/2019
19709279	BH03			04/04/2019
19709280	BH04			04/04/2019

Maximum Sample/Coolbox Temperature (°C) : **5.8**

ISO5667-3 Water quality - Sampling - Part3 -
During Transportation samples shall be stored in a cooling device capable of maintaining a temperature of (5±3)°C.

ALS have data which show that a cool box with 4 frozen icepacks is capable of maintaining pre-chilled samples at a temperature of (5±3)°C for a period of up to 24hrs.

Only received samples which have had analysis scheduled will be shown on the following pages.

CERTIFICATE OF ANALYSIS

Validated

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

Lab Sample No(s)								19709277							19709278							19709279				19709280	
Customer Sample Reference								BH01							BH02							BH03				BH04	
AGS Reference																											
Depth (m)																											
Container								1000ml glass bottle (ALE220)	500ml Plastic (ALE208)	H2SO4 (ALE244)	HNO3 Filtered (ALE204)	NaOH (ALE245)	Vial (ALE297)	1000ml glass bottle (ALE220)	500ml Plastic (ALE208)	H2SO4 (ALE244)	HNO3 Filtered (ALE204)	NaOH (ALE245)	Vial (ALE297)	1000ml glass bottle (ALE220)	500ml Plastic (ALE208)	H2SO4 (ALE244)	HNO3 Filtered (ALE204)	NaOH (ALE245)	Vial (ALE297)	1000ml glass bottle (ALE220)	500ml Plastic (ALE208)
Sample Type								GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW	GW
Ammoniacal Nitrogen	All	NDPs: 0 Tests: 4								X						X						X					
Anions by Kone (w)	All	NDPs: 0 Tests: 4							X						X						X						X
Conductivity (at 20 deg.C)	All	NDPs: 0 Tests: 4							X						X						X						X
Cyanide Comp/Free/Total/Thiocyanate	All	NDPs: 0 Tests: 4						X								X						X					
Dissolved Metals by ICP-MS	All	NDPs: 0 Tests: 4					X									X						X					
EPH CWG (Aliphatic) Aqueous GC (W)	All	NDPs: 0 Tests: 4	X						X					X							X						X	
EPH CWG (Aromatic) Aqueous GC (W)	All	NDPs: 0 Tests: 4	X						X					X							X						X	
Fluoride	All	NDPs: 0 Tests: 4		X						X						X						X						X
GRO by GC-FID (W)	All	NDPs: 0 Tests: 4						X							X						X							
Low Level Phenols by HPLC (W)	All	NDPs: 0 Tests: 4			X						X						X						X					
Mercury Dissolved	All	NDPs: 0 Tests: 4				X						X						X										
PAH Spec MS - Aqueous (W)	All	NDPs: 0 Tests: 4	X						X					X							X						X	
PCB Congeners - Aqueous (W)	All	NDPs: 0 Tests: 4	X						X					X							X						X	
pH Value	All	NDPs: 0 Tests: 4		X						X						X						X						X
Phosphate by Kone (w)	All	NDPs: 0 Tests: 4		X						X						X						X						X

				19709280
				BH04
H2SO4 (ALE244)	HNO3 Filtered (ALE204)	NaOH (ALE245)	Vial (ALE297)	
GW	GW	GW	GW	
X				
		X		
	X			
			X	
X				
	X			

CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Results Legend

X Test

N No Determination Possible

Sample Types -
S - Soil/Solid
UNS - Unspecified Solid
GW - Ground Water
SW - Surface Water
LE - Land Leachate
PL - Prepared Leachate
PR - Process Water
SA - Saline Water
TE - Trade Effluent
TS - Treated Sewage
US - Untreated Sewage
RE - Recreational Water
DW - Drinking Water Non-regulatory
UNL - Unspecified Liquid
SL - Sludge
G - Gas
OTH - Other

			Lab Sample No(s)	Customer Sample Reference	AGS Reference	Depth (m)	Container	Sample Type
			19709277	BH01			1000ml glass bottle (ALE220)	GW
							500ml Plastic (ALE208)	GW
							H2SO4 (ALE244)	GW
							HNO3 Filtered (ALE204)	GW
							NaOH (ALE245)	GW
							Vial (ALE297)	GW
			19709278	BH02			1000ml glass bottle (ALE220)	GW
							500ml Plastic (ALE208)	GW
							H2SO4 (ALE244)	GW
							HNO3 Filtered (ALE204)	GW
							NaOH (ALE245)	GW
							Vial (ALE297)	GW
			19709279	BH03			1000ml glass bottle (ALE220)	GW
							500ml Plastic (ALE208)	GW
							H2SO4 (ALE244)	GW
							HNO3 Filtered (ALE204)	GW
							NaOH (ALE245)	GW
							Vial (ALE297)	GW
			19709280	BH04			1000ml glass bottle (ALE220)	GW
							500ml Plastic (ALE208)	GW
Sulphide	All	NDPs: 0 Tests: 4		X				X						X						X
SVOC MS (W) - Aqueous	All	NDPs: 0 Tests: 4	X						X						X						X	
Total Organic and Inorganic Carbon	All	NDPs: 0 Tests: 4			X						X						X					
TPH CWG (W)	All	NDPs: 0 Tests: 4	X						X						X						X	
VOC MS (W)	All	NDPs: 0 Tests: 4						X						X						X		

				19709280
				BH04
Vial (ALE297)	NaOH (ALE245)	HNO3 Filtered (ALE204)	H2SO4 (ALE244)	
GW	GW	GW	GW	
			X	
X				

Validated

CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH01	BH02	BH03	BH04		
			Depth (m)	.	.	.	.		
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)		
			Date Sampled	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			Sampled Time	.	.	.	.		
			Date Received	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			SDG Ref	190405-72	190405-72	190405-72	190405-72		
			Lab Sample No.(s)	19709277	19709278	19709279	19709280		
			AGS Reference						
Organic Carbon, Total	<3 mg/l	TM090		<3 #	<3 #	<3 #	<3 #		
Ammoniacal Nitrogen as N	<0.2 mg/l	TM099		0.257 #	<0.2 #	<0.2 #	<0.2 #		
Sulphide	<0.01 mg/l	TM101		<0.01 2 #	0.0332 2 #	<0.01 2 #	<0.01 2 #		
Fluoride	<0.5 mg/l	TM104		<0.5 #	<0.5 #	<0.5 #	<0.5 #		
Conductivity @ 20 deg.C	<0.005 mS/cm	TM120		0.454 #	0.481 #	0.504 #	0.526 #		
Arsenic (diss.filt)	<0.5 µg/l	TM152		0.515 #	<0.5 #	0.794 #	6.76 #		
Boron (diss.filt)	<10 µg/l	TM152		<10 #	<10 #	<10 #	<10 #		
Cadmium (diss.filt)	<0.08 µg/l	TM152		<0.08 #	<0.08 #	<0.08 #	<0.08 #		
Chromium (diss.filt)	<1 µg/l	TM152		11.5 #	10.8 #	11.6 #	10.3 #		
Copper (diss.filt)	<0.3 µg/l	TM152		1.88 #	1.13 #	0.777 #	1.18 #		
Lead (diss.filt)	<0.2 µg/l	TM152		<0.2 #	<0.2 #	0.307 #	<0.2 #		
Nickel (diss.filt)	<0.4 µg/l	TM152		1.04 #	0.61 #	1.05 #	2.51 #		
Selenium (diss.filt)	<1 µg/l	TM152		<1 #	<1 #	<1 #	<1 #		
Vanadium (diss.filt)	<1 µg/l	TM152		<1 #	<1 #	<1 #	<1 #		
Zinc (diss.filt)	<1 µg/l	TM152		4.97 #	1.72 #	4.81 #	3.64 #		
Mercury (diss.filt)	<0.01 µg/l	TM183		<0.01 #	<0.01 #	<0.01 #	<0.01 #		
Phosphate (Ortho as PO4)	<0.05 mg/l	TM184		<0.05 #	<0.05 #	<0.05 #	<0.05 #		
Sulphate	<2 mg/l	TM184		11.9 #	10.1 #	16.3 #	21.8 #		
Chloride	<2 mg/l	TM184		19.1 #	18 #	19.9 #	24.7 #		
Nitrate as NO3	<0.3 mg/l	TM184		42.6	48	52.1	42.5		
PCB congener 28	<0.015 µg/l	TM197		<0.015	<0.015	<0.015	<0.015		
PCB congener 52	<0.015 µg/l	TM197		<0.015	<0.015	<0.015	<0.015		
PCB congener 101	<0.015 µg/l	TM197		<0.015	<0.015	<0.015	<0.015		
PCB congener 118	<0.015 µg/l	TM197		<0.015	<0.015	<0.015	<0.015		
PCB congener 138	<0.015 µg/l	TM197		<0.015	<0.015	<0.015	<0.015		
PCB congener 153	<0.015 µg/l	TM197		<0.015	<0.015	<0.015	<0.015		
PCB congener 180	<0.015 µg/l	TM197		<0.015	<0.015	<0.015	<0.015		
Sum of detected EC7 PCB's	<0.105 µg/l	TM197		<0.105	<0.105	<0.105	<0.105		
Cyanide, Total	<0.05 mg/l	TM227		<0.05 #	<0.05 #	<0.05 #	<0.05 #		
Resorcinol (low level)	<0.5 µg/l	TM255		<0.5	<0.5	<0.5	<0.5		
Catechol (low level)	<0.5 µg/l	TM255		<0.5	<0.5	<0.5	<0.5		
Phenol (low level)	<0.5 µg/l	TM255		<0.5	<0.5	<0.5	<0.5		

Validated

CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH01	BH02	BH03	BH04		
			Depth (m)	-	-	-	-		
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)		
			Date Sampled	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			Sampled Time	-	-	-	-		
			Date Received	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			SDG Ref	190405-72	190405-72	190405-72	190405-72		
			Lab Sample No.(s)	19709277	19709278	19709279	19709280		
			AGS Reference						
Cresols (low level)	<0.5 µg/l	TM255		<0.5	<0.5	<0.5	<0.5		
Xylenols (low level)	<0.5 µg/l	TM255		<0.5	<0.5	<0.5	<0.5		
1-Naphthol (low level)	<0.5 µg/l	TM255		<0.5	<0.5	<0.5	<0.5		
2,3,5-Trimethylphenol (low level)	<0.5 µg/l	TM255		<0.5	<0.5	<0.5	<0.5		
2-Isopropylphenol (low level)	<0.5 µg/l	TM255		<0.5	<0.5	<0.5	<0.5		
pH	<1 pH Units	TM256		7.7 #	7.66 #	7.62 #	7.53 #		

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PAH Spec MS - Aqueous (W)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH01	BH02	BH03	BH04		
			Depth (m)	.	.	.	.		
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)		
			Date Sampled	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			Sampled Time	.	.	.	.		
			Date Received	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			SDG Ref	190405-72	190405-72	190405-72	190405-72		
			Lab Sample No.(s)	19709277	19709278	19709279	19709280		
			AGS Reference						
Naphthalene (aq)	<0.01 µg/l	TM178		<0.01 #	<0.01 #	<0.01 #	<0.01 #		
Acenaphthene (aq)	<0.005 µg/l	TM178		<0.005 #	<0.005 #	<0.005 #	<0.005 #		
Acenaphthylene (aq)	<0.005 µg/l	TM178		<0.005 #	<0.005 #	<0.005 #	<0.005 #		
Fluoranthene (aq)	<0.005 µg/l	TM178		0.0104 #	0.00971 #	0.0336 #	0.0136 #		
Anthracene (aq)	<0.005 µg/l	TM178		<0.005 #	<0.005 #	<0.005 #	<0.005 #		
Phenanthrene (aq)	<0.005 µg/l	TM178		<0.005 #	<0.005 #	0.0109 #	<0.005 #		
Fluorene (aq)	<0.005 µg/l	TM178		<0.005 #	<0.005 #	<0.005 #	<0.005 #		
Chrysene (aq)	<0.005 µg/l	TM178		<0.005 #	<0.005 #	0.0161 #	<0.005 #		
Pyrene (aq)	<0.005 µg/l	TM178		0.012 #	0.0155 #	0.0393 #	0.0204 #		
Benzo(a)anthracene (aq)	<0.005 µg/l	TM178		<0.005 #	<0.005 #	0.0132 #	<0.005 #		
Benzo(b)fluoranthene (aq)	<0.005 µg/l	TM178		0.00762 #	0.0118 #	0.0274 #	0.0123 #		
Benzo(k)fluoranthene (aq)	<0.005 µg/l	TM178		<0.005 #	0.00503 #	0.0108 #	0.00577 #		
Benzo(a)pyrene (aq)	<0.002 µg/l	TM178		0.00551 #	0.00835 #	0.0197 #	0.00972 #		
Dibenzo(a,h)anthracene (aq)	<0.005 µg/l	TM178		<0.005 #	<0.005 #	<0.005 #	<0.005 #		
Benzo(g,h,i)perylene (aq)	<0.005 µg/l	TM178		<0.005 #	<0.005 #	<0.005 #	<0.005 #		
Indeno(1,2,3-cd)pyrene (aq)	<0.005 µg/l	TM178		<0.005 #	<0.005 #	0.0117 #	<0.005 #		
PAH, Total Detected USEPA 16 (aq)	<0.082 µg/l	TM178		<0.082 #	<0.082 #	0.183 #	<0.082 #		

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SVOC MS (W) - Aqueous

Results Legend

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**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH01	BH02	BH03	BH04		
			Depth (m)	.	.	.	.		
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)		
			Date Sampled	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			Sampled Time	.	.	.	.		
			Date Received	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			SDG Ref	190405-72	190405-72	190405-72	190405-72		
			Lab Sample No.(s)	19709277	19709278	19709279	19709280		
			AGS Reference						
1,2,4-Trichlorobenzene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
1,2-Dichlorobenzene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
1,3-Dichlorobenzene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
1,4-Dichlorobenzene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
2,4,5-Trichlorophenol (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
2,4,6-Trichlorophenol (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
2,4-Dichlorophenol (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
2,4-Dimethylphenol (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
2,4-Dinitrotoluene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
2,6-Dinitrotoluene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
2-Chloronaphthalene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
2-Chlorophenol (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
2-Methylnaphthalene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
2-Methylphenol (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
2-Nitroaniline (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
2-Nitrophenol (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
3-Nitroaniline (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
4-Bromophenylphenylether (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
4-Chloro-3-methylphenol (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
4-Chloroaniline (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
4-Chlorophenylphenylether (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
4-Methylphenol (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
4-Nitroaniline (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
4-Nitrophenol (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
Azobenzene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
bis(2-Chloroethyl)ether (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
bis(2-Chloroethoxy)methane (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
bis(2-Ethylhexyl) phthalate (aq)	<2 µg/l	TM176		2.93 #	<2 #	3.21 #	<2 #		
Butylbenzyl phthalate (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
Carbazole (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
Dibenzofuran (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
n-Dibutyl phthalate (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		

CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

SVOC MS (W) - Aqueous

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH01	BH02	BH03	BH04		
			Depth (m)	-	-	-	-		
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)		
			Date Sampled	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			Sampled Time	-	-	-	-		
			Date Received	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			SDG Ref	190405-72	190405-72	190405-72	190405-72		
			Lab Sample No.(s)	19709277	19709278	19709279	19709280		
			AGS Reference						
Diethyl phthalate (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
Dimethyl phthalate (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
n-Dioctyl phthalate (aq)	<5 µg/l	TM176		<5 #	<5 #	<5 #	<5 #		
Hexachlorobenzene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
Hexachlorobutadiene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
Pentachlorophenol (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
Phenol (aq)	<1 µg/l	TM176		<1	<1	<1	<1		
n-Nitroso-n-dipropylamine (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
Hexachloroethane (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
Nitrobenzene (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
Isophorone (aq)	<1 µg/l	TM176		<1 #	<1 #	<1 #	<1 #		
Hexachlorocyclopentadiene (aq)	<1 µg/l	TM176		<1	<1	<1	<1		

CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

TPH CWG (W)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH01	BH02	BH03	BH04		
			Depth (m)	.	.	.	.		
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)		
			Date Sampled	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			Sampled Time	.	.	.	.		
			Date Received	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			SDG Ref	190405-72	190405-72	190405-72	190405-72		
			Lab Sample No.(s)	19709277	19709278	19709279	19709280		
			AGS Reference						
GRO Surrogate % recovery**	%	TM245		113	111	109	116 1		
GRO >C5-C12	<50 µg/l	TM245		<50 #	<50 #	<50 #	<50 1 #		
Methyl tertiary butyl ether (MTBE)	<3 µg/l	TM245		<3	<3	<3	<3 1		
Benzene	<7 µg/l	TM245		<7	<7	<7	<7 1		
Toluene	<4 µg/l	TM245		<4	<4	<4	<4 1		
Ethylbenzene	<5 µg/l	TM245		<5	<5	<5	<5 1		
m,p-Xylene	<8 µg/l	TM245		<8	<8	<8	<8 1		
o-Xylene	<3 µg/l	TM245		<3	<3	<3	<3 1		
Sum of detected Xylenes	<11 µg/l	TM245		<11	<11	<11	<11 1		
Sum of detected BTEX	<28 µg/l	TM245		<28	<28	<28	<28 1		
Aliphatics >C5-C6	<10 µg/l	TM245		<10	<10	<10	<10 1		
Aliphatics >C6-C8	<10 µg/l	TM245		<10	<10	<10	<10 1		
Aliphatics >C8-C10	<10 µg/l	TM245		<10	<10	<10	<10 1		
Aliphatics >C10-C12	<10 µg/l	TM245		<10	<10	<10	<10 1		
Aliphatics >C12-C16 (aq)	<10 µg/l	TM174		<10	<10	<10	<10		
Aliphatics >C16-C21 (aq)	<10 µg/l	TM174		<10	<10	15	<10		
Aliphatics >C21-C35 (aq)	<10 µg/l	TM174		39	59	87	38		
Total Aliphatics >C12-C35 (aq)	<10 µg/l	TM174		39	59	102	38		
Aromatics >EC5-EC7	<10 µg/l	TM245		<10	<10	<10	<10 1		
Aromatics >EC7-EC8	<10 µg/l	TM245		<10	<10	<10	<10 1		
Aromatics >EC8-EC10	<10 µg/l	TM245		<10	<10	<10	<10 1		
Aromatics >EC10-EC12	<10 µg/l	TM245		<10	<10	<10	<10 1		
Aromatics >EC12-EC16 (aq)	<10 µg/l	TM174		<10	<10	<10	<10		
Aromatics >EC16-EC21 (aq)	<10 µg/l	TM174		<10	<10	<10	<10		
Aromatics >EC21-EC35 (aq)	<10 µg/l	TM174		<10	<10	34	12		
Total Aromatics >EC12-EC35 (aq)	<10 µg/l	TM174		<10	<10	34	12		
Total Aliphatics & Aromatics >C5-35 (aq)	<10 µg/l	TM174		39	59	136	50		
Aliphatics >C16-C35 Aqueous	<10 µg/l	TM174		39	59	102	38		

CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

VOC MS (W)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+5@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH01	BH02	BH03	BH04		
			Depth (m)	.	.	.	.		
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)		
			Date Sampled	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			Sampled Time	.	.	.	.		
			Date Received	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			SDG Ref	190405-72	190405-72	190405-72	190405-72		
			Lab Sample No.(s)	19709277	19709278	19709279	19709280		
			AGS Reference						
Dibromofluoromethane**	%	TM208		111	109	108	109		
Toluene-d8**	%	TM208		99.3	99.1	99.4	100		
4-Bromofluorobenzene**	%	TM208		97.8	100	99.8	99.9		
Dichlorodifluoromethane	<1 µg/l	TM208		<1	<1	<1	<1		
Chloromethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Vinyl chloride	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Bromomethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Chloroethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Trichlorofluoromethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,1-Dichloroethene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Carbon disulphide	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Dichloromethane	<3 µg/l	TM208		<3 #	<3 #	<3 #	<3 #		
Methyl tertiary butyl ether (MTBE)	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
trans-1,2-Dichloroethene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,1-Dichloroethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
cis-1,2-Dichloroethene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
2,2-Dichloropropane	<1 µg/l	TM208		<1	<1	<1	<1		
Bromochloromethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Chloroform	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,1,1-Trichloroethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,1-Dichloropropene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Carbontetrachloride	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,2-Dichloroethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Benzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Trichloroethene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,2-Dichloropropane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Dibromomethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Bromodichloromethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
cis-1,3-Dichloropropene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Toluene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
trans-1,3-Dichloropropene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,1,2-Trichloroethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		

CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

VOC MS (W)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH01	BH02	BH03	BH04		
			Depth (m)	-	-	-	-		
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)		
			Date Sampled	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			Sampled Time	-	-	-	-		
			Date Received	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			SDG Ref	190405-72	190405-72	190405-72	190405-72		
			Lab Sample No.(s)	19709277	19709278	19709279	19709280		
			AGS Reference						
1,3-Dichloropropane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Tetrachloroethene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Dibromochloromethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,2-Dibromoethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Chlorobenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,1,1,2-Tetrachloroethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Ethylbenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
m,p-Xylene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
o-Xylene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Styrene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Bromoform	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Isopropylbenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,1,2,2-Tetrachloroethane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,2,3-Trichloropropane	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Bromobenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Propylbenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
2-Chlorotoluene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,3,5-Trimethylbenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
4-Chlorotoluene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
tert-Butylbenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,2,4-Trimethylbenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
sec-Butylbenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
4-iso-Propyltoluene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,3-Dichlorobenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,4-Dichlorobenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
n-Butylbenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,2-Dichlorobenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,2-Dibromo-3-chloropropane	<1 µg/l	TM208		<1	<1	<1	<1		
1,2,4-Trichlorobenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Hexachlorobutadiene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
tert-Amyl methyl ether (TAME)	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
Naphthalene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		

Validated

CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

VOC MS (W)

Results Legend

#	ISO17025 accredited.
M	*m*CERTS accredited.
aq	Aqueous / settled sample.
diss.filt	Dissolved / filtered sample.
tot.unfilt	Total / unfiltered sample.
*	Subcontracted - refer to subcontractor report for accreditation status.
**	% recovery of the surrogate standard to check the efficiency of the method. The results of individual compounds within samples aren't corrected for the recovery
(F)	Trigger breach confirmed
1-3+§@	Sample deviation (see appendix)

Component	LOD/Units	Method	Customer Sample Ref.	BH01	BH02	BH03	BH04		
			Depth (m)	.	.	.	.		
			Sample Type	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)	Ground Water (GW)		
			Date Sampled	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			Sampled Time	.	.	.	.		
			Date Received	04/04/2019	04/04/2019	04/04/2019	04/04/2019		
			SDG Ref	190405-72	190405-72	190405-72	190405-72		
			Lab Sample No.(s)	19709277	19709278	19709279	19709280		
			AGS Reference						
1,2,3-Trichlorobenzene	<1 µg/l	TM208		<1 #	<1 #	<1 #	<1 #		
1,3,5-Trichlorobenzene	<1 µg/l	TM208		<1	<1	<1	<1		
Sum of detected Xylenes	<2 µg/l	TM208		<2	<2	<2	<2		

CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Table of Results - Appendix

Method No	Reference	Description
TM061	Method for the Determination of EPH,Massachusetts Dept.of EP, 1998	Determination of Extractable Petroleum Hydrocarbons by GC-FID (C10-C40)
TM090	Method 5310, AWWA/APHA, 20th Ed., 1999 / Modified: US EPA Method 415.1 & 9060	Determination of Total Organic Carbon/Total Inorganic Carbon in Water and Waste Water
TM099	BS 2690: Part 7:1968 / BS 6068: Part2.11:1984	Determination of Ammonium in Water Samples using the Kone Analyser
TM101	Method 4500B & C, AWWA/APHA, 20th Ed., 1999	Determination of Sulphide in soil and water samples using the Kone Analyser
TM104	Method 4500F, AWWA/APHA, 20th Ed., 1999	Determination of Fluoride using the Kone Analyser
TM120	Method 2510B, AWWA/APHA, 20th Ed., 1999 / BS 2690: Part 9:1970	Determination of Electrical Conductivity using a Conductivity Meter
TM152	Method 3125B, AWWA/APHA, 20th Ed., 1999	Analysis of Aqueous Samples by ICP-MS
TM174	Analysis of Petroleum Hydrocarbons in Environmental Media – Total Petroleum Hydrocarbon Criteria	Determination of Speciated Extractable Petroleum Hydrocarbons in Waters by GC-FID
TM176	EPA 8270D Semi-Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)	Determination of SVOCs in Water by GCMS
TM178	Modified: US EPA Method 8100	Determination of Polynuclear Aromatic Hydrocarbons (PAH) by GC-MS in Waters
TM183	BS EN 23506:2002, (BS 6068-2.74:2002) ISBN 0 580 38924 3	Determination of Trace Level Mercury in Waters and Leachates by PSA Cold Vapour Atomic Fluorescence Spectrometry
TM184	EPA Methods 325.1 & 325.2,	The Determination of Anions in Aqueous Matrices using the Kone Spectrophotometric Analysers
TM197	Modified: US EPA Method 8082.EA Method 174 and 5109631	Determination of WHO12 and EC7 Polychlorinated Biphenyl Congeners by GC-MS in Waters
TM208	Modified: US EPA Method 8260b & 624	Determination of Volatile Organic Compounds by Headspace / GC-MS in Waters
TM227	Standard methods for the examination of waters and wastewaters 20th Edition, AWWA/APHA Method 4500.	Determination of Total Cyanide, Free (Easily Liberatable) Cyanide and Thiocyanate
TM245	By GC-FID	Determination of GRO by Headspace in waters
TM255		Determination of Low Level Phenols in Waters and Leachates by HPLC
TM256	The measurement of Electrical Conductivity and the Laboratory determination of pH Value of Natural, Treated and Wastewaters. HMSO, 1978. ISBN 011 751428 4.	Determination of pH in Water and Leachate using the GLpH pH Meter

NA = not applicable.

Chemical testing (unless subcontracted) performed at ALS Environmental Hawarden (Method codes TM) or ALS Environmental Aberdeen (Method codes S).

CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Test Completion Dates

Lab Sample No(s)	19709277	19709278	19709279	19709280
Customer Sample Ref.	BH01	BH02	BH03	BH04
AGS Ref.				
Depth				
Type	Ground Water	Ground Water	Ground Water	Ground Water
Ammoniacal Nitrogen	08-Apr-2019	08-Apr-2019	08-Apr-2019	08-Apr-2019
Anions by Kone (w)	12-Apr-2019	11-Apr-2019	12-Apr-2019	12-Apr-2019
Conductivity (at 20 deg.C)	09-Apr-2019	10-Apr-2019	10-Apr-2019	10-Apr-2019
Cyanide Comp/Free/Total/Thiocyanate	10-Apr-2019	10-Apr-2019	10-Apr-2019	10-Apr-2019
Dissolved Metals by ICP-MS	12-Apr-2019	12-Apr-2019	12-Apr-2019	12-Apr-2019
EPH CWG (Aliphatic) Aqueous GC (W)	12-Apr-2019	12-Apr-2019	12-Apr-2019	12-Apr-2019
EPH CWG (Aromatic) Aqueous GC (W)	12-Apr-2019	12-Apr-2019	12-Apr-2019	12-Apr-2019
Fluoride	09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019
GRO by GC-FID (W)	12-Apr-2019	12-Apr-2019	12-Apr-2019	12-Apr-2019
Low Level Phenols by HPLC (W)	15-Apr-2019	15-Apr-2019	15-Apr-2019	15-Apr-2019
Mercury Dissolved	11-Apr-2019	10-Apr-2019	10-Apr-2019	10-Apr-2019
Nitrite by Kone (w)	09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019
PAH Spec MS - Aqueous (W)	11-Apr-2019	11-Apr-2019	11-Apr-2019	11-Apr-2019
PCB Congeners - Aqueous (W)	12-Apr-2019	12-Apr-2019	12-Apr-2019	12-Apr-2019
pH Value	10-Apr-2019	11-Apr-2019	10-Apr-2019	10-Apr-2019
Phosphate by Kone (w)	09-Apr-2019	09-Apr-2019	09-Apr-2019	09-Apr-2019
Sulphide	10-Apr-2019	10-Apr-2019	10-Apr-2019	10-Apr-2019
SVOC MS (W) - Aqueous	11-Apr-2019	11-Apr-2019	11-Apr-2019	11-Apr-2019
Total Organic and Inorganic Carbon	12-Apr-2019	10-Apr-2019	12-Apr-2019	10-Apr-2019
TPH CWG (W)	12-Apr-2019	12-Apr-2019	12-Apr-2019	12-Apr-2019
VOC MS (W)	11-Apr-2019	11-Apr-2019	11-Apr-2019	11-Apr-2019

ASSOCIATED AQC DATA

Ammoniacal Nitrogen

Component	Method Code	QC 1987
Ammoniacal Nitrogen as N	TM099	**101.6** 93.14 : 108.60

Anions by Kone (w)

Component	Method Code	QC 1990	QC 1939	QC 1939
Chloride	TM184	**100.0** 94.04 : 108.61	**106.0** 92.93 : 115.43	**107.0** 92.93 : 115.43
Phosphate (Ortho as PO4)	TM184	 95.74 : 105.80	 96.40 : 108.40	 96.40 : 108.40
Sulphate (soluble)	TM184	**101.2** 96.38 : 107.58	**99.6** 90.53 : 113.03	**101.2** 90.53 : 113.03
TON as NO3	TM184	**104.0** 92.98 : 109.90	**104.5** 96.26 : 111.21	**104.5** 96.26 : 111.21

Conductivity (at 20 deg.C)

Component	Method Code	QC 1906	QC 1923
Conductivity (at 20 deg.C)	TM120	**103.76** 100.75 : 105.26	**103.76** 100.75 : 105.26

Cyanide Comp/Free/Total/Thiocyanate

Component	Method Code	QC 1950	QC 1971
Free Cyanide (W)	TM227	**98.25** 93.25 : 112.75	**101.0** 93.25 : 112.75
Thiocyanate (W)	TM227	**104.5** 96.25 : 111.25	**105.25** 96.25 : 111.25
Total Cyanide (W)	TM227	**99.5** 92.25 : 111.75	**101.0** 92.25 : 111.75

Dissolved Metals by ICP-MS

Component	Method Code	QC 1913
Aluminium	TM152	**101.0** 94.19 : 114.31
Antimony	TM152	**107.33** 79.80 : 122.00
Arsenic	TM152	**102.33** 90.42 : 111.32
Barium	TM152	**104.5** 90.79 : 113.16
Beryllium	TM152	**100.17** 93.25 : 120.04
Bismuth	TM152	**106.17** 94.65 : 117.05

CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Dissolved Metals by ICP-MS

		QC 1913
Borate	TM152	**101.23** 88.00 : 112.00
Boron	TM152	**101.33** 86.68 : 117.67
Cadmium	TM152	**105.0** 94.60 : 112.40
Calcium	TM152	**103.33** 83.40 : 121.11
Chromium	TM152	**101.83** 93.28 : 110.91
Cobalt	TM152	**101.67** 84.39 : 114.26
Copper	TM152	**103.0** 88.86 : 118.72
Iron	TM152	**101.33** 92.00 : 113.00
Lead	TM152	**105.17** 89.25 : 115.12
Lithium	TM152	**101.33** 89.26 : 119.04
Magnesium	TM152	**101.33** 86.35 : 113.36
Manganese	TM152	**101.33** 94.24 : 112.74
Molybdenum	TM152	**97.17** 87.00 : 108.89
Nickel	TM152	**101.0** 92.11 : 110.56
Phosphorus	TM152	**101.17** 90.52 : 115.47
Potassium	TM152	**103.33** 98.63 : 110.48
Selenium	TM152	**104.0** 88.44 : 113.86
Silver	TM152	**105.17** 94.40 : 114.74
Sodium	TM152	**101.33** 97.63 : 110.31
Strontium	TM152	**104.33** 90.72 : 114.82
Tellurium	TM152	**100.17** 90.72 : 112.62
Thallium	TM152	**108.17** 86.08 : 122.48
Tin	TM152	**105.83** 91.00 : 109.00
Titanium	TM152	**95.17** 91.87 : 102.47
Tungsten	TM152	**103.17** 78.12 : 132.82
Uranium	TM152	**101.67** 90.58 : 113.28

Dissolved Metals by ICP-MS

		QC 1913
Vanadium	TM152	**102.33** 88.43 : 114.30
Zinc	TM152	**102.67** 86.52 : 115.27

EPH CWG (Aliphatic) Aqueous GC (W)

Component	Method Code	QC 1921
Total Aliphatics >C10-C40	TM174	**86.47** 68.59 : 134.82

EPH CWG (Aromatic) Aqueous GC (W)

Component	Method Code	QC 1962
Total Aromatics >EC10-EC40	TM174	**88.05** 60.75 : 129.09

Fluoride

Component	Method Code	QC 1911	QC 1932
Fluoride	TM104	**98.0** 93.20 : 104.48	**98.0** 93.20 : 104.48

GRO by GC-FID (W)

Component	Method Code	QC 1952
Benzene by GC	TM245	**103.5** 81.54 : 119.70
Ethylbenzene by GC	TM245	**103.0** 80.99 : 121.09
m & p Xylene by GC	TM245	**101.5** 82.77 : 123.19
MTBE GC-FID	TM245	**103.0** 80.06 : 123.27
o Xylene by GC	TM245	**102.5** 84.26 : 121.50
QC	TM245	**107.34** 76.13 : 145.89
Toluene by GC	TM245	**102.0** 82.78 : 121.99

Mercury Dissolved

Mercury Dissolved

Component	Method Code	QC 1990	QC 1990
Mercury Dissolved (CVAF)	TM183	**95.5** 75.00 : 111.00	**90.9** 75.00 : 111.00

PAH Spec MS - Aqueous (W)

Component	Method Code	QC 1902
Acenaphthene by GCMS	TM178	**104.8** 100.00 : 119.20
Acenaphthylene by GCMS	TM178	**102.0** 95.20 : 119.20
Anthracene by GCMS	TM178	**107.2** 91.60 : 113.20
Benz(a)anthracene by GCMS	TM178	**104.0** 90.40 : 119.20
Benzo(a)pyrene by GCMS	TM178	**110.8** 92.80 : 119.20
Benzo(b)fluoranthene by GCMS	TM178	**112.4** 89.60 : 120.80
Benzo(ghi)perylene by GCMS	TM178	**101.2** 93.20 : 117.20
Benzo(k)fluoranthene by GCMS	TM178	**112.4** 96.40 : 120.40
Chrysene by GCMS	TM178	**106.8** 96.40 : 125.20
Dibenzo(ah)anthracene by GCMS	TM178	**96.4** 92.00 : 113.60
Fluoranthene by GCMS	TM178	**106.0** 91.20 : 117.60
Fluorene by GCMS	TM178	**109.2** 95.60 : 122.00
Indeno(123cd)pyrene by GCMS	TM178	**103.6** 90.40 : 112.00
Naphthalene by GCMS	TM178	**110.0** 98.00 : 122.00
Phenanthrene by GCMS	TM178	**107.2** 94.00 : 120.40
Pyrene by GCMS	TM178	**109.2** 92.40 : 118.80

PCB Congeners - Aqueous (W)

Component	Method Code	QC 1992
PCB congener 101	TM197	**104.4** 85.28 : 119.60
PCB congener 105	TM197	**106.8** 81.16 : 119.80
PCB congener 114	TM197	**104.8** 88.32 : 118.08
PCB congener 118	TM197	**106.8** 87.76 : 117.04

PCB Congeners - Aqueous (W)

		QC 1992
PCB congener 123	TM197	**108.0** 86.80 : 117.28
PCB congener 126	TM197	**106.0** 84.56 : 116.00
PCB congener 138	TM197	**107.2** 83.00 : 117.80
PCB congener 153	TM197	**106.4** 84.12 : 117.00
PCB congener 156	TM197	**107.6** 82.24 : 119.20
PCB congener 157	TM197	**108.8** 84.96 : 116.40
PCB congener 167	TM197	**107.2** 81.64 : 119.32
PCB congener 169	TM197	**109.2** 84.60 : 117.96
PCB congener 180	TM197	**107.2** 80.40 : 119.04
PCB congener 189	TM197	**106.4** 81.56 : 119.00
PCB congener 28	TM197	**102.0** 83.20 : 117.04
PCB congener 52	TM197	**103.6** 81.84 : 119.52
PCB congener 77	TM197	**104.0** 81.96 : 117.24
PCB congener 81	TM197	**103.2** 82.28 : 120.20

pH Value

Component	Method Code	QC 1944	QC 1999	QC 1980	QC 1985
pH	TM256	**101.62** 99.73 : 102.16	**100.67** 99.33 : 102.56	**101.35** 99.73 : 102.16	**101.62** 99.73 : 102.16

Phosphate by Kone (w)

Component	Method Code	QC 1967	QC 1997	QC 1909
Phosphate (Ortho as PO4)	TM184	**102.8** 96.40 : 109.60	**104.0** 96.40 : 109.60	**103.6** 96.40 : 109.60

Sulphide

Sulphide

Component	Method Code	QC 1987	QC 1907	QC 1917
Sulphide	TM101	**103.33** 88.90 : 112.50	**103.33** 88.90 : 112.50	**106.0** 88.90 : 112.50

SVOC MS (W) - Aqueous

Component	Method Code	QC 1972
4-Bromophenylphenylether	TM176	**69.76** 55.76 : 105.20
Benzo(a)anthracene	TM176	**66.16** 59.28 : 107.76
Benzo(a)pyrene	TM176	**66.32** 54.40 : 105.76
Butylbenzyl phthalate	TM176	**65.44** 49.84 : 109.84
Hexachlorobutadiene	TM176	**70.4** 48.64 : 95.68
Naphthalene	TM176	**72.08** 63.04 : 111.04
Nitrobenzene	TM176	**78.32** 59.92 : 108.40
Phenol	TM176	**43.68** 38.16 : 63.60

Total Organic and Inorganic Carbon

Component	Method Code	QC 1913	QC 1944	QC 1963
Total Organic Carbon	TM090	**105.67** 97.97 : 110.17	**107.33** 97.97 : 110.17	**107.17** 97.97 : 110.17

VOC MS (W)

Component	Method Code	QC 1937	QC 1919
1,1,1,2-Tetrachloroethane	TM208	**97.0** 78.82 : 115.90	**96.5** 81.85 : 113.65
1,1,1-Trichloroethane	TM208	**95.5** 79.61 : 114.35	**96.5** 81.48 : 111.75
1,1-Dichloroethane	TM208	**93.5** 79.99 : 118.57	**95.0** 79.60 : 118.57
1,2-Dichloroethane	TM208	**92.5** 79.35 : 124.02	**95.5** 77.72 : 133.33
2-Chlorotoluene	TM208	**99.5** 79.67 : 114.74	**97.0** 82.89 : 116.61
4-Chlorotoluene	TM208	**99.5** 80.15 : 113.42	**98.0** 79.46 : 115.88
Benzene	TM208	**96.5** 84.37 : 119.68	**98.0** 81.22 : 118.60
Bromomethane	TM208	**89.0** 68.41 : 115.99	**91.0** 68.25 : 113.64

VOC MS (W)

		QC 1937	QC 1919
Carbontetrachloride	TM208	**91.0** 79.73 : 118.91	**98.5** 86.16 : 119.10
Chlorobenzene	TM208	**98.5** 89.49 : 115.83	**102.5** 87.25 : 116.65
Chloroform	TM208	**96.0** 82.31 : 120.71	**98.5** 83.01 : 121.64
Chloromethane	TM208	**94.0** 62.46 : 124.98	**95.0** 65.28 : 130.05
Cis-1,2-Dichloroethene	TM208	**95.0** 84.04 : 126.19	**95.0** 82.23 : 124.89
Dichloromethane	TM208	**95.0** 81.20 : 120.83	**98.5** 78.23 : 120.65
Ethylbenzene	TM208	**91.5** 80.54 : 112.31	**92.5** 79.55 : 110.51
Hexachlorobutadiene	TM208	**102.0** 59.76 : 107.25	**86.0** 67.63 : 111.28
o-Xylene	TM208	**98.0** 79.22 : 112.31	**98.5** 90.42 : 112.27
p/m-Xylene	TM208	**93.5** 79.85 : 111.06	**96.5** 84.45 : 113.50
Tert-butyl methyl ether	TM208	**92.0** 70.94 : 119.66	**87.5** 70.18 : 125.95
Tetrachloroethene	TM208	**94.5** 87.13 : 116.26	**93.5** 80.43 : 115.53
Toluene	TM208	**93.5** 81.59 : 111.56	**94.0** 79.88 : 116.83
Trichloroethene	TM208	**96.0** 79.53 : 112.32	**94.5** 82.30 : 112.45
Vinyl Chloride	TM208	**85.0** 68.68 : 119.35	**85.5** 66.89 : 111.22

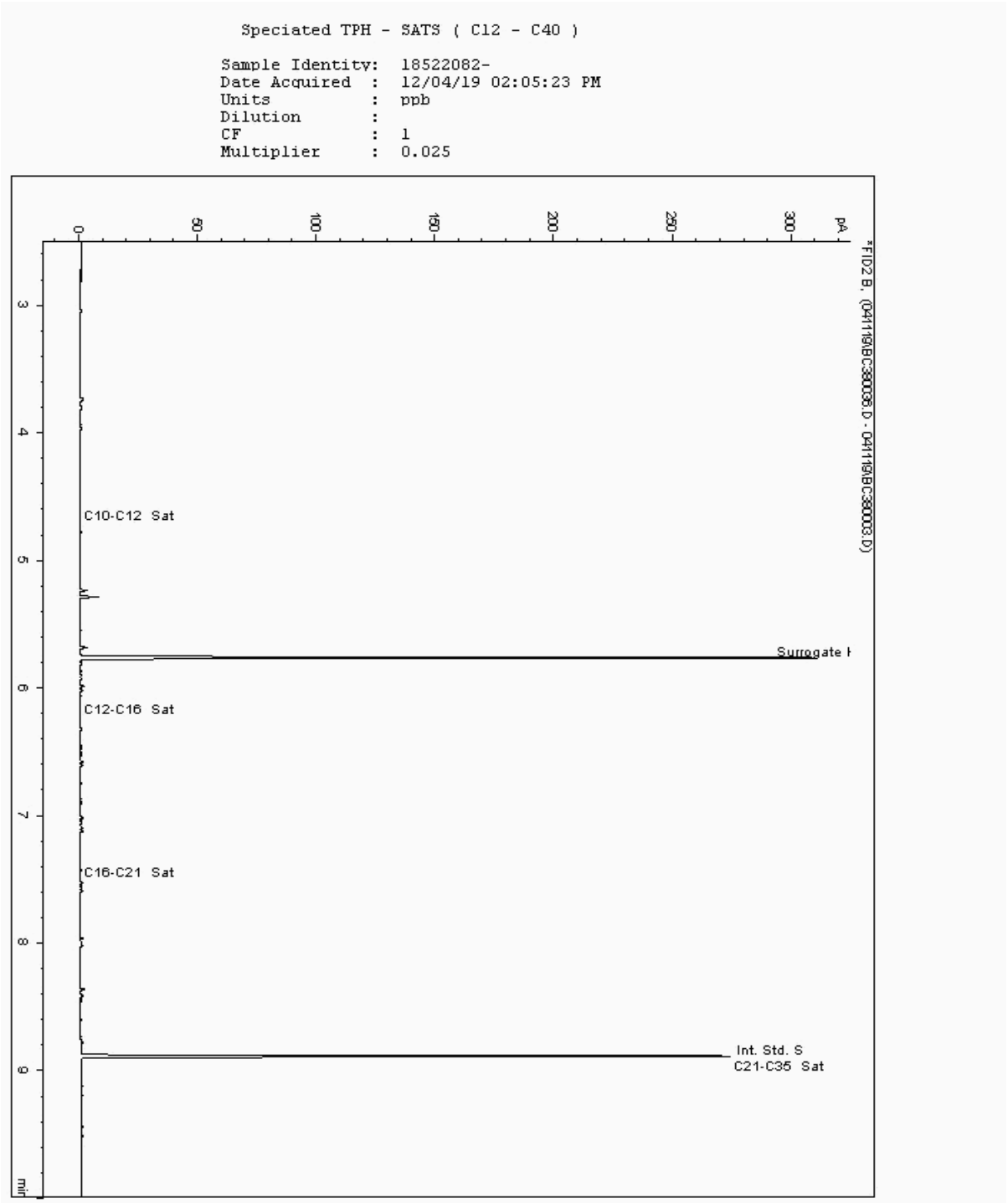
The above information details the reference name of the analytical quality control sample (AQC) that has been run with the samples contained in this report for the different methods of analysis.
The figure detailed is the percentage recovery result for the AQC.
The subscript numbers below are the percentage recovery lower control limit (LCL) and the upper control limit (UCL). The percentage recovery result for the AQC should be between these limits to be statistically in control.

CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aliphatic) Aqueous GC (W) **Sample No :** 19717361 **Depth :**
Sample ID : BH02



CERTIFICATE OF ANALYSIS

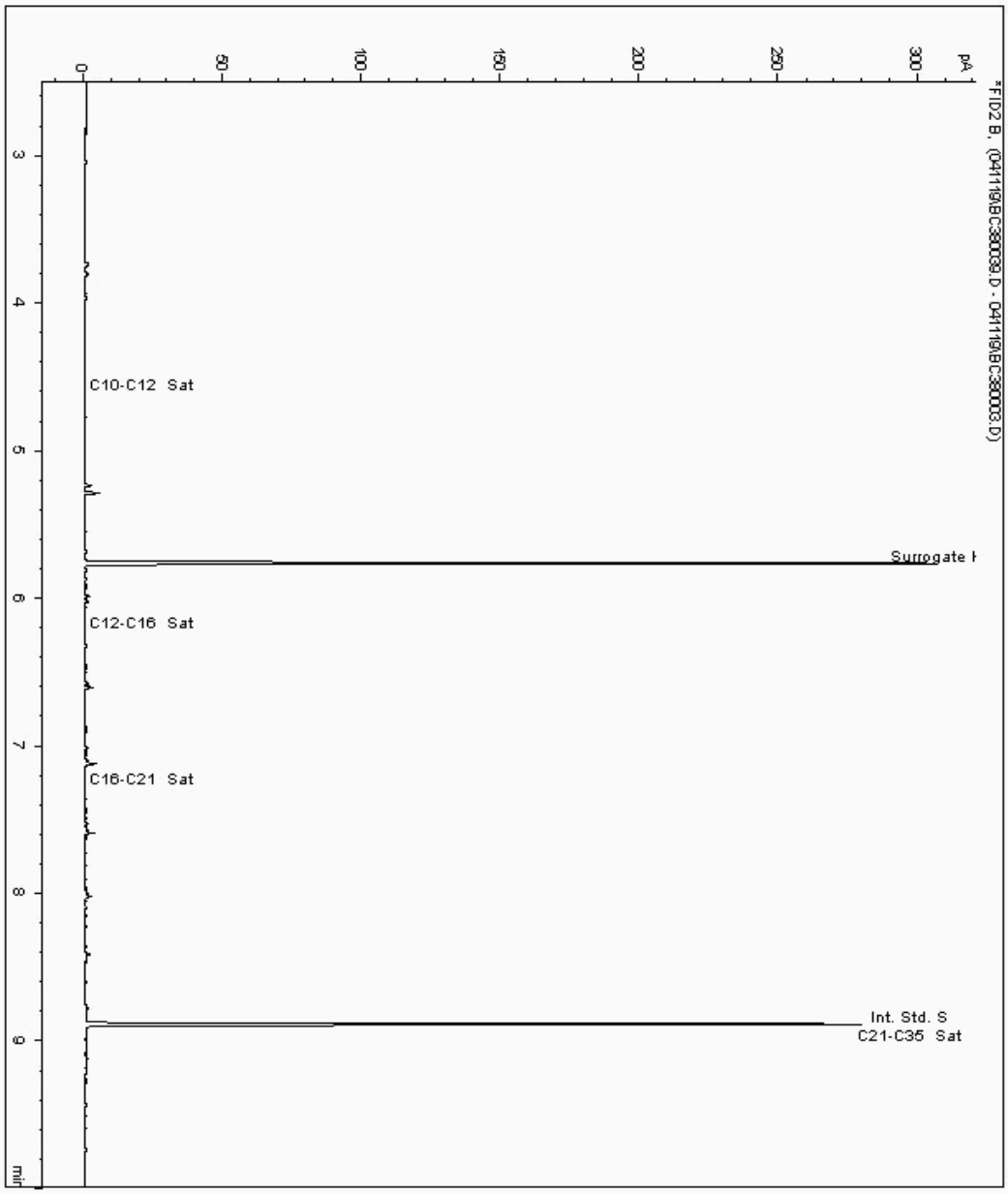
SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aliphatic) Aqueous GC (W) **Sample No :** 19717372 **Depth :**
Sample ID : BH01

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18521996-
Date Acquired : 12/04/19 03:15:29 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

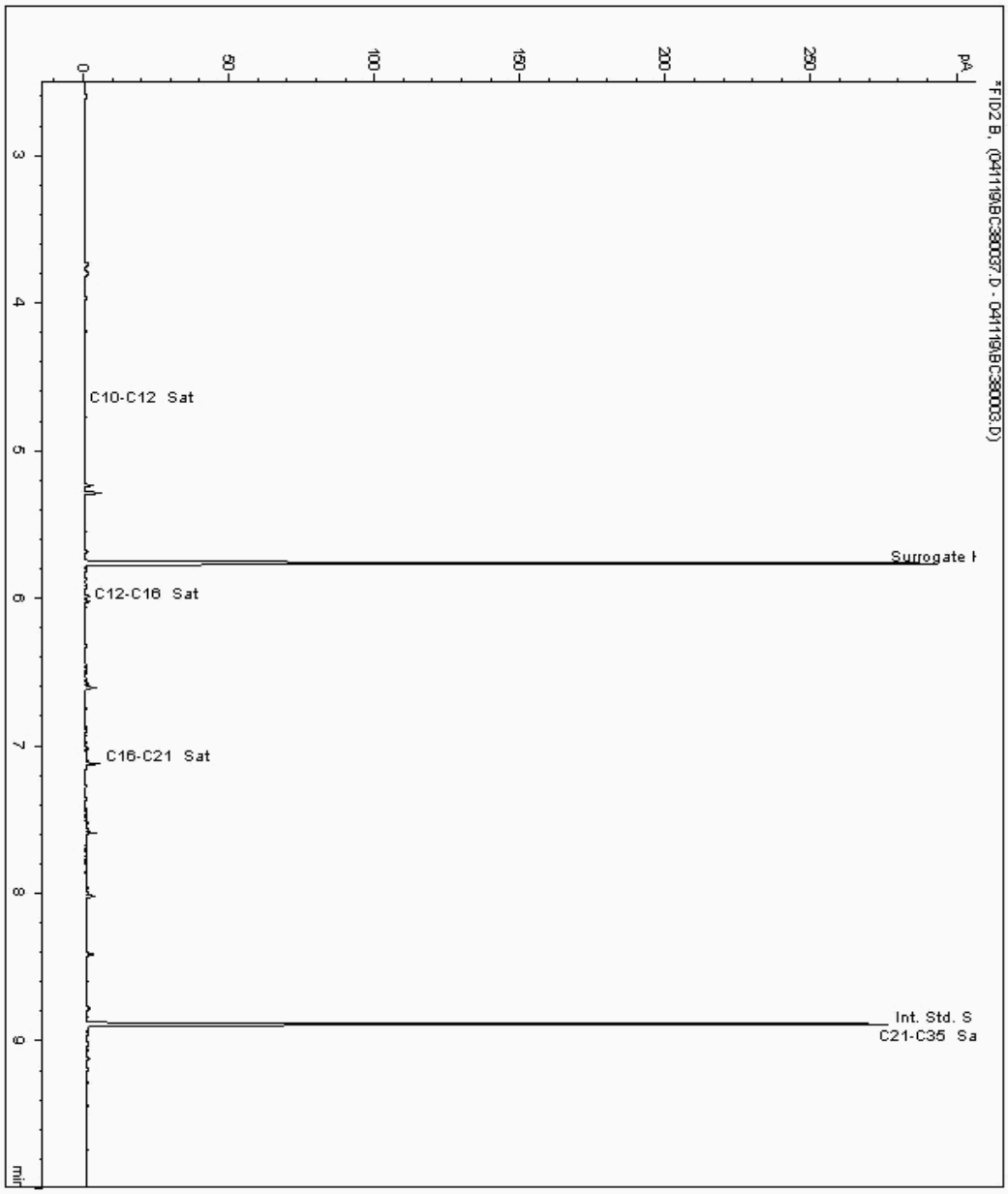
SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aliphatic) Aqueous GC (W) **Sample No :** 19717616 **Depth :**
Sample ID : BH03

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18522178-
Date Acquired : 12/04/19 02:28:54 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

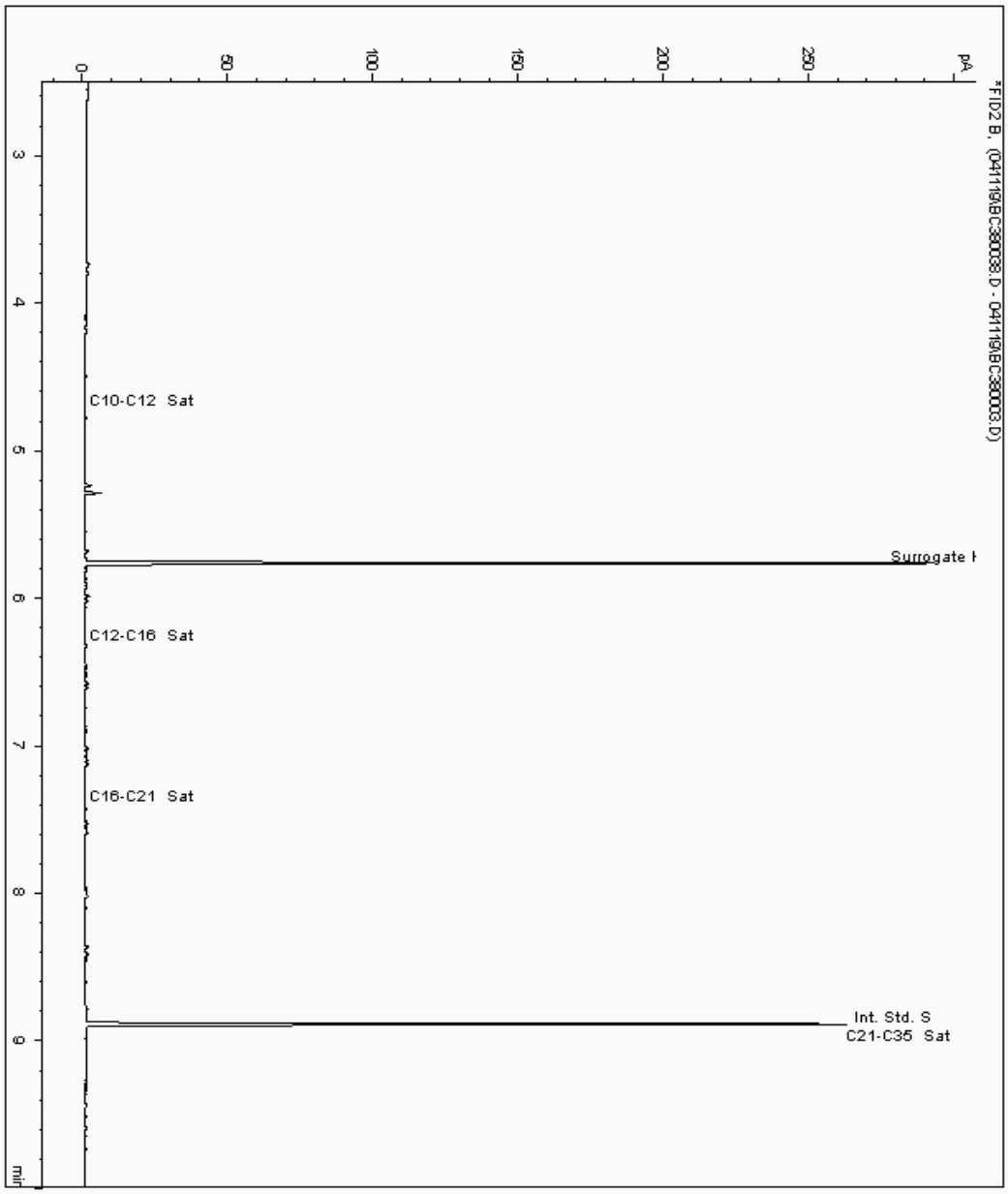
SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aliphatic) Aqueous GC (W) **Sample No :** 19717618 **Depth :**
Sample ID : BH04

Speciated TPH - SATS (C12 - C40)

Sample Identity: 18522272-
Date Acquired : 12/04/19 02:52:10 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

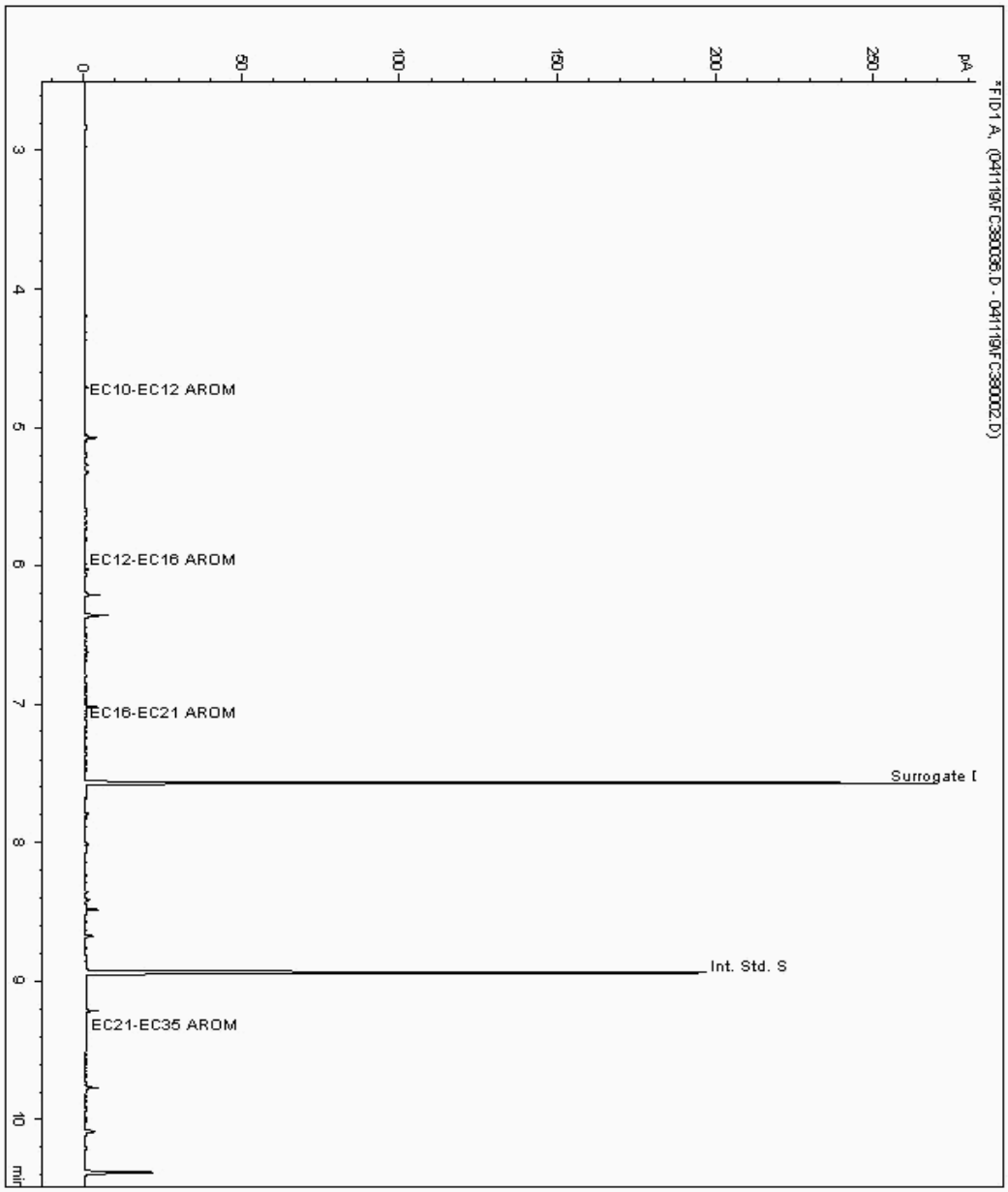
SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aromatic) Aqueous GC (W) **Sample No :** 19717361 **Depth :**
Sample ID : BH02

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18522083-
Date Acquired : 12/04/19 02:05:24 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

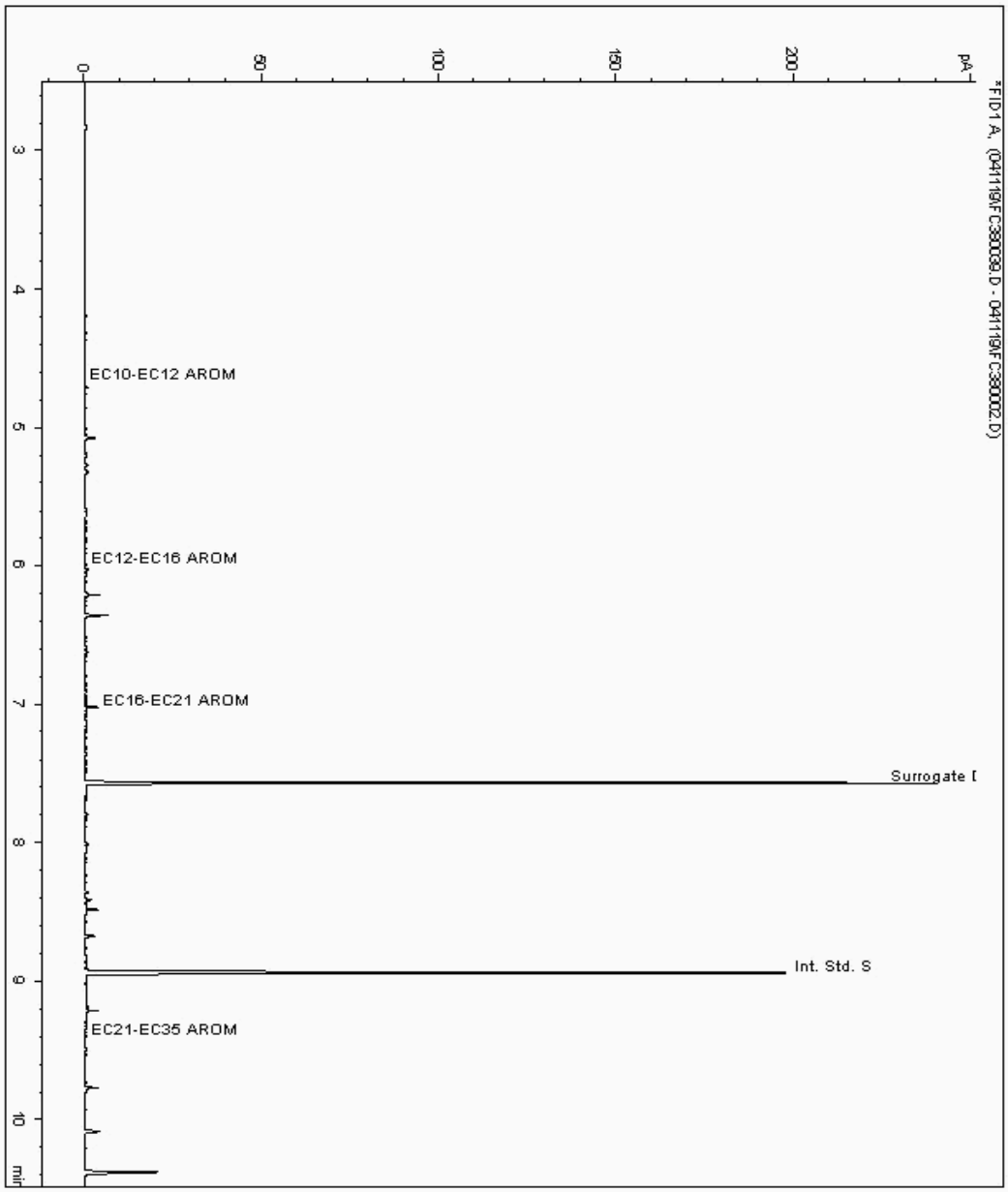
SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aromatic) Aqueous GC (W) **Sample No :** 19717372 **Depth :**
Sample ID : BH01

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18521997-
Date Acquired : 12/04/19 03:15:29 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025

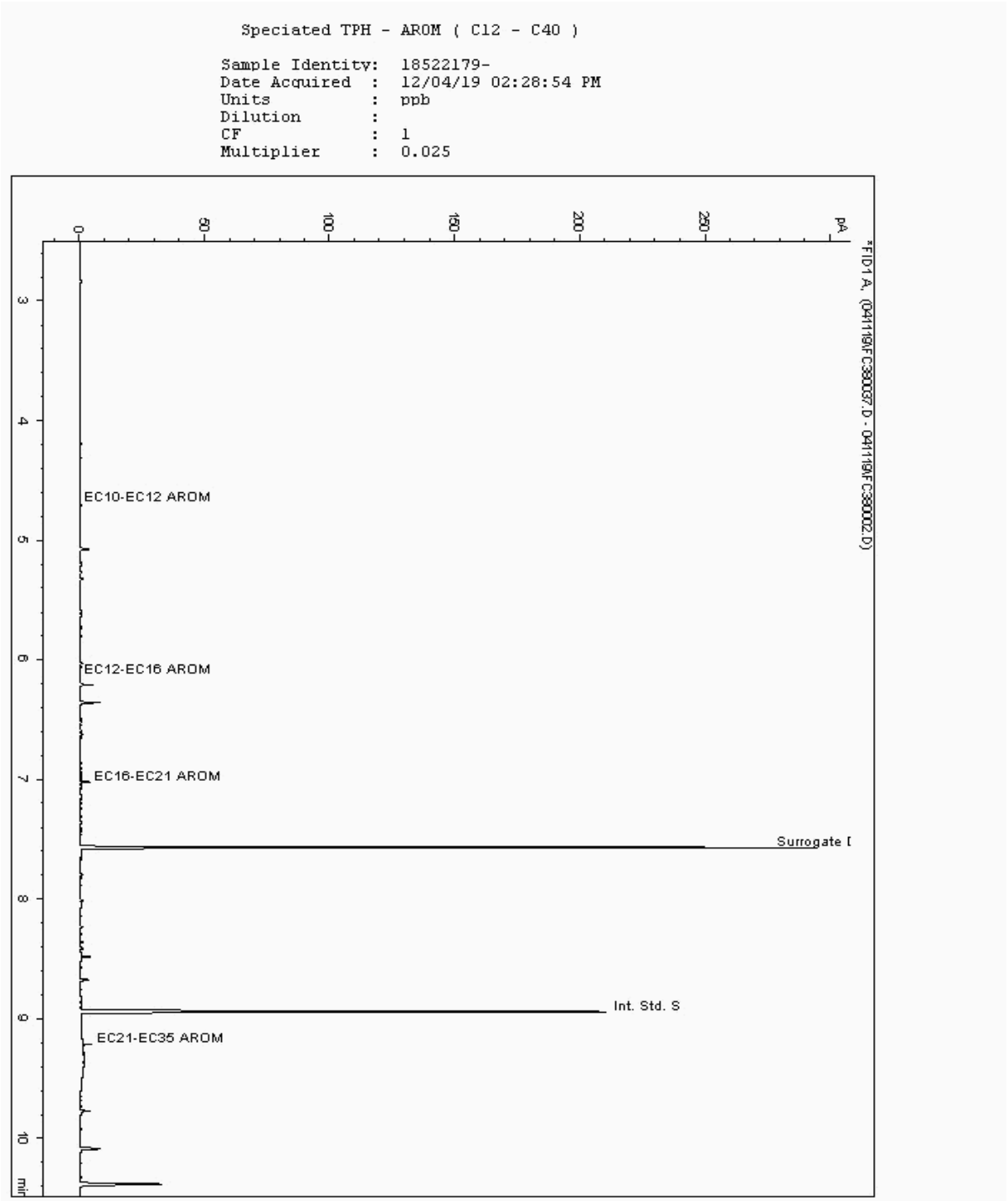


CERTIFICATE OF ANALYSIS

SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aromatic) Aqueous GC (W) **Sample No :** 19717616 **Depth :**
Sample ID : BH03



CERTIFICATE OF ANALYSIS

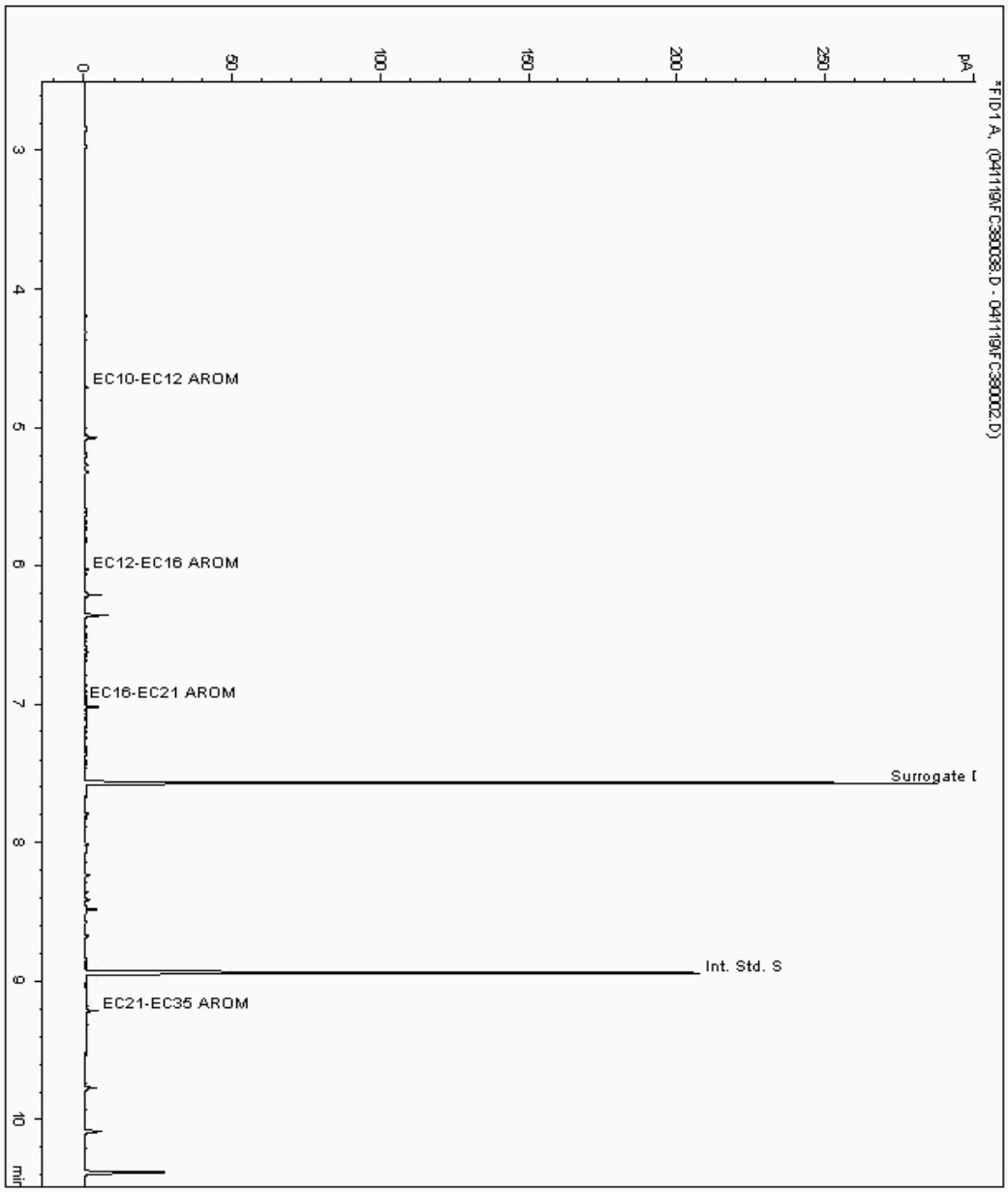
SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Chromatogram

Analysis: EPH CWG (Aromatic) Aqueous GC (W) **Sample No :** 19717618 **Depth :**
Sample ID : BH04

Speciated TPH - AROM (C12 - C40)

Sample Identity: 18522273-
Date Acquired : 12/04/19 02:52:10 PM
Units : ppb
Dilution :
CF : 1
Multiplier : 0.025



CERTIFICATE OF ANALYSIS

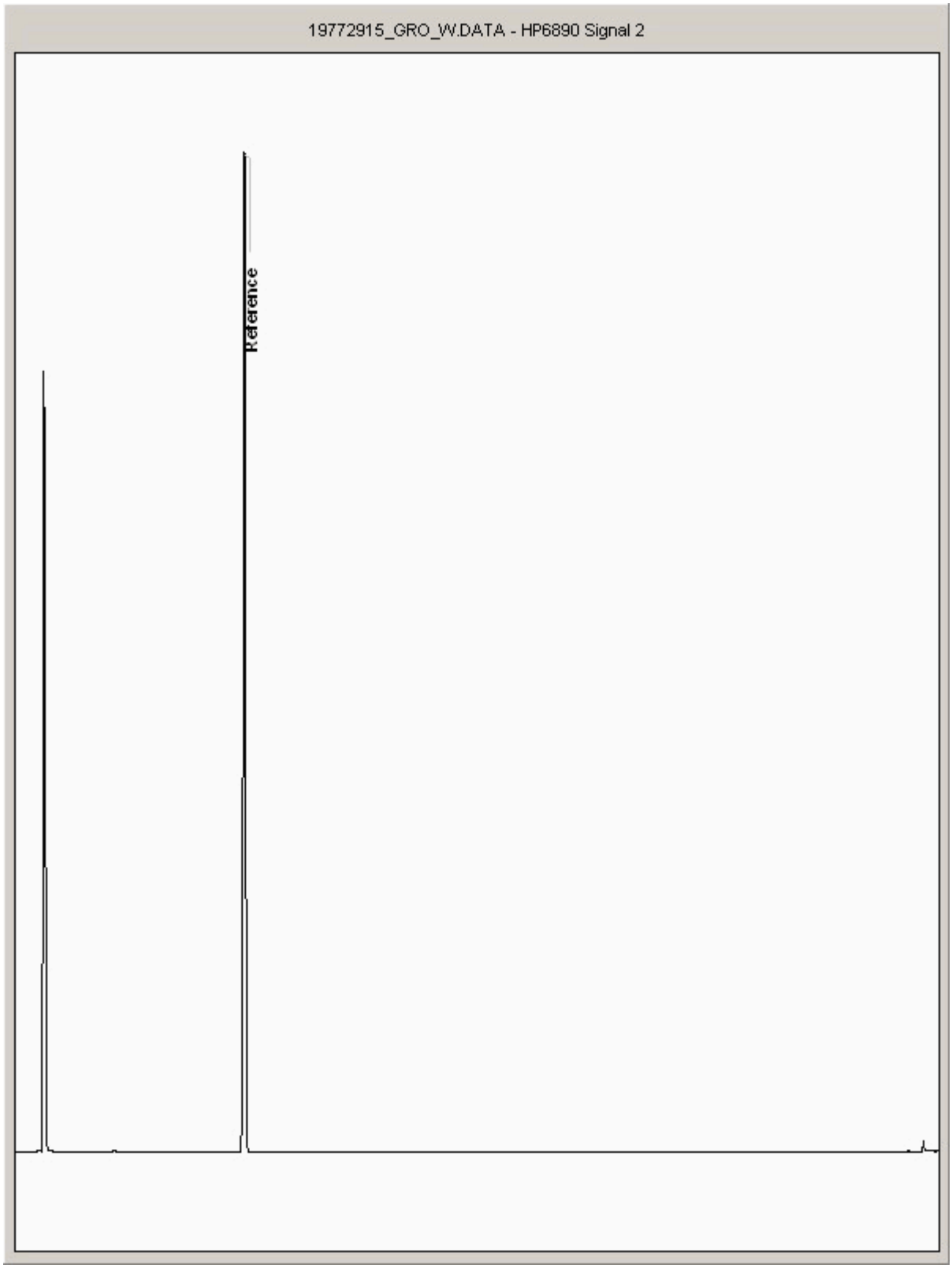
SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19772915
Sample ID : BH04

Depth :



CERTIFICATE OF ANALYSIS

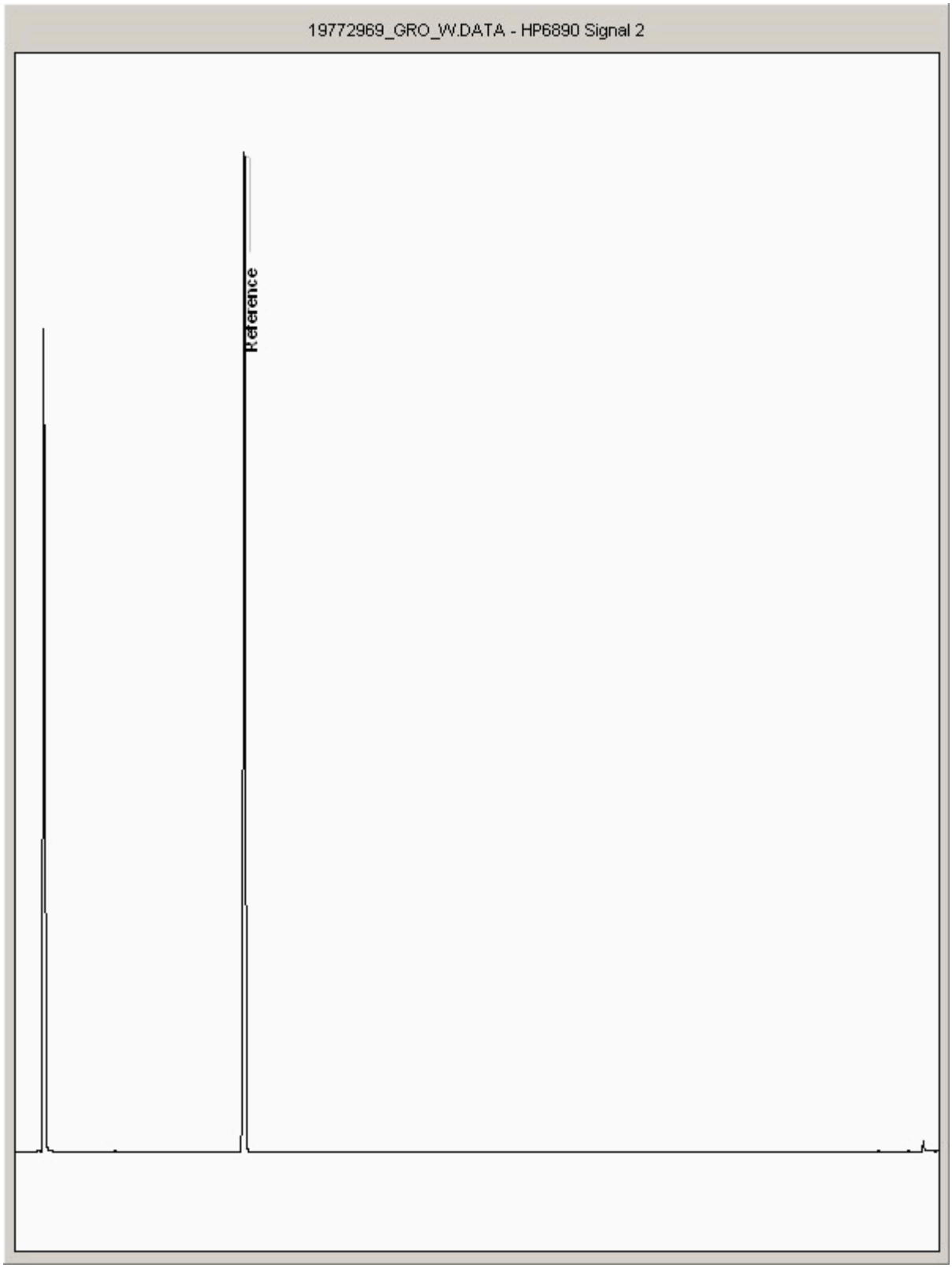
SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19772969
Sample ID : BH03

Depth :



CERTIFICATE OF ANALYSIS

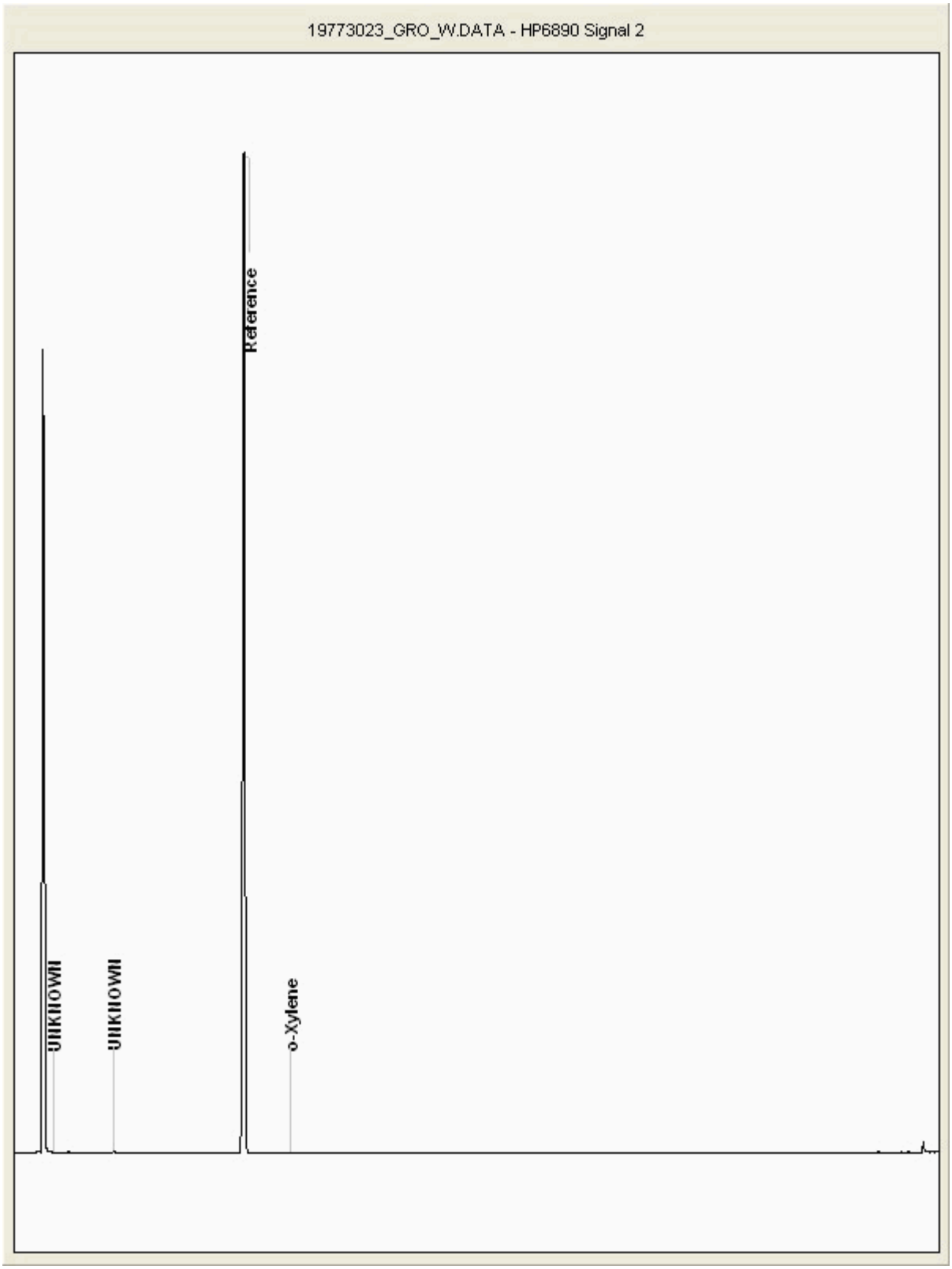
SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19773023
Sample ID : BH01

Depth :



CERTIFICATE OF ANALYSIS

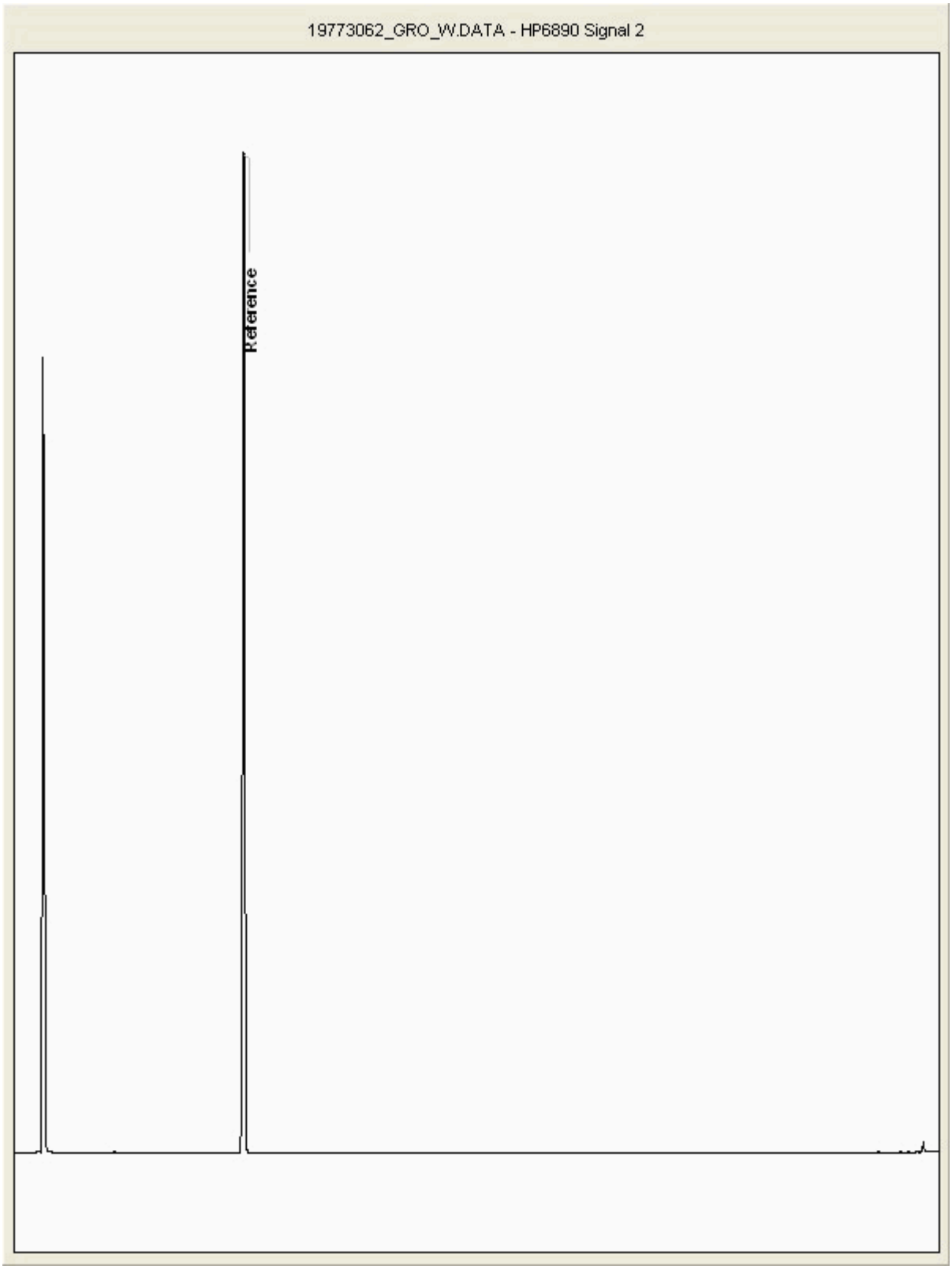
SDG:	190405-72	**Client Reference:**	A090070-474	**Report Number:**	501239
Location:	HE COMPTON	**Order Number:**	8116/19/0064	**Superseded Report:**	

Chromatogram

Analysis: GRO by GC-FID (W)

Sample No : 19773062
Sample ID : BH02

Depth :



Appendix General

1. Results are expressed on a dry weight basis (dried at 35ºC) for all soil analyses except for the following: NRA and CEN Leach tests, flash point LOI, pH, ammonium as NH4 by the BRE method, VOC TICs and SVOC TICs.

2. Samples will be run in duplicate upon request, but an additional charge may be incurred.

3. If sufficient sample is received a sub sample will be retained free of charge for 30 days after analysis is completed (e-mailed) for all sample types unless the sample is destroyed on testing. The prepared soil sub sample that is analysed for asbestos will be retained for a period of 6 months after the analysis date. All bulk samples will be retained for a period of 6 months after the analysis date. All samples received and not scheduled will be disposed of one month after the date of receipt unless we are instructed to the contrary. Once the initial period has expired, a storage charge will be applied for each month or part thereof until the client cancels the request for sample storage. ALS reserve the right to charge for samples received and stored but not analysed.

4. With respect to turnaround, we will always endeavour to meet client requirements wherever possible, but turnaround times cannot be absolutely guaranteed due to so many variables beyond our control.

5. We take responsibility for any test performed by sub-contractors (marked with an asterisk). We endeavour to use UKAS/MCERTS Accredited Laboratories, who either complete a quality questionnaire or are audited by ourselves. For some determinands there are no UKAS/MCERTS Accredited Laboratories, in this instance a laboratory with a known track record will be utilised.

6. When requested, the individual sub sample scheduled will be analysed in house for the presence of asbestos fibres and asbestos containing material by our documented in house method TM048 based on HSG 248 (2005), which is accredited to ISO17025. If a specific asbestos fibre type is not found this will be reported as “Not detected”. If no asbestos fibre types are found all will be reported as “Not detected” and the sub sample analysed deemed to be clear of asbestos. If an asbestos fibre type is found it will be reported as detected (for each fibre type found). Testing can be carried out on asbestos positive samples, but, due to Health and Safety considerations, may be replaced by alternative tests or reported as No Determination Possible (NDP). The quantity of asbestos present is not determined unless specifically requested.

7. If no separate volatile sample is supplied by the client, or if a headspace or sediment is present in the volatile sample, the integrity of the data may be compromised. This will be flagged up as an invalid VOC on the test schedule and the result marked as deviating on the test certificate.

8. If appropriate preserved bottles are not received preservation will take place on receipt. However, the integrity of the data may be compromised.

9. NDP - No determination possible due to insufficient/unsuitable sample.

10. Metals in water are performed on a filtered sample, and therefore represent dissolved metals - total metals must be requested separately.

11. Results relate only to the items tested.

12. LoDs (Limit of Detection) for wet tests reported on a dry weight basis are not corrected for moisture content.

13. **Surrogate recoveries** - Surrogates are added to your sample to monitor recovery of the test requested. A % recovery is reported, results are not corrected for the recovery measured. Typical recoveries for organics tests are 70-130%. Recoveries in soils are affected by organic rich or clay rich matrices. Waters can be affected by remediation fluids or high amounts of sediment. Test results are only ever reported if all of the associated quality checks pass; it is assumed that all recoveries outside of the values above are due to matrix affect.

14. **Product analyses** - Organic analyses on products can only be semi-quantitative due to the matrix effects and high dilution factors employed.

15. Phenols monohydric by HPLC include phenol, cresols (2-Methylphenol, 3-Methylphenol and 4-Methylphenol) and Xylenols (2,3 Dimethylphenol, 2,4 Dimethylphenol, 2,5 Dimethylphenol, 2,6 Dimethylphenol, 3,4 Dimethyphenol, 3,5 Dimethylphenol).

16. Total of 5 speciated phenols by HPLC includes Phenol, 2,3,5-Trimethyl Phenol, 2-Isopropylphenol, Cresols and Xylenols (as detailed in 15).

17. Stones/debris are not routinely removed. We always endeavour to take a representative sub sample from the received sample.

18. In certain circumstances the method detection limit may be elevated due to the sample being outside the calibration range. Other factors that may contribute to this include possible interferences. In both cases the sample would be diluted which would cause the method detection limit to be raised.

19. Mercury results quoted on soils will not include volatile mercury as the analysis is performed on a dried and crushed sample.

20. For leachate preparations other than Zero Headspace Extraction (ZHE) volatile loss may occur.

21. For the BSEN 12457-3 two batch process to allow the cumulative release to be calculated, the volume of the leachate produced is measured and filtered for all tests. We therefore cannot carry out any unfiltered analysis. The tests affected include volatiles GCFID/GCMS and all subcontracted analysis.

22. We are accredited to MCERTS for sand, clay and loam/topsoil, or any of these materials - whether these are derived from naturally occurring soil profiles, or from fill/made ground, as long as these materials constitute the major part of the sample. Other coarse granular material such as concrete, gravel and brick are not accredited if they comprise the major part of the sample.

23. Analysis and identification of specific compounds using GCFID is by retention time only, and we routinely calibrate and quantify for benzene, toluene, ethylbenzenes and xylenes (BTEX). For total volatiles in the C5-C12 range, the total area of the chromatogram is integrated and expressed as ug/kg or ug/l. Although this analysis is commonly used for the quantification of gasoline range organics (GRO), the system will also detect other compounds such as chlorinated solvents, and this may lead to a falsely high result with respect to hydrocarbons only. It is not possible to specifically identify these non-hydrocarbons, as standards are not routinely run for any other compounds, and for more definitive identification, volatiles by GCMS should be utilised.

24. **Tentatively Identified Compounds (TICs)** are non-target peaks in VOC and SVOC analysis. All non-target peaks detected with a concentration above the LoD are subjected to a mass spectral library search. Non-target peaks with a library search confidence of >75% are reported based on the best mass spectral library match. When a non-target peak with a library search confidence of <75% is detected it is reported as “mixed hydrocarbons”. Non-target compounds identified from the scan data are semi-quantified relative to one of the deuterated internal standards, under the same chromatographic conditions as the target compounds. This result is reported as a semi-quantitative value and reported as Tentatively Identified Compounds (TICs). TICs are outside the scope of UKAS accreditation and are not moisture corrected.

Sample Deviations

If a sample is classed as deviated then the associated results may be compromised.

1	**Container with Headspace provided for volatiles analysis**
2	**Incorrect container received**
3	**Deviation from method**
§	**Sampled on date not provided**
♦	**Sample holding time exceeded in laboratory**
@	**Sample holding time exceeded due to late arrival of instructions or samples**

Asbestos

Identification of Asbestos in Bulk Materials & Soils

The results for identification of asbestos in bulk materials are obtained from supplied bulk materials which have been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

The results for identification of asbestos in soils are obtained from a homogenised sub sample which has been examined to determine the presence of asbestos fibres using ALS (Hawarden) in-house method of transmitted/polarised light microscopy and central stop dispersion staining, based on HSG 248 (2005).

Asbestos Type	Common Name
Chrysotile	White Asbestos
Amosite	Brown Asbestos
Crocidolite	Blue Asbestos
Fibrous Actinolite	-
Fibrous Anthophyllite	-
Fibrous Tremolite	-

Visual Estimation Of Fibre Content

Estimation of fibre content is not permitted as part of our UKAS accredited test other than: - Trace - Where only one or two asbestos fibres were identified.

Further guidance on typical asbestos fibre content of manufactured products can be found in HSG 264.

The identification of asbestos containing materials and soils falls within our schedule of tests for which we hold UKAS accreditation, however opinions, interpretations and all other information contained in the report are outside the scope of UKAS accreditation.

Analysis of Soil

Client:	WYG 11th Floor 1 Angel Court London EC2R 7HJ
Testing Facility:	SOCOTEC UK Unit 12, Moorbrook Southmead Industrial Park Didcot Oxfordshire OX11 7HP
Laboratory Reference:	19-0165
Customer Reference:	A090070-474
Quote Number:	ENR-ANU-9566
PO Number:	18/COMP056
Sample Received:	19 February 2019
Sample Condition:	Satisfactory, Ambient
Analysis Completed:	30 April 2019
Report Author:	Regulation 13 [redacted]
Author's Name:	Regulation 13 [redacted]
Job Title:	Senior Analyst
Approved By:	Regulation 13 [redacted]
Approver's name:	Regulation 13 [redacted]
Job Title:	Laboratory Manager
Report Date:	07 May 2019

SOCOTEC

Sample Summary

Customer Reference	Laboratory Reference	Matrix	Sampling Date
Compton Trial Pit 15	RX1064	Soil	29/01/2019 12:00
Bull Pen Pot 3	RX1065	Soil	04/02/2019 12:00
Bull Pen Pot 13	RX1066	Soil	04/02/2019 12:00
Bull Pen Pot 19	RX1067	Soil	04/02/2019 12:00
Bull Pen Pot 16	RX1068	Soil	05/02/2019 12:00

Experimental

Samples were frozen upon receipt.

Total Tritium by Combustion and Liquid Scintillation Counting

ANU/SOP/2094 – A sub-sample of known weight was taken from each sample and combusted in an oxygen rich atmosphere in the presence of a copper oxide catalyst. Under these conditions the hydrogen and tritium were converted to water vapour. These were then selectively trapped in a series of gas-bubblers containing dilute acid. Aliquots of known weight were then assessed for their tritium content by liquid scintillation counting. The tritium activity was corrected for the proportion of the bubbler trapping solution taken and for the weight of combusted sample.

Carbon-14 by Combustion and Liquid Scintillation Counting

ANU/SOP/2103 – A sub-sample of known weight was taken from each sample and combusted in an oxygen rich atmosphere in the presence of a copper oxide catalyst. Under these conditions the carbon species were converted to carbon dioxide, which were then selectively trapped in a series of gas-bubblers containing a trapping medium. Aliquots of known weight were then assessed for their ^{14}C content by liquid scintillation counting. Hence the total recovered ^{14}C was calculated from the total weights of each respective trapping medium.

Uranium Isotopes

ANU/SOP/2123 – The appropriate internal yield tracers were added and the sample was digested in acids using microwave treatment. After co-precipitation of the nuclides of interest with iron, ion-exchange chromatography was then used to further purify and separate the uranium, which was then electrodeposited onto stainless-steel discs. Measurement of the uranium isotopes was carried out by alpha-spectrometry.

Plutonium, Americium

ANU/SOP/2117 – The appropriate internal yield tracers were added to an aliquot of the sample and ashed in a furnace overnight. The ashed residue was leached with aqua regia to extract actinides. After co-precipitation of the nuclides of interest with iron hydroxide, ion-exchange chromatography was used to further purify and separate the plutonium and americium fractions, which were then electrodeposited onto stainless-steel discs. Measurements were carried out by alpha-spectrometry. The chemical recoveries for plutonium analysis were below the guidelines in the method, however the laboratory believes the statistics on QC samples and good peak resolutions demonstrate the accuracy of the method was unaffected.

The QC sample failed for americium analysis by alpha spectrometry so this result cannot be reported, however the Am-241 result is provided by gamma spectrometry. This analysis will be removed from the price of the job unless a repeat analysis of americium by alpha spectrometry is specifically required.

Strontium
ISO 18589-5. Measurement of radioactivity in the environment -- Soil -- Part 5: Measurement of strontium 90.

Due to late delivery of the Sr-85 yield tracer, SOCOTEC referred to the ISO standard to enable them to deliver Sr-90 results in soil. An AQC sample was run along side, showing that the performance of the method was 103%±2%, and the accuracy and precision of the method was not affected. Deviation made were minor. Instead of the Sr-85 yield tracer, the final weight of the SrCO3 precipitate was taken and instead of gas-proportional counting, liquid scintillation counting was used to detect Sr-90. Both options are defined within the ISO standard, but fall outside our accredited methodology.

Sr-90 was extracted using aqua regia and, following a series of precipitations to remove interferences, a SrCO3 preparative was prepared. This preparative was counted using LSC, which was calibrated against a Sr-90 standard traceable to national standards, having the same ingrowth of Y-90 as the samples. Final results were corrected for decay to the sampling date and an overall uncertainty calculated based on an uncertainty budget with an expanded uncertainty using a coverage factor k=2. (Not UKAS accredited)

Gamma Spectrometry
ANU/SOP/2029 – Samples were placed in containers to match the appropriate calibration geometries and then measured by high-resolution gamma ray spectrometry.

The measurement technique is based on the use of high purity germanium (HPGe) detectors coupled to an Ortec gamma ray spectroscopy system. The gamma ray spectra are stored on a computer and analysed using the software programme Fitzpeaks for photopeak identification and quantification. The detectors are calibrated for efficiency using a mixed radionuclide standard, which covers an energy range of approximately 60-2000 keV. The efficiency of gamma rays between 30 keV and 120 keV are determined on an individual basis.

Application of decay corrections for the naturally occurring daughter radionuclides of uranium and thorium assumes that the series daughter radionuclides are all in secular equilibrium and therefore decay with the half-life of the first radionuclide in the series. (^{226}Ra is not UKAS accredited)

Results

Results are presented in the following tables.

Any opinions and interpretations expressed herein are outside the scope of our UKAS accreditation.

The results in this test report relate only to the items tested, and test portions taken thereof. This test report must not be reproduced except in full, without written approval of the laboratory.

Results Summary – Tritium and Carbon-14

Customer Reference	Laboratory Reference	Tritium	Carbon-14
Compton Trial Pit 15	RX1064	<21	<3.5
Bull Pen Pot 3	RX1065	1400 ± 400	11.4 ± 4.5
Bull Pen Pot 19	RX1067	2930 ± 820	25.3 ± 8.4

Notes:
1. Results are presented as $Bq.Kg^{-1}$ of sample as received and are decay corrected to the sampling date.
2. Uncertainties are quoted at 2 s.d. and are based on an expanded uncertainty budget.

Results Summary – Uranium Isotopes

Customer Reference	Laboratory Reference	Reference Date	U-234	U-235	U-238
Bull Pen Pot 13	RX1066	08/04/2019	<1.7	<0.74	<1.6
Bull Pen Pot 16	RX1068	08/04/2019	<2.6	<2.4	<2.6

Notes:
1. Results are presented as $Bq.Kg^{-1}$ of sample as received, relative to the reference date.
2. Uncertainties are quoted at 2 s.d. and are based on a total uncertainty budget.

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Results Summary – Plutonium

Customer Reference	Laboratory Reference	Reference Date	Pu-238	Pu-239
Bull Pen Pot 13	RX1066	18/04/2019	10.303 ± 1.819	454 ± 38
Bull Pen Pot 16	RX1068	18/04/2019	9.122 ± 2.467	387 ± 42

Notes:

1. Results are presented as $Bq.Kg^{-1}$ of sample as received, relative to the reference date.
2. Uncertainties are quoted at 2 s.d. and are based on a total uncertainty budget.

Results Summary – Strontium

Customer Reference	Laboratory Reference	Reference Date	Sr-90*
Compton Trial Pit 15	RX1064	29-Jan-2019 12:00	165.7 ± 5.6
Bull Pen Pot 3	RX1065	04-Feb-2019 12:00	149.9 ± 19.8
Bull Pen Pot 19	RX1067	04-Feb-2019 12:00	117.1 ± 3.8
Bull Pen Pot 16	RX1068	05-Feb-2019 12:00	45.2 ± 5.8

Notes:

1. Analyses and/or samples marked with an asterisk are not UKAS accredited.
2. Results are presented as $Bq.Kg^{-1}$ of sample as received, relative to the reference date.
3. Uncertainties are quoted at 2 s.d. and are based on a total uncertainty budget.

SOCOTEC

Results Summary – Gamma Spectrometry

Customer Reference	Laboratory Reference	K-40	Co-60	Cs-134	Cs-137	Eu-152	Eu-154	Tl-208	Pb-210	Pb-212
Compton Trial Pit 15	RX1064	78 ± 22	<1.8	<3.1	1560 ± 120	<9.9	<5.0	<3.2	<53	<5.2
Bull Pen Pot 13	RX1066	116 ± 28	<2.2	<2.6	129 ± 11	124.8 ± 9.7	<8.3	<2.4	<84	15.2 ± 2.8
Bull Pen Pot 19	RX1067	119 ± 29	<3.5	<3.7	924 ± 70	460 ± 34	<16	<3.5	<150	15.3 ± 3.7
Bull Pen Pot 16	RX1068	140 ± 32	<2.9	<3.3	525 ± 41	324 ± 24	<13	<3.1	<130	14.6 ± 3.3

Customer Reference	Laboratory Reference	Bi-212	Pb-214	Bi-214	Ra-226 *	Ac-228	Th-234	Pa-234m	U-235	Am-241
Compton Trial Pit 15	RX1064	<21	<8.2	<5.9	<62	11.7 ± 4.6	<50	<220	<3.9	<4.7
Bull Pen Pot 13	RX1066	<29	11 ± 3.8	8.7 ± 3.5	<41	16.1 ± 6.3	<43	<270	<2.6	39.8 ± 5.0
Bull Pen Pot 19	RX1067	<41	<8.2	12.9 ± 5.1	<63	<23	<59	<430	<3.9	341 ± 27
Bull Pen Pot 16	RX1068	<37	<6.5	10.9 ± 4.4	<54	<19	<52	<330	<3.4	150 ± 13

Notes:

1. Analyses and/or samples marked with an asterisk are not UKAS accredited.
2. Results are presented as $Bq.Kg^{-1}$ of sample as received and are decay corrected to the sampling date.
3. For results below the Limit of Detection, the LoD is rounded up to 2 significant figures.
4. Detector calibrations are based upon homogenous standard solutions. For quantification purposes the sample is assumed to be homogenous.
5. ^{226}Ra has only one gamma ray at 186 keV and the major gamma ray from ^{235}U also occurs at 186 keV. ^{235}U can be measured by the lower abundance gamma ray at 144 keV and if a positive result for ^{235}U is reported the ^{226}Ra result will be unreliable and overestimated. However even if ^{235}U is below the LoD there may still be a contribution to the ^{226}Ra from ^{235}U and the ^{226}Ra result may be unreliable and overestimated. If an accurate result for ^{226}Ra is required this is better obtained by radiochemical analysis.

- End of Test Report-