

Monitor Phase 57 - Southern Section

[illegible]

Monitor Phase 57 - Southern Section

[illegible]

Monitor Phase 57 - Northern Section

Test Method	Soil Organic TM132	pH TM133	Arsenic TM181	Cadmium TM181	Chromium TM181	Copper TM181	Lead TM181	Mercury TM181	Nickel TM181	Selenium TM181	Vanadium TM181	Zinc TM181
Units	%	pH Units	mg/kg	mg/kg	mg/kg	mg/kg	ng/kg	mg/kg	mg/kg	mg/kg	mg/kg	ng/kg
LOD	<0.35	<1	<0.6	<0.02	<0.9	<1.4	<0.7	<0.14	<0.2	<1	<0.2	<1.9

Parks >1m

[illegible]

Monitor Phase 57 - Northern Section

Test Method	Soil Organic TM132	pH TM133	Arsenic TM181	Cadmium TM181	Chromium TM181	Copper TM181	Lead TM181	Mercury TM181	Nickel TM181	Selenium TM181	Vanadium TM181	Zinc TM181
Units	%	pH Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
LOD	<0.35	<1	<0.6	<0.02	<0.9	<1.4	<0.7	<0.14	<0.2	<1	<0.2	<1.9

Parks >1m

Trial Pit	Depth	Sample		Final		SDG											
		Sampled Date	Received Date	Instruction Date													
TPE 2124	4.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	6.49	15.7	<0.02	18.1	23.7	18.5	<0.14	22.1	<1	20.4	68.1
TPE 2127	0.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	83.3	7.7	17.8	0.736	15.1	59.8	16	<0.14	48.9	<1	46.1	95.2
TPE 2127	1.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	-	6.95	27.3	<0.02	10.6	56.1	20.9	<0.14	30	<1	33	52.7
TPE 2127	2.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	-	7	32.9	0.0918	12.8	96.1	86.7	1.3	62.7	<1	29.7	280
TPE 2129	1.00-	27/04/2015	01/05/2015	01/05/2015	150501-93	86	7.24	27.5	<0.02	14.2	51.6	50.9	<0.14	31.5	<1	34.8	55.8
TPE 2129	3.00-	27/04/2015	01/05/2015	01/05/2015	150501-93	-	7.77	91.9	5.66	71.3	2070	1170	<1.4	252	<10	60	4320
TPE 2143	0.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	6.27	20.4	1.29	19.1	91.1	175	0.591	35.6	<1	36.8	440
TPE 2143	1.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	6.87	85.3	0.638	12.6	18.9	18.1	<0.14	31.6	<1	15.3	116
TPE 2143	2.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	1.44	6.11	9.12	<0.02	12.9	13.5	18.9	<0.14	31	<1	14.8	91.5
TPE 2147	0.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	1.05	6.52	10.6	<0.02	12.8	17.9	15.5	<0.14	24.6	<1	14.9	77.3
TPE 2147	1.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	5.12	98.3	0.101	16.6	175	44.7	<0.14	15.1	<1	24.7	66.1
TPE 2147	2.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	6.34	11.3	0.11	11.8	17.5	15	<0.14	21.4	<1	14.1	71.9
TPE 2147	3.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	5.29	60.1	0.449	13.8	74.1	42.9	<0.14	19.5	<1	19.3	104
TPE 2149	0.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	1.42	5.99	19.3	0.602	15	40.5	24.5	<0.14	21.6	<1	17.9	98
TPE 2149	1.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	6.86	26.7	<0.02	13.3	54.7	36.2	<0.14	26.7	<1	16.5	106
TPE 2149	2.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	6.15	14.8	0.179	12.1	23.6	18.9	<0.14	22.5	<1	14.9	80.9
TPE 2149	3.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	5.68	9.73	<0.02	10.8	11.4	12.2	<0.14	21.3	<1	12.5	65.1
TPE 2151	0.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	7.4	22.5	0.321	14.1	38.7	27.7	<0.14	24.8	<1	17.7	81.4
TPE 2151	1.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	4.5	235	0.194	13.9	243	211	<0.14	13	<1	24.7	69.1
TPE 2151	2.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	1.46	5.46	13	<0.02	18	53.8	19.9	<0.14	24.1	<1	22.2	92.8
TPE 2153	0.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	2.19	5.49	13.2	0.276	15.2	24.2	20	<0.14	30.7	<1	16.9	94.1
TPE 2153	1.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	6.06	29.1	0.259	13.7	50.6	23.7	<0.14	25.4	<1	17.3	108
TPE 2153	2.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	5.16	73.4	0.187	12.3	140	50.6	<0.14	12	<1	20	53
TPE 2153	3.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	5.36	13.3	0.404	14.2	30.3	21.7	<0.14	24.8	<1	21.7	82.6
TPE 2155	0.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	58.3	6.26	18.3	0.806	11.8	96.2	135	<0.14	31.7	<1	26.2	117
TPE 2155	1.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	6.27	13.4	0.0564	10.8	129	96.4	<0.14	43	<1	34.8	81.8
TPE 2155	2.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	5.24	20	0.282	16.4	45.8	23	<0.14	12.5	<1	24.7	57.7
TPE 2155	3.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	5.14	13.8	0.333	16.8	39.9	38.7	0.179	31	<1	23.2	114
TPE 2159	0.50-	27/04/2015	01/05/2015	01/05/2015	150501-93	-	7.36	21	0.119	11.5	33.5	13.5	<0.14	19.4	<1	30	26.9
TPE 2159	2.00-	27/04/2015	01/05/2015	01/05/2015	150501-93	-	6.75	21.7	0.281	10.5	49.6	13.9	<0.14	32.6	<1	29.3	45.7
TPE 2159	3.50-	27/04/2015	01/05/2015	01/05/2015	150501-93	-	7.03	10.4	3.54	14.1	202	101	<0.14	32.2	1.02	23.7	258
TPE 2161	0.50-0.50	27/04/2015	01/05/2015	01/05/2015	150501-93	-	7.55	32.7	1.35	21.2	253	275	8.25	194	<1	36.9	303
TPE 2161	2.00-2.00	27/04/2015	01/05/2015	01/05/2015	150501-93	64.7	6.62	26.3	0.675	15.8	114	28.9	<0.14	37.2	<1	38	107
TPE 2161	3.50-3.50	27/04/2015	01/05/2015	01/05/2015	150501-93	-	5.88	20	2.28	13.1	17	16.4	<0.14	14.2	<1	23	140
TPE 2174	0.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	6.54	32.1	0.183	16.4	71.1	30.4	<0.14	21.6	<1	22.4	97.5
TPE 2174	1.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	6.1	13.4	0.0891	13.3	20.7	17.6	<0.14	25.2	<1	15.8	82.3
TPE 2174	2.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	5.56	14.9	0.0663	14.4	27.9	26.1	<0.14	24.7	<1	17.2	103
TPE 2174	3.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	2.02	5.96	13.9	0.0378	12.9	26.4	19.1	<0.14	27.1	<1	17.6	95.7
TPE 2208	0.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	2.6	6.79	12.2	<0.2	12.3	27.7	18.7	<0.14	26.3	<10	16.9	99.3
TPE 2208	1.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	5.44	6.65	<0.02	10.9	10.2	9.8	<0.14	23.1	<1	10.9	51.4
TPE 2208	2.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	6.25	8	<0.02	11.9	14.2	14.6	<0.14	25.1	<1	12.3	71
TPE 2210	0.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	6.07	12.5	0.0401	12.5	21.3	15.8	<0.14	26.8	<1	15.5	142
TPE 2210	1.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	1.68	5.66	11.4	0.66	15.8	29.8	15.2	<0.14	31.4	<1	18.5	139
TPE 2210	2.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	6.17	25.2	<0.02	13.6	22.4	19.8	2.92	14.4	<1	19.8	61.7
TPE 2210	3.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	5.85	10.5	<0.02	11.4	23.2	27	<0.14	25.7	<1	14	88
TPE 2212	0.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	7.56	18.7	1.54	14.2	139	37	<0.14	44	<1	23.8	178
TPE 2212	1.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	0.864	5.58	9.15	0.106	10.9	11.2	12.2	<0.14	23.9	<1	12.2	64.1
TPE 2212	2.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	6.58	9.53	0.14	11.6	17.5	15.1	<0.14	24	<1	13.7	75.3
TPE 2214	0.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	5.73	10.4	1.01	15.3	43.9	27.8	<0.14	31.3	<1	20.7	117
TPE 2214	1.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	5.36	11.5	0.167	11.9	15	15.4	<0.14	23.6	<1	14.9	74.6
TPE 2214	3.00-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	6.68	14.8	0.199	18.1	28.7	20.8	<0.14	45.6	<1	20.6	109
TPE 2216	0.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	1.52	6.05	9.2	<0.02	11.7	16.1	14.8	<0.14	23.7	<1	13	64.1
TPE 2216	1.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	4.9	7.68	<0.02	10.6	18.9	11.9	<0.14	23	<1	11.3	52.5
TPE 2216	2.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	5	9.65	<0.02	11.6	7.79	12	<0.14	30.6	<1	13.8	60.1
TPE 2216	3.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	6.5	17.2	<0.02	13.2	9.04	15.7	<0.14	39.4	<1	14.5	68.5
TPE 2218	0.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	2.6	6.35	9.68	1.08	12.3	23.7	15	<0.14	25.7	<1	15.3	67.7
TPE 2218	1.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	6.07	6.5	<0.02	12.5	10.9	12.1	<0.14	30	<1	12.1	59.5
TPE 2218	2.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	-	6.29	9.9	<0.02	13.6	10.9	15.6	<0.14	38.6	<1	13.7	65.5
TPE 2220	0.50-	27/04/2015	01/05/2015	01/05/2015	150501-93	-	4.2	35	0.419	11.5	43.6	26.3	<0.14	37.4	<1	21.6	146
TPE 2220	1.50-	27/04/2015	01/05/2015	01/05/2015	150501-93	0.883	6.59	8.19	0.565	11.9	11.2	11.6	<0.14	24.1	<1	12.4	53.5
TPE 2220	2.50-	27/04/2015	01/05/2015	01/05/2015	150501-93	-	6.46	7.92	<0.02	11.6	17.4	12.9	<0.14	32.5	<1	11	67
TPE 2222	0.50-	27/04/2015	01/05/2015	01/05/2015	150501-93	-	7.11	17.1	0.871	11.3	76.5	28.1	<0.14	35.4	<1	21.1	152
TPE 2222	1.50-	27/04/2015	01/05/2015	01/05/2015	150501-93	2.36	6.8	7.4	0.587	10.4	10.3	11.1	<0.14	23	<1	10.2	57.4
TPE 2222	2.50-	27/04/2015	01/05/2015	01/05/2015	150501-93	-	6.26	8.05	0.624	11.2	23.6	13.7	<0.14	28.5	<1	12.4	60.7
TPE 2222	3.50-	27/04/2015	01/05/2015	01/05/2015	150501-93	-	5.99	9.32	0.663	12.9	13.7	13.6	<0.14	32.2	<1	13.3	63.7

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Test Method	Units	LOD	GRO Surrogate % recovery**	GRO TOT (Moisture Corrected)	Methy tertiary butyl ether (MTBE)	Benzene	Toluene	Ethylbenzen e	m,p-Xylene	o-Xylene	sum of detected mpo xylene by GC	sum of detected BTEx by GC	Aliphatics >C5-C6	Aliphatics >C6-C8	Aliphatics >C8-C10	Aliphatics >C10-C12	Aliphatics >C12-C16	Aliphatics >C16-C21	Aliphatics >C21-C35	Aliphatics >C35-C44	Total Aliphatics >C12-C44	Aromatics >EC5-EC7	Aromatics >EC7-EC8	Aromatics >EC8-EC10	Aromatics >EC10-EC12	Aromatics >EC12-EC16	Aromatics >EC16-EC21	Aromatics >EC21-EC35	Aromatics >EC40-EC44	Total Aromatics >EC12-EC44	Total Aliphatics & Aromatics >C5-C44													
			TM089	TM089	TM089	TM089	TM089	TM089	TM089	TM089	TM089	TM089	TM089	TM089	TM089	TM089	TM089	TM173	TM173	TM173	TM173	TM173	TM173	TM089	TM089	TM089	TM089	TM173	TM173	TM173	TM173	TM173	TM173											
			%	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg											
			Parks >1m										48,000										478,000										432,000											
Trial Pit	Depth	Sampled Date	Sample Received Date	Final Instruction Date	SDG																																							
TPE 2124	4.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	92	6820	<20	<40	<8	<12	<24	<12	<9	<24	100	450	1190	2580	32900	30800	4290	<100	68000	<40	<40	791	1720	5400	8700	<100	<100	1730	14100	88900									
TPE 2127	0.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	52	<176	<20	<40	<8	<12	<24	<12	<9	<24	<40	<40	<40	<40	<40	11900	35100	35200	3180	85400	<40	<40	<40	<40	1280	7660	33500	17400	6630	59900	145000								
TPE 2127	1.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	37	<176	<20	<40	<8	<12	<24	<12	<9	<24	<40	<40	<40	<40	<40	27200	62800	50100	15100	155000	<40	<40	<40	<40	<100	5010	21800	13600	5570	40500	196000								
TPE 2127	2.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	42	<176	<20	<40	<8	<12	<24	<12	<9	<24	<40	<40	<40	<40	<40	52300	1200000	51800000	372000	53400000	<40	<40	<40	<40	2230	23200	155000	66600	23200	247000	53700000								
TPE 2129	1.00-	27/04/2015	01/05/2015	01/05/2015	150501-93	55	<176	<20	<40	<8	<12	<24	<12	<9	<24	<40	<40	<40	<40	<40	8530	97800	36300	4970	148000	<40	<40	<40	<40	<100	10400	16200	8760	4460	35300	183000								
TPE 2129	3.00-	27/04/2015	01/05/2015	01/05/2015	150501-93	52	<176	<20	<40	<8	<12	<24	<12	<9	<24	<40	<40	<40	<40	<40	24000	187000	111000	17700	340000	<40	<40	<40	<40	<10500	226000	644000	138000	41300	1020000	1360000								
TPE 2143	0.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	55	4220	<20	<40	<8	<12	<24	<12	<9	<24	<57.2	117	533	1890	3590000	4230000	4970000	1090000	13900000	<40	<40	<359	1260	659000	1980000	3590000	1070000	415000	7300000	12100000									
TPE 2143	1.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	85	278000	<20	76.8	<8	<12	<24	<12	<9	76.8	436	15100	56700	101000	665000	474000	58300	2370000	76.8	<40	37800	67300	95700	222000	32400	94100	40000	735000	3380000										
TPE 2143	2.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	76	500000	<100	<200	<40	<8	<12	<24	<12	<9	<24	449	10600	80100	213000	523000	207000	103000	12100	845000	<200	<200	53400	142000	34900	63400	57900	19000	8610	175000	1520000								
TPE 2147	0.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	80	106000	<20	<40	<8	<12	<24	<12	<9	<24	111	1640	25500	36900	162000	181000	182000	21700	546000	<40	<40	17000	24600	32200	72600	114000	31000	11800	250000	902000									
TPE 2147	1.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	94	84500	<20	<40	<8	<12	<24	<12	<9	<24	372	13600	26500	15800	51700	56900	59700	8450	177000	<40	<40	17700	10500	2700	11100	32600	10000	3420	56400	318000									
TPE 2147	2.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	103	143000	<20	<40	<8	<12	<24	<12	<9	<24	1020	21600	40100	32400	199000	166000	95400	9210	470000	<40	<40	26700	21600	7770	35600	58500	18400	7100	120000	733000									
TPE 2147	3.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	107	63900	<20	175	<8	<12	<24	<12	<9	175	108	1470	15300	21900	40900	28200	16900	<100	86000	175	<40	10200	14600	8060	13100	16000	6040	2340	43200	193000									
TPE 2149	0.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	100	130000	<20	<40	<8	<12	<24	<12	<9	<24	54.1	1640	39000	38100	749000	480000	122000	8030	1360000	<40	<40	26000	25400	91200	120000	55400	18800	8230	286000	1770000									
TPE 2149	1.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	87	275000	<20	120	<8	<12	<24	<12	<9	120	3330	32900	60200	83000	750000	720000	499000	75300	2040000	120	<40	40100	55300	77800	234000	286000	70100	28300	668000	2990000									
TPE 2149	2.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	71	136000	<20	<40	<8	<12	<24	<12	<9	<24	123	3620	38800	40600	456000	289000	120000	17300	883000	<40	<40	25900	27000	65200	110000	74700	21200	8900	271000	1290000									
TPE 2149	3.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	75	72500	<20	<40	<8	<12	<24	<12	<9	<24	63.3	578	15300	27900	461000	307000	87900	5230	862000	<40	<40	10200	18600	93600	125000	50900	10900	4570	281000	1210000									
TPE 2151	0.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	81	187000	<20	88.1	<8	<12	<24	<12	<9	88.1	4480	11400	32900	69600	1050000	987000	221000	7010	2260000	88.1	<40	22000	46400	105000	255000	105000	18500	7490	483000	2930000									
TPE 2151	1.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	93	93400	<20	517	114	<12	<24	<12	<9	631	1960	4220	18600	33400	169000	166000	51900	2320	389000	517	114	12400	22300	101000	100000	57500	15600	6960	275000	757000									
TPE 2151	2.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	55	<176	<20	<40	<8	<12	<24	<12	<9	<24	<40	<40	<40	<40	306000	284000	84800	5250	680000	<40	<40	<40	<40	41300	77300	49100	14500	6450	182000	863000									
TPE 2153	0.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	106	30900	<20	<40	<8	<12	<24	<12	<9	<24	71.7	525	5250	12900	72900	65900	44400	11300	194000	<40	<40	3500	8630	3700	12500	32100	15200	6380	63500	289000									
TPE 2153	1.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	82	10100	<20	<40	<8	<12	<24	<12	<9	<24	113	1450	2140	2960	20300	7510	5710	<100	33600	<40	<40	1430	1970	4090	1580	4090	4100	2440	13900	57500									
TPE 2153	2.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	93	65700	<20	88.4	<8	<12	<24	<12	<9	88.4	754	5110	14000	21800	973000	445000	92100	3180	1510000	88.4	<40	9360	14500	165000	157000	49400	7630	3200	378000	1960000									
TPE 2153	3.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	68	351000	<50	130	<20	<30	<60	<30	<9	130	1570	8560	41200	163000	502000	354000	121000	7750	985000	130	<100	27500	109000	79000	125000	84700	23700	9990	312000	1650000									
TPE 2155	0.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	42	3090	<20	76.2	26.7	<12	<24	22.9	126	311	596	532	688	71600	98800	153000	24700	349000	76.2	<40	408	458	13000	38700	135000	37000	16300	230000	582000										
TPE 2155	1.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	52	7320	<20	81.8	31.7	<12	<24	30.4	144	358	583	616	3100	192000	418000	853000	164000	1630000	81.8	<40	475	2070	18600	118000	490000	140000	47500	766000	2400000										
TPE 2155	2.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	93	1390000	<100	<200	<40	<60	<120	<60	<9	<24	864	80000	342000	444000	2270000	2380000	1430000	68900	6140000	237	<200	228000	296000	95000	254000	28500	10400	636000	8170000										
TPE 2155	3.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	73	482000	<50	<100	<20	<30	<60	<30	<9	<24	203	14100	93500	187000	1050000	606000	322000	28600	2010000	<100	<100	62300	125000	177000	230000	204000	45500	17200	657000	3150000									
TPE 2159	0.50-	27/04/2015	01/05/2015	01/05/2015	150501-93	31	821	<20	<40	<8	<12	<24	<12	<9	<24	<40	81.6	199	198	7150	12900	12300	2200	34600	<40	<40	169	132	312	631	7330	5080	2570	13400	48800									
TPE 2159	2.00-	27/04/2015	01/05/2015	01/05/2015	150501-93	50	<176	<20	<40	<8	<12	<24	<12	<9	<24	<40	<40	<40	<40	24600	49900	47900	10800	133000	<40	<40	<40	<40	1660	10100	36500	17400	7220	65700	199000									
TPE 2159	3.50-	27/04/2015	01/05/2015	01/05/2015	150501-93	104	<176	<20	<40	<8	<12																																	

Monitor Phase 57 - Northern Section

		Test	Naphthalene-d8 % recovery**	Acenaphthene- d10 % recovery**	Phenanthrene- d10 % recovery**	Chrysene- d12 % recovery**	Perylene- d12 % recovery**	Naphthalene TM218	Acenaphthylene TM218	Acenaphthene TM218	Fluorene TM218	Phenanthrene TM218	Anthracene TM218	Fluoranthene TM218	Pyrene TM218	Benz(a)anthracene TM218	Chrysene TM218	Benzo(b)fluoranthene TM218	Benzo(k)fluoranthene TM218	Benzo(a)pyrene TM218	Indeno(1,2,3-cd)pyrene TM218	Dibenzo(a,h)anthracene TM218	Benzo(g,h,i)perylene TM218	PAH, Total Detected USEPA 16			
		Method	TM218	TM218	TM218	TM218	TM218	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg			
		Units	%	%	%	%	%	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg			
		LOD						<9	<12	<8	<10	<15	<16	<17	<15	<14	<10	<15	<14	<15	<18	<23	<24	<118			
		Parks >1m																									
Trial Pit	Depth	Sampled Date	Sample Received Date	Final Instruction Date	SDG																						
TPE 2016	0.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	97.1	96.1	94.6	94.9	93.4	1370	22.5	322	331	1910	350	1350	1110	173	195	150	42.9	79.3	53.7	25.7	77.3	7560
TPE 2016	1.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	99.1	98.9	99.1	98.5	99	<9	<12	<8	<10	74.9	<16	<17	<15	<14	54	32.9	<14	<15	<18	<23	<24	162
TPE 2016	2.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	93.6	93.7	91.9	87.8	94.6	11.9	<12	<8	<10	66.3	<16	77.9	55	51.2	46.3	53.2	<14	28.2	<18	<23	<24	390
TPE 2016	3.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	93.2	93.4	91.5	85.5	89.5	<9	<12	<8	<10	55.9	<16	<17	<15	<14	22.7	17.7	<14	<15	<18	<23	<24	<118
TPE 2018	0.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	98.7	98.2	96.7	99	98.5	155	30.7	33.5	89	1200	137	561	636	399	745	525	129	284	170	108	243	5440
TPE 2018	1.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	94.9	90.4	91.3	80.8	73.8	<9	<12	<8	<10	38.9	<16	<17	<15	<14	15.9	<15	<14	<15	<18	<23	<24	<118
TPE 2018	3.00-	28/04/2015	01/05/2015	01/05/2015	150501-93	92.9	90	90.6	83.4	83.4	<9	<12	<8	<10	28.7	<16	<17	<15	<14	<10	<15	<14	<15	<18	<23	<24	<118
TPE 2020	0.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	94.5	95.4	96.8	92.8	95.4	1060	<12	135	58.7	139	18.5	30.6	20.8	18.3	20.3	22.5	<14	<15	<18	<23	<24	1520
TPE 2020	1.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	95.3	92.1	92.6	85.5	80.5	19.7	<12	<8	<10	53.2	<16	<17	<15	<14	22.5	18.5	<14	<15	<18	<23	<24	<118
TPE 2020	2.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	90.5	87.5	88	79.9	76	27.7	<12	<8	<10	73.6	<16	<17	<15	<14	34	34.9	<14	<15	<18	<23	<24	170
TPE 2022	0.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	96.9	94.7	92.2	96.5	95.3	79.8	28.4	<8	59.2	179	72.3	138	175	57.8	75.3	141	30.1	54.9	50.3	<23	69.6	1210
TPE 2022	1.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	90.8	87.4	88	80.1	78.3	<9	<12	<8	<10	105	<16	<17	<15	<14	50.6	37.8	<14	<15	<18	<23	<24	194
TPE 2022	2.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	86.2	81.4	81.2	74.7	72.2	13.6	<12	<8	<10	70.6	<16	24.2	25.7	<14	32.4	30.8	<14	<15	<18	<23	<24	197
TPE 2022	4.00-	28/04/2015	01/05/2015	01/05/2015	150501-93	93.1	89.1	89.7	81.8	77.6	10.8	<12	<8	<10	100	<16	<17	<15	<14	38.2	26.4	<14	<15	<18	<23	<24	176
TPE 2026	0.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	99.3	99.4	99.3	102	102	865	<12	753	1130	2190	1150	570	538	230	346	391	97.5	180	133	74.6	214	8860
TPE 2026	2.00-	28/04/2015	01/05/2015	01/05/2015	150501-93	91.5	90.5	90.1	88.2	86.7	<9	<12	16.6	24.7	51.9	<16	<17	<15	<14	12.7	<15	<14	<15	<18	<23	<24	<118
TPE 2026	3.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	92.6	89	89.2	80.4	75.5	<9	<12	<8	<10	63.2	<16	<17	<15	<14	18.1	<15	<14	<15	<18	<23	<24	<118
TPE 2026	4.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	97	94.1	94.8	87.5	88.2	12.7	<12	<8	<10	82.4	<16	<17	<15	<14	30.6	<15	<14	<15	<18	<23	<24	155
TPE 2028	0.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	97	95.8	94.9	96.6	96.1	15.3	<12	<8	<10	125	20.6	133	107	77.1	100	116	36.3	67.4	43.2	<23	55.7	897
TPE 2028	1.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	93.6	93.9	91.6	86.1	89.3	<9	<12	<8	<10	50.6	<16	<17	<15	<14	30	29.8	<14	<15	<18	<23	<24	<118
TPE 2028	2.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	91.6	88	89	79.4	73.1	<9	<12	<8	<10	21.2	<16	<17	<15	<14	<10	<15	<14	<15	<18	<23	<24	<118
TPE 2028	3.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	90.3	89.1	86	79.3	82.2	<9	<12	<8	<10	73.2	<16	<17	<15	<14	41	28.1	<14	<15	<18	<23	<24	142
TPE 2030	0.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	102	101	100	98.9	99.9	28	<12	18	22.3	283	83.9	448	404	229	244	274	92.4	216	108	38.7	136	2620
TPE 2030	1.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	99.6	101	101	103	102	<9	<12	<8	21	56.9	<16	20.2	20.2	<14	35	40.6	<14	<15	<18	<23	<24	194
TPE 2030	2.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	100	102	103	106	104	17.1	<12	<8	<10	94.9	<16	38	31	<14	53	57.8	<14	22	<18	<23	<24	314
TPE 2032	0.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	102	102	104	98	100	<9	<12	<8	<10	<15	<16	<17	<15	<14	<10	<15	<14	<15	<18	<23	<24	<118
TPE 2032	1.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	92.5	91.4	93.3	94.1	100	155	<12	49.6	184	576	66.6	<17	<15	<14	<10	44.8	<14	<15	<18	<23	<24	1080
TPE 2032	2.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	92.6	90.2	91	86.9	91.3	<9	<12	<8	<10	22	<16	<17	<15	<14	11.5	<15	<14	<15	<18	<23	<24	<118
TPE 2032	3.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	92.2	88.4	89.5	81.4	79.9	15.6	<12	<8	<10	166	<16	<17	<15	<14	70	40.3	<14	<15	<18	<23	<24	292
TPE 2034	0.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	122	124	121	108	100	308	<12	<8	35.4	376	38.3	132	151	72.1	161	156	41.8	81.6	68.5	30.3	126	1780
TPE 2034	1.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	89.9	87.4	89.9	83.1	78.4	<9	<12	<8	<10	46.4	<16	<17	<15	<14	18.1	24.4	<14	<15	<18	<23	<24	<118
TPE 2034	2.60-	28/04/2015	01/05/2015	01/05/2015	150501-93	97	97.4	97.2	96.7	94.6	<9	<12	<8	<10	<15	<16	<17	<15	<14	<10	18.6	<14	<15	<18	<23	<24	<118
TPE 2034	3.80-	28/04/2015	01/05/2015	01/05/2015	150501-93	96.7	97.1	96.7	96.6	95.6	<9	<12	<8	<10	<15	<16	<17	<15	<14	<10	<15	<14	<15	<18	<23	<24	<118
TPE 2036	0.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	95.1	95.6	95.7	88.2	90.3	360	91.4	202	104	776	103	506	682	302	1090	607	165	463	304	201	732	6690
TPE 2036	2.00-	28/04/2015	01/05/2015	01/05/2015	150501-93	93.5	95	95.9	93	97	66.2	44.8	135	260	114	79	79	84.8	<14	26.5	55.4	<14	<15	<18	<23	<24	945
TPE 2036	3.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	102	100	98.8	102	101	54.2	<12	<8	63.1	113	39.5	25.8	32.1	<14	26.4	36	<14	<15	<18	<23	<24	390
TPE 2038	0.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	101	96.4	97.3	92.2	93.6	136	<60	<40	<50	833	117	1410	1280	766	896	1590	533	1030	789	256	1360	11000
TPE 2038	1.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	94.5	95.1	93.5	93.5	101	19.3	<12	<8	<10	194	24.2	318	268	169	188	233	90	172	95	31.9	143	1950
TPE 2038	2.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	96	96	94.2	88.8	92.9	35.3	<12	48.7	38.6	230	85.8	391	323	175	175	179	71.6	124	55.2	<23	67.9	2000
TPE 2038	3.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	90.6	89.7	86.7	80.4	84.5	<9	<12	<8	<10	18.7	<16	23.1	21.1	<14	<10	<15	<14	<15	<18	<23	<24	<118
TPE 2040	0.50-	28/04/2015	01/05/2015																								

Monitor Phase 57 - Northern Section

						Test	Naphthalene-d8 % recovery**	Acenaphthene- d10 % recovery**	Phenanthrene- d10 % recovery**	Chrysene- d12 % recovery**	Perylene- d12 % recovery**	Naphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benz(a)anthracene	Chrysene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Indeno(1,2,3-cd)pyrene	Dibenzo(a,h)anthracene	Benzo(g,h,i)perylene	PAH, Total Detected USEPA 16	
						Method	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	
						Units	%	%	%	%	%	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg		
						LOD						<9	<12	<8	<10	<15	<16	<17	<15	<14	<10	<15	<14	<15	<18	<23	<24	<118	
Parks >1m																													
Trial Pit	Depth	Sampled Date	Sample Received Date	Final Instruction Date	SDG																								
TPE 2124	4.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	88.4		87.7		88.7	85.2	84.5	24.3	<12	20.9	38.8	125	24	85.6	74.9	<14	23.5	<15	<14	<15	<18	<23	<24	41
TPE 2127	0.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	105		106		90.2	45.4	26.3	119	<12	12.4	<10	174	<16	64.9	44.5	31	39.7	41.3	<14	<15	<18	<23	<24	52
TPE 2127	1.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	119		119		105	71.8	54.5	77.9	<12	20.6	<10	124	<16	33	31.1	20.6	32.5	26.7	<14	<15	<18	<23	<24	36
TPE 2127	2.50-	28/04/2015	01/05/2015	01/05/2015	150501-93	86.1		86.3		77.1	55.4	44.8	77.7	26.2	29.7	21.3	194	45.4	191	175	64.4	123	108	37.1	63	35.4	<23	48.9	124
TPE 2129	1.00-	27/04/2015	01/05/2015	01/05/2015	150501-93	101		102		94.8	62.8	39.4	61	<12	<8	<10	216	<16	<17	<15	<14	<10	<15	<14	<15	<18	<23	<24	27
TPE 2129	3.00-	27/04/2015	01/05/2015	01/05/2015	150501-93	135		140		137	128	133	443	132	2970	2990	52300	10400	106000	70300	57700	64500	55600	21700	38900	20600	9270	19500	53300
TPE 2143	0.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	87.7		93		95.8	95.8	97	551	436	1230	1060	2550	2890	4760	8090	2120	3580	1830	498	1390	551	315	740	3260
TPE 2143	1.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	90.9		91.3		90.3	94.9	97.1	147	<12	<8	169	318	237	216	472	109	164	141	43	78.3	42	<23	65.5	220
TPE 2143	2.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	91.7		91.9		89.7	94.1	95	<9	<12	<8	<10	173	84.2	44.2	108	<14	54	35.2	<14	<15	<18	<23	<24	49
TPE 2147	0.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	84.8		84.3		86	90	94.2	188	14	50	99.5	213	86.4	91.4	127	33	55.1	47.4	<14	16.5	<18	<23	<24	102
TPE 2147	1.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	107		108		111	107	116	1500	<12	54.1	59.1	155	49.6	57	85.7	<14	42.1	43.6	<14	<15	<18	<23	<24	205
TPE 2147	2.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	92.6		93.2		94.4	93.2	102	950	15.2	193	202	279	124	133	125	43.7	60.8	45.1	<14	<15	<18	<23	<24	217
TPE 2147	3.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	119		119		121	116	125	729	<12	26.1	39.1	107	<16	31.5	31.1	<14	25.4	24.9	<14	<15	<18	<23	<24	1010
TPE 2149	0.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	94.7		99.4		97.2	98.2	103	355	24.4	336	704	1340	387	235	201	59.9	75.2	55.9	<14	21.9	<18	<23	<24	3790
TPE 2149	1.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	93.4		92.5		94.4	92.4	102	213	52	69	172	373	185	350	488	294	271	432	150	298	127	48.7	158	368
TPE 2149	2.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	94.3		93.7		92.6	91.5	100	263	33.1	195	331	536	232	214	200	74.4	84.2	68.4	17.4	30.7	<18	<23	<24	2280
TPE 2149	3.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	92.9		92.1		91.5	90.4	98.6	172	17.8	183	352	581	172	89.3	80	16.6	22.6	19.1	<14	<15	<18	<23	<24	1710
TPE 2151	0.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	84.6		88.4		88.6	89.6	88.5	497	<12	547	1180	2200	599	230	245	54.5	61	39.8	<14	<15	<18	<23	<24	565
TPE 2151	1.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	97.7		98.7		98.4	91.5	91.7	63.6	<12	45.4	50.5	55.2	<16	<17	<15	23.8	<10	<15	<14	<15	<18	<23	<24	239
TPE 2151	2.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	95.1		99		101	110	93.2	91.9	<12	<8	130	192	79.6	41.2	59.5	34.6	28.5	23.9	<14	<15	<18	<23	<24	68
TPE 2153	0.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	101		104		102	96.4	105	64.1	<12	11.8	26.1	148	46	115	101	56.2	91.8	110	24	42.2	33.1	<23	41.7	910
TPE 2153	1.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	94		95.5		97.4	93.8	101	152	<12	23.7	42.3	98.8	<16	30.8	27.2	27.1	36.6	31.7	<14	<15	<18	<23	<24	47
TPE 2153	2.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	89		87.8		89.4	87.4	86.3	387	<12	211	639	815	240	105	104	<14	29.3	20.5	<14	<15	<18	<23	<24	2550
TPE 2153	3.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	88.6		88.6		89.4	86.5	86.8	724	47.5	67.8	253	479	170	146	149	59	78.2	100	19.5	30.1	<18	<23	28	2350
TPE 2155	0.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	119		120		113	92.9	78	1070	80.5	38.8	35.9	1260	198	1500	1010	553	906	1170	324	476	338	142	372	9480
TPE 2155	1.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	97.2		98		97.5	91	89.9	518	50.9	26.6	72.9	602	161	774	837	487	536	952	281	475	316	129	389	6610
TPE 2155	2.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	107		113		115	113	121	1280	<12	873	1670	2280	929	275	528	72.9	196	69.5	21.9	39.6	<18	<23	<24	8240
TPE 2155	3.50-	29/04/2015	01/05/2015	01/05/2015	150501-93	87.8		87.1		88.3	86.2	86.5	174	<12	70.1	296	243	205	187	211	99.6	115	142	41.6	66.9	39.6	<23	54.2	1950
TPE 2159	0.50-	27/04/2015	01/05/2015	01/05/2015	150501-93	101		103		88.6	48.7	28.5	91.2	<12	17.7	<10	149	<16	<17	<15	<14	44	19.1	<14	<15	<18	<23	<24	32
TPE 2159	2.00-	27/04/2015	01/05/2015	01/05/2015	150501-93	98.4		98.7		87.4	58																		

Monitor Phase 57 - Northern Section

Phase 57 - Northern Section										Asbestos Quantification n - Gravimetric %	Date of Analysis	Analysed By	Asbestos Quantification n - Detailed Gravimetric %	Additional Asbestos Components (Using TM048)	Comments	Analysts Comments	Chrysotile (White) Asbestos	Amosite (Brown) Asbestos	Asbestos Quantification - Total - %	Crocidolite (Blue) Asbestos	Fibrous Anthophyllite	Fibrous Tremolite	Fibrous Actinolite	Non-Asbestos Fibre
Test Method	Actinolite* SUB (ASB)	Amosite* SUB (ASB)	Anthophyllite* SUB (ASB)	Chrysotile* SUB (ASB)	Crocidolite* SUB (ASB)	Tremolite* SUB (ASB)	Non-Asbestos Fibres Detected SUB (ASB)																	
Units	-	-	-	-	-	-	-	%	-	-	-	%	-	-	-	-	-	-	%	-	-	-	-	-
LOD	<0.001												<0.001											
Parks >1m																								
Trial Pit	Depth	Sampled Date	Sample Received Date	Final Instruction Date	SDG																			
TPE 2124	4.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2127	0.50	28/04/2015	01/05/2015	01/05/2015	150501-93	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
TPE 2127	1.50	28/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2127	2.50	28/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2129	1.00	27/04/2015	01/05/2015	01/05/2015	150501-93	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
TPE 2129	3.00	27/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2143	0.50	29/04/2015	01/05/2015	01/05/2015	150501-93	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
TPE 2143	1.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2143	2.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2147	0.50	29/04/2015	01/05/2015	01/05/2015	150501-93	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
TPE 2147	1.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2147	2.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2147	3.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2149	0.50	29/04/2015	01/05/2015	01/05/2015	150501-93	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
TPE 2149	1.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2149	2.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2149	3.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2151	0.50	29/04/2015	01/05/2015	01/05/2015	150501-93	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
TPE 2151	1.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2151	2.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2153	0.50	29/04/2015	01/05/2015	01/05/2015	150501-93	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
TPE 2153	1.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2153	2.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2153	3.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2155	0.50	29/04/2015	01/05/2015	01/05/2015	150501-93	Not Detected	Not Detected	Not Detected	Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
TPE 2155	1.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2155	2.50	29/04/2015	01/05/2015	01/05/2015	150501-93	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
TPE 2155	3.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2159	0.50	27/04/2015	01/05/2015	01/05/2015	150501-93	Not Detected	Not Detected	Not Detected	Detected	Not Detected	Not Detected	Not Detected	Not Detected	<0.001	-	-	<0.001	None	-	N/C	-	-	<0.001	-
TPE 2159	2.00	27/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2159	3.50	27/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2161	0.50-0.50	27/04/2015	01/05/2015	01/05/2015	150501-93	Not Detected	Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	<0.001	-	-	<0.001	None	-	N/C	-	-	<0.001	-
TPE 2161	2.00-2.00	27/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2161	3.50-3.50	27/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2174	0.50	29/04/2015	01/05/2015	01/05/2015	150501-93	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
TPE 2174	1.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2174	2.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2174	3.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2208	0.50	29/04/2015	01/05/2015	01/05/2015	150501-93	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
TPE 2208	1.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2208	2.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2210	0.50	29/04/2015	01/05/2015	01/05/2015	150501-93	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
TPE 2210	1.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2210	2.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2210	3.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2212	0.50	29/04/2015	01/05/2015	01/05/2015	150501-93	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
TPE 2212	1.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2212	2.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2214	0.50	29/04/2015	01/05/2015	01/05/2015	150501-93	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
TPE 2214	1.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2214	3.00	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2216	0.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2216	1.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2216	2.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2216	3.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2218	0.50	29/04/2015	01/05/2015	01/05/2015	150501-93	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
TPE 2218	1.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2218	2.50	29/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2220	0.50	27/04/2015	01/05/2015	01/05/2015	150501-93	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
TPE 2220	1.50	27/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2220	2.50	27/04/2015	01/05/2015	01/05/2015	150501-93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPE 2222	0.50	27/04/2015	01/05/2015	01/05/2015	150501-93	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not										

Monitor Phase 57 - Follow Up Ground Investigation

Test	Soil Organic Matter (SOM)	pH	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Vanadium	Zinc
Method	TM132	TM133	TM181	TM181	TM181	TM181	TM181	TM181	TM181	TM181	TM181	TM181
Units	%	pH Units	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
LOD	<0.35	<1	<0.6	<0.02	<0.9	<1.4	<0.7	<0.14	<0.2	<1	<0.2	<1.9

Parks >1m

		Sample		Final													
Trial Pit	Depth	Sampled Date	Received Date	Instruction Date	SDG												
IP5001	0.50-	05/08/2015	06/08/2015	06/08/2015	150806-61	1.78	8.52	7.23	0.717	15.2	17	80.4	<0.14	34.2	<1	16.9	134
IP5002	0.70-	05/08/2015	06/08/2015	06/08/2015	150806-61	-	8.13	8.23	0.574	13	26.2	23.6	<0.14	40.1	<1	14.5	107
IP5003	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	1.74	5.63	20.3	0.812	17.1	44.4	43.7	<0.14	61.1	<1	18.1	111
IP5003	1.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	8.07	7.98	0.41	18	50.5	31.4	<0.14	52.7	<1	17.4	110
IP5004	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	8.64	21.5	1.09	15.4	169	174	<0.14	28.9	1.01	22.7	225
IP5005	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	8.58	13.4	0.743	14.3	188	35.4	<0.14	33.9	<1	17.6	98
IP5005	1.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	8.44	13.4	0.773	21.7	68.9	32.4	<1.4	51.2	<10	26.5	132
IP5006	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	2.48	8.49	157	1.13	9.98	1680	72	<0.14	20.3	<1	17.2	1460
IP5006	1.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	6.91	55.7	0.881	23.1	257	41.6	<1.4	55.9	<10	27.3	248
IP5007	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	8.12	67.2	1.15	15.2	>500	78.4	<0.14	37.7	<1	22.4	429
IP5007	1.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	5.84	25.5	0.822	17.9	199	41.6	<0.14	35.7	<1	25.2	214
IP5008	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	6.37	8.88	0.587	14.7	21.2	29.5	<0.14	27.4	<1	14.8	104
IP5008	1.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	7.31	7.4	0.68	20.7	34.1	21.6	<0.14	48	<1	19.6	114
IP5009	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	5.98	8.95	0.604	16.3	15	38.4	<0.14	32.5	<1	19.6	116
IP5010	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	2.64	7.52	18.4	1.08	17	37.1	128	<0.14	30.6	<1	20.7	199
IP5010	1.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	7.39	14.5	1.36	15.6	22.6	70.3	<0.14	40.5	<1	17.6	159
IP5011	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	6.55	44.6	2.35	21.8	29.6	77.6	<1.4	78	<10	34.5	173
IP5012	0.20-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	5.38	8.58	0.597	17.2	9.6	17.6	<0.14	30.2	<1	21.6	144
IP5013	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	6.46	9.38	1.04	21.4	26.1	36.4	<1.4	43.7	<10	25.8	139
IP5013	1.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	1.78	7	10.9	0.415	22	35.7	19.7	<0.14	46.4	<10	24.2	96.6
IP5013	2.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	7.12	12.8	0.552	18.9	26.8	17.3	<1.4	62.3	<10	21.1	95.8

Monitor Phase 57 - Follow Up Ground Investigation

Investigation		GRO Surrogate % recovery**	GRO TOT (Moisture Corrected)	Methyl tertiary butyl ether (MTBE)	Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	sum of detected mpo xylene by GC	sum of detected BTEX by GC	Aliphatics >C5-C6	Aliphatics >C6-C8	Aliphatics >C8-C10	Aliphatics >C10-C12	Aliphatics >C12-C16	Aliphatics >C16-C21	Aliphatics >C21-C35	Aliphatics >C35-C44	Total Aliphatics >C12-C44	Aromatics >EC5-EC7	Aromatics >EC7-EC8	Aromatics >EC8-EC10	Aromatics >EC10-EC12	Aromatics >EC12-EC16	Aromatics >EC16-EC21	Aromatics >EC21-EC35	Aromatics >EC35-EC44	Aromatics >EC40-EC44	Total Aromatics >EC12-EC44	Total Aliphatics & Aromatics >C5-C44						
Test Method	Units	%	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg					
LOD			<44	<5	<10	<2	<3	<6	<3	<9	<24	<10	<10	<10	<10	<100	<100	<100	<100	<100	<10	<10	<10	<10	<100	<100	<100	<100	<100	<100	<100						
Parks >1m					48,000					478,000											432,000																
Trial Pit	Depth	Sampled Date	Sample Received Date	Final Instruction Date	SDG																																
IP5001	0.50-	05/08/2015	06/08/2015	06/08/2015	150806-61	92	<176	<20	<40	<8	<12	<24	<12	<9	<24	<40	<40	<40	<40	<40	1500	3830	53400	7430	66200	<40	<40	<40	<40	289	1050	17300	5780	2140	24400	90600	
IP5002	0.70-	05/08/2015	06/08/2015	06/08/2015	150806-61	85	<176	<20	<40	<8	<12	<24	<12	<9	<24	<40	<40	<40	<40	<40	1160	4860	19300	1500	26800	<40	<40	<40	<40	184	889	6170	2320	904	9570	36300	
IP5003	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	90	251	<20	<40	<8	<12	<24	<12	<9	<24	<40	<40	<40	<40	117	14200	52500	40800	847	108000	<40	<40	<40	<40	77.8	2040	8360	12100	4060	1670	26500	135000
IP5003	1.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	92	48.2	<5	<10	<2	<3	<6	<3	<9	<24	<10	<10	<10	19.3	4840	19700	23200	836	48600	<10	<10	<10	12.8	<100	3570	4300	395	<100	8270	56900		
IP5004	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	68	255	<5	<10	<2	<3	<6	<3	<9	<24	<10	<10	19.4	125	36800	102000	200000	33800	373000	<10	<10	14.8	83.2	7380	23400	114000	59300	22200	204000	577000		
IP5005	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	82	<176	<20	<40	<8	<12	<24	<12	<9	<24	<40	<40	<40	<40	1620	8810	36600	4670	51700	<40	<40	<40	<40	355	1820	20000	10300	3550	32500	84200		
IP5005	1.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	76	<176	<20	<40	<8	<12	<24	<12	<9	<24	<40	<40	<40	<40	2160	7140	10100	<100	19400	<40	<40	<40	<40	314	1430	4280	2160	991	8180	27500		
IP5006	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	78	<176	<20	<40	<8	<12	<24	<12	<9	<24	<40	<40	<40	<40	2620	21800	158000	28600	211000	<40	<40	<40	<40	695	4620	79800	50500	17000	136000	346000		
IP5006	1.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	92	<176	<20	<40	<8	<12	<24	<12	<9	<24	<40	<40	<40	<40	<100	2870	5210	<100	8090	<40	<40	<40	<40	<100	1950	8170	2110	<100	12200	20300		
IP5007	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	83	<176	<20	<40	<8	<12	<24	<12	<9	<24	<40	<40	<40	<40	447	4670	39100	5910	50100	<40	<40	<40	<40	<100	598	22800	11000	3810	34400	84500		
IP5007	1.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	84	<176	<20	<40	<8	<12	<24	<12	<9	<24	<40	<40	<40	<40	1440	5220	16100	1670	24400	<40	<40	<40	<40	<100	547	7790	3150	909	11500	35900		
IP5008	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	88	<176	<20	<40	<8	<12	<24	<12	<9	<24	<40	<40	<40	<40	1830	7110	7540	<100	16500	<40	<40	<40	<40	<100	<100	<100	<100	<100	<100	16500		
IP5008	1.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	100	<176	<20	<40	<8	<12	<24	<12	<9	<24	<40	<40	<40	<40	<100	1820	2570	<100	4390	<40	<40	<40	<40	483	616	<100	<100	<100	<100	1100	5500	
IP5009	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	111	<176	<20	<40	<8	<12	<24	<12	<9	<24	<40	<40	<40	<40	<100	1110	10100	1240	12400	<40	<40	<40	<40	<100	<100	8250	<100	<100	8250	20700		
IP5010	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	86	<176	<20	<40	<8	<12	<24	<12	<9	<24	<40	<40	<40	<40	2540	20700	38400	20300	81900	<40	<40	<40	<40	1070	4600	29200	13300	5350	48200	130000		
IP5010	1.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	103	<176	<20	<40	<8	<12	<24	<12	<9	<24	<40	<40	<40	<40	1930	16200	23100	1310	42500	<40	<40	<40	<40	329	2360	13800	5420	2140	21900	64400		
IP5011	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	81	<176	<20	<40	<8	<12	<24	<12	<9	<24	<40	<40	<40	<40	<100	<100	<100	<100	<100	<40	<40	<40	<40	<100	1960	13000	1420	<100	16400	16400		
IP5012	0.20-	11/08/2015	12/08/2015	21/08/2015	150812-79	109	<176	<20	<40	<8	<12	<24	<12	<9	<24	<40	<40	<40	<40	<100	<100	<100	<100	<100	<40	<40	<40	<40	<100	<100	<100	<100	<100	<100	<100		
IP5013	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	99	<176	<20	<40	<8	<12	<24	<12	<9	<24	<40	<40	<40	<40	<100	6010	199000	25300	230000	<40	<40	<40	<40	<100	1090	57500	20000	2860	78600	309000		
IP5013	1.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	106	384	<20	<40	<8	<12	<24	<12	<9	<24	<40	<40	99.7	99.7	<100	<100	<100	<100	<100	<40	<40	71.7	66.1	<100	<100	<100	<100	<100	<100	<100	384	
IP5013	2.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	83	64.4	<5	<10	2.26	<3	<6	<3	<9	<24	<10	14.7	13.6	<10	<100	2770	91900	9070	104000	<10	<10	14.7	<10	<100	<100	33800	9080	1150	42800	147000		

Monitor Phase 57 - Follow Up Ground Investigation

Investigation						Naphthalene-d8 % recovery**	Acenaphthene-d10 % recovery**	Phenanthrene-d10 % recovery**	Chrysene-d12 % recovery**	Perylene-d12 % recovery**	Naphthalene	Acenaphthylene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benz(a)anthracene	Chrysene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Indeno(1,2,3-cd)pyrene	Dibenzo(a,h)anthracene	Benzo(g,h,i)perylene	PAH, Total Detected USEPA 16	Actinolite*	Amosite*	Anthophyllite*	Chrysotile*	Crocidolite*	Tremolite*
Test Method		TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	TM218	SUB (ASB)	SUB (ASB)	SUB (ASB)	SUB (ASB)	SUB (ASB)	SUB (ASB)
Units		%	%	%	%	%	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	µg/kg	-	-	-	-	-	-
LOD							<9	<12	<8	<10	<15	<16	<17	<15	<14	<10	<15	<14	<10	<15	<14	<15	<18	<23	<24	<118							
Parks >1m																																	
Trial Pit	Depth	Sampled Date	Sample Received Date	Final Instruction Date	SDG																												
IP5001	0.50-	05/08/2015	06/08/2015	06/08/2015	150806-61	98.1	96.5	96.6	89.6	88.7	28.6	<12	<8	<10	133	<16	67.8	52.6	53.6	104	173	38.7	57.1	61.7	33.2	78.9	882	-	-	-	-	-	-
IP5002	0.70-	05/08/2015	06/08/2015	06/08/2015	150806-61	80.7	76.8	75.8	74.9	78.4	16.6	<12	<8	<10	119	<16	<17	<15	<14	51	63.9	<14	<15	<18	<23	<24	250	-	-	-	-	-	-
IP5003	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	112	110	111	105	106	15.8	<12	<8	<10	104	<16	88.1	69.8	43	80.5	109	35.4	38.7	40.7	<23	41.5	666	-	-	-	-	-	-
IP5003	1.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	91.5	95.9	96.6	99.3	104	11.3	<12	<8	<10	42.4	<16	44.4	43.8	34.4	51.7	99	33.7	49.1	45.5	<23	48.1	503	-	-	-	-	-	-
IP5004	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	105	103	104	97.8	101	86.9	46.6	18.6	23.8	289	49.5	383	319	216	312	563	235	383	386	116	421	3850	-	-	-	-	-	-
IP5005	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	101	97.8	98.3	90.2	92.8	23	15.8	<8	<10	177	<16	122	102	58.2	149	195	62.5	114	110	36.6	116	1280	-	-	-	-	-	-
IP5005	1.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	102	100	102	94.9	91.3	15.1	<12	<8	<10	179	<16	37.7	26.8	<14	92.4	86.6	<14	22.9	<18	<23	<24	461	-	-	-	-	-	-
IP5006	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	105	102	103	98.8	101	26.3	<12	<8	<10	211	<16	120	102	70.2	157	154	52.6	93.9	92.4	33.7	103	1220	-	-	-	-	-	-
IP5006	1.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	101	98.6	99.7	96	95.1	24.1	<12	<8	<10	182	<16	36.3	24.3	<14	74.1	73.2	<14	<15	<18	<23	<24	414	-	-	-	-	-	-
IP5007	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	118	115	116	108	113	15.7	<12	<8	<10	105	18.6	148	112	94.4	117	170	64.5	113	98.3	33.3	105	1190	-	-	-	-	-	-
IP5007	1.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	103	102	104	101	101	17.7	<12	<8	<10	449	<16	58.4	37	<14	233	204	16.3	24.3	32.6	33.1	40.2	1150	-	-	-	-	-	-
IP5008	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	102	102	104	109	110	<9	<12	<8	<10	143	<16	33.5	28	<14	72.2	86.5	<14	22	20.6	<23	26.1	432	-	-	-	-	-	-
IP5008	1.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	102	99.8	102	97	96	<9	<12	<8	<10	70.2	<16	<17	<15	<14	27.8	24	<14	<15	<18	<23	<24	122	-	-	-	-	-	-
IP5009	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	99.7	101	105	103	106	10.7	<12	<8	<10	55.7	<16	<17	<15	<14	15.9	46.9	<14	<15	20.1	<23	<24	149	-	-	-	-	-	-
IP5010	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	111	108	110	103	104	67.7	<12	16.4	17.1	423	30.4	550	408	253	459	736	251	332	251	100	313	4210	-	-	-	-	-	-
IP5010	1.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	103	101	103	98.2	94.8	32.8	17.5	<8	<10	319	21.5	230	177	148	223	300	89.5	138	99.4	41.9	128	1970	-	-	-	-	-	-
IP5011	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	100	97.8	99.4	93.3	89.9	65.5	<12	<8	14.2	1500	<16	293	184	107	840	551	73.7	117	116	97.5	110	4070	-	-	-	-	-	-
IP5012	0.20-	11/08/2015	12/08/2015	21/08/2015	150812-79	101	99.2	99.6	92.6	96	11.5	<12	<8	<10	80.5	<16	20.2	<15	24.7	34.1	46.9	<14	<15	<18	<23	<24	218	-	-	-	-	-	-
IP5013	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	101	97.7	99.3	93.7	95.1	15.5	<12	<8	<10	234	<16	25.2	16.1	<14	106	75.5	<14	<15	<18	<23	<24	473	-	-	-	-	-	-
IP5013	1.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	102	101	103	101	102	10.1	<12	<8	<10	78.5	81.1	<17	<15	<14	35.6	43.1	39.1	<15	<18	<23	<24	287	-	-	-	-	-	-
IP5013	2.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	78	75.6	74.3	73.1	76.5	16.7	<12	<8	<10	49.5	<16	<17	<15	<14	20.9	23.7	<14	<15	<18	<23	<24	<118	-	-	-	-	-	-

Monitor Phase 57 - Follow Up Ground Investigation

Monitor Phase 57 - Follow Up Ground Investigation																										
Trial Pit	Depth	Sampled Date	Sample Received Date	Final Instruction Date	SDG	Test Method	Non-Asbestos Fibres Detected	Asbestos Quantification - Gravimetric - %	Date of Analysis	Analysed By	Asbestos Quantification - PCOM Evaluation - %	Additional Asbestos Components (Using TMO48)	Comments	Analysts Comments	Chrysotile (White) Asbestos	Amosite (Brown) Asbestos	Asbestos Quantification - Total - %	Crocidolite (Blue) Asbestos	Fibrous Anthophyllite	Fibrous Tremolite	Fibrous Actinolite	Non-Asbestos Fibre				
						SUB (ASB)	TM 304	TM048	TM048	TM 304	TM 304	TM048	TM048	TM 304	TM048	TM048	TM048	TM048	TM048	TM048	TM048	TM048	TM048	TM048	TM048	
						Units	-																			
						LOD																				
Parks >1m																										
IP5001	0.50-	05/08/2015	06/08/2015	06/08/2015	150806-61	-	-	-	13/08/2015	tebecca Rawlings	-	-	0	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected			
IP5002	0.70-	05/08/2015	06/08/2015	06/08/2015	150806-61	-	-	-	13/08/2015	tebecca Rawlings	-	-	0	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected			
IP5003	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	-	-	20/08/2015	tebecca Rawlings	-	-	0	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected			
IP5003	1.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
IP5004	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	<0.001	-	20/08/2015	Kevin Hughes	<0.001	None	oose fibres in soil	N/C	Detected	Not Detected	<0.001	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected			
IP5005	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	-	-	20/08/2015	tebecca Rawlings	-	-	0	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected			
IP5005	1.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
IP5006	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	-	-	20/08/2015	tebecca Rawlings	-	-	0	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected			
IP5006	1.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
IP5007	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	-	-	20/08/2015	tebecca Rawlings	-	-	0	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected			
IP5007	1.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
IP5008	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	-	-	20/08/2015	tebecca Rawlings	-	-	0	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected			
IP5008	1.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
IP5009	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	-	-	20/08/2015	Kevin Gill	-	-	0	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected			
IP5010	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	-	-	20/08/2015	tebecca Rawlings	-	-	0	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected			
IP5010	1.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
IP5011	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	<0.001	-	20/08/2015	tebecca Rawlings	<0.001	None	oose fibres in soil	N/C	Detected	Not Detected	<0.001	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Detected			
IP5012	0.20-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	-	-	20/08/2015	Kevin Gill	-	-	0	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected			
IP5013	0.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	-	-	20/08/2015	Kevin Gill	-	-	0	-	-	Not Detected	Not Detected	-	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected			
IP5013	1.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
IP5013	2.50-	11/08/2015	12/08/2015	21/08/2015	150812-79	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				



Atkins Global Ltd
Project Jonah site office
Llan Coed House
Suite 24
Coed Darcy
Llandarcy
SA10 6HJ

Attention: Barney Irlam

CERTIFICATE OF ANALYSIS

Date: 01 September 2015
Customer: H_ATKINS_LDC
Sample Delivery Group (SDG): 150812-79
Your Reference: SWTP
Location: Coed Darcy
Report No: 327723

This report has been revised and directly supersedes 326590 in its entirety.

We received 19 samples on Wednesday August 12, 2015 and 19 of these samples were scheduled for analysis which was completed on Tuesday September 01, 2015. 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.

All chemical testing (unless subcontracted) is performed at ALcontrol Hawarden Laboratories.

Approved By:

Sonia McWhan

Operations Manager





SDG:	150812-79	Location:	Coed Darcy	Order Number:	CD1350
Job:	H_ATKINS_LDC-299	Customer:	Atkins Global Ltd	Report Number:	327723
Client Reference:	SWTP	Attention:	Barney Irlam	Superseded Report:	326590

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
11881502	IP5003		0.50	11/08/2015
11881568	IP5003		1.50	11/08/2015
11881572	IP5004		0.50	11/08/2015
11881577	IP5005		0.50	11/08/2015
11881583	IP5005		1.50	11/08/2015
11881588	IP5006		0.50	11/08/2015
11881595	IP5006		1.50	11/08/2015
11881599	IP5007		0.50	11/08/2015
11881603	IP5007		1.50	11/08/2015
11881514	IP5008		0.50	11/08/2015
11881522	IP5008		1.50	11/08/2015
11881530	IP5009		0.50	11/08/2015
11881534	IP5010		0.50	11/08/2015
11881538	IP5010		1.50	11/08/2015
11881543	IP5011		0.50	11/08/2015
11881547	IP5012		0.20	11/08/2015
11881551	IP5013		0.50	11/08/2015
11881556	IP5013		1.50	11/08/2015
11881561	IP5013		2.50	11/08/2015

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



SDG: 150812-79
Job: H_ATKINS_LDC-299
Client Reference: SWTP

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Barney Irlam

Order Number: CD1350
Report Number: 327723
Superseded Report: 326590

SOLID Results Legend X Test N No Determination Possible	Lab Sample No(s)		Customer Sample Reference		AGS Reference		Depth (m)		Container	
	11881538	IP5010					1.50		250g Amber Jar (AL	
	11881534	IP5010					0.50		60g VOC (ALE215)	
	11881530	IP5009					0.50		400g Tub (ALE214)	
	11881522	IP5008					1.50		250g Amber Jar (AL	
Asbestos ID in Solid Samples	All	NDPs: 0 Tests: 11								
Asbestos Quantification - Full	All	NDPs: 0 Tests: 2								
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 19								
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 12								
GRO by GC-FID (S)	All	NDPs: 0 Tests: 19								
Metals in solid samples by OES	All	NDPs: 0 Tests: 19								
PAH by GCMS	All	NDPs: 0 Tests: 19								
pH	All	NDPs: 0 Tests: 19								
Sample description	All	NDPs: 0 Tests: 19								
Total Organic Carbon	All	NDPs: 0 Tests: 4								
TPH CWG GC (S)	All	NDPs: 0 Tests: 19								



SDG: 150812-79
Job: H_ATKINS_LDC-299
Client Reference: SWTP

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Barney Irlam

Order Number: CD1350
Report Number: 327723
Superseded Report: 326590

SOLID Results Legend X Test N No Determination Possible	Lab Sample No(s)		11881538	11881543	11881547	11881551	11881556	11881561
	Customer Sample Reference		IP5010	IP5011	IP5012	IP5013	IP5013	IP5013
	AGS Reference							
	Depth (m)		1.50	0.50	0.20	0.50	1.50	2.50
	Container		400g Tub (ALE214) 60g VOC (ALE215)	250g Amber Jar (AL) 400g Tub (ALE214) 60g VOC (ALE215)	250g Amber Jar (AL) 400g Tub (ALE214) 60g VOC (ALE215)	400g Tub (ALE214) 60g VOC (ALE215)	250g Amber Jar (AL) 400g Tub (ALE214) 60g VOC (ALE215)	250g Amber Jar (AL) 400g Tub (ALE214) 60g VOC (ALE215)
Asbestos ID in Solid Samples	All	NDPs: 0 Tests: 11		X	X	X		
Asbestos Quantification - Full	All	NDPs: 0 Tests: 2		X				
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 19		X	X	X	X	X
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 12		X	X	X		
GRO by GC-FID (S)	All	NDPs: 0 Tests: 19	X	X	X	X	X	X
Metals in solid samples by OES	All	NDPs: 0 Tests: 19		X	X	X	X	X
PAH by GCMS	All	NDPs: 0 Tests: 19		X	X	X	X	X
pH	All	NDPs: 0 Tests: 19	X	X	X	X	X	X
Sample description	All	NDPs: 0 Tests: 19		X	X	X	X	X
Total Organic Carbon	All	NDPs: 0 Tests: 4					X	
TPH CWG GC (S)	All	NDPs: 0 Tests: 19		X	X	X	X	X



CERTIFICATE OF ANALYSIS

SDG: 150812-79
Job: H_ATKINS_LDC-299
Client Reference: SWTP

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Barney Irlam

Order Number: CD1350
Report Number: 327723
Superseded Report: 326590

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	Grain size	Inclusions	Inclusions 2
11881502	IP5003	0.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Crushed Brick	Stones
11881568	IP5003	1.50	Green	Gravel	> 10 mm	Stones	N/A
11881572	IP5004	0.50	Dark Brown	Sand	0.1 - 2 mm	Brick	Stones
11881577	IP5005	0.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Crushed Brick	Stones
11881583	IP5005	1.50	Green	Sand	0.1 - 2 mm	Stones	None
11881588	IP5006	0.50	Dark Brown	Loamy Sand	0.1 - 2 mm	Crushed Brick	Stones
11881595	IP5006	1.50	Green	Gravel	> 10 mm	Stones	N/A
11881599	IP5007	0.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Brick	Stones
11881603	IP5007	1.50	Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	Vegetation
11881514	IP5008	0.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	Vegetation
11881522	IP5008	1.50	Dark Brown	Sand	0.1 - 2 mm	Vegetation	Stones
11881530	IP5009	0.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	None
11881534	IP5010	0.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	Vegetation
11881538	IP5010	1.50	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	Vegetation
11881543	IP5011	0.50	Green	Sandy Loam	0.1 - 2 mm	Stones	Vegetation
11881547	IP5012	0.20	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	Vegetation
11881551	IP5013	0.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	Vegetation
11881556	IP5013	1.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
11881561	IP5013	2.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	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 occurring 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.

Order Number: CD1350
Report Number: 327723
Superseded Report: 326590

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Order Number: CD1350
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Order Number: CD1350
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CERTIFICATE OF ANALYSIS

SDG: 150812-79
Job: H_ATKINS_LDC-299
Client Reference: SWTP

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Barney Irlam

Order Number: CD1350
Report Number: 327723
Superseded Report: 326590

[illegible]

SDG: 150812-79
Job: H_ATKINS_LDC-299
Client Reference: SWTP

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Barney Irlam

Order Number: CD1350
Report Number: 327723
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PAH by GCMS

[illegible]

Order Number: CD1350
Report Number: 327723
Superseded Report: 326590

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Order Number:	CD1350
Report Number:	327723
Superseded Report:	326590

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Order Number:	CD1350
Report Number:	327723
Superseded Report:	326590

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CERTIFICATE OF ANALYSIS

SDG: 150812-79
Job: H_ATKINS_LDC-299
Client Reference: SWTP

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Barney Irlam

Order Number: CD1350
Report Number: 327723
Superseded Report: 326590

TPH CWG (S)

Results Legend		Customer Sample R						
#	ISO17025 accredited.		IP5003		IP5003		IP5004	
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.50		1.50		0.50	
aq	Aqueous / settled sample.		Soil/Solid		Soil/Solid		Soil/Solid	
diss.filt	Dissolved / filtered sample.		11/08/2015		11/08/2015		11/08/2015	
tot.unfilt	Total / unfiltered sample.		12/08/2015		12/08/2015		12/08/2015	
*	Subcontracted test.		150812-79		150812-79		150812-79	
**	% 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		11881502		11881568		11881572	
(F)	Trigger breach confirmed							
1-5&\$@	Sample deviation (see appendix)							
Component	LOD/Units	Method	IP5005		IP5005		IP5006	
GRO Surrogate % recovery**	%	TM089	90		92		68	
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	251		48.2		255	
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20		<5		<5	
Benzene	<10 µg/kg	TM089	<40		<10		<10	
Toluene	<2 µg/kg	TM089	<8		<2		<8	
Ethylbenzene	<3 µg/kg	TM089	<12		<3		<12	
m,p-Xylene	<6 µg/kg	TM089	<24		<6		<24	
o-Xylene	<3 µg/kg	TM089	<12		<3		<12	
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9		<9		<9	
sum of detected BTEX by GC	<24 µg/kg	TM089	<24		<24		<24	
Aliphatics >C5-C6	<10 µg/kg	TM089	<40		<10		<10	
Aliphatics >C6-C8	<10 µg/kg	TM089	<40		<10		<40	
Aliphatics >C8-C10	<10 µg/kg	TM089	<40		<10		19.4	
Aliphatics >C10-C12	<10 µg/kg	TM089	117		19.3		<40	
Aliphatics >C12-C16	<100 µg/kg	TM173	14200		4840		36800	
Aliphatics >C16-C21	<100 µg/kg	TM173	52500		19700		102000	
Aliphatics >C21-C35	<100 µg/kg	TM173	40800		23200		200000	
Aliphatics >C35-C44	<100 µg/kg	TM173	847		836		33800	
Total Aliphatics >C12-C44	<100 µg/kg	TM173	108000		48600		373000	
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40		<10		<40	
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40		<10		<40	
Aromatics >EC8-EC10	<10 µg/kg	TM089	<40		<10		14.8	
Aromatics >EC10-EC12	<10 µg/kg	TM089	77.8		12.8		83.2	
Aromatics >EC12-EC16	<100 µg/kg	TM173	2040		<100		7380	
Aromatics >EC16-EC21	<100 µg/kg	TM173	8360		3570		23400	
Aromatics >EC21-EC35	<100 µg/kg	TM173	12100		4300		114000	
Aromatics >EC35-EC44	<100 µg/kg	TM173	4060		395		59300	
Aromatics >EC40-EC44	<100 µg/kg	TM173	1670		<100		22200	
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	26500		8270		204000	
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	135000		56900		577000	



CERTIFICATE OF ANALYSIS

SDG: 150812-79
Job: H_ATKINS_LDC-299
Client Reference: SWTP

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Barney Irlam

Order Number: CD1350
Report Number: 327723
Superseded Report: 326590

TPH CWG (S)

Results Legend		Customer Sample R						
#	ISO17025 accredited.							
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	IP5006	IP5007	IP5007	IP5008	IP5008	IP5009
aq	Aqueous / settled sample.		1.50	0.50	1.50	0.50	1.50	0.50
diss.filt	Dissolved / filtered sample.		Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
tot.unfilt	Total / unfiltered sample.		11/08/2015	11/08/2015	11/08/2015	11/08/2015	11/08/2015	11/08/2015
*	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		12/08/2015	12/08/2015	12/08/2015	12/08/2015	12/08/2015	12/08/2015
(F)	Trigger breach confirmed		150812-79	150812-79	150812-79	150812-79	150812-79	150812-79
1-5&\$@	Sample deviation (see appendix)		11881595	11881599	11881603	11881514	11881522	11881530
Component	LOD/Units	Method						
GRO Surrogate % recovery**	%	TM089	92	83	84	88	100	111
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	<176	<176	<176	<176	<176	<176
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20	<20	<20	<20	<20	<20
Benzene	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
Toluene	<2 µg/kg	TM089	<8	<8	<8	<8	<8	<8
Ethylbenzene	<3 µg/kg	TM089	<12	<12	<12	<12	<12	<12
m,p-Xylene	<6 µg/kg	TM089	<24	<24	<24	<24	<24	<24
o-Xylene	<3 µg/kg	TM089	<12	<12	<12	<12	<12	<12
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	<9	<9	<9	<9	<9
sum of detected BTEX by GC	<24 µg/kg	TM089	<24	<24	<24	<24	<24	<24
Aliphatics >C5-C6	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
Aliphatics >C6-C8	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
Aliphatics >C8-C10	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
Aliphatics >C10-C12	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
Aliphatics >C12-C16	<100 µg/kg	TM173	<100	447	1440	1830	<100	<100
Aliphatics >C16-C21	<100 µg/kg	TM173	2870	4670	5220	7110	1820	1110
Aliphatics >C21-C35	<100 µg/kg	TM173	5210	39100	16100	7540	2570	10100
Aliphatics >C35-C44	<100 µg/kg	TM173	<100	5910	1670	<100	<100	1240
Total Aliphatics >C12-C44	<100 µg/kg	TM173	8090	50100	24400	16500	4390	12400
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
Aromatics >EC8-EC10	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
Aromatics >EC10-EC12	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
Aromatics >EC12-EC16	<100 µg/kg	TM173	<100	<100	<100	<100	483	<100
Aromatics >EC16-EC21	<100 µg/kg	TM173	1950	598	547	<100	616	<100
Aromatics >EC21-EC35	<100 µg/kg	TM173	8170	22800	7790	<100	<100	8250
Aromatics >EC35-EC44	<100 µg/kg	TM173	2110	11000	3150	<100	<100	<100
Aromatics >EC40-EC44	<100 µg/kg	TM173	<100	3810	909	<100	<100	<100
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	12200	34400	11500	<100	1100	8250
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	20300	84500	35900	16500	5500	20700



CERTIFICATE OF ANALYSIS

SDG: 150812-79
Job: H_ATKINS_LDC-299
Client Reference: SWTP

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Barney Irlam

Order Number: CD1350
Report Number: 327723
Superseded Report: 326590

TPH CWG (S)

Results Legend		Customer Sample R Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	IP5010		IP5010		IP5011		IP5012		IP5013		IP5013	
#	ISO17025 accredited.		0.50		1.50		0.50		0.20		0.50		1.50	
M	mCERTS accredited.		Soil/Solid		Soil/Solid		Soil/Solid		Soil/Solid		Soil/Solid		Soil/Solid	
aq	Aqueous / settled sample.		11/08/2015		11/08/2015		11/08/2015		11/08/2015		11/08/2015		11/08/2015	
diss.filt	Dissolved / filtered sample.		12/08/2015		12/08/2015		12/08/2015		12/08/2015		12/08/2015		12/08/2015	
tot.unfilt	Total / unfiltered sample.		150812-79		150812-79		150812-79		150812-79		150812-79		150812-79	
*	% recontracted test.		11881534		11881538		11881543		11881547		11881551		11881556	
**	% 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	86		103		81		109		99		106	
GRO Surrogate % recovery**	%	TM089												
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	<176		<176		<176		<176		<176		384	
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20		<20		<20		<20		<20		<20	
Benzene	<10 µg/kg	TM089	<40		<40		<40		<40		<40		<40	
Toluene	<2 µg/kg	TM089	<8		<8		<8		<8		<8		<8	
Ethylbenzene	<3 µg/kg	TM089	<12		<12		<12		<12		<12		<12	
m,p-Xylene	<6 µg/kg	TM089	<24		<24		<24		<24		<24		<24	
o-Xylene	<3 µg/kg	TM089	<12		<12		<12		<12		<12		<12	
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9		<9		<9		<9		<9		<9	
sum of detected BTEX by GC	<24 µg/kg	TM089	<24		<24		<24		<24		<24		<24	
Aliphatics >C5-C6	<10 µg/kg	TM089	<40		<40		<40		<40		<40		<40	
Aliphatics >C6-C8	<10 µg/kg	TM089	<40		<40		<40		<40		<40		<40	
Aliphatics >C8-C10	<10 µg/kg	TM089	<40		<40		<40		<40		<40		99.7	
Aliphatics >C10-C12	<10 µg/kg	TM089	<40		<40		<40		<40		<40		99.7	
Aliphatics >C12-C16	<100 µg/kg	TM173	2540		1930		<100		<100		<100		<100	
Aliphatics >C16-C21	<100 µg/kg	TM173	20700		16200		<100		<100		6010		<100	
Aliphatics >C21-C35	<100 µg/kg	TM173	38400		23100		<100		<100		199000		<100	
Aliphatics >C35-C44	<100 µg/kg	TM173	20300		1310		<100		<100		25300		<100	
Total Aliphatics >C12-C44	<100 µg/kg	TM173	81900		42500		<100		<100		230000		<100	
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40		<40		<40		<40		<40		<40	
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40		<40		<40		<40		<40		<40	
Aromatics >EC8-EC10	<10 µg/kg	TM089	<40		<40		<40		<40		<40		71.7	
Aromatics >EC10-EC12	<10 µg/kg	TM089	<40		<40		<40		<40		<40		66.1	
Aromatics >EC12-EC16	<100 µg/kg	TM173	1070		329		<100		<100		<100		<100	
Aromatics >EC16-EC21	<100 µg/kg	TM173	4600		2360		1960		<100		1090		<100	
Aromatics >EC21-EC35	<100 µg/kg	TM173	29200		13800		13000		<100		57500		<100	
Aromatics >EC35-EC44	<100 µg/kg	TM173	13300		5420		1420		<100		20000		<100	
Aromatics >EC40-EC44	<100 µg/kg	TM173	5350		2140		<100		<100		2860		<100	
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	48200		21900		16400		<100		78600		<100	
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	130000		64400		16400		<100		309000		384	



CERTIFICATE OF ANALYSIS

SDG: 150812-79
Job: H_ATKINS_LDC-299
Client Reference: SWTP

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Barney Irlam

Order Number: CD1350
Report Number: 327723
Superseded Report: 326590

TPH CWG (S)

Results Legend		Customer Sample R					
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	IP5013 2.50 Soil/Solid 11/08/2015 12/08/2015 150812-79 11881561				
M	mCERTS 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					
GRO Surrogate % recovery**	%	TM089	83				
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	64.4	M			
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<5	M			
Benzene	<10 µg/kg	TM089	<10	M			
Toluene	<2 µg/kg	TM089	2.26	M			
Ethylbenzene	<3 µg/kg	TM089	<3	M			
m,p-Xylene	<6 µg/kg	TM089	<6	M			
o-Xylene	<3 µg/kg	TM089	<3	M			
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9				
sum of detected BTEX by GC	<24 µg/kg	TM089	<24				
Aliphatics >C5-C6	<10 µg/kg	TM089	<10				
Aliphatics >C6-C8	<10 µg/kg	TM089	14.7				
Aliphatics >C8-C10	<10 µg/kg	TM089	13.6				
Aliphatics >C10-C12	<10 µg/kg	TM089	<10				
Aliphatics >C12-C16	<100 µg/kg	TM173	<100				
Aliphatics >C16-C21	<100 µg/kg	TM173	2770				
Aliphatics >C21-C35	<100 µg/kg	TM173	91900				
Aliphatics >C35-C44	<100 µg/kg	TM173	9070				
Total Aliphatics >C12-C44	<100 µg/kg	TM173	104000				
Aromatics >EC5-EC7	<10 µg/kg	TM089	<10				
Aromatics >EC7-EC8	<10 µg/kg	TM089	<10				
Aromatics >EC8-EC10	<10 µg/kg	TM089	14.7				
Aromatics >EC10-EC12	<10 µg/kg	TM089	<10				
Aromatics >EC12-EC16	<100 µg/kg	TM173	<100				
Aromatics >EC16-EC21	<100 µg/kg	TM173	<100				
Aromatics >EC21-EC35	<100 µg/kg	TM173	33800				
Aromatics >EC35-EC44	<100 µg/kg	TM173	9080				
Aromatics >EC40-EC44	<100 µg/kg	TM173	1150				
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	42800				
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	147000				



SDG: 150812-79
Job: H_ATKINS_LDC-299
Client Reference: SWTP

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Barney Irlam

Order Number: CD1350
Report Number: 327723
Superseded Report: 326590

Asbestos Identification - Solid Samples

		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 Received SDG Original Sample Method Number	IP5003 0.50 SOLID 11/08/2015 00:00:00 14/08/2015 07:32:17 150812-79 11881502 TM048	20/08/2015	Rebecca Rawlings	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	IP5004 0.50 SOLID 11/08/2015 00:00:00 14/08/2015 07:38:11 150812-79 11881572 TM048	20/08/2015	Kevin Hughes	Loose fibres in soil	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	IP5005 0.50 SOLID 11/08/2015 00:00:00 14/08/2015 07:42:46 150812-79 11881577 TM048	20/08/2015	Rebecca Rawlings	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	IP5006 0.50 SOLID 11/08/2015 00:00:00 14/08/2015 07:46:04 150812-79 11881588 TM048	20/08/2015	Rebecca Rawlings	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	IP5007 0.50 SOLID 11/08/2015 00:00:00 13/08/2015 15:35:51 150812-79 11881599 TM048	20/08/2015	Rebecca Rawlings	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected



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SDG: 150812-79
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Superseded Report: 326590

		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 Received SDG Original Sample Method Number	IP5008 0.50 SOLID 11/08/2015 00:00:00 17/08/2015 08:16:40 150812-79 11881514 TM048	20/08/2015	Rebecca Rawlings	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	IP5009 0.50 SOLID 11/08/2015 00:00:00 13/08/2015 15:33:49 150812-79 11881530 TM048	20/08/2015	Kevin Gill	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	IP5010 0.50 SOLID 11/08/2015 00:00:00 13/08/2015 15:40:17 150812-79 11881534 TM048	20/08/2015	Rebecca Rawlings	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	IP5011 0.50 SOLID 11/08/2015 00:00:00 13/08/2015 15:42:51 150812-79 11881543 TM048	20/08/2015	Rebecca Rawlings	Loose fibres in soil	Not Detected (#)	Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	IP5012 0.20 SOLID 11/08/2015 00:00:00 13/08/2015 15:37:40 150812-79 11881547 TM048	20/08/2015	Kevin Gill	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	IP5013 0.50 SOLID 11/08/2015 00:00:00 17/08/2015 08:13:42 150812-79 11881551 TM048	20/08/2015	Kevin Gill	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected



SDG:	150812-79	Location:	Coed Darcy	Order Number:	CD1350
Job:	H_ATKINS_LDC-299	Customer:	Atkins Global Ltd	Report Number:	327723
Client Reference:	SWTP	Attention:	Barney Irlam	Superseded Report:	326590

Asbestos Quantification - Full

Additional Asbestos Components (Using TM048)	Analysts Comments	Asbestos Quantification - Gravimetric - %	Asbestos Quantification - PCOM Evaluation - %	Asbestos Quantification - Total - %
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Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	IP5004 0.50 SOLID 11/08/2015 00:00:00 27/08/2015 01:10:12 150812-79 11881572 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	IP5011 0.50 SOLID 11/08/2015 00:00:00 27/08/2015 01:06:38 150812-79 11881543 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)



SDG:	150812-79	Location:	Coed Darcy	Order Number:	CD1350
Job:	H_ATKINS_LDC-299	Customer:	Atkins Global Ltd	Report Number:	327723
Client Reference:	SWTP	Attention:	Barney Irlam	Superseded Report:	326590

Table of Results - Appendix

Method No	Reference	Description	Wet/Dry Sample ¹	Surrogate Corrected
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		
TM 304				
TM048	HSG 248, Asbestos: The analysts' guide for sampling, analysis and clearance procedures	Identification of Asbestos in Bulk Material		
TM089	Modified: US EPA Methods 8020 & 602	Determination of Gasoline Range Hydrocarbons (GRO) and BTEX (MTBE) compounds by Headspace GC-FID (C4-C12)		
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		
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	Microwave extraction – EPA method 3546	Microwave extraction - EPA method 3546		

¹ Applies to Solid samples only. DRY indicates samples have been dried at 35°C. NA = not applicable.



CERTIFICATE OF ANALYSIS

SDG: 150812-79
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Test Completion Dates

Lab Sample No(s)	11881502	11881568	11881572	11881577	11881583	11881588	11881595	11881599	11881603	11881514
Customer Sample Ref.	IP5003	IP5003	IP5004	IP5005	IP5005	IP5006	IP5006	IP5007	IP5007	IP5008
AGS Ref.										
Depth	0.50	1.50	0.50	0.50	1.50	0.50	1.50	0.50	1.50	0.50
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos ID in Solid Samples	20-Aug-2015		20-Aug-2015	20-Aug-2015		20-Aug-2015		20-Aug-2015		20-Aug-2015
Asbestos Quantification - Full			01-Sep-2015							
EPH CWG (Aliphatic) GC (S)	18-Aug-2015	20-Aug-2015	18-Aug-2015	18-Aug-2015	20-Aug-2015	18-Aug-2015	18-Aug-2015	18-Aug-2015	20-Aug-2015	20-Aug-2015
EPH CWG (Aromatic) GC (S)	18-Aug-2015	20-Aug-2015	18-Aug-2015	18-Aug-2015	20-Aug-2015	18-Aug-2015	18-Aug-2015	18-Aug-2015	20-Aug-2015	20-Aug-2015
GRO by GC-FID (S)	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015
Metals in solid samples by OES	19-Aug-2015	18-Aug-2015	18-Aug-2015	18-Aug-2015	18-Aug-2015	19-Aug-2015	18-Aug-2015	18-Aug-2015	19-Aug-2015	19-Aug-2015
PAH by GCMS	18-Aug-2015	17-Aug-2015	18-Aug-2015	18-Aug-2015	18-Aug-2015	18-Aug-2015	19-Aug-2015	18-Aug-2015	19-Aug-2015	19-Aug-2015
pH	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	21-Aug-2015	20-Aug-2015	20-Aug-2015
Sample description	15-Aug-2015	13-Aug-2015	15-Aug-2015	15-Aug-2015	13-Aug-2015	15-Aug-2015	13-Aug-2015	15-Aug-2015	13-Aug-2015	17-Aug-2015
Total Organic Carbon	20-Aug-2015					20-Aug-2015				
TPH CWG GC (S)	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015

Lab Sample No(s)	11881522	11881530	11881534	11881538	11881543	11881547	11881551	11881556	11881561
Customer Sample Ref.	IP5008	IP5009	IP5010	IP5010	IP5011	IP5012	IP5013	IP5013	IP5013
AGS Ref.									
Depth	1.50	0.50	0.50	1.50	0.50	0.20	0.50	1.50	2.50
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos ID in Solid Samples		20-Aug-2015	20-Aug-2015		20-Aug-2015	20-Aug-2015	20-Aug-2015		
Asbestos Quantification - Full					01-Sep-2015				
EPH CWG (Aliphatic) GC (S)	20-Aug-2015	18-Aug-2015	17-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015
EPH CWG (Aromatic) GC (S)	20-Aug-2015	18-Aug-2015	17-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015
GRO by GC-FID (S)	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015
Metals in solid samples by OES	19-Aug-2015	16-Aug-2015	19-Aug-2015	19-Aug-2015	20-Aug-2015	19-Aug-2015	20-Aug-2015	19-Aug-2015	18-Aug-2015
PAH by GCMS	19-Aug-2015	18-Aug-2015	20-Aug-2015	18-Aug-2015	18-Aug-2015	18-Aug-2015	18-Aug-2015	19-Aug-2015	17-Aug-2015
pH	20-Aug-2015	21-Aug-2015	21-Aug-2015	20-Aug-2015	21-Aug-2015	21-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015
Sample description	13-Aug-2015	13-Aug-2015	14-Aug-2015	13-Aug-2015	17-Aug-2015	17-Aug-2015	17-Aug-2015	13-Aug-2015	13-Aug-2015
Total Organic Carbon			20-Aug-2015					19-Aug-2015	
TPH CWG GC (S)	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015	20-Aug-2015



SDG: 150812-79
Job: H_ATKINS_LDC-299
Client Reference: SWTP

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Barney Irlam

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Superseded Report: 326590

Appendix General

1. Results are expressed on a dry weight basis (dried at 35°C) 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. ALcontrol Laboratories 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. 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 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%, they are generally wider for volatiles analysis, 50-150%. 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 Dimethylphenol, 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 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.

21. For all leachate preparations (NRA, DIN, TCLP, BSEN 12457-1, 2, 3) volatile loss may occur, as we do not employ zero headspace extraction.

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.

Sample Deviations

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 preservation 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 Alcontrol Laboratories (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 Alcontrol Laboratories (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.



Atkins Global Ltd
Project Jonah site office
Llan Coed House
Suite 24
Coed Darcy
Llandarcy
SA10 6HJ

Attention: Barney Irlam

CERTIFICATE OF ANALYSIS

Date: 18 August 2015
Customer: H_ATKINS_LDC
Sample Delivery Group (SDG): 150806-61
Your Reference: SWTP
Location: Coed Darcy
Report No: 325899

We received 18 samples on Thursday August 06, 2015 and 18 of these samples were scheduled for analysis which was completed on Tuesday August 18, 2015. 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.

All chemical testing (unless subcontracted) is performed at ALcontrol Hawarden Laboratories.

Approved By:

Sonia McWhan

Operations Manager





SDG:	150806-61	Location:	Coed Darcy	Order Number:	CD1336
Job:	H_ATKINS_LDC-299	Customer:	Atkins Global Ltd	Report Number:	325899
Client Reference:	SWTP	Attention:	Barney Irlam	Superseded Report:	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
11846469	IP4208		0.50	05/08/2015
11846474	IP4208		1.50	05/08/2015
11846480	IP4210		0.50	05/08/2015
11846485	IP4210		1.50	05/08/2015
11846490	IP4211		0.50	05/08/2015
11846414	IP4211		1.50	05/08/2015
11846420	IP4212		0.50	05/08/2015
11846425	IP4212		1.50	05/08/2015
11846429	IP4213		0.50	05/08/2015
11846433	IP4213		1.50	05/08/2015
11846437	IP4214		0.50	05/08/2015
11846442	IP4214		1.50	05/08/2015
11846447	IP5001		0.50	05/08/2015
11846451	IP5002		0.70	05/08/2015
11846409	TPE2374		0.50	05/08/2015
11846455	TPE2374		1.50	05/08/2015
11846460	TPE2374		2.50	05/08/2015
11846465	TPE2374		3.50	05/08/2015

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



SDG: 150806-61
Job: H_ATKINS_LDC-299
Client Reference: SWTP

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Barney Irlam

Order Number: CD1336
Report Number: 325899
Superseded Report:

SOLID Results Legend X Test N No Determination Possible	Lab Sample No(s)		Customer Sample Reference		AGS Reference		Depth (m)		Container	
	11846451	IP5002					0.70		250g Amber Jar (AL	
	11846447	IP5001					0.50		60g VOC (ALE215)	
									400g Tub (ALE214)	
									250g Amber Jar (AL	
Asbestos ID in Solid Samples	All	NDPs: 0 Tests: 9							60g VOC (ALE215)	
			X						400g Tub (ALE214)	
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 18							250g Amber Jar (AL	
			X	X	X	X	X	X	60g VOC (ALE215)	
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 18							400g Tub (ALE214)	
			X	X	X	X	X	X	250g Amber Jar (AL	
GRO by GC-FID (S)	All	NDPs: 0 Tests: 18							60g VOC (ALE215)	
				X	X	X	X	X	400g Tub (ALE214)	
Metals in solid samples by OES	All	NDPs: 0 Tests: 18							250g Amber Jar (AL	
			X	X	X	X	X	X	60g VOC (ALE215)	
PAH by GCMS	All	NDPs: 0 Tests: 18							400g Tub (ALE214)	
			X	X	X	X	X	X	250g Amber Jar (AL	
pH	All	NDPs: 0 Tests: 18							60g VOC (ALE215)	
				X	X	X	X	X	400g Tub (ALE214)	
Sample description	All	NDPs: 0 Tests: 18							250g Amber Jar (AL	
			X	X	X	X	X	X	60g VOC (ALE215)	
Total Organic Carbon	All	NDPs: 0 Tests: 6							400g Tub (ALE214)	
					X				250g Amber Jar (AL	
TPH CWG GC (S)	All	NDPs: 0 Tests: 18							60g VOC (ALE215)	
			X	X	X	X	X	X	400g Tub (ALE214)	



SDG: 150806-61
Job: H_ATKINS_LDC-299
Client Reference: SWTP

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Barney Irlam

Order Number: CD1336
Report Number: 325899
Superseded Report:

SOLID Results Legend X Test N No Determination Possible	Lab Sample No(s)		11846451	11846409	11846455	11846460	11846465
	Customer Sample Reference		IP5002	TPE2374	TPE2374	TPE2374	TPE2374
	AGS Reference						
	Depth (m)		0.70	0.50	1.50	2.50	3.50
	Container		400g Tub (ALE214) 60g VOC (ALE215)	250g Amber Jar (AL) 400g Tub (ALE214) 60g VOC (ALE215)	250g Amber Jar (AL) 400g Tub (ALE214) 60g VOC (ALE215)	250g Amber Jar (AL) 400g Tub (ALE214) 60g VOC (ALE215)	400g Tub (ALE214) 250g Amber Jar (AL) 60g VOC (ALE215)
Asbestos ID in Solid Samples	All	NDPs: 0 Tests: 9	X	X			
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 18		X	X	X	X
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 18		X	X	X	X
GRO by GC-FID (S)	All	NDPs: 0 Tests: 18	X	X	X	X	X
Metals in solid samples by OES	All	NDPs: 0 Tests: 18		X	X	X	X
PAH by GCMS	All	NDPs: 0 Tests: 18		X	X	X	X
pH	All	NDPs: 0 Tests: 18	X	X	X	X	X
Sample description	All	NDPs: 0 Tests: 18		X	X	X	X
Total Organic Carbon	All	NDPs: 0 Tests: 6		X		X	
TPH CWG GC (S)	All	NDPs: 0 Tests: 18		X	X	X	X



CERTIFICATE OF ANALYSIS

SDG: 150806-61
Job: H_ATKINS_LDC-299
Client Reference: SWTP

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Barney Irlam

Order Number: CD1336
Report Number: 325899
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
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Lab Sample No(s)	Customer Sample Ref.	Depth (m)	Colour	Description	Grain size	Inclusions	Inclusions 2
11846469	IP4208	0.50	Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	None
11846474	IP4208	1.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	Vegetation
11846480	IP4210	0.50	Dark Brown	Sand	0.1 - 2 mm	Stones	None
11846485	IP4210	1.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	Vegetation
11846414	IP4211	1.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	Vegetation
11846490	IP4211	0.50	Light Brown	Sand	0.1 - 2 mm	Stones	None
11846420	IP4212	0.50	Dark Brown	Loamy Sand	0.1 - 2 mm	Vegetation	Stones
11846425	IP4212	1.50	Light Brown	Sandy Clay Loam	0.063 - 0.1 mm	Stones	N/A
11846429	IP4213	0.50	Dark Brown	Sand	0.1 - 2 mm	Stones	None
11846433	IP4213	1.50	Light Brown	Stone/Soil	0.1 - 2 mm	Stones	N/A
11846437	IP4214	0.50	Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	None
11846442	IP4214	1.50	Light Brown	Loamy Sand	0.1 - 2 mm	Stones	None
11846447	IP5001	0.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Vegetation	Stones
11846451	IP5002	0.70	Dark Brown	Sand	0.1 - 2 mm	Stones	Vegetation
11846409	TPE2374	0.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	None	None
11846455	TPE2374	1.50	Light Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	None
11846460	TPE2374	2.50	Light Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	None
11846465	TPE2374	3.50	Light Brown	Sandy Silt Loam	0.1 - 2 mm	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 occurring 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: 150806-61
Job: H_ATKINS_LDC-299
Client Reference: SWTP

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Barney Irlam

Order Number: CD1336
Report Number: 325899
Superseded Report:

Results Legend		Customer Sample R	IP4208	IP4208	IP4210	IP4210	IP4211	IP4211
#	ISO17025 accredited.							
M	mCERTS 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)							
		Depth (m)	0.50	1.50	0.50	1.50	0.50	1.50
		Sample Type	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
		Date Sampled	05/08/2015	05/08/2015	05/08/2015	05/08/2015	05/08/2015	05/08/2015
		Sample Time	.	.	.	.	.	.
		Date Received	06/08/2015	06/08/2015	06/08/2015	06/08/2015	06/08/2015	06/08/2015
		SDG Ref	150806-61	150806-61	150806-61	150806-61	150806-61	150806-61
		Lab Sample No.(s)	11846469	11846474	11846480	11846485	11846490	11846414
		AGS Reference						
Component	LOD/Units	Method						
Moisture Content Ratio (% of as received sample)	%	PM024	11	7.6	9	6.8	6.3	7.6
Soil Organic Matter (SOM)	<0.35 %	TM132			3.29 #		1.27 #	
pH	1 pH Units	TM133	5.7 M	6.41 M	7.41 M	5.31 M	5.59 M	7.13 M
Arsenic	<0.6 mg/kg	TM181	29.2 M	7.97 M	42.1 M	13 M	13.9 M	11.6 M
Cadmium	<0.02 mg/kg	TM181	0.738 M	0.508 M	0.841 M	0.722 M	0.47 M	0.551 M
Chromium	<0.9 mg/kg	TM181	12.1 M	14.9 M	13.9 M	13.7 M	11.6 M	13.4 M
Copper	<1.4 mg/kg	TM181	41.6 M	16.3 M	64.5 M	18 M	17 M	12.9 M
Lead	<0.7 mg/kg	TM181	26.7 M	12.2 M	46.7 M	13.5 M	17.1 M	11.7 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	22.7 M	28.2 M	24.5 M	24.8 M	23.5 M	26 M
Selenium	<1 mg/kg	TM181	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Vanadium	<0.2 mg/kg	TM181	15.7 #	15.6 #	20.9 #	16.1 #	14.1 #	15.2 #
Zinc	<1.9 mg/kg	TM181	93.9 M	75.9 M	103 M	83.8 M	81.4 M	78.7 M
							</	



CERTIFICATE OF ANALYSIS

SDG: 150806-61
Job: H_ATKINS_LDC-299
Client Reference: SWTP

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Barney Irlam

Order Number: CD1336
Report Number: 325899
Superseded Report:

Results Legend		Customer Sample R	IP4212		IP4212		IP4213		IP4213		IP4214		IP4214		
#	ISO17025 accredited.		Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.50		1.50		0.50		1.50		0.50		1.50	
M	mCERTS accredited.			Soil/Solid		Soil/Solid		Soil/Solid		Soil/Solid		Soil/Solid		Soil/Solid	
aq	Aqueous / settled sample.			05/08/2015		05/08/2015		05/08/2015		05/08/2015		05/08/2015		05/08/2015	
diss.filt	Dissolved / filtered sample.			06/08/2015		06/08/2015		06/08/2015		06/08/2015		06/08/2015		06/08/2015	
tot.unfilt	Total / unfiltered sample.			150806-61		150806-61		150806-61		150806-61		150806-61		150806-61	
*	Subcontracted test.			11846420		11846425		11846429		11846433		11846437		11846442	
**	% 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												
Moisture Content Ratio (% of as received sample)		%	PM024	7.5		9.3		9.3		14		10			
Soil Organic Matter (SOM)		<0.35 %	TM132							2.45					
pH		1 pH Units	TM133	7.6		8.1		8.35		8.27		8.16			
Arsenic		<0.6 mg/kg	TM181	12.3		9.71		13.9		12.5		18.7			
Cadmium		<0.02 mg/kg	TM181	1.36		0.401		0.642		0.502		0.751			
Chromium		<0.9 mg/kg	TM181	14.4		13.6		13.8		15.4		14.2			
Copper		<1.4 mg/kg	TM181	<14		15.7		31.5		25.2		47.9			
Lead		<0.7 mg/kg	TM181	17.2		17.8		45.5		35.3		74.4			
Mercury		<0.14 mg/kg	TM181	<0.14		<0.14		<0.14		<0.14		0.159			
Nickel		<0.2 mg/kg	TM181	29		26.6		25.9		33.3		24.3			
Selenium		<1 mg/kg	TM181	<10		<1		<1		<1		<1			
Vanadium		<0.2 mg/kg	TM181	18.6		15.6		16.4		17.1		16.6			
Zinc		<1.9 mg/kg	TM181	111		84.5		124		108		152			

Order Number: CD1336
Report Number: 325899
Superseded Report:

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Order Number: CD1336
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CERTIFICATE OF ANALYSIS

SDG: 150806-61
Job: H_ATKINS_LDC-299
Client Reference: SWTP

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Barney Irlam

Order Number: CD1336
Report Number: 325899
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R	IP4208		IP4208		IP4210		IP4210		IP4211		IP4211	
#	ISO17025 accredited.		0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
M	mCERTS accredited.	Depth (m)	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
aq	Aqueous / settled sample.	Sample Type	05/08/2015	05/08/2015	05/08/2015	05/08/2015	05/08/2015	05/08/2015	05/08/2015	05/08/2015	05/08/2015	05/08/2015	05/08/2015	05/08/2015
diss.filt	Dissolved / filtered sample.	Date Sampled	06/08/2015	06/08/2015	06/08/2015	06/08/2015	06/08/2015	06/08/2015	06/08/2015	06/08/2015	06/08/2015	06/08/2015	06/08/2015	06/08/2015
tot.unfilt	Total / unfiltered sample.	Sample Time	150806-61	150806-61	150806-61	150806-61	150806-61	150806-61	150806-61	150806-61	150806-61	150806-61	150806-61	150806-61
*	Subcontracted test.	Date Received	11846469	11846474	11846480	11846485	11846485	11846490	11846490	11846490	11846490	11846490	11846490	11846490
**	% 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	SDG Ref												
(F)	Trigger breach confirmed	Lab Sample No.(s)												
1-5&\$@	Sample deviation (see appendix)	AGS Reference												
Component	LOD/Units	Method	IP4208		IP4208		IP4210		IP4210		IP4211		IP4211	
GRO Surrogate % recovery**	%	TM089	94	98	81	101	98	105						
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	802	<176	<176	<176	<176	<176						
			M	M	M	M	M	M						
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20	<20	<20	<20	<20	<20						
			M	M	M	M	M	M						
Benzene	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40						
			M	M	M	M	M	M						
Toluene	<2 µg/kg	TM089	<8	<8	<8	<8	<8	<8						
			M	M	M	M	M	M						
Ethylbenzene	<3 µg/kg	TM089	<12	<12	<12	<12	<12	<12						
			M	M	M	M	M	M						
m,p-Xylene	<6 µg/kg	TM089	<24	<24	<24	<24	<24	<24						
			M	M	M	M	M	M						
o-Xylene	<3 µg/kg	TM089	<12	<12	<12	<12	<12	<12						
			M	M	M	M	M	M						
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	<9	<9	<9	<9	<9						
sum of detected BTEX by GC	<24 µg/kg	TM089	<24	<24	<24	<24	<24	<24						
Aliphatics >C5-C6	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40						
Aliphatics >C6-C8	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40						
Aliphatics >C8-C10	<10 µg/kg	TM089	71.2	<40	<40	<40	<40	<40						
Aliphatics >C10-C12	<10 µg/kg	TM089	381	<40	40.7	<40	<40	<40						
Aliphatics >C12-C16	<100 µg/kg	TM173	4250	<100	1870	<100	<100	<100						
Aliphatics >C16-C21	<100 µg/kg	TM173	9270	<100	8650	<100	<100	<100						
Aliphatics >C21-C35	<100 µg/kg	TM173	2920	<100	32400	1590	<100	<100						
Aliphatics >C35-C44	<100 µg/kg	TM173	930	<100	9050	<100	<100	<100						
Total Aliphatics >C12-C44	<100 µg/kg	TM173	17400	<100	52000	1590	<100	<100						
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40						
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40						
Aromatics >EC8-EC10	<10 µg/kg	TM089	48.6	<40	<40	<40	<40	<40						
Aromatics >EC10-EC12	<10 µg/kg	TM089	254	<40	<40	<40	<40	<40						
Aromatics >EC12-EC16	<100 µg/kg	TM173	393	479	213	<100	1160	1340						
Aromatics >EC16-EC21	<100 µg/kg	TM173	1310	234	2290	<100	1220	1450						
Aromatics >EC21-EC35	<100 µg/kg	TM173	9050	<100	31700	1810	6600	7620						
Aromatics >EC35-EC44	<100 µg/kg	TM173	4620	164	13100	<100	3290	4620						
Aromatics >EC40-EC44	<100 µg/kg	TM173	1730	<100	5210	<100	1280	2000						
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	15400	878	47300	1810	12300	15000						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	33500	885	99500	3390	12300	25300						



CERTIFICATE OF ANALYSIS

SDG: 150806-61
Job: H_ATKINS_LDC-299
Client Reference: SWTP

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Barney Irlam

Order Number: CD1336
Report Number: 325899
Superseded Report:

TPH CWG (S)

Results Legend			Customer Sample R	IP4212		IP4212		IP4213		IP4213		IP4214		IP4214		
#	ISO17025 accredited.			Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.50		1.50		0.50		1.50		0.50		1.50	
M	mCERTS accredited.				Soil/Solid		Soil/Solid		Soil/Solid		Soil/Solid		Soil/Solid		Soil/Solid	
aq	Aqueous / settled sample.				05/08/2015		05/08/2015		05/08/2015		05/08/2015		05/08/2015		05/08/2015	
diss.filt	Dissolved / filtered sample.				06/08/2015		06/08/2015		06/08/2015		06/08/2015		06/08/2015		06/08/2015	
tot.unfilt	Total / unfiltered sample.				150806-61		150806-61		150806-61		150806-61		150806-61		150806-61	
*	Subcontracted test.				11846420		11846425		11846429		11846433		11846437		11846442	
**	% 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												
GRO Surrogate % recovery**			%	TM089	101	99	86	16	77	82						
GRO TOT (Moisture Corrected)			<44 µg/kg	TM089	<176											
Methyl tertiary butyl ether (MTBE)			<5 µg/kg	TM089	<20											
Benzene			<10 µg/kg	TM089	<40											
Toluene			<2 µg/kg	TM089	<8											
Ethylbenzene			<3 µg/kg	TM089	<12											
m,p-Xylene			<6 µg/kg	TM089	<24											
o-Xylene			<3 µg/kg	TM089	<12											
sum of detected mpo xylene by GC			<9 µg/kg	TM089	<9											
sum of detected BTEX by GC			<24 µg/kg	TM089	<24											
Aliphatics >C5-C6			<10 µg/kg	TM089	<40											
Aliphatics >C6-C8			<10 µg/kg	TM089	<40											
Aliphatics >C8-C10			<10 µg/kg	TM089	<40											
Aliphatics >C10-C12			<10 µg/kg	TM089	<40											
Aliphatics >C12-C16			<100 µg/kg	TM173	<100											
Aliphatics >C16-C21			<100 µg/kg	TM173	681											
Aliphatics >C21-C35			<100 µg/kg	TM173	4790											
Aliphatics >C35-C44			<100 µg/kg	TM173	907											
Total Aliphatics >C12-C44			<100 µg/kg	TM173	6370											
Aromatics >EC5-EC7			<10 µg/kg	TM089	<40											
Aromatics >EC7-EC8			<10 µg/kg	TM089	<40											
Aromatics >EC8-EC10			<10 µg/kg	TM089	<40											
Aromatics >EC10-EC12			<10 µg/kg	TM089	<40											
Aromatics >EC12-EC16			<100 µg/kg	TM173	<100											
Aromatics >EC16-EC21			<100 µg/kg	TM173	295											
Aromatics >EC21-EC35			<100 µg/kg	TM173	4610											
Aromatics >EC35-EC44			<100 µg/kg	TM173	4200											
Aromatics >EC40-EC44			<100 µg/kg	TM173	1010											
Total Aromatics >EC12-EC44			<100 µg/kg	TM173	9100											
Total Aliphatics & Aromatics >C5-C44			<100 µg/kg	TM173	15500											



CERTIFICATE OF ANALYSIS

SDG: 150806-61
Job: H_ATKINS_LDC-299
Client Reference: SWTP

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Barney Irlam

Order Number: CD1336
Report Number: 325899
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R						
#	ISO17025 accredited.		IP5001	IP5002	TPE2374	TPE2374	TPE2374	TPE2374
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.50 Soil/Solid 05/08/2015	0.70 Soil/Solid 05/08/2015	0.50 Soil/Solid 05/08/2015	1.50 Soil/Solid 05/08/2015	2.50 Soil/Solid 05/08/2015	3.50 Soil/Solid 05/08/2015
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		06/08/2015 150806-61 11846447	06/08/2015 150806-61 11846451	06/08/2015 150806-61 11846409	06/08/2015 150806-61 11846455	06/08/2015 150806-61 11846460	06/08/2015 150806-61 11846465
1-5&*\$@	Sample deviation (see appendix)							
Component	LOD/Units	Method						
GRO Surrogate % recovery**	%	TM089	92	85	72	138	157	125
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	<176 M	<176 M	32500 M	1190000 M	2170000 3 M	133000 M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20 M	<20 M	270 M	<100 M	<100 M	<20 M
Benzene	<10 µg/kg	TM089	<40 M	<40 M	<40 M	1610 M	1830 M	<40 M
Toluene	<2 µg/kg	TM089	<8 M	<8 M	<8 M	<40 M	<40 M	<8 M
Ethylbenzene	<3 µg/kg	TM089	<12 M	<12 M	<12 M	<60 M	<60 M	<12 M
m,p-Xylene	<6 µg/kg	TM089	<24 M	<24 M	<24 M	<120 M	<120 M	<24 M
o-Xylene	<3 µg/kg	TM089	<12 M	<12 M	<12 M	<60 M	<60 M	<12 M
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	<9	<9	<9	<9	<9
sum of detected BTEX by GC	<24 µg/kg	TM089	<24	<24	<24	1610	1830	<24
Aliphatics >C5-C6	<10 µg/kg	TM089	<40	<40	302	52000	85600 3	979
Aliphatics >C6-C8	<10 µg/kg	TM089	<40	<40	3990	382000	684000 3	19700
Aliphatics >C8-C10	<10 µg/kg	TM089	<40	<40	11500	264000	509000 3	33500
Aliphatics >C10-C12	<10 µg/kg	TM089	<40	<40	5310	185000	329000 3	34000
Aliphatics >C12-C16	<100 µg/kg	TM173	1500	1160	37200	351000	389000	309000
Aliphatics >C16-C21	<100 µg/kg	TM173	3830	4860	147000	175000	203000	201000
Aliphatics >C21-C35	<100 µg/kg	TM173	53400	19300	248000	41800	48900	101000
Aliphatics >C35-C44	<100 µg/kg	TM173	7430	1500	63400	4940	5020	15400
Total Aliphatics >C12-C44	<100 µg/kg	TM173	66200	26800	495000	573000	646000	627000
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40	<40	<40	1610	1830 3	<40
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40	<40	<40	<200	<200 3	<40
Aromatics >EC8-EC10	<10 µg/kg	TM089	<40	<40	7650	176000	339000 3	22400
Aromatics >EC10-EC12	<10 µg/kg	TM089	<40	<40	3540	124000	219000 3	22700
Aromatics >EC12-EC16	<100 µg/kg	TM173	289	184	3940	130000	123000	75100
Aromatics >EC16-EC21	<100 µg/kg	TM173	1050	889	19700	83300	85200	66300
Aromatics >EC21-EC35	<100 µg/kg	TM173	17300	6170	137000	32500	33000	57500
Aromatics >EC35-EC44	<100 µg/kg	TM173	5780	2320	59100	8720	7250	14300
Aromatics >EC40-EC44	<100 µg/kg	TM173	2140	904	23100	3770	3030	5740
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	24400	9570	220000	254000	248000	213000
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	90600	36300	747000	2010000	3060000	973000



SDG:	150806-61	Location:	Coed Darcy	Order Number:	CD1336
Job:	H_ATKINS_LDC-299	Customer:	Atkins Global Ltd	Report Number:	325899
Client Reference:	SWTP	Attention:	Barney Irlam	Superseded Report:	

Asbestos Identification - Solid Samples

		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 Received SDG Original Sample Method Number	IP4208 0.50 SOLID 05/08/2015 00:00:00 07/08/2015 14:08:29 150806-61 11846469 TM048	14/8/15	Kevin Hughes	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	IP4210 0.50 SOLID 05/08/2015 00:00:00 07/08/2015 14:19:00 150806-61 11846480 TM048	14/8/15	Kevin Hughes	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	IP4211 0.50 SOLID 05/08/2015 00:00:00 07/08/2015 14:13:58 150806-61 11846490 TM048	14/8/15	Kevin Hughes	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	IP4212 0.50 SOLID 05/08/2015 00:00:00 10/08/2015 10:44:27 150806-61 11846420 TM048	13/08/2015	Rebecca Rawlings	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	IP4213 0.50 SOLID 05/08/2015 00:00:00 10/08/2015 10:31:11 150806-61 11846429 TM048	13/08/2015	Rebecca Rawlings	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Detected



CERTIFICATE OF ANALYSIS

SDG: 150806-61
Job: H_ATKINS_LDC-299
Client Reference: SWTP

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Barney Irlam

Order Number: CD1336
Report Number: 325899
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 Received SDG Original Sample Method Number	IP4214 0.50 SOLID 05/08/2015 00:00:00 10/08/2015 12:13:54 150806-61 11846437 TM048	13/08/2015	Rebecca Rawlings	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	IP5001 0.50 SOLID 05/08/2015 00:00:00 10/08/2015 12:10:35 150806-61 11846447 TM048	13/08/2015	Rebecca Rawlings	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	IP5002 0.70 SOLID 05/08/2015 00:00:00 10/08/2015 10:41:38 150806-61 11846451 TM048	13/08/2015	Rebecca Rawlings	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TPE2374 0.50 SOLID 05/08/2015 00:00:00 10/08/2015 12:07:40 150806-61 11846409 TM048	13/08/2015	Rebecca Rawlings	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected



SDG:	150806-61	Location:	Coed Darcy	Order Number:	CD1336
Job:	H_ATKINS_LDC-299	Customer:	Atkins Global Ltd	Report Number:	325899
Client Reference:	SWTP	Attention:	Barney Irlam	Superseded Report:	

Table of Results - Appendix

Method No	Reference	Description	Wet/Dry Sample ¹	Surrogate Corrected
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		
TM048	HSG 248, Asbestos: The analysts' guide for sampling, analysis and clearance procedures	Identification of Asbestos in Bulk Material		
TM089	Modified: US EPA Methods 8020 & 602	Determination of Gasoline Range Hydrocarbons (GRO) and BTEX (MTBE) compounds by Headspace GC-FID (C4-C12)		
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		
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	Microwave extraction – EPA method 3546	Microwave extraction - EPA method 3546		

¹ Applies to Solid samples only. DRY indicates samples have been dried at 35°C. NA = not applicable.



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Superseded Report:

Test Completion Dates

Lab Sample No(s)	11846469	11846474	11846480	11846485	11846414	11846490	11846420	11846425	11846429	11846433
Customer Sample Ref.	IP4208	IP4208	IP4210	IP4210	IP4211	IP4211	IP4212	IP4212	IP4213	IP4213
AGS Ref.										
Depth	0.50	1.50	0.50	1.50	1.50	0.50	0.50	1.50	0.50	1.50
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos ID in Solid Samples	14-Aug-2015		14-Aug-2015			14-Aug-2015	13-Aug-2015		13-Aug-2015	
EPH CWG (Aliphatic) GC (S)	12-Aug-2015	14-Aug-2015	18-Aug-2015	14-Aug-2015	14-Aug-2015	14-Aug-2015	12-Aug-2015	13-Aug-2015	13-Aug-2015	13-Aug-2015
EPH CWG (Aromatic) GC (S)	12-Aug-2015	14-Aug-2015	18-Aug-2015	14-Aug-2015	14-Aug-2015	14-Aug-2015	12-Aug-2015	13-Aug-2015	13-Aug-2015	13-Aug-2015
GRO by GC-FID (S)	14-Aug-2015	14-Aug-2015	14-Aug-2015	14-Aug-2015	14-Aug-2015	14-Aug-2015	14-Aug-2015	14-Aug-2015	14-Aug-2015	14-Aug-2015
Metals in solid samples by OES	14-Aug-2015	13-Aug-2015	14-Aug-2015	13-Aug-2015	13-Aug-2015	12-Aug-2015	13-Aug-2015	13-Aug-2015	13-Aug-2015	13-Aug-2015
PAH by GCMS	13-Aug-2015	14-Aug-2015	13-Aug-2015	14-Aug-2015	14-Aug-2015	13-Aug-2015	13-Aug-2015	14-Aug-2015	13-Aug-2015	12-Aug-2015
pH	14-Aug-2015	13-Aug-2015	14-Aug-2015	13-Aug-2015	13-Aug-2015	14-Aug-2015	14-Aug-2015	13-Aug-2015	14-Aug-2015	13-Aug-2015
Sample description	07-Aug-2015	07-Aug-2015	07-Aug-2015	07-Aug-2015	07-Aug-2015	07-Aug-2015	10-Aug-2015	11-Aug-2015	10-Aug-2015	11-Aug-2015
Total Organic Carbon			13-Aug-2015			13-Aug-2015				13-Aug-2015
TPH CWG GC (S)	14-Aug-2015	14-Aug-2015	18-Aug-2015	14-Aug-2015	14-Aug-2015	14-Aug-2015	14-Aug-2015	14-Aug-2015	14-Aug-2015	14-Aug-2015

Lab Sample No(s)	11846437	11846442	11846447	11846451	11846409	11846455	11846460	11846465
Customer Sample Ref.	IP4214	IP4214	IP5001	IP5002	TPE2374	TPE2374	TPE2374	TPE2374
AGS Ref.								
Depth	0.50	1.50	0.50	0.70	0.50	1.50	2.50	3.50
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos ID in Solid Samples	13-Aug-2015		13-Aug-2015	13-Aug-2015	13-Aug-2015			
EPH CWG (Aliphatic) GC (S)	12-Aug-2015	13-Aug-2015	12-Aug-2015	12-Aug-2015	12-Aug-2015	13-Aug-2015	13-Aug-2015	13-Aug-2015
EPH CWG (Aromatic) GC (S)	12-Aug-2015	13-Aug-2015	12-Aug-2015	12-Aug-2015	12-Aug-2015	13-Aug-2015	13-Aug-2015	13-Aug-2015
GRO by GC-FID (S)	14-Aug-2015	14-Aug-2015	14-Aug-2015	14-Aug-2015	14-Aug-2015	17-Aug-2015	17-Aug-2015	14-Aug-2015
Metals in solid samples by OES	13-Aug-2015	13-Aug-2015	12-Aug-2015	13-Aug-2015	14-Aug-2015	13-Aug-2015	13-Aug-2015	13-Aug-2015
PAH by GCMS	12-Aug-2015	12-Aug-2015	12-Aug-2015	13-Aug-2015	11-Aug-2015	12-Aug-2015	12-Aug-2015	12-Aug-2015
pH	14-Aug-2015	13-Aug-2015	14-Aug-2015	14-Aug-2015	14-Aug-2015	13-Aug-2015	13-Aug-2015	13-Aug-2015
Sample description	10-Aug-2015	10-Aug-2015	10-Aug-2015	10-Aug-2015	07-Aug-2015	10-Aug-2015	10-Aug-2015	10-Aug-2015
Total Organic Carbon			14-Aug-2015		14-Aug-2015		13-Aug-2015	
TPH CWG GC (S)	14-Aug-2015	14-Aug-2015	14-Aug-2015	14-Aug-2015	14-Aug-2015	17-Aug-2015	17-Aug-2015	14-Aug-2015



SDG: 150806-61
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Appendix General

1. Results are expressed on a dry weight basis (dried at 35°C) 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. ALcontrol Laboratories 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. 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 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%, they are generally wider for volatiles analysis, 50-150%. 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 Dimethylphenol, 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 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.

21. For all leachate preparations (NRA, DIN, TCLP, BSEN 12457-1, 2, 3) volatile loss may occur, as we do not employ zero headspace extraction.

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.

Sample Deviations

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 preservation 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 Alcontrol Laboratories (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 Alcontrol Laboratories (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.



Atkins Global Ltd
Project Jonah site office
Llan Coed House
Suite 24
Coed Darcy
Llandarcy
SA10 6HJ

Attention: Alex Mann

CERTIFICATE OF ANALYSIS

Date: 18 June 2015
Customer: H_ATKINS_LDC
Sample Delivery Group (SDG): 150501-93
Your Reference: Railhead TPs
Location: Coed Darcy
Report No: 317645

We received 163 samples on Friday May 01, 2015 and 163 of these samples were scheduled for analysis which was completed on Thursday June 18, 2015. 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.

All chemical testing (unless subcontracted) is performed at ALcontrol Hawarden Laboratories.

Approved By:

Sonia McWhan

Operations Manager





CERTIFICATE OF ANALYSIS

Validated

SDG:	150501-93	Location:	Coed Darcy	Order Number:	CD1197
Job:	H_ATKINS_LDC-350	Customer:	Atkins Global Ltd	Report Number:	317645
Client Reference:	Railhead TPs	Attention:	Alex Mann	Superseded Report:	

Received Sample Overview

Lab Sample No(s)	Customer Sample Ref.	AGS Ref.	Depth (m)	Sampled Date
11293166	TPE 2014		0.50	29/04/2015
11293171	TPE 2014		1.50	29/04/2015
11293177	TPE 2014		2.50	29/04/2015
11293751	TPE 2016		0.50	28/04/2015
11293756	TPE 2016		1.50	28/04/2015
11293761	TPE 2016		2.50	28/04/2015
11293767	TPE 2016		3.50	28/04/2015
11293903	TPE 2018		0.50	28/04/2015
11293919	TPE 2018		1.50	28/04/2015
11293929	TPE 2018		3.00	28/04/2015
11293809	TPE 2020		0.50	28/04/2015
11293814	TPE 2020		1.50	28/04/2015
11293818	TPE 2020		2.50	28/04/2015
11293849	TPE 2022		0.50	28/04/2015
11293864	TPE 2022		1.50	28/04/2015
11293876	TPE 2022		2.50	28/04/2015
11293888	TPE 2022		4.00	28/04/2015
11293824	TPE 2026		0.50	28/04/2015
11293830	TPE 2026		2.00	28/04/2015
11293837	TPE 2026		3.50	28/04/2015
11293844	TPE 2026		4.50	28/04/2015
11293777	TPE 2028		0.50	28/04/2015
11293783	TPE 2028		1.50	28/04/2015
11293798	TPE 2028		2.50	28/04/2015
11293803	TPE 2028		3.50	28/04/2015
11293736	TPE 2030		0.50	28/04/2015
11293740	TPE 2030		1.50	28/04/2015
11293745	TPE 2030		2.50	28/04/2015
11293691	TPE 2032		0.50	28/04/2015
11293695	TPE 2032		1.50	28/04/2015
11293699	TPE 2032		2.50	28/04/2015
11293704	TPE 2032		3.50	28/04/2015
11293673	TPE 2034		0.50	28/04/2015
11293677	TPE 2034		1.50	28/04/2015
11293681	TPE 2034		2.60	28/04/2015
11293686	TPE 2034		3.80	28/04/2015
11293603	TPE 2036		0.50	28/04/2015
11293615	TPE 2036		2.00	28/04/2015
11293620	TPE 2036		3.50	28/04/2015
11293582	TPE 2038		0.50	28/04/2015
11293586	TPE 2038		1.50	28/04/2015
11293592	TPE 2038		2.50	28/04/2015
11293597	TPE 2038		3.50	28/04/2015
11293560	TPE 2040		0.50	28/04/2015
11293566	TPE 2040		1.50	28/04/2015
11293572	TPE 2040		2.50	28/04/2015
11293577	TPE 2040		3.50	28/04/2015
11293938	TPE 2051		0.50	28/04/2015
11293947	TPE 2051		1.50	28/04/2015
11293964	TPE 2051		2.80	28/04/2015
11293977	TPE 2051		4.00	28/04/2015
11293713	TPE 2059		0.50	28/04/2015
11293717	TPE 2059		1.50	28/04/2015
11293731	TPE 2059		3.00	28/04/2015
11293539	TPE 2067		0.50	28/04/2015
11293543	TPE 2067		1.60	28/04/2015



CERTIFICATE OF ANALYSIS

SDG:	150501-93	Location:	Coed Darcy	Order Number:	CD1197
Job:	H_ATKINS_LDC-350	Customer:	Atkins Global Ltd	Report Number:	317645
Client Reference:	Railhead TPs	Attention:	Alex Mann	Superseded Report:	
11293551		TPE 2067		2.70	28/04/2015
11293523		TPE 2069		0.50	28/04/2015
11293527		TPE 2069		1.50	28/04/2015
11293531		TPE 2069		2.50	28/04/2015
11293535		TPE 2069		3.50	28/04/2015
11293497		TPE 2071		0.50	27/04/2015
11293507		TPE 2071		2.50	27/04/2015
11293995		TPE 2079		0.50	29/04/2015
11294004		TPE 2079		1.50	29/04/2015
11294013		TPE 2079		2.50	28/04/2015
11294021		TPE 2081		0.50	29/04/2015
11294028		TPE 2081		1.50	29/04/2015
11294037		TPE 2081		3.00	29/04/2015
11294046		TPE 2083		0.50	29/04/2015
11294056		TPE 2083		1.50	29/04/2015
11294063		TPE 2083		2.50	29/04/2015
11294071		TPE 2083		3.50	29/04/2015
11293644		TPE 2087		0.50	28/04/2015
11293652		TPE 2087		1.50	28/04/2015
11293658		TPE 2087		2.50	28/04/2015
11293664		TPE 2087		3.50	28/04/2015
11293625		TPE 2089		0.50	28/04/2015
11293629		TPE 2089		1.50	28/04/2015
11293634		TPE 2089		2.50	28/04/2015
11293638		TPE 2089		3.50	28/04/2015
11293372		TPE 2091		0.50	29/04/2015
11293377		TPE 2091		1.50	29/04/2015
11293382		TPE 2091		2.50	29/04/2015
11293390		TPE 2091		3.50	29/04/2015
11293115		TPE 2111		0.50	29/04/2015
11293121		TPE 2111		1.50	29/04/2015
11293125		TPE 2111		2.50	29/04/2015
11293095		TPE 2115		0.50	29/04/2015
11293100		TPE 2115		1.50	29/04/2015
11293105		TPE 2115		2.50	29/04/2015
11293109		TPE 2115		3.50	29/04/2015
11293413		TPE 2124		0.50	29/04/2015
11293422		TPE 2124		1.50	29/04/2015
11293428		TPE 2124		3.00	29/04/2015
11293432		TPE 2124		4.50	29/04/2015
11293511		TPE 2127		0.50	28/04/2015
11293515		TPE 2127		1.50	28/04/2015
11293519		TPE 2127		2.50	28/04/2015
11293489		TPE 2129		1.00	27/04/2015
11293493		TPE 2129		3.00	27/04/2015
11293130		TPE 2143		0.50	29/04/2015
11293134		TPE 2143		1.50	29/04/2015
11293138		TPE 2143		2.50	29/04/2015
11293195		TPE 2147		0.50	29/04/2015
11293201		TPE 2147		1.50	29/04/2015
11293207		TPE 2147		2.50	29/04/2015
11293231		TPE 2147		3.50	29/04/2015
11293237		TPE 2149		0.50	29/04/2015
11293245		TPE 2149		1.50	29/04/2015
11293251		TPE 2149		2.50	29/04/2015
11293257		TPE 2149		3.50	29/04/2015
11293328		TPE 2151		0.50	29/04/2015
11293337		TPE 2151		1.50	29/04/2015
11293349		TPE 2151		2.50	29/04/2015



CERTIFICATE OF ANALYSIS

SDG:	150501-93	Location:	Coed Darcy	Order Number:	CD1197
Job:	H_ATKINS_LDC-350	Customer:	Atkins Global Ltd	Report Number:	317645
Client Reference:	Railhead TPs	Attention:	Alex Mann	Superseded Report:	
11293395	TPE 2153			0.50	29/04/2015
11293400	TPE 2153			1.50	29/04/2015
11293405	TPE 2153			2.50	29/04/2015
11293409	TPE 2153			3.50	29/04/2015
11293436	TPE 2155			0.50	29/04/2015
11293440	TPE 2155			1.50	29/04/2015
11293445	TPE 2155			2.50	29/04/2015
11293449	TPE 2155			3.50	29/04/2015
11293362	TPE 2159			0.50	27/04/2015
11293417	TPE 2159			2.00	27/04/2015
11293468	TPE 2159			3.50	27/04/2015
11293144	TPE 2161			0.50 - 0.50	27/04/2015
11293297	TPE 2161			2.00 - 2.00	27/04/2015
11293218	TPE 2161			3.50 - 3.50	27/04/2015
11293149	TPE 2174			0.50	29/04/2015
11293153	TPE 2174			1.50	29/04/2015
11293157	TPE 2174			2.50	29/04/2015
11293161	TPE 2174			3.50	29/04/2015
11293261	TPE 2208			0.50	29/04/2015
11293266	TPE 2208			1.50	29/04/2015
11293271	TPE 2208			2.50	29/04/2015
11293275	TPE 2210			0.50	29/04/2015
11293292	TPE 2210			1.50	29/04/2015
11293301	TPE 2210			2.50	29/04/2015
11293306	TPE 2210			3.50	29/04/2015
11293311	TPE 2212			0.50	29/04/2015
11293318	TPE 2212			1.50	29/04/2015
11293323	TPE 2212			2.50	29/04/2015
11293354	TPE 2214			0.50	29/04/2015
11293358	TPE 2214			1.50	29/04/2015
11293368	TPE 2214			3.00	29/04/2015
11293455	TPE 2216			0.50	29/04/2015
11293459	TPE 2216			1.50	29/04/2015
11293464	TPE 2216			2.50	29/04/2015
11293472	TPE 2216			3.50	29/04/2015
11293477	TPE 2218			0.50	29/04/2015
11293481	TPE 2218			1.50	29/04/2015
11293485	TPE 2218			2.50	29/04/2015
11293855	TPE 2220			0.50	27/04/2015
11293987	TPE 2220			1.50	27/04/2015
11293091	TPE 2220			2.50	27/04/2015
11293610	TPE 2222			0.50	27/04/2015
11293669	TPE 2222			1.50	27/04/2015
11293725	TPE 2222			2.50	27/04/2015
11293789	TPE 2222			3.50	27/04/2015
11293087	TPE 2223			0.50	27/04/2015
11293502	TPE 2223			1.50	27/04/2015
11293547	TPE 2223			2.50	27/04/2015

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



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

SOLID Results Legend X Test N No Determination Possible	Lab Sample No(s)		Customer Sample Reference		AGS Reference		Depth (m)		Container	
	11293849	TPE 2022					0.50		400g Tub (ALE214)	
	11293818	TPE 2020					2.50		250g Amber Jar (AL 60g VOC (ALE215))	
	11293814	TPE 2020					1.50		400g Tub (ALE214)	
	11293809	TPE 2020					0.50		250g Amber Jar (AL 60g VOC (ALE215))	
	11293929	TPE 2018					3.00		250g Amber Jar (AL 60g VOC (ALE215))	
	11293919	TPE 2018					1.50		400g Tub (ALE214)	
	11293903	TPE 2018					0.50		250g Amber Jar (AL 60g VOC (ALE215))	
	11293767	TPE 2016					3.50		400g Tub (ALE214)	
	11293761	TPE 2016					2.50		250g Amber Jar (AL 60g VOC (ALE215))	
	11293756	TPE 2016					1.50		400g Tub (ALE214)	
	11293751	TPE 2016					0.50		250g Amber Jar (AL 60g VOC (ALE215))	
	11293177	TPE 2014					2.50		400g Tub (ALE214)	
	11293171	TPE 2014					1.50		250g Amber Jar (AL 60g VOC (ALE215))	
	11293166	TPE 2014					0.50		400g Tub (ALE214)	
Asbestos fibres in Soil*	All	NDPs: 0 Tests: 46								
Asbestos Quant. Detail Gravimetric	All	NDPs: 1 Tests: 14								
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 150								
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 160								
GRO by GC-FID (S)	All	NDPs: 0 Tests: 163								
Metals in solid samples by OES	All	NDPs: 0 Tests: 163								
PAH by GCMS	All	NDPs: 0 Tests: 163								
pH	All	NDPs: 0 Tests: 163								
Sample description	All	NDPs: 0 Tests: 160								
Total Organic Carbon	All	NDPs: 0 Tests: 41								
TPH CWG GC (S)	All	NDPs: 0 Tests: 163								



SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

SOLID Results Legend X Test N No Determination Possible	Lab Sample No(s)		Customer Sample Reference		AGS Reference		Depth (m)		Container	
	11293740		TPE 2030				1.50		60g VOC (ALE215)	
	11293736		TPE 2030				0.50		400g Tub (ALE214)	
	11293803		TPE 2028				3.50		250g Amber Jar (AL)	
	11293798		TPE 2028				2.50		60g VOC (ALE215)	
Asbestos fibres in Soil* Asbestos Quant. Detail Gravimetric EPH CWG (Aliphatic) GC (S) EPH CWG (Aromatic) GC (S) GRO by GC-FID (S) Metals in solid samples by OES PAH by GCMS pH Sample description Total Organic Carbon TPH CWG GC (S)	11293849		TPE 2022				0.50		60g VOC (ALE215)	
	11293864		TPE 2022				1.50		400g Tub (ALE214)	
	11293876		TPE 2022				2.50		250g Amber Jar (AL)	
	11293888		TPE 2022				4.00		60g VOC (ALE215)	
	11293824		TPE 2026				0.50		400g Tub (ALE214)	
	11293830		TPE 2026				2.00		250g Amber Jar (AL)	
	11293837		TPE 2026				3.50		60g VOC (ALE215)	
	11293844		TPE 2026				4.50		400g Tub (ALE214)	
	11293777		TPE 2028				0.50		250g Amber Jar (AL)	
	11293783		TPE 2028				1.50		60g VOC (ALE215)	
	11293798		TPE 2028				2.50		400g Tub (ALE214)	
	11293803		TPE 2028				3.50		250g Amber Jar (AL)	
	11293849		TPE 2022				0.50		60g VOC (ALE215)	
	11293864		TPE 2022				1.50		400g Tub (ALE214)	
	11293876		TPE 2022				2.50		250g Amber Jar (AL)	
	11293888		TPE 2022				4.00		60g VOC (ALE215)	
	11293824		TPE 2026				0.50		400g Tub (ALE214)	
	11293830		TPE 2026				2.00		250g Amber Jar (AL)	
	11293837		TPE 2026				3.50		60g VOC (ALE215)	
	11293844		TPE 2026				4.50		400g Tub (ALE214)	
	11293777		TPE 2028				0.50		250g Amber Jar (AL)	
	11293783		TPE 2028				1.50		60g VOC (ALE215)	
	11293798		TPE 2028				2.50		400g Tub (ALE214)	
	11293803		TPE 2028				3.50		250g Amber Jar (AL)	
	11293849		TPE 2022				0.50		60g VOC (ALE215)	
	11293864		TPE 2022				1.50		400g Tub (ALE214)	
	11293876		TPE 2022				2.50		250g Amber Jar (AL)	
	11293888		TPE 2022				4.00		60g VOC (ALE215)	
	11293824		TPE 2026				0.50		400g Tub (ALE214)	
	11293830		TPE 2026				2.00		250g Amber Jar (AL)	
	11293837		TPE 2026				3.50		60g VOC (ALE215)	
	11293844		TPE 2026				4.50		400g Tub (ALE214)	
	11293777		TPE 2028				0.50		250g Amber Jar (AL)	
	11293783		TPE 2028				1.50		60g VOC (ALE215)	
	11293798		TPE 2028				2.50		400g Tub (ALE214)	
	11293803		TPE 2028				3.50		250g Amber Jar (AL)	
	11293849		TPE 2022				0.50		60g VOC (ALE215)	
	11293864		TPE 2022				1.50		400g Tub (ALE214)	
	11293876		TPE 2022				2.50		250g Amber Jar (AL)	
	11293888		TPE 2022				4.00		60g VOC (ALE215)	
	11293824		TPE 2026				0.50		400g Tub (ALE214)	
	11293830		TPE 2026				2.00		250g Amber Jar (AL)	
	11293837		TPE 2026				3.50		60g VOC (ALE215)	
	11293844		TPE 2026				4.50		400g Tub (ALE214)	
	11293777		TPE 2028				0.50		250g Amber Jar (AL)	
	11293783		TPE 2028				1.50		60g VOC (ALE215)	
	11293798		TPE 2028				2.50		400g Tub (ALE214)	
	11293803		TPE 2028				3.50		250g Amber Jar (AL)	
	11293849		TPE 2022				0.50		60g VOC (ALE215)	
	11293864		TPE 2022				1.50		400g Tub (ALE214)	
	11293876		TPE 2022				2.50		250g Amber Jar (AL)	
	11293888		TPE 2022				4.00		60g VOC (ALE215)	
	11293824		TPE 2026				0.50		400g Tub (ALE214)	
	11293830		TPE 2026				2.00		250g Amber Jar (AL)	
	11293837		TPE 2026				3.50		60g VOC (ALE215)	
	11293844		TPE 2026				4.50		400g Tub (ALE214)	
	11293777		TPE 2028				0.50		250g Amber Jar (AL)	
	11293783		TPE 2028				1.50		60g VOC (ALE215)	
	11293798		TPE 2028				2.50		400g Tub (ALE214)	
	11293803		TPE 2028				3.50		250g Amber Jar (AL)	
	11293849		TPE 2022				0.50		60g VOC (ALE215)	
	11293864		TPE 2022				1.50		400g Tub (ALE214)	
	11293876		TPE 2022				2.50		250g Amber Jar (AL)	
	11293888		TPE 2022				4.00		60g VOC (ALE215)	
	11293824		TPE 2026				0.50		400g Tub (ALE214)	
	11293830		TPE 2026				2.00		250g Amber Jar (AL)	
	11293837		TPE 2026				3.50		60g VOC (ALE215)	
	11293844		TPE 2026				4.50		400g Tub (ALE214)	
	11293777		TPE 2028				0.50		250g Amber Jar (AL)	
	11293783		TPE 2028				1.50		60g VOC (ALE215)	
	11293798		TPE 2028				2.50		400g Tub (ALE214)	
	11293803		TPE 2028				3.50		250g Amber Jar (AL)	
	11293849		TPE 2022				0.50		60g VOC (ALE215)	
	11293864		TPE 2022				1.50		400g Tub (ALE214)	
	11293876		TPE 2022				2.50		250g Amber Jar (AL)	
	11293888		TPE 2022				4.00		60g VOC (ALE215)	
	11293824		TPE 2026				0.50		400g Tub (ALE214)	
	11293830		TPE 2026				2.00		250g Amber Jar (AL)	
	11293837		TPE 2026				3.50		60g VOC (ALE215)	
	11293844		TPE 2026				4.50		400g Tub (ALE214)	
	11293777		TPE 2028				0.50		250g Amber Jar (AL)	
	11293783		TPE 2028				1.50		60g VOC (ALE215)	
	11293798		TPE 2028				2.50		400g Tub (ALE214)	
	11293803		TPE 2028				3.50		250g Amber Jar (AL)	
	11293849		TPE 2022				0.50		60g VOC (ALE215)	
	11293864		TPE 2022				1.50		400g Tub (ALE214)	
	11293876		TPE 2022				2.50		250g Amber Jar (AL)	
	11293888		TPE 2022				4.00		60g VOC (ALE215)	
	11293824		TPE 2026				0.50		400g Tub (ALE214)	
	11293830		TPE 2026				2.00		250g Amber Jar (AL)	
	11293837		TPE 2026				3.50		60g VOC (ALE215)	
	11293844		TPE 2026				4.50		400g Tub (ALE214)	
	11293777		TPE 2028				0.50		250g Amber Jar (AL)	
	11293783		TPE 2028				1.50		60g VOC (ALE215)	
	11293798		TPE 2028				2.50		400g Tub (ALE214)	
	11293803		TPE 2028				3.50		250g Amber Jar (AL)	
	11293849		TPE 2022				0.50		60g VOC (ALE215)	
	11293864		TPE 2022				1.50		400g Tub (ALE214)	
	11293876		TPE 2022				2.50		250g Amber Jar (AL)	
	11293888		TPE 2022				4.00		60g VOC (ALE215)	
	11293824		TPE 2026				0.50		400g Tub (ALE214)	
	11293830		TPE 2026				2.00		250g Amber Jar (AL)	
	11293837		TPE 2026				3.50		60g VOC (ALE215)	
	11293844		TPE 2026				4.50		400g Tub (ALE214)	
	11293777		TPE 2028				0.50		250g Amber Jar (AL)	
	11293783		TPE 2028				1.50		60g VOC (ALE215)	
	11293798		TPE 2028				2.50		400g Tub (ALE214)	
	11293803		TPE 2028				3.50		250g Amber Jar (AL)	
	11293849		TPE 2022				0.50		60g VOC (ALE215)	
	11293864		TPE 2022				1.50		400g Tub (ALE214)	
	11293876		TPE 2022				2.50		250g Amber Jar (AL)	
	11293888		TPE 2022				4.00		60g VOC (ALE215)	
	11293824		TPE 2026				0.50		400g Tub (ALE214)	
	11293830		TPE 2026				2.00		250g Amber Jar (AL)	
	11293837		TPE 2026				3.50		60g VOC (ALE215)	
	11293844		TPE 2026				4.50		400g Tub (ALE214)	
	11293777		TPE 2028				0.50		250g Amber Jar (AL)	
	11293783		TPE 2028				1.50		60g VOC (ALE215)	
	11293798		TPE 2028				2.50		400g Tub (ALE214)	
	11293803		TPE 2028				3.50		250g Amber Jar (AL)	
	11293849		TPE 2022				0.50		60g VOC (ALE215)	
	11293864		TPE 2022				1.50		400g Tub (ALE214)	
	11293876		TPE 2022				2.50		250g Amber Jar (AL)	
	11293888		TPE 2022				4.00		60g VOC (ALE215)	
	11293824		TPE 2026				0.50		400g Tub (ALE214)	
	11293830		TPE 2026				2.00		250g Amber Jar (AL)	
	11293837		TPE 2026				3.50		60g VOC (ALE215)	
	11293844		TPE 2026				4.50		400g Tub (ALE214)	
	11293777		TPE 2028				0.50		250g Amber Jar (AL)	
	11293783		TPE 2028				1.50		60g VOC (ALE215)	
	11293798		TPE 2028				2.50		400g Tub (ALE214)	
	11293803		TPE 2028				3.50		250g Amber Jar (AL)	
	11293849		TPE 2022				0.50		60g VOC (ALE215)	



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

SOLID Results Legend X Test N No Determination Possible	Lab Sample No(s)		Customer Sample Reference		AGS Reference		Depth (m)		Container	
	11293586	TPE 2038					1.50		250g Amber Jar (AL)	
	11293582	TPE 2038					0.50		60g VOC (ALE215)	
	11293620	TPE 2036					3.50		400g Tub (ALE214)	
	11293615	TPE 2036					2.00		250g Amber Jar (AL)	
Asbestos fibres in Soil*	All	NDPs: 0 Tests: 46							400g Tub (ALE214)	
Asbestos Quant. Detail Gravimetric	All	NDPs: 1 Tests: 14							60g VOC (ALE215)	
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 150							250g Amber Jar (AL)	
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 160							400g Tub (ALE214)	
GRO by GC-FID (S)	All	NDPs: 0 Tests: 163							60g VOC (ALE215)	
Metals in solid samples by OES	All	NDPs: 0 Tests: 163							250g Amber Jar (AL)	
PAH by GCMS	All	NDPs: 0 Tests: 163							400g Tub (ALE214)	
pH	All	NDPs: 0 Tests: 163							60g VOC (ALE215)	
Sample description	All	NDPs: 0 Tests: 160							250g Amber Jar (AL)	
Total Organic Carbon	All	NDPs: 0 Tests: 41							400g Tub (ALE214)	
TPH CWG GC (S)	All	NDPs: 0 Tests: 163							60g VOC (ALE215)	

Validated

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Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

SOLID Results Legend X Test N No Determination Possible	Lab Sample No(s)		Customer Sample Reference		AGS Reference		Depth (m)		Container	
	11293638	TPE 2089					3.50		250g Amber Jar (AL)	
	11293634	TPE 2089					2.50		60g VOC (ALEE15)	
	11293629	TPE 2089					1.50		400g Tub (ALEE14)	
	11293625	TPE 2089					0.50		250g Amber Jar (AL)	
Asbestos fibres in Soil*	11294028	TPE 2081					1.50		250g Amber Jar (AL)	
	11294037	TPE 2081					3.00		60g VOC (ALEE15)	
	11294046	TPE 2083					0.50		400g Tub (ALEE14)	
	11294056	TPE 2083					1.50		250g Amber Jar (AL)	
	11294063	TPE 2083					2.50		60g VOC (ALEE15)	
	11294071	TPE 2083					3.50		400g Tub (ALEE14)	
	11293644	TPE 2087					0.50		250g Amber Jar (AL)	
	11293652	TPE 2087					1.50		60g VOC (ALEE15)	
	11293658	TPE 2087					2.50		400g Tub (ALEE14)	
	11293664	TPE 2087					3.50		250g Amber Jar (AL)	
	11293668	TPE 2087					2.50		60g VOC (ALEE15)	
	11293662	TPE 2087					1.50		400g Tub (ALEE14)	
Asbestos Quant. Detail Gravimetric	All	NDPs: 1 Tests: 14								
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 150								
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 160								
GRO by GC-FID (S)	All	NDPs: 0 Tests: 163								
Metals in solid samples by OES	All	NDPs: 0 Tests: 163								
PAH by GCMS	All	NDPs: 0 Tests: 163								
pH	All	NDPs: 0 Tests: 163								
Sample description	All	NDPs: 0 Tests: 160								
Total Organic Carbon	All	NDPs: 0 Tests: 41								
TPH CWG GC (S)	All	NDPs: 0 Tests: 163								



CERTIFICATE OF ANALYSIS

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SOLID Results Legend X Test N No Determination Possible	Lab Sample No(s)		Customer Sample Reference		AGS Reference		Depth (m)		Container	
	11293422		TPE 2124				1.50		60g VOC (ALE215)	
	11293413		TPE 2124				0.50		400g Tub (ALE214)	
	11293109		TPE 2115				3.50		60g VOC (ALE215)	
	11293105		TPE 2115				2.50		400g Tub (ALE214)	
Asbestos fibres in Soil*	All	NDPs: 0 Tests: 46							250g Amber Jar (AL)	
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 150							60g VOC (ALE215)	
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 160							400g Tub (ALE214)	
GRO by GC-FID (S)	All	NDPs: 0 Tests: 163							250g Amber Jar (AL)	
Metals in solid samples by OES	All	NDPs: 0 Tests: 163							60g VOC (ALE215)	
PAH by GCMS	All	NDPs: 0 Tests: 163							400g Tub (ALE214)	
pH	All	NDPs: 0 Tests: 163							250g Amber Jar (AL)	
Sample description	All	NDPs: 0 Tests: 160							60g VOC (ALE215)	
Total Organic Carbon	All	NDPs: 0 Tests: 41							400g Tub (ALE214)	
TPH CWG GC (S)	All	NDPs: 0 Tests: 163							250g Amber Jar (AL)	



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SOLID Results Legend X Test N No Determination Possible	Lab Sample No(s)		Customer Sample Reference		AGS Reference		Depth (m)		Container	
	11293231		TPE 2147				3.50		250g Amber Jar (AL)	
	11293207		TPE 2147				2.50		60g VOC (ALE215)	
	11293201		TPE 2147				1.50		400g Tub (ALE214)	
	11293195		TPE 2147				0.50		60g VOC (ALE215)	
Asbestos fibres in Soil*	All	NDPs: 0 Tests: 46								
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 150								
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 160								
GRO by GC-FID (S)	All	NDPs: 0 Tests: 163								
Metals in solid samples by OES	All	NDPs: 0 Tests: 163								
PAH by GCMS	All	NDPs: 0 Tests: 163								
pH	All	NDPs: 0 Tests: 163								
Sample description	All	NDPs: 0 Tests: 160								
Total Organic Carbon	All	NDPs: 0 Tests: 41								
TPH CWG GC (S)	All	NDPs: 0 Tests: 163								

SOLID

Lab Sample No(s)

Test

No Determination Possible

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Attention: Alex Mann

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Superseded Report:

SOLID Results Legend X Test N No Determination Possible	Lab Sample No(s)		Customer Sample Reference		AGS Reference		Depth (m)		Container	
	11293464		TPE 2216				2.50		250g Amber Jar (AL 60g VOC (ALE215) 400g Tub (ALE214) 250g Amber Jar (AL 60	



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Superseded Report:

SOLID Results Legend X Test N No Determination Possible	Lab Sample No(s)		Customer Sample Reference		AGS Reference		Depth (m)		Container	
	11293502	TPE 2223					1.50		400g Tub (ALE214)	
	11293087	TPE 2223					0.50		250g Amber Jar (AL 60g VOC (ALE215))	
	11293789	TPE 2222					3.50		400g Tub (ALE214)	
	11293725	TPE 2222					2.50		250g Amber Jar (AL 60g VOC (ALE215))	
Asbestos fibres in Soil*	11293669	TPE 2222					1.50		400g Tub (ALE215)	
	11293610	TPE 2222					0.50		250g Amber Jar (AL 60g VOC (ALE215))	
	11293091	TPE 2220					2.50		400g Tub (ALE214)	
	11293987	TPE 2220					1.50		250g Amber Jar (AL 60g VOC (ALE215))	
	11293855	TPE 2220					0.50		400g Tub (ALE214)	
	11293485	TPE 2218					2.50		250g Amber Jar (AL 60g VOC (ALE215))	
	11293481	TPE 2218					1.50		400g Tub (ALE214)	
	11293477	TPE 2218					0.50		250g Amber Jar (AL 60g VOC (ALE215))	
	11293472	TPE 2216					3.50		400g Tub (ALE215)	
	11293464	TPE 2216					2.50		250g Amber Jar (AL 60g VOC (ALE215))	
									400g Tub (ALE214)	
EPH CWG (Aliphatic) GC (S)	All	NDPs: 0 Tests: 150								
EPH CWG (Aromatic) GC (S)	All	NDPs: 0 Tests: 160								
GRO by GC-FID (S)	All	NDPs: 0 Tests: 163								
Metals in solid samples by OES	All	NDPs: 0 Tests: 163								
PAH by GCMS	All	NDPs: 0 Tests: 163								
pH	All	NDPs: 0 Tests: 163								
Sample description	All	NDPs: 0 Tests: 160								
Semi Volatile Organic Compounds	All	NDPs: 0 Tests: 2								
Total Organic Carbon	All	NDPs: 0 Tests: 41								
TPH CWG GC (S)	All	NDPs: 0 Tests: 163								
VOC MS (S)	All	NDPs: 0 Tests: 2								



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Superseded Report:

SOLID**Results Legend**

Test

No Determination
Possible**Lab Sample No(s)**

11293502

11293547

**Customer
Sample Reference**

TPE 2223

TPE 2223

AGS Reference**Depth (m)**

1.50

2.50

Container

60g VOC (ALE215)

400g Tub (ALE214)

250g Amber Jar (AL

60g VOC (ALE215)

EPH CWG (Aliphatic) GC (S)

All

NDPs: 0
Tests: 150

X

EPH CWG (Aromatic) GC (S)

All

NDPs: 0
Tests: 160

X

GRO by GC-FID (S)

All

NDPs: 0
Tests: 163

X

X

Metals in solid samples by OES

All

NDPs: 0
Tests: 163

X

PAH by GCMS

All

NDPs: 0
Tests: 163

X

pH

All

NDPs: 0
Tests: 163

X

Sample description

All

NDPs: 0
Tests: 160

X

TPH CWG GC (S)

All

NDPs: 0
Tests: 163

X



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

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Report Number: 317645
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Sample Descriptions

Grain Sizes

very fine	<0.063mm	fine	0.063mm - 0.1mm	medium	0.1mm - 2mm	coarse	2mm - 10mm	very coarse	>10mm
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Lab Sample No(s)	Customer Sample Ref.	Depth (m)	Colour	Description	Grain size	Inclusions	Inclusions 2
11293166	TPE 2014	0.50	Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	None
11293171	TPE 2014	1.50	Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	Vegetation
11293177	TPE 2014	2.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	None
11293751	TPE 2016	0.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	Vegetation
11293756	TPE 2016	1.50	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	None
11293761	TPE 2016	2.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
11293767	TPE 2016	3.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
11293903	TPE 2018	0.50	Dark Brown	Silty Clay Loam	0.063 - 0.1 mm	Stones	None
11293919	TPE 2018	1.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Vegetation	None
11293929	TPE 2018	3.00	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	None
11293809	TPE 2020	0.50	Dark Brown	Loamy Sand	0.1 - 2 mm	Vegetation	Stones
11293814	TPE 2020	1.50	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	None
11293818	TPE 2020	2.50	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	None
11293849	TPE 2022	0.50	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	None
11293864	TPE 2022	1.50	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	None
11293876	TPE 2022	2.50	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	None
11293888	TPE 2022	4.00	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	None
11293824	TPE 2026	0.50	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	None
11293830	TPE 2026	2.00	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
11293837	TPE 2026	3.50	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	None
11293844	TPE 2026	4.50	Dark Brown	Sandy Loam	0.063 - 0.1 mm	Stones	None
11293777	TPE 2028	0.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
11293783	TPE 2028	1.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
11293798	TPE 2028	2.50	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	None
11293803	TPE 2028	3.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
11293736	TPE 2030	0.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Brick	Stones
11293740	TPE 2030	1.50	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	None
11293745	TPE 2030	2.50	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	None
11293691	TPE 2032	0.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
11293695	TPE 2032	1.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	None
11293699	TPE 2032	2.50	Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	None
11293704	TPE 2032	3.50	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	None
11293673	TPE 2034	0.50	Dark Brown	Sand	0.1 - 2 mm	Stones	N/A
11293677	TPE 2034	1.50	Red	Sandy Clay	0.1 - 2 mm	Stones	None
11293681	TPE 2034	2.60	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	None
11293686	TPE 2034	3.80	Dark Brown	Sandy Loam	0.1 - 2 mm	Vegetation	Stones
11293603	TPE 2036	0.50	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	None
11293615	TPE 2036	2.00	Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	None



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
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Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

			Colour	Description	Grain size	Inclusions	Inclusions 2
11293620	TPE 2036	3.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	Oil/Petroleum
11293582	TPE 2038	0.50	Dark Brown	Sand	0.1 - 2 mm	Stones	Vegetation
11293586	TPE 2038	1.50	Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	None
11293592	TPE 2038	2.50	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	None
11293597	TPE 2038	3.50	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	None
11293560	TPE 2040	0.50	Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	Coal fragments
11293566	TPE 2040	1.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	None
11293572	TPE 2040	2.50	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	None
11293577	TPE 2040	3.50	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	None
11293938	TPE 2051	0.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	None
11293947	TPE 2051	1.50	Dark Brown	N/A	2 - 10 mm	Stones	None
11293964	TPE 2051	2.80	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	None
11293977	TPE 2051	4.00	Dark Brown	Sandy Clay	0.1 - 2 mm	Vegetation	None
11293713	TPE 2059	0.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
11293717	TPE 2059	1.50	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	Vegetation
11293731	TPE 2059	3.00	Light Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	Vegetation
11293539	TPE 2067	0.50	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	None
11293543	TPE 2067	1.60	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	None
11293551	TPE 2067	2.70	Dark Brown	Sandy Loam	0.1 - 2 mm	Oil/Petroleum	Stones
11293523	TPE 2069	0.50	Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	None
11293527	TPE 2069	1.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	None
11293531	TPE 2069	2.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	None
11293535	TPE 2069	3.50	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	None
11293497	TPE 2071	0.50	Black	Sand	0.1 - 2 mm	Crushed Brick	Stones
11293507	TPE 2071	2.50	Black	Sand	0.1 - 2 mm	N/A	None
11293995	TPE 2079	0.50	Dark Brown	Silty Clay Loam	0.063 - 0.1 mm	Stones	None
11294004	TPE 2079	1.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
11294013	TPE 2079	2.50	Light Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	None
11294021	TPE 2081	0.50	Black	Loamy Sand	0.1 - 2 mm	Vegetation	Stones
11294028	TPE 2081	1.50	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	None
11294037	TPE 2081	3.00	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	Oil/Petroleum
11294046	TPE 2083	0.50	Grey	Loamy Sand	0.1 - 2 mm	Stones	Oil/Petroleum
11294056	TPE 2083	1.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	None
11294063	TPE 2083	2.50	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	Vegetation
11294071	TPE 2083	3.50	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	Vegetation
11293644	TPE 2087	0.50	Black	Sand	0.1 - 2 mm	Stones	None
11293652	TPE 2087	1.50	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	Vegetation
11293658	TPE 2087	2.50	Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	Vegetation
11293664	TPE 2087	3.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	Oil/Petroleum
11293625	TPE 2089	0.50	Black	Stone/Soil	2 - 10 mm	None	None
11293629	TPE 2089	1.50	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	Oil/Petroleum



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			Colour	Description	Grain size	Inclusions	Inclusions 2
11293634	TPE 2089	2.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Oil/Petroleum	Stones
11293638	TPE 2089	3.50	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	None
11293372	TPE 2091	0.50	Dark Brown	Silty Clay	0.063 - 0.1 mm	Stones	None
11293377	TPE 2091	1.50	Dark Brown	Sand	0.1 - 2 mm	Stones	Oil/Petroleum
11293382	TPE 2091	2.50	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	Oil/Petroleum
11293390	TPE 2091	3.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
11293115	TPE 2111	0.50	Black	Sandy Clay Loam	0.1 - 2 mm	Crushed Brick	Vegetation
11293121	TPE 2111	1.50	Dark Brown	Sand	0.1 - 2 mm	Stones	None
11293125	TPE 2111	2.50	Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	Vegetation
11293095	TPE 2115	0.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	Vegetation
11293100	TPE 2115	1.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	Oil/Petroleum
11293105	TPE 2115	2.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	Oil/Petroleum
11293109	TPE 2115	3.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	Vegetation
11293413	TPE 2124	0.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	Vegetation
11293422	TPE 2124	1.50	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	None
11293428	TPE 2124	3.00	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	None
11293432	TPE 2124	4.50	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	None
11293511	TPE 2127	0.50	Black	N/A	0.1 - 2 mm	Stones	None
11293515	TPE 2127	1.50	Black	N/A	0.1 - 2 mm	Stones	None
11293519	TPE 2127	2.50	Black	N/A	2 - 10 mm	Stones	N/A
11293489	TPE 2129	1.00	Black	Sand	0.1 - 2 mm	Crushed Brick	Stones
11293493	TPE 2129	3.00	Black	Sand	0.1 - 2 mm	N/A	None
11293130	TPE 2143	0.50	Black	Sandy Clay Loam	0.1 - 2 mm	Stones	Vegetation
11293134	TPE 2143	1.50	Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	None
11293138	TPE 2143	2.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
11293195	TPE 2147	0.50	Beige	Sand	0.1 - 2 mm	Stones	None
11293201	TPE 2147	1.50	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	Vegetation
11293207	TPE 2147	2.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	None
11293231	TPE 2147	3.50	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	None
11293237	TPE 2149	0.50	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	None
11293245	TPE 2149	1.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	None
11293251	TPE 2149	2.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	Oil/Petroleum
11293257	TPE 2149	3.50	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	None
11293328	TPE 2151	0.50	Dark Brown	Silty Clay Loam	0.063 - 0.1 mm	Stones	N/A
11293337	TPE 2151	1.50	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	Vegetation
11293349	TPE 2151	2.50	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	Vegetation
11293395	TPE 2153	0.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	None
11293400	TPE 2153	1.50	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	Oil/Petroleum
11293405	TPE 2153	2.50	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	Vegetation
11293409	TPE 2153	3.50	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	Vegetation
11293436	TPE 2155	0.50	Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	None



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

			Colour	Description	Grain size	Inclusions	Inclusions 2
11293440	TPE 2155	1.50	Black	Sand	0.1 - 2 mm	N/A	None
11293445	TPE 2155	2.50	Dark Brown	Silty Clay Loam	0.063 - 0.1 mm	Stones	Vegetation
11293449	TPE 2155	3.50	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	None
11293362	TPE 2159	0.50	Black	N/A	2 - 10 mm	Brick	Stones
11293417	TPE 2159	2.00	Black	N/A	0.1 - 2 mm	Stones	Vegetation
11293468	TPE 2159	3.50	Dark Brown	Clay Loam	0.063 - 0.1 mm	Stones	None
11293144	TPE 2161	0.50 - 0.50	Black	Sand	0.1 - 2 mm	Tile/Insulation Board	None
11293218	TPE 2161	3.50 - 3.50	Light Brown	Clay	<0.063 mm	None	None
11293297	TPE 2161	2.00 - 2.00	Black	N/A	2 - 10 mm	Stones	N/A
11293149	TPE 2174	0.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	Vegetation
11293153	TPE 2174	1.50	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	Vegetation
11293157	TPE 2174	2.50	Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	None
11293161	TPE 2174	3.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Stones	Oil/Petroleum
11293261	TPE 2208	0.50	Dark Brown	Sandy Silt Loam	0.063 - 0.1 mm	Stones	None
11293266	TPE 2208	1.50	Light Brown	Loamy Sand	0.1 - 2 mm	Stones	None
11293271	TPE 2208	2.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	None
11293275	TPE 2210	0.50	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	None
11293292	TPE 2210	1.50	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	None
11293301	TPE 2210	2.50	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	None
11293306	TPE 2210	3.50	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	None
11293311	TPE 2212	0.50	Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	N/A
11293318	TPE 2212	1.50	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	Stones	None
11293323	TPE 2212	2.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	None
11293354	TPE 2214	0.50	Light Brown	Sand	0.063 - 0.1 mm	Stones	N/A
11293358	TPE 2214	1.50	Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	None
11293368	TPE 2214	3.00	Dark Brown	Clay	<0.063 mm	Stones	None
11293455	TPE 2216	0.50	Light Brown	Loamy Sand	0.063 - 0.1 mm	Stones	N/A
11293459	TPE 2216	1.50	Dark Brown	Sand	0.1 - 2 mm	Stones	None
11293464	TPE 2216	2.50	Dark Brown	Sand	0.1 - 2 mm	Oil/Petroleum	Stones
11293472	TPE 2216	3.50	Dark Brown	Sand	0.1 - 2 mm	Stones	None
11293477	TPE 2218	0.50	Light Brown	Loamy Sand	0.063 - 0.1 mm	Stones	N/A
11293481	TPE 2218	1.50	Dark Brown	Sandy Clay Loam	0.1 - 2 mm	Oil/Petroleum	Stones
11293485	TPE 2218	2.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Oil/Petroleum	None
11293091	TPE 2220	2.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Stones	Oil/Petroleum
11293855	TPE 2220	0.50	Black	Sandy Loam	0.1 - 2 mm	Stones	None
11293987	TPE 2220	1.50	Dark Brown	Sandy Clay	0.1 - 2 mm	Oil/Petroleum	Stones
11293610	TPE 2222	0.50	Dark Brown	Sand	0.1 - 2 mm	Stones	None
11293669	TPE 2222	1.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Oil/Petroleum	None
11293725	TPE 2222	2.50	Dark Brown	Sandy Clay	0.1 - 2 mm	Stones	Oil/Petroleum
11293789	TPE 2222	3.50	Dark Brown	Sandy Loam	0.1 - 2 mm	Oil/Petroleum	Stones
11293087	TPE 2223	0.50	Light Brown	Loamy Sand	0.1 - 2 mm	Stones	None



CERTIFICATE OF ANALYSIS

SDG:	150501-93	Location:	Coed Darcy	Order Number:	CD1197
Job:	H_ATKINS_LDC-350	Customer:	Atkins Global Ltd	Report Number:	317645
Client Reference:	Railhead TPs	Attention:	Alex Mann	Superseded Report:	

			Colour	Description	Grain size	Inclusions	Inclusions 2
11293502	TPE 2223	1.50	Dark Brown	Loamy Sand	0.1 - 2 mm	Stones	None
11293547	TPE 2223	2.50	Dark Brown	Sandy Silt Loam	0.1 - 2 mm	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 occurring 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

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SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

Results Legend		Customer Sample R Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	TPE 2026	TPE 2026	TPE 2026	TPE 2028	TPE 2028	TPE 2028
#	ISO17025 accredited.		2.00	3.50	4.50	0.50	1.50	2.50
M	mCERTS accredited.		Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
aq	Aqueous / filtered sample.		28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015
diss.filt	Dissolved / filtered sample.		.	.	.	.	.	.
tot.unfilt	Total / unfiltered sample.		01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015
*	Subcontracted test.		150501-93	150501-93	150501-93	150501-93	150501-93	150501-93
**	% 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		11293830	11293837	11293844	11293777	11293783	11293798
(F)	Trigger breach confirmed							
1-5&*\$@	Sample deviation (see appendix)							
Component	LOD/Units	Method						
Moisture Content Ratio (% of as received sample)	%	PM024	13	12	15	13	12	11
Actinolite*	-	SUB (ASB)				Not Detected #		
Amosite*	-	SUB (ASB)				Not Detected #		
Anthophyllite*	-	SUB (ASB)				Not Detected #		
Chrysotile*	-	SUB (ASB)				Detected #		
Crocidolite*	-	SUB (ASB)				Not Detected #		
Tremolite*	-	SUB (ASB)				Not Detected #		
Non-Asbestos Fibres Detected	-	SUB (ASB)				Not Detected #		
Soil Organic Matter (SOM)	<0.35 %	TM132		1.46 #			1.49 #	
pH	1 pH Units	TM133	6.7 M	7.46 M	6.59 M	6.1 M	6.18 M	6.66 M
Arsenic	<0.6 mg/kg	TM181	13.8 M	10.6 M	21.8 M	19.8 M	13.2 M	11.9 M
Cadmium	<0.02 mg/kg	TM181	<0.02 M	<0.02 M	0.261 M	0.515 M	<0.02 M	0.0831 M
Chromium	<0.9 mg/kg	TM181	12.6 M	12.3 M	14.2 M	15 M	14.2 M	12.2 M
Copper	<1.4 mg/kg	TM181	24.2 M	18.4 M	47 M	54.4 M	18.1 M	16.4 M
Lead	<0.7 mg/kg	TM181	15.1 M	14.2 M	22.7 M	28.9 M	14.8 M	13.4 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	23.1 M	22.4 M	22.6 M	31.1 M	22.5 M	26 M
Selenium	<1 mg/kg	TM181	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Vanadium	<0.2 mg/kg	TM181	14.4 #	13.4 #	17.2 #	18.4 #	16.3 #	13.3 #
Zinc	<1.9 mg/kg	TM181	68.4 M	62 M	98.5 M	101 M	58.7 M	78.9 M

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Customer: Atkins Global Ltd
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CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

Results Legend		Customer Sample R Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	TPE 2089	TPE 2089	TPE 2089	TPE 2091	TPE 2091	TPE 2091
#	ISO17025 accredited.		1.50	2.50	3.50	0.50	1.50	2.50
M	mCERTS accredited.		Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
aq	Aqueous / filtered sample.		28/04/2015	28/04/2015	28/04/2015	29/04/2015	29/04/2015	29/04/2015
diss.filt	Dissolved / filtered sample.		.	.	.	.	.	.
tot.unfilt	Total / unfiltered sample.		01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015
*	Subcontracted test.		150501-93	150501-93	150501-93	150501-93	150501-93	150501-93
**	% 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		11293629	11293634	11293638	11293372	11293377	11293382
(F)	Trigger breach confirmed							
1-5&*\$@	Sample deviation (see appendix)							
Component	LOD/Units	Method						
Moisture Content Ratio (% of as received sample)	%	PM024	14	14	16	19	13	14
Actinolite*	-	SUB (ASB)				Not Detected #		
Amosite*	-	SUB (ASB)				Not Detected #		
Anthophyllite*	-	SUB (ASB)				Not Detected #		
Chrysotile*	-	SUB (ASB)				Not Detected #		
Crocidolite*	-	SUB (ASB)				Not Detected #		
Tremolite*	-	SUB (ASB)				Not Detected #		
Non-Asbestos Fibres Detected	-	SUB (ASB)				Not Detected #		
Soil Organic Matter (SOM)	<0.35 %	TM132			2.09 #	1.46 #		
pH	1 pH Units	TM133	6.03 M	5.87 M	6.81 M	5.76 M	6.09 M	6.69 M
Arsenic	<0.6 mg/kg	TM181	14.5 M	11.6 M	23.1 M	17.2 M	15.9 M	14.7 M
Cadmium	<0.02 mg/kg	TM181	0.0797 M	<0.02 M	1.21 M	0.138 M	0.116 M	<0.02 M
Chromium	<0.9 mg/kg	TM181	13.1 M	12.7 M	14.4 M	24.7 M	12.4 M	13.9 M
Copper	<1.4 mg/kg	TM181	23.7 M	23.2 M	50.5 M	13.6 M	27.4 M	27.5 M
Lead	<0.7 mg/kg	TM181	17.8 M	16.7 M	23.8 M	34.1 M	17.2 M	17.9 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	21.9 M	24.6 M	20.4 M	24.3 M	21.6 M	21.5 M
Selenium	<1 mg/kg	TM181	<1 #	<1 #	<1 #	<1 #	<1 #	<1 #
Vanadium	<0.2 mg/kg	TM181	15.9 #	14.6 #	18.6 #	39.6 #	14.9 #	15.6 #
Zinc	<1.9 mg/kg	TM181	69.2 M	76.5 M	99.2 M	75.9 M	77.3 M	68.3 M

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Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

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Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

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Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

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Customer: Atkins Global Ltd
Attention: Alex Mann

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CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

Results Legend		Customer Sample R	TPE 2222						TPE 2223	
#	ISO17025 accredited.		0.50		1.50		2.50		3.50	
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	Soil/Solid		Soil/Solid		Soil/Solid		Soil/Solid	
aq	Aqueous / settled sample.		27/04/2015		27/04/2015		27/04/2015		27/04/2015	
diss.filt	Dissolved / filtered sample.		01/05/2015		01/05/2015		01/05/2015		01/05/2015	
tot.unfilt	Total / unfiltered sample.		150501-93		150501-93		150501-93		150501-93	
*	Subcontracted test.		11293610		11293669		11293725		11293087	
**	% 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	16		11		12		13	
Moisture Content Ratio (% of as received sample)	%	PM024							8.5	
Actinolite*	-	SUB (ASB)	Not Detected						Not Detected	
Amosite*	-	SUB (ASB)	Not Detected						Not Detected	
Anthophyllite*	-	SUB (ASB)	Not Detected						Not Detected	
Chrysotile*	-	SUB (ASB)	Not Detected						Not Detected	
Crocidolite*	-	SUB (ASB)	Not Detected						Not Detected	
Tremolite*	-	SUB (ASB)	Not Detected						Not Detected	
Non-Asbestos Fibres Detected	-	SUB (ASB)	Not Detected						Not Detected	
Soil Organic Matter (SOM)	<0.35 %	TM132			2.36				1.71	
pH	1 pH Units	TM133	7.11		6.8		6.26		5.99	
Arsenic	<0.6 mg/kg	TM181	17.1		7.4		8.05		9.32	
Cadmium	<0.02 mg/kg	TM181	0.871		0.587		0.624		0.663	
Chromium	<0.9 mg/kg	TM181	11.3		10.4		11.2		12.9	
Copper	<1.4 mg/kg	TM181	76.5		10.3		23.6		13.7	
Lead	<0.7 mg/kg	TM181	28.1		11.1		13.7		13.6	
Mercury	<0.14 mg/kg	TM181	<0.14		<0.14		<0.14		<0.14	
Nickel	<0.2 mg/kg	TM181	35.4		23		28.5		32.2	
Selenium	<1 mg/kg	TM181	<1		<1		<1		<1	
Vanadium	<0.2 mg/kg	TM181	21.1		10.2		12.4		13.3	
Zinc	<1.9 mg/kg	TM181	152		57.4		60.7		63.7	

CERTIFICATE OF ANALYSIS

SDG:	150501-93
Job:	H_ATKINS_LDC-350
Client Reference:	Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

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Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

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Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

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Customer: Atkins Global Ltd
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Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

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Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
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SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

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Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

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Customer: Atkins Global Ltd
Attention: Alex Mann

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Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

[illegible]

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Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
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[illegible]

Location: Coed Darcy
Customer: Atkins Global Ltd
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Order Number: CD1197
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SDG: 150501-93
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[illegible]

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CERTIFICATE OF ANALYSIS

SDG: 150501-93
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Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
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Superseded Report:

PAH by GCMS

[illegible]

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

SDG: 150501-93
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Client Reference: Railhead TPs

[illegible]

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CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
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Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

Semi Volatile Organic Compounds

Results Legend		Customer Sample R	TPE 2069	TPE 2220			
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference					
M	mCERTS 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					
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: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

Semi Volatile Organic Compounds

Results Legend		Customer Sample R	TPE 2069	TPE 2220				
#	ISO17025 accredited.							
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.50 Soil/Solid 28/04/2015 01/05/2015 150501-93 11293523	2.50 Soil/Solid 27/04/2015 01/05/2015 150501-93 11293091				
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&+5@	Sample deviation (see appendix)							
Component	LOD/Units	Method						
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	131	<100				
Fluoranthene	<100 µg/kg	TM157	163	<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	152	117				
Naphthalene	<100 µg/kg	TM157	<100	<100				
Dibenzo(a,h)anthracene	<100 µg/kg	TM157	<100	<100				



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

TPH CWG (S)

Results Legend			Customer Sample R		TPE 2014	TPE 2014	TPE 2014	TPE 2016	TPE 2016	TPE 2016
#	ISO17025 accredited.		Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference		0.50	1.50	2.50	0.50	1.50	2.50
M	mCERTS accredited.				Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
aq	Aqueous / settled sample.				29/04/2015	29/04/2015	29/04/2015	28/04/2015	28/04/2015	28/04/2015
diss.filt	Dissolved / filtered sample.									
tot.unfilt	Total / unfiltered sample.				01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015
*	Subcontracted test.				150501-93	150501-93	150501-93	150501-93	150501-93	150501-93
**	% 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				11293166	11293171	11293177	11293751	11293756	11293761
(F)	Trigger breach confirmed									
1-5&*\$@	Sample deviation (see appendix)									
Component	LOD/Units	Method								
GRO Surrogate % recovery**	%	TM089	81	78	87	62	88	101		
			♦	♦	♦	@	@	@		
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	252000	8100	6540	11300	229	<176		
			♦ M	♦ M	♦ M	@ M	@ M	@ M		
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20	<20	<20	<20	<20	<20		
			♦ M	♦ M	♦ M	@ M	@ M	@ M		
Benzene	<10 µg/kg	TM089	50.4	<40	52.8	<40	<40	<40		
			♦ M	♦ M	♦ M	@ M	@ M	@ M		
Toluene	<2 µg/kg	TM089	<8	10.9	<8	9.99	<8	<8		
			♦ M	♦ M	♦ M	@ M	@ M	@ M		
Ethylbenzene	<3 µg/kg	TM089	<12	<12	<12	<12	<12	<12		
			♦ M	♦ M	♦ M	@ M	@ M	@ M		
m,p-Xylene	<6 µg/kg	TM089	<24	<24	<24	<24	<24	<24		
			♦ M	♦ M	♦ M	@ M	@ M	@ M		
o-Xylene	<3 µg/kg	TM089	<12	<12	<12	<12	<12	<12		
			♦ M	♦ M	♦ M	@ M	@ M	@ M		
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	<9	<9	<9	<9	<9		
			♦	♦	♦	@	@	@		
sum of detected BTEX by GC	<24 µg/kg	TM089	50.4	<24	52.8	<24	<24	<24		
			♦	♦	♦	@	@	@		
Aliphatics >C5-C6	<10 µg/kg	TM089	103	56.5	88	<40	<40	<40		
			♦	♦	♦	@	@	@		
Aliphatics >C6-C8	<10 µg/kg	TM089	2280	170	391	81	<40	48		
			♦	♦	♦	@	@	@		
Aliphatics >C8-C10	<10 µg/kg	TM089	44300	748	1140	1360	<40	<40		
			♦	♦	♦	@	@	@		
Aliphatics >C10-C12	<10 µg/kg	TM089	106000	3930	2460	5320	106	<40		
			♦	♦	♦	@	@	@		
Aliphatics >C12-C16	<100 µg/kg	TM173	411000	80900	36900	81400	<100	<100		
Aliphatics >C16-C21	<100 µg/kg	TM173	233000	77000	42400	125000	<100	<100		
Aliphatics >C21-C35	<100 µg/kg	TM173	233000	89000	38100	202000	<100	<100		
Aliphatics >C35-C44	<100 µg/kg	TM173	37200	19000	5450	37900	<100	<100		
Total Aliphatics >C12-C44	<100 µg/kg	TM173	915000	266000	123000	446000	<100	<100		
Aromatics >EC5-EC7	<10 µg/kg	TM089	50.4	<40	52.8	<40	<40	<40		
			♦	♦	♦	@	@	@		
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40		
			♦	♦	♦	@	@	@		
Aromatics >EC8-EC10	<10 µg/kg	TM089	29500	527	762	905	<40	<40		
			♦	♦	♦	@	@	@		
Aromatics >EC10-EC12	<10 µg/kg	TM089	70400	2620	1640	3550	70.2	<40		
			♦	♦	♦	@	@	@		
Aromatics >EC12-EC16	<100 µg/kg	TM173	70300	4020	960	6030	<100	<100		
Aromatics >EC16-EC21	<100 µg/kg	TM173	98700	12900	3010	29200	<100	<100		
Aromatics >EC21-EC35	<100 µg/kg	TM173	189000	26600	8000	105000	<100	2970		
Aromatics >EC35-EC44	<100 µg/kg	TM173	51000	8480	3120	38000	<100	2810		
Aromatics >EC40-EC44	<100 µg/kg	TM173	17600	3830	1050	15100	<100	1620		
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	409000	52100	15100	179000	<100	5770		
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	1580000	326000	144000	636000	143	5920		



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
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Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R	TPE 2016		TPE 2018		TPE 2018		TPE 2018		TPE 2020		TPE 2020	
#	ISO17025 accredited.		3.50	Soil/Solid	0.50	Soil/Solid	1.50	Soil/Solid	3.00	Soil/Solid	0.50	Soil/Solid	1.50	Soil/Solid
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015
aq	Aqueous / settled sample.		01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015
diss.filt	Dissolved / filtered sample.		150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93
tot.unfilt	Total / unfiltered sample.		11293767	11293903	11293919	11293929	11293929	11293929	11293929	11293929	11293929	11293929	11293929	11293929
*	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	TPE 2016		TPE 2018		TPE 2018		TPE 2018		TPE 2020		TPE 2020	
GRO Surrogate % recovery**	%	TM089	91	@	45	@	107	@	74	@	87	@	97	@
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	<176	@ M	985	@ M	715	@ M	<176	@ M	591	@ M	3090	@ M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20	@ M	<20	@ M	<20	@ M	<20	@ M	<20	@ M	<20	@ M
Benzene	<10 µg/kg	TM089	<40	@ M	<40	@ M	<40	@ M	<40	@ M	<40	@ M	<40	@ M
Toluene	<2 µg/kg	TM089	<8	@ M	<8	@ M	<8	@ M	<8	@ M	<8	@ M	<8	@ M
Ethylbenzene	<3 µg/kg	TM089	<12	@ M	<12	@ M	<12	@ M	<12	@ M	<12	@ M	<12	@ M
m,p-Xylene	<6 µg/kg	TM089	<24	@ M	<24	@ M	<24	@ M	<24	@ M	<24	@ M	<24	@ M
o-Xylene	<3 µg/kg	TM089	<12	@ M	<12	@ M	<12	@ M	<12	@ M	<12	@ M	<12	@ M
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	@	<9	@	<9	@	<9	@	<9	@	<9	@
sum of detected BTEX by GC	<24 µg/kg	TM089	<24	@	<24	@	<24	@	<24	@	<24	@	<24	@
Aliphatics >C5-C6	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@	<40	@	88.1	@
Aliphatics >C6-C8	<10 µg/kg	TM089	<40	@	50	@	175	@	<40	@	<40	@	393	@
Aliphatics >C8-C10	<10 µg/kg	TM089	<40	@	137	@	239	@	<40	@	40.3	@	930	@
Aliphatics >C10-C12	<10 µg/kg	TM089	<40	@	401	@	66.7	@	<40	@	302	@	636	@
Aliphatics >C12-C16	<100 µg/kg	TM173	<100		30300		<100		<100		28800		<100	
Aliphatics >C16-C21	<100 µg/kg	TM173	<100		55400		<100		<100		29900		<100	
Aliphatics >C21-C35	<100 µg/kg	TM173	<100		99500		<100		<100		35100		<100	
Aliphatics >C35-C44	<100 µg/kg	TM173	<100		30900		<100		<100		6650		<100	
Total Aliphatics >C12-C44	<100 µg/kg	TM173	<100		216000		<100		<100		100000		<100	
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@	<40	@	<40	@
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@	<40	@	<40	@
Aromatics >EC8-EC10	<10 µg/kg	TM089	<40	@	97.7	@	160	@	<40	@	<40	@	620	@
Aromatics >EC10-EC12	<10 µg/kg	TM089	<40	@	267	@	43.7	@	<40	@	201	@	424	@
Aromatics >EC12-EC16	<100 µg/kg	TM173	<100		7860		<100		<100		17100		<100	
Aromatics >EC16-EC21	<100 µg/kg	TM173	<100		33800		<100		<100		19400		<100	
Aromatics >EC21-EC35	<100 µg/kg	TM173	<100		110000		3890		5710		26000		<100	
Aromatics >EC35-EC44	<100 µg/kg	TM173	<100		60300		<100		8300		9660		<100	
Aromatics >EC40-EC44	<100 µg/kg	TM173	<100		23800		<100		4030		4520		<100	
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	<100		212000		3890		14000		72200		<100	
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	<100		429000		4600		14000		173000		3090	



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Order Number: CD1197
Report Number: 317645
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R	TPE 2020		TPE 2022		TPE 2022		TPE 2022		TPE 2022		TPE 2026	
#	ISO17025 accredited.		2.50	Soil/Solid	0.50	Soil/Solid	1.50	Soil/Solid	2.50	Soil/Solid	4.00	Soil/Solid	0.50	Soil/Solid
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015
aq	Aqueous / settled sample.		01/05/2015	150501-93	01/05/2015	150501-93	01/05/2015	150501-93	01/05/2015	150501-93	01/05/2015	150501-93	01/05/2015	150501-93
diss.filt	Dissolved / filtered sample.		11293818	11293849	11293864	11293876	11293888	11293824						
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	TPE 2020		TPE 2022		TPE 2022		TPE 2022		TPE 2022		TPE 2026	
GRO Surrogate % recovery**	%	TM089	130	@	70	@	73	@	75	@	70	@	50	
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	7820	@ M	4710	@ M	484	@ M	2050	@ M	<176	@ M	148000	M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20	@ M	<20	@ M	<20	@ M	<20	@ M	<20	@ M	<20	M
Benzene	<10 µg/kg	TM089	<40	@ M	<40	@ M	<40	@ M	<40	@ M	<40	@ M	<40	M
Toluene	<2 µg/kg	TM089	<8	@ M	<8	@ M	<8	@ M	<8	@ M	<8	@ M	<8	M
Ethylbenzene	<3 µg/kg	TM089	52.7	@ M	<12	@ M	<12	@ M	<12	@ M	<12	@ M	<12	M
m,p-Xylene	<6 µg/kg	TM089	<24	@ M	<24	@ M	<24	@ M	<24	@ M	<24	@ M	<24	M
o-Xylene	<3 µg/kg	TM089	<12	@ M	<12	@ M	<12	@ M	<12	@ M	<12	@ M	<12	M
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	@	<9	@	<9	@	<9	@	<9	@	<9	
sum of detected BTEX by GC	<24 µg/kg	TM089	52.7	@	<24	@	<24	@	<24	@	<24	@	<24	
Aliphatics >C5-C6	<10 µg/kg	TM089	193	@	<40	@	<40	@	<40	@	<40	@	88.8	
Aliphatics >C6-C8	<10 µg/kg	TM089	990	@	<40	@	<40	@	86.3	@	<40	@	948	
Aliphatics >C8-C10	<10 µg/kg	TM089	2310	@	337	@	139	@	307	@	<40	@	36500	
Aliphatics >C10-C12	<10 µg/kg	TM089	1630	@	2460	@	125	@	854	@	<40	@	51700	
Aliphatics >C12-C16	<100 µg/kg	TM173	<100		267000		<100		6230		<100		1150000	
Aliphatics >C16-C21	<100 µg/kg	TM173	<100		340000		<100		8480		<100		859000	
Aliphatics >C21-C35	<100 µg/kg	TM173	<100		236000		<100		9090		<100		399000	
Aliphatics >C35-C44	<100 µg/kg	TM173	<100		48700		<100		<100		<100		58800	
Total Aliphatics >C12-C44	<100 µg/kg	TM173	<100		892000		<100		23800		<100		2460000	
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@	<40	@	<40	
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@	<40	@	<40	
Aromatics >EC8-EC10	<10 µg/kg	TM089	1590	@	224	@	92.4	@	205	@	<40	@	24400	
Aromatics >EC10-EC12	<10 µg/kg	TM089	1080	@	1640	@	83.1	@	570	@	<40	@	34400	
Aromatics >EC12-EC16	<100 µg/kg	TM173	<100		2840		<100		1500		<100		190000	
Aromatics >EC16-EC21	<100 µg/kg	TM173	<100		23400		<100		4130		<100		301000	
Aromatics >EC21-EC35	<100 µg/kg	TM173	<100		507000		<100		6890		<100		330000	
Aromatics >EC35-EC44	<100 µg/kg	TM173	<100		609000		<100		2950		<100		108000	
Aromatics >EC40-EC44	<100 µg/kg	TM173	<100		289000		<100		1470		<100		35800	
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	<100		1140000		<100		15500		<100		928000	
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	7820		2040000		483		41300		<100		3540000	



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R	TPE 2026		TPE 2026		TPE 2026		TPE 2028		TPE 2028		TPE 2028	
#	ISO17025 accredited.		2.00	Soil/Solid	3.50	Soil/Solid	4.50	Soil/Solid	0.50	Soil/Solid	1.50	Soil/Solid	2.50	Soil/Solid
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015
aq	Aqueous / settled sample.		01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015
diss.filt	Dissolved / filtered sample.		150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93
tot.unfilt	Total / unfiltered sample.		11293830	11293837	11293844	11293777	11293783	11293798						
*	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	TPE 2026		TPE 2026		TPE 2026		TPE 2028		TPE 2028		TPE 2028	
GRO Surrogate % recovery**	%	TM089	97	@	74	@	76	@	97	@	98	@	93	@
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	11900	@ M	1630	@ M	5500	@ M	285	@ M	<176	@ M	<176	@ M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20	@ M	<20	@ M	<20	@ M	<20	@ M	<20	@ M	<20	@ M
Benzene	<10 µg/kg	TM089	<40	@ M	<40	@ M	<40	@ M	<40	@ M	<40	@ M	<40	@ M
Toluene	<2 µg/kg	TM089	<8	@ M	<8	@ M	<8	@ M	<8	@ M	<8	@ M	<8	@ M
Ethylbenzene	<3 µg/kg	TM089	<12	@ M	<12	@ M	<12	@ M	<12	@ M	<12	@ M	<12	@ M
m,p-Xylene	<6 µg/kg	TM089	<24	@ M	<24	@ M	<24	@ M	<24	@ M	<24	@ M	<24	@ M
o-Xylene	<3 µg/kg	TM089	<12	@ M	<12	@ M	<12	@ M	<12	@ M	<12	@ M	<12	@ M
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	@	<9	@	<9	@	<9	@	<9	@	<9	@
sum of detected BTEX by GC	<24 µg/kg	TM089	<24	@	<24	@	<24	@	<24	@	<24	@	<24	@
Aliphatics >C5-C6	<10 µg/kg	TM089	83.6	@	<40	@	<40	@	<40	@	<40	@	<40	@
Aliphatics >C6-C8	<10 µg/kg	TM089	748	@	145	@	333	@	<40	@	<40	@	<40	@
Aliphatics >C8-C10	<10 µg/kg	TM089	2700	@	568	@	1460	@	<40	@	<40	@	<40	@
Aliphatics >C10-C12	<10 µg/kg	TM089	3950	@	295	@	1620	@	128	@	<40	@	<40	@
Aliphatics >C12-C16	<100 µg/kg	TM173	<100		<100		<100		10200		<100		<100	
Aliphatics >C16-C21	<100 µg/kg	TM173	<100		<100		<100		17400		<100		<100	
Aliphatics >C21-C35	<100 µg/kg	TM173	<100		<100		<100		20100		<100		<100	
Aliphatics >C35-C44	<100 µg/kg	TM173	<100		<100		<100		2850		<100		<100	
Total Aliphatics >C12-C44	<100 µg/kg	TM173	<100		<100		<100		50600		<100		<100	
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@	<40	@	<40	@
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@	<40	@	<40	@
Aromatics >EC8-EC10	<10 µg/kg	TM089	1800	@	378	@	973	@	<40	@	<40	@	<40	@
Aromatics >EC10-EC12	<10 µg/kg	TM089	2630	@	196	@	1080	@	84.7	@	<40	@	<40	@
Aromatics >EC12-EC16	<100 µg/kg	TM173	2040		<100		<100		2010		<100		<100	
Aromatics >EC16-EC21	<100 µg/kg	TM173	<100		<100		<100		9260		<100		<100	
Aromatics >EC21-EC35	<100 µg/kg	TM173	<100		<100		<100		18700		<100		<100	
Aromatics >EC35-EC44	<100 µg/kg	TM173	<100		<100		<100		9310		<100		<100	
Aromatics >EC40-EC44	<100 µg/kg	TM173	<100		<100		<100		4280		<100		<100	
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	2040		<100		<100		39200		<100		<100	
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	13900		1630		5500		90100		<100		<100	



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R						
#	ISO17025 accredited.							
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	TPE 2028	TPE 2030	TPE 2030	TPE 2030	TPE 2032	TPE 2032
aq	Aqueous / settled sample.		3.50	0.50	1.50	2.50	0.50	1.50
diss.filt	Dissolved / filtered sample.		Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
tot.unfilt	Total / unfiltered sample.		28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015
*	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		01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015
(F)	Trigger breach confirmed		150501-93	150501-93	150501-93	150501-93	150501-93	150501-93
1-5&*\$@	Sample deviation (see appendix)		11293803	11293736	11293740	11293745	11293691	11293695
Component	LOD/Units	Method						
GRO Surrogate % recovery**	%	TM089	94 @	91 @	130 @	93 @	126 @	86 @
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	<176 @ M	271 @ M	7860 @ M	774 @ M	<176 @ M	67300 @ M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20 @ M	<20 @ M	<20 @ M	<20 @ M	<20 @ M	<20 @ M
Benzene	<10 µg/kg	TM089	<40 @ M	<40 @ M	<40 @ M	<40 @ M	<40 @ M	<40 @ M
Toluene	<2 µg/kg	TM089	<8 @ M	<8 @ M	<8 @ M	<8 @ M	<8 @ M	<8 @ M
Ethylbenzene	<3 µg/kg	TM089	<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ M
m,p-Xylene	<6 µg/kg	TM089	<24 @ M	<24 @ M	<24 @ M	<24 @ M	<24 @ M	<24 @ M
o-Xylene	<3 µg/kg	TM089	<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ M
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9 @	<9 @	<9 @	<9 @	<9 @	<9 @
sum of detected BTEX by GC	<24 µg/kg	TM089	<24 @	<24 @	<24 @	<24 @	<24 @	<24 @
Aliphatics >C5-C6	<10 µg/kg	TM089	<40 @	<40 @	<40 @	68.4 @	<40 @	<40 @
Aliphatics >C6-C8	<10 µg/kg	TM089	<40 @	<40 @	131 @	110 @	<40 @	288 @
Aliphatics >C8-C10	<10 µg/kg	TM089	<40 @	<40 @	895 @	223 @	<40 @	12400 @
Aliphatics >C10-C12	<10 µg/kg	TM089	<40 @	109 @	3710 @	135 @	<40 @	27800 @
Aliphatics >C12-C16	<100 µg/kg	TM173	<100	25000	1220	6450	<100	274000
Aliphatics >C16-C21	<100 µg/kg	TM173	<100	51200	1810	15400	<100	320000
Aliphatics >C21-C35	<100 µg/kg	TM173	<100	88900	<100	23000	<100	509000
Aliphatics >C35-C44	<100 µg/kg	TM173	<100	20100	<100	4700	<100	161000
Total Aliphatics >C12-C44	<100 µg/kg	TM173	<100	185000	3030	49600	<100	1260000
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40 @	<40 @	<40 @	<40 @	<40 @	<40 @
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40 @	<40 @	<40 @	<40 @	<40 @	<40 @
Aromatics >EC8-EC10	<10 µg/kg	TM089	<40 @	<40 @	610 @	148 @	<40 @	8270 @
Aromatics >EC10-EC12	<10 µg/kg	TM089	<40 @	73 @	2480 @	89.3 @	<40 @	18500 @
Aromatics >EC12-EC16	<100 µg/kg	TM173	<100	2840	<100	1510	<100	62400
Aromatics >EC16-EC21	<100 µg/kg	TM173	<100	25000	<100	7010	<100	90500
Aromatics >EC21-EC35	<100 µg/kg	TM173	<100	76800	<100	22200	619	213000
Aromatics >EC35-EC44	<100 µg/kg	TM173	<100	26200	<100	6590	<100	87100
Aromatics >EC40-EC44	<100 µg/kg	TM173	<100	10400	<100	2510	<100	36100
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	<100	131000	<100	37300	619	453000
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	<100	316000	10900	87700	619	1780000



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R	TPE 2032		TPE 2032		TPE 2034		TPE 2034		TPE 2034		TPE 2034	
#	ISO17025 accredited.		2.50	Soil/Solid	3.50	Soil/Solid	0.50	Soil/Solid	1.50	Soil/Solid	2.60	Soil/Solid	3.80	Soil/Solid
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015
aq	Aqueous / settled sample.		01/05/2015	150501-93	01/05/2015	150501-93	01/05/2015	150501-93	01/05/2015	150501-93	01/05/2015	150501-93	01/05/2015	150501-93
diss.filt	Dissolved / filtered sample.		11293699	11293704	11293704	11293673	11293673	11293677	11293681	11293681	11293681	11293681	11293686	11293686
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	TPE 2032		TPE 2032		TPE 2034		TPE 2034		TPE 2034		TPE 2034	
GRO Surrogate % recovery**	%	TM089	97	@	102	@	65	@	97	@	106	@	94	@
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	2400	@ M	8450	@ M	<176	@ M	1190	@ M	<176	@ M	<176	@ M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20	@ M	<20	@ M	<20	@ M	<20	@ M	<20	@ M	<20	@ M
Benzene	<10 µg/kg	TM089	<40	@ M	<40	@ M	<40	@ M	<40	@ M	<40	@ M	<40	@ M
Toluene	<2 µg/kg	TM089	<8	@ M	<8	@ M	<8	@ M	<8	@ M	<8	@ M	<8	@ M
Ethylbenzene	<3 µg/kg	TM089	<12	@ M	<12	@ M	<12	@ M	<12	@ M	<12	@ M	<12	@ M
m,p-Xylene	<6 µg/kg	TM089	<24	@ M	<24	@ M	<24	@ M	<24	@ M	<24	@ M	<24	@ M
o-Xylene	<3 µg/kg	TM089	<12	@ M	<12	@ M	<12	@ M	<12	@ M	<12	@ M	<12	@ M
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	@	<9	@	<9	@	<9	@	<9	@	<9	@
sum of detected BTEX by GC	<24 µg/kg	TM089	<24	@	<24	@	<24	@	<24	@	<24	@	<24	@
Aliphatics >C5-C6	<10 µg/kg	TM089	121	@	431	@	<40	@	<40	@	<40	@	<40	@
Aliphatics >C6-C8	<10 µg/kg	TM089	1030	@	2620	@	<40	@	<40	@	<40	@	<40	@
Aliphatics >C8-C10	<10 µg/kg	TM089	471	@	2540	@	<40	@	249	@	<40	@	<40	@
Aliphatics >C10-C12	<10 µg/kg	TM089	274	@	692	@	<40	@	439	@	<40	@	<40	@
Aliphatics >C12-C16	<100 µg/kg	TM173	<100		<100		45500		9000		<100		<100	
Aliphatics >C16-C21	<100 µg/kg	TM173	<100		<100		201000		11200		<100		<100	
Aliphatics >C21-C35	<100 µg/kg	TM173	<100		<100		199000		2820		<100		<100	
Aliphatics >C35-C44	<100 µg/kg	TM173	<100		<100		57800		<100		<100		<100	
Total Aliphatics >C12-C44	<100 µg/kg	TM173	<100		<100		503000		23000		<100		<100	
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@	<40	@	<40	@
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@	<40	@	<40	@
Aromatics >EC8-EC10	<10 µg/kg	TM089	314	@	1700	@	<40	@	166	@	<40	@	<40	@
Aromatics >EC10-EC12	<10 µg/kg	TM089	182	@	462	@	<40	@	292	@	<40	@	<40	@
Aromatics >EC12-EC16	<100 µg/kg	TM173	<100		<100		4460		2740		<100		<100	
Aromatics >EC16-EC21	<100 µg/kg	TM173	<100		<100		31200		6070		<100		<100	
Aromatics >EC21-EC35	<100 µg/kg	TM173	<100		<100		115000		4860		<100		<100	
Aromatics >EC35-EC44	<100 µg/kg	TM173	<100		<100		47000		<100		<100		<100	
Aromatics >EC40-EC44	<100 µg/kg	TM173	<100		<100		17600		<100		<100		<100	
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	<100		<100		198000		13700		<100		<100	
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	2400		8450		701000		37900		<100		<100	



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R	TPE 2036		TPE 2036		TPE 2036		TPE 2038		TPE 2038		TPE 2038	
#	ISO17025 accredited.		0.50	2.00	3.50	0.50	1.50	2.50	0.50	1.50	2.50	0.50	1.50	2.50
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
aq	Aqueous / settled sample.		28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015
diss.filt	Dissolved / filtered sample.	Date Received SDG Ref Lab Sample No.(s) AGS Reference	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015
tot.unfilt	Total / unfiltered sample.		150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93
*	Subcontracted test.	Lab Sample No.(s) AGS Reference	11293603	11293615	11293620	11293582	11293586	11293592	11293582	11293586	11293592	11293582	11293586	11293592
**	% 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	Lab Sample No.(s) AGS Reference												
1-5&\$@	Sample deviation (see appendix)													
Component	LOD/Units	Method	TPE 2036		TPE 2036		TPE 2036		TPE 2038		TPE 2038		TPE 2038	
GRO Surrogate % recovery**	%	TM089	28	89	86	39	81	77						
			@		@	@	@	@						
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	1490	11500	74600	<176	<44	<176						
			@ M	M	@ M	@ M	@ M	@ M						
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20	<20	<20	<20	<5	<20						
			@ M	M	@ M	@ M	@ M	@ M						
Benzene	<10 µg/kg	TM089	57.3	<40	<40	<40	<10	<40						
			@ M	M	@ M	@ M	@ M	@ M						
Toluene	<2 µg/kg	TM089	<8	<8	<8	<8	<2	<8						
			@ M	M	@ M	@ M	@ M	@ M						
Ethylbenzene	<3 µg/kg	TM089	<12	<12	<12	<12	<3	<12						
			@ M	M	@ M	@ M	@ M	@ M						
m,p-Xylene	<6 µg/kg	TM089	<24	<24	<24	<24	<6	<24						
			@ M	M	@ M	@ M	@ M	@ M						
o-Xylene	<3 µg/kg	TM089	<12	<12	<12	<12	<3	<12						
			@ M	M	@ M	@ M	@ M	@ M						
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	<9	<9	<9	<9	<9						
			@		@	@	@	@						
sum of detected BTEX by GC	<24 µg/kg	TM089	57.3	<24	<24	<24	<24	<24						
			@		@	@	@	@						
Aliphatics >C5-C6	<10 µg/kg	TM089	51.5	<40	<40	<40	<10	<40						
			@		@	@	@	@						
Aliphatics >C6-C8	<10 µg/kg	TM089	106	42.2	408	<40	<10	<40						
			@		@	@	@	@						
Aliphatics >C8-C10	<10 µg/kg	TM089	170	447	12400	<40	<10	<40						
			@		@	@	@	@						
Aliphatics >C10-C12	<10 µg/kg	TM089	590	6410	32100	<40	<10	<40						
			@		@	@	@	@						
Aliphatics >C12-C16	<100 µg/kg	TM173	554000	318000	209000	17700	4480	<100						
Aliphatics >C16-C21	<100 µg/kg	TM173	1300000	233000	166000	172000	42000	<100						
Aliphatics >C21-C35	<100 µg/kg	TM173	3970000	49400	18400	1080000	237000	<100						
Aliphatics >C35-C44	<100 µg/kg	TM173	292000	3180	<100	300000	61600	<100						
Total Aliphatics >C12-C44	<100 µg/kg	TM173	6110000	603000	393000	1570000	345000	<100						
Aromatics >EC5-EC7	<10 µg/kg	TM089	57.3	<40	<40	<40	<10	<40						
			@		@	@	@	@						
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40	<40	<40	<40	<10	<40						
			@		@	@	@	@						
Aromatics >EC8-EC10	<10 µg/kg	TM089	126	306	8260	<40	<10	<40						
			@		@	@	@	@						
Aromatics >EC10-EC12	<10 µg/kg	TM089	393	4270	21400	<40	<10	<40						
			@		@	@	@	@						
Aromatics >EC12-EC16	<100 µg/kg	TM173	21500	69900	29900	3910	<100	<100						
Aromatics >EC16-EC21	<100 µg/kg	TM173	298000	93000	51000	51600	11800	904						
Aromatics >EC21-EC35	<100 µg/kg	TM173	3450000	74100	19000	801000	179000	1760						
Aromatics >EC35-EC44	<100 µg/kg	TM173	623000	15800	<100	384000	84100	<100						
Aromatics >EC40-EC44	<100 µg/kg	TM173	180000	6210	<100	172000	33900	<100						
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	4390000	253000	99900	1240000	275000	2660						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	10500000	868000	567000	2810000	620000	2670						



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R	TPE 2038		TPE 2040		TPE 2040		TPE 2040		TPE 2051	
#	ISO17025 accredited.		3.50	Soil/Solid	0.50	Soil/Solid	1.50	Soil/Solid	2.50	Soil/Solid	3.50	Soil/Solid
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015
aq	Aqueous / settled sample.		01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015
diss.filt	Dissolved / filtered sample.		150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93
tot.unfilt	Total / unfiltered sample.		11293597	11293560	11293566	11293572	11293577	11293577	11293577	11293577	11293577	11293577
*	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	TPE 2038		TPE 2040		TPE 2040		TPE 2040		TPE 2051	
GRO Surrogate % recovery**	%	TM089	85	@	45	@	76	@	88	@	103	@
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	<176	@ M	<176	@ M	<176	@ M	<176	@ M	<176	@ M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20	@ M	<20	@ M	<20	@ M	<20	@ M	<20	@ M
Benzene	<10 µg/kg	TM089	<40	@ M	<40	@ M	<40	@ M	<40	@ M	<40	@ M
Toluene	<2 µg/kg	TM089	<8	@ M	<8	@ M	<8	@ M	<8	@ M	<8	@ M
Ethylbenzene	<3 µg/kg	TM089	<12	@ M	<12	@ M	<12	@ M	<12	@ M	<12	@ M
m,p-Xylene	<6 µg/kg	TM089	<24	@ M	<24	@ M	<24	@ M	<24	@ M	<24	@ M
o-Xylene	<3 µg/kg	TM089	<12	@ M	<12	@ M	<12	@ M	<12	@ M	<12	@ M
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	@	<9	@	<9	@	<9	@	<9	@
sum of detected BTEX by GC	<24 µg/kg	TM089	<24	@	<24	@	<24	@	<24	@	<24	@
Aliphatics >C5-C6	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@	<40	@
Aliphatics >C6-C8	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@	<40	@
Aliphatics >C8-C10	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@	<40	@
Aliphatics >C10-C12	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@	<40	@
Aliphatics >C12-C16	<100 µg/kg	TM173	<100		29200		<100		2710		30600	
Aliphatics >C16-C21	<100 µg/kg	TM173	<100		156000		<100		2400		31100	
Aliphatics >C21-C35	<100 µg/kg	TM173	<100		563000		<100		4900		222000	
Aliphatics >C35-C44	<100 µg/kg	TM173	<100		4170		<100		4350		182000	
Total Aliphatics >C12-C44	<100 µg/kg	TM173	<100		753000		<100		14400		466000	
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@	<40	@
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@	<40	@
Aromatics >EC8-EC10	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@	<40	@
Aromatics >EC10-EC12	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@	<40	@
Aromatics >EC12-EC16	<100 µg/kg	TM173	<100		10800		<100		<100		7350	
Aromatics >EC16-EC21	<100 µg/kg	TM173	<100		65600		1910		2600		16500	
Aromatics >EC21-EC35	<100 µg/kg	TM173	<100		119000		9460		12100		215000	
Aromatics >EC35-EC44	<100 µg/kg	TM173	<100		50900		3120		6110		171000	
Aromatics >EC40-EC44	<100 µg/kg	TM173	<100		24200		983		3050		72700	
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	<100		246000		14500		20800		410000	
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	<100		999000		14500		35200		876000	



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

TPH CWG (S)

Results Legend			Customer Sample R		TPE 2051	TPE 2051	TPE 2051	TPE 2059	TPE 2059	TPE 2059
#	ISO17025 accredited.		Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference		1.50	2.80	4.00	0.50	1.50	3.00
M	mCERTS accredited.				Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
aq	Aqueous / settled sample.				28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015
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				01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015
(F)	Trigger breach confirmed				150501-93	150501-93	150501-93	150501-93	150501-93	150501-93
1-5&\$@	Sample deviation (see appendix)				11293947	11293964	11293977	11293713	11293717	11293731
Component	LOD/Units	Method								
GRO Surrogate % recovery**	%	TM089	56	@	65	@	64	@	99	@
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	27500	@	<176	@ M	7270	@ M	238000	@ M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20	@	<20	@ M	<20	@ M	<20	@ M
Benzene	<10 µg/kg	TM089	<40	@	<40	@ M	<40	@ M	541	@ M
Toluene	<2 µg/kg	TM089	<8	@	<8	@ M	35.6	@ M	<8	@ M
Ethylbenzene	<3 µg/kg	TM089	61	@	<12	@ M	<12	@ M	260	@ M
m,p-Xylene	<6 µg/kg	TM089	74.6	@	<24	@ M	<24	@ M	912	@ M
o-Xylene	<3 µg/kg	TM089	<12	@	<12	@ M	<12	@ M	<12	@ M
sum of detected mpo xylene by GC	<9 µg/kg	TM089	74.6	@	<9	@	<9	@	912	@
sum of detected BTEX by GC	<24 µg/kg	TM089	136	@	<24	@	35.6	@	541	@
Aliphatics >C5-C6	<10 µg/kg	TM089	47.5	@	<40	@	86.3	@	977	@
Aliphatics >C6-C8	<10 µg/kg	TM089	365	@	<40	@	521	@	6580	@
Aliphatics >C8-C10	<10 µg/kg	TM089	3240	@	<40	@	1480	@	68600	@
Aliphatics >C10-C12	<10 µg/kg	TM089	12900	@	<40	@	2490	@	69300	@
Aliphatics >C12-C16	<100 µg/kg	TM173	207000		<100		9600		74500	
Aliphatics >C16-C21	<100 µg/kg	TM173	277000		<100		4410		19500	
Aliphatics >C21-C35	<100 µg/kg	TM173	368000		<100		2730		200000	
Aliphatics >C35-C44	<100 µg/kg	TM173	106000		<100		<100		16300	
Total Aliphatics >C12-C44	<100 µg/kg	TM173	958000		<100		16700		311000	
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40	@	<40	@	<40	@	541	@
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@
Aromatics >EC8-EC10	<10 µg/kg	TM089	2300	@	<40	@	988	@	45700	@
Aromatics >EC10-EC12	<10 µg/kg	TM089	8600	@	<40	@	1660	@	46200	@
Aromatics >EC12-EC16	<100 µg/kg	TM173	44400		<100		3340		9660	
Aromatics >EC16-EC21	<100 µg/kg	TM173	147000		<100		<100		8080	
Aromatics >EC21-EC35	<100 µg/kg	TM173	298000		<100		14000		105000	
Aromatics >EC35-EC44	<100 µg/kg	TM173	106000		<100		2550		19700	
Aromatics >EC40-EC44	<100 µg/kg	TM173	43000		<100		684		5750	
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	596000		<100		19900		143000	
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	1580000		<100		43900		691000	



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R	TPE 2067		TPE 2067		TPE 2067		TPE 2069		TPE 2069		TPE 2069	
#	ISO17025 accredited.		0.50	Soil/Solid	1.60	Soil/Solid	2.70	Soil/Solid	0.50	Soil/Solid	1.50	Soil/Solid	2.50	Soil/Solid
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015
aq	Aqueous / settled sample.		01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015
diss.filt	Dissolved / filtered sample.		150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93
tot.unfilt	Total / unfiltered sample.		11293539	11293543	11293551	11293523	11293527	11293531						
*	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	TPE 2067		TPE 2067		TPE 2067		TPE 2069		TPE 2069		TPE 2069	
GRO Surrogate % recovery**	%	TM089	99	@	81	@	100	@	82	@	101	@	78	@
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	1530	@ M	6080	@ M	22700	@ M	<176	@ M	<176	@ M	<176	@ M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20	@ M	<20	@ M	<20	@ M	<20	@ M	<20	@ M	<20	@ M
Benzene	<10 µg/kg	TM089	<40	@ M	<40	@ M	<40	@ M	<40	@ M	<40	@ M	<40	@ M
Toluene	<2 µg/kg	TM089	<8	@ M	<8	@ M	<8	@ M	<8	@ M	<8	@ M	<8	@ M
Ethylbenzene	<3 µg/kg	TM089	<12	@ M	<12	@ M	<12	@ M	<12	@ M	<12	@ M	<12	@ M
m,p-Xylene	<6 µg/kg	TM089	<24	@ M	<24	@ M	<24	@ M	<24	@ M	<24	@ M	<24	@ M
o-Xylene	<3 µg/kg	TM089	<12	@ M	<12	@ M	<12	@ M	<12	@ M	<12	@ M	<12	@ M
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	@	<9	@	<9	@	<9	@	<9	@	<9	@
sum of detected BTEX by GC	<24 µg/kg	TM089	<24	@	<24	@	<24	@	<24	@	<24	@	<24	@
Aliphatics >C5-C6	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@	<40	@	<40	@
Aliphatics >C6-C8	<10 µg/kg	TM089	<40	@	46.3	@	59.4	@	<40	@	<40	@	<40	@
Aliphatics >C8-C10	<10 µg/kg	TM089	86.6	@	332	@	897	@	<40	@	<40	@	<40	@
Aliphatics >C10-C12	<10 µg/kg	TM089	801	@	3270	@	12700	@	<40	@	<40	@	<40	@
Aliphatics >C12-C16	<100 µg/kg	TM173	17800		122000		160000		10800		814		<100	
Aliphatics >C16-C21	<100 µg/kg	TM173	50300		212000		175000		5210		4020		<100	
Aliphatics >C21-C35	<100 µg/kg	TM173	25300		125000		43600		2400		7290		3830	
Aliphatics >C35-C44	<100 µg/kg	TM173	3960		39600		6840		<100		1590		<100	
Total Aliphatics >C12-C44	<100 µg/kg	TM173	97400		500000		385000		18400		13700		3830	
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@	<40	@	<40	@
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@	<40	@	<40	@
Aromatics >EC8-EC10	<10 µg/kg	TM089	57.7	@	221	@	598	@	<40	@	<40	@	<40	@
Aromatics >EC10-EC12	<10 µg/kg	TM089	534	@	2180	@	8460	@	<40	@	<40	@	<40	@
Aromatics >EC12-EC16	<100 µg/kg	TM173	658		2850		21500		2550		<100		<100	
Aromatics >EC16-EC21	<100 µg/kg	TM173	5180		17500		65600		579		756		618	
Aromatics >EC21-EC35	<100 µg/kg	TM173	14100		57900		34800		409		6030		4620	
Aromatics >EC35-EC44	<100 µg/kg	TM173	9640		33800		10800		<100		8120		3950	
Aromatics >EC40-EC44	<100 µg/kg	TM173	4100		14000		4150		<100		4510		1860	
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	29600		112000		133000		3530		14900		9180	
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	129000		618000		541000		22000		28600		13000	



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

TPH CWG (S)

Results Legend			Customer Sample R		TPE 2069	TPE 2071	TPE 2071	TPE 2079	TPE 2079	TPE 2079
#	ISO17025 accredited.		Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference		3.50	0.50	2.50	0.50	1.50	2.50
M	mCERTS accredited.				Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
aq	Aqueous / settled sample.				28/04/2015	27/04/2015	27/04/2015	29/04/2015	29/04/2015	28/04/2015
diss.filt	Dissolved / filtered sample.									
tot.unfilt	Total / unfiltered sample.				01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015
*	Subcontracted test.				150501-93	150501-93	150501-93	150501-93	150501-93	150501-93
**	% 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				11293535	11293497	11293507	11293995	11294004	11294013
(F)	Trigger breach confirmed									
1-5&*\$@	Sample deviation (see appendix)									
Component	LOD/Units	Method								
GRO Surrogate % recovery**	%	TM089	81	@	43	@	40	@	53	@
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	<176	@ M	<176	@ M	<176	@ M	2470	@ M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20	@ M	<20	@ M	<20	@ M	<20	@ M
Benzene	<10 µg/kg	TM089	<40	@ M	<40	@ M	<40	@ M	76.9	@ M
Toluene	<2 µg/kg	TM089	<8	@ M	<8	@ M	8.73	@ M	<8	@ M
Ethylbenzene	<3 µg/kg	TM089	<12	@ M	<12	@ M	<12	@ M	132	@ M
m,p-Xylene	<6 µg/kg	TM089	<24	@ M	<24	@ M	<24	@ M	265	@ M
o-Xylene	<3 µg/kg	TM089	<12	@ M	<12	@ M	<12	@ M	<12	@ M
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	@	<9	@	<9	@	265	@
sum of detected BTEX by GC	<24 µg/kg	TM089	<24	@	<24	@	<24	@	474	@
Aliphatics >C5-C6	<10 µg/kg	TM089	<40	@	<40	@	<40	@	140	@
Aliphatics >C6-C8	<10 µg/kg	TM089	<40	@	<40	@	88.4	@	572	@
Aliphatics >C8-C10	<10 µg/kg	TM089	<40	@	<40	@	461	@	2340	@
Aliphatics >C10-C12	<10 µg/kg	TM089	<40	@	<40	@	925	@	921	@
Aliphatics >C12-C16	<100 µg/kg	TM173	<100		2070		<100		<100	
Aliphatics >C16-C21	<100 µg/kg	TM173	<100		12000		332000		<100	
Aliphatics >C21-C35	<100 µg/kg	TM173	2960		45000		750000		<100	
Aliphatics >C35-C44	<100 µg/kg	TM173	3050		16000		228000		<100	
Total Aliphatics >C12-C44	<100 µg/kg	TM173	6010		75000		1470000		<100	
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40	@	<40	@	<40	@	76.9	@
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@
Aromatics >EC8-EC10	<10 µg/kg	TM089	<40	@	<40	@	323	@	1960	@
Aromatics >EC10-EC12	<10 µg/kg	TM089	<40	@	<40	@	616	@	615	@
Aromatics >EC12-EC16	<100 µg/kg	TM173	<100		1250		<100		<100	
Aromatics >EC16-EC21	<100 µg/kg	TM173	354		7190		105000		<100	
Aromatics >EC21-EC35	<100 µg/kg	TM173	4260		71000		381000		6660	
Aromatics >EC35-EC44	<100 µg/kg	TM173	4360		49400		160000		5870	
Aromatics >EC40-EC44	<100 µg/kg	TM173	2000		21500		57800		3310	
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	8970		129000		664000		12500	
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	15000		204000		179000		2130000	



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R						
#	ISO17025 accredited.		TPE 2081		TPE 2081		TPE 2083	
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.50	1.50	3.00	0.50	1.50	2.50
aq	Aqueous / settled sample.		Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
diss.filt	Dissolved / filtered sample.		29/04/2015	29/04/2015	29/04/2015	29/04/2015	29/04/2015	29/04/2015
tot.unfilt	Total / unfiltered sample.		01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015
*	Subcontracted test.		150501-93	150501-93	150501-93	150501-93	150501-93	150501-93
**	% 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		11294021	11294028	11294037	11294046	11294056	11294063
(F)	Trigger breach confirmed							
1-55*5@	Sample deviation (see appendix)							
Component	LOD/Units	Method						
GRO Surrogate % recovery**	%	TM089	43	81	161	39	96	93
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	37100	954	1460000	128000	43000	1460
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20	<20	<100	<20	<20	<20
Benzene	<10 µg/kg	TM089	52.9	154	<200	180	<40	163
Toluene	<2 µg/kg	TM089	29.9	13.2	<40	<8	<8	<8
Ethylbenzene	<3 µg/kg	TM089	<12	<12	<60	<12	<12	34.5
m,p-Xylene	<6 µg/kg	TM089	66.7	<24	<120	<24	<24	57.1
o-Xylene	<3 µg/kg	TM089	<12	<12	<60	<12	<12	<12
sum of detected mpo xylene by GC	<9 µg/kg	TM089	66.7	<9	<9	<9	<9	57.1
sum of detected BTEX by GC	<24 µg/kg	TM089	150	167	<24	180	<24	255
Aliphatics >C5-C6	<10 µg/kg	TM089	319	172	11800	399	109	82.1
Aliphatics >C6-C8	<10 µg/kg	TM089	353	328	184000	9290	1590	293
Aliphatics >C8-C10	<10 µg/kg	TM089	7310	91.2	461000	41600	10600	283
Aliphatics >C10-C12	<10 µg/kg	TM089	14500	70.8	298000	29000	14200	215
Aliphatics >C12-C16	<100 µg/kg	TM173	48500	<100	270000	9560000	318000	<100
Aliphatics >C16-C21	<100 µg/kg	TM173	747000	<100	81100	10700000	236000	<100
Aliphatics >C21-C35	<100 µg/kg	TM173	1560000	<100	108000	3670000	74100	<100
Aliphatics >C35-C44	<100 µg/kg	TM173	318000	<100	103000	743000	14700	<100
Total Aliphatics >C12-C44	<100 µg/kg	TM173	2680000	<100	562000	24700000	643000	<100
Aromatics >EC5-EC7	<10 µg/kg	TM089	52.9	154	<200	180	<40	163
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40	<40	<200	<40	<40	<40
Aromatics >EC8-EC10	<10 µg/kg	TM089	4940	79.2	307000	27800	7030	280
Aromatics >EC10-EC12	<10 µg/kg	TM089	9650	46.8	199000	19300	9470	144
Aromatics >EC12-EC16	<100 µg/kg	TM173	15600	<100	68300	580000	92000	<100
Aromatics >EC16-EC21	<100 µg/kg	TM173	264000	<100	37900	2140000	89000	<100
Aromatics >EC21-EC35	<100 µg/kg	TM173	1390000	<100	50400	1240000	34700	<100
Aromatics >EC35-EC44	<100 µg/kg	TM173	619000	<100	40300	328000	4020	<100
Aromatics >EC40-EC44	<100 µg/kg	TM173	120000	<100	18000	121000	944	<100
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	2290000	<100	197000	4280000	220000	<100
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	5000000	953	2220000	29100000	906000	1460



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	TPE 2083		TPE 2087		TPE 2087		TPE 2087		TPE 2087		TPE 2089	
#	ISO17025 accredited.		3.50		0.50		1.50		2.50		3.50		0.50	
M	mCERTS accredited.		Soil/Solid		Soil/Solid		Soil/Solid		Soil/Solid		Soil/Solid		Soil/Solid	
aq	Aqueous / settled sample.		29/04/2015		28/04/2015		28/04/2015		28/04/2015		28/04/2015		28/04/2015	
diss.filt	Dissolved / filtered sample.		01/05/2015		01/05/2015		01/05/2015		01/05/2015		01/05/2015		01/05/2015	
tot.unfilt	Total / unfiltered sample.		150501-93		150501-93		150501-93		150501-93		150501-93		150501-93	
*	Subcontracted test.		11294071		11293644		11293652		11293658		11293664		11293625	
**	% 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												
GRO Surrogate % recovery**	%	TM089	75		79		91		99		158		38	
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	19700	♦ M	3140000	3 @ M	93400	@ M	1400000	@ M	1850000	@ M	77100	@ #
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20	♦ M	<100	@ M	<20	@ M	<100	@ M	<100	@ M	<20	@ #
Benzene	<10 µg/kg	TM089	102	♦ M	725	@ M	495	@ M	239	@ M	1230	@ M	210	@ #
Toluene	<2 µg/kg	TM089	<8	♦ M	48.4	@ M	<8	@ M	<40	@ M	<40	@ M	67.8	@ #
Ethylbenzene	<3 µg/kg	TM089	<12	♦ M	3420	@ M	<12	@ M	<60	@ M	<60	@ M	62.7	@ #
m,p-Xylene	<6 µg/kg	TM089	<24	♦ M	3760	@ M	806	@ M	<120	@ M	29300	@ M	92.2	@ #
o-Xylene	<3 µg/kg	TM089	<12	♦ M	<60	@ M	<12	@ M	<60	@ M	<60	@ M	137	@ #
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	♦	3760	@	806	@	<9	@	29300	@	229	@
sum of detected BTEX by GC	<24 µg/kg	TM089	102	♦	7950	@	1300	@	239	@	30500	@	570	@
Aliphatics >C5-C6	<10 µg/kg	TM089	166	♦	707	3 @	618	@	344	@	15800	@	404	@
Aliphatics >C6-C8	<10 µg/kg	TM089	1430	♦	4300	3 @	3370	@	12200	@	135000	@	896	@
Aliphatics >C8-C10	<10 µg/kg	TM089	4290	♦	623000	3 @	25100	@	251000	@	526000	@	5660	@
Aliphatics >C10-C12	<10 µg/kg	TM089	6490	♦	1250000	3 @	27800	@	581000	@	475000	@	39500	@
Aliphatics >C12-C16	<100 µg/kg	TM173	16000		1350000		363000		193000		55300		2650000	
Aliphatics >C16-C21	<100 µg/kg	TM173	14500		355000		190000		40300		8540		1360000	
Aliphatics >C21-C35	<100 µg/kg	TM173	6730		289000		236000		42900		9960		578000	
Aliphatics >C35-C44	<100 µg/kg	TM173	<100		52000		46600		<100		<100		125000	
Total Aliphatics >C12-C44	<100 µg/kg	TM173	37200		2050000		836000		276000		73800		4710000	
Aromatics >EC5-EC7	<10 µg/kg	TM089	102	♦	725	3 @	495	@	239	@	1230	@	210	@
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40	♦	<200	3 @	<40	@	<200	@	<200	@	67.8	@
Aromatics >EC8-EC10	<10 µg/kg	TM089	2860	♦	423000	3 @	17500	@	168000	@	380000	@	4060	@
Aromatics >EC10-EC12	<10 µg/kg	TM089	4320	♦	835000	3 @	18500	@	387000	@	317000	@	26300	@
Aromatics >EC12-EC16	<100 µg/kg	TM173	4840		233000		77300		38300		11200		44200	
Aromatics >EC16-EC21	<100 µg/kg	TM173	6800		137000		80100		19500		4380		253000	
Aromatics >EC21-EC35	<100 µg/kg	TM173	8570		166000		155000		31100		6810		647000	
Aromatics >EC35-EC44	<100 µg/kg	TM173	7070		48000		41200		<100		3820		984000	
Aromatics >EC40-EC44	<100 µg/kg	TM173	3340		19400		16900		<100		2090		539000	
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	27300		585000		354000		89000		26200		1930000	
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	84200		5770000		1280000		1770000		1950000		6720000	



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R	TPE 2089		TPE 2089		TPE 2089		TPE 2091		TPE 2091		TPE 2091	
#	ISO17025 accredited.		1.50	2.50	3.50	0.50	1.50	2.50	0.50	1.50	2.50	0.50	1.50	2.50
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
aq	Aqueous / settled sample.		28/04/2015	28/04/2015	28/04/2015	29/04/2015	29/04/2015	29/04/2015	29/04/2015	29/04/2015	29/04/2015	29/04/2015	29/04/2015	29/04/2015
diss.filt	Dissolved / filtered 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	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015
tot.unfilt	Total / unfiltered sample.		150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93
*	Subcontracted test.	Trigger breach confirmed 1-5&*&@ Sample deviation (see appendix)	11293629	11293634	11293638	11293637	11293637	11293637	11293637	11293637	11293637	11293637	11293637	11293637
**	% 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	Lab Sample No.(s) AGS Reference												
1-5&*&@	Sample deviation (see appendix)													
Component	LOD/Units	Method	TPE 2089		TPE 2089		TPE 2089		TPE 2091		TPE 2091		TPE 2091	
GRO Surrogate % recovery**	%	TM089	206	195	115	85	127	25						
			@	@	@	♦	♦	♦						
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	3910000	2220000	12700	87600	277000	99600						
			3 @ M	3 @ M	@ M	♦ M	♦ M	♦ M						
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<100	<100	<20	<20	<20	<20						
			@ M	@ M	@ M	♦ M	♦ M	♦ M						
Benzene	<10 µg/kg	TM089	1540	2680	533	<40	116	<40						
			@ M	@ M	@ M	♦ M	♦ M	♦ M						
Toluene	<2 µg/kg	TM089	<40	<40	32.1	<8	<8	<8						
			@ M	@ M	@ M	♦ M	♦ M	♦ M						
Ethylbenzene	<3 µg/kg	TM089	<60	<60	894	<12	<12	<12						
			@ M	@ M	@ M	♦ M	♦ M	♦ M						
m,p-Xylene	<6 µg/kg	TM089	<120	31900	3460	<24	<24	<24						
			@ M	@ M	@ M	♦ M	♦ M	♦ M						
o-Xylene	<3 µg/kg	TM089	<60	<60	1250	<12	<12	<12						
			@ M	@ M	@ M	♦ M	♦ M	♦ M						
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	31900	4710	<9	<9	<9						
			@	@	@	♦	♦	♦						
sum of detected BTEX by GC	<24 µg/kg	TM089	1540	34600	6170	<24	116	<24						
			@	@	@	♦	♦	♦						
Aliphatics >C5-C6	<10 µg/kg	TM089	71000	53100	932	758	2440	46.4						
			3 @	3 @	@	♦	♦	♦						
Aliphatics >C6-C8	<10 µg/kg	TM089	772000	589000	3460	6340	31600	2910						
			3 @	3 @	@	♦	♦	♦						
Aliphatics >C8-C10	<10 µg/kg	TM089	863000	495000	965	13800	47000	24400						
			3 @	3 @	@	♦	♦	♦						
Aliphatics >C10-C12	<10 µg/kg	TM089	979000	429000	347	34500	99000	33600						
			3 @	3 @	@	♦	♦	♦						
Aliphatics >C12-C16	<100 µg/kg	TM173	619000	399000	5040	28200	386000	295000						
Aliphatics >C16-C21	<100 µg/kg	TM173	176000	94600	3130	26500	282000	170000						
Aliphatics >C21-C35	<100 µg/kg	TM173	72300	43400	1930	7720	44800	37200						
Aliphatics >C35-C44	<100 µg/kg	TM173	12200	6020	<100	<100	<100	<100						
Total Aliphatics >C12-C44	<100 µg/kg	TM173	880000	543000	10100	62400	712000	503000						
Aromatics >EC5-EC7	<10 µg/kg	TM089	1540	2680	533	<40	116	<40						
			3 @	3 @	@	♦	♦	♦						
Aromatics >EC7-EC8	<10 µg/kg	TM089	<200	<200	<40	<40	<40	<40						
			3 @	3 @	@	♦	♦	♦						
Aromatics >EC8-EC10	<10 µg/kg	TM089	575000	362000	6250	9210	31300	16300						
			3 @	3 @	@	♦	♦	♦						
Aromatics >EC10-EC12	<10 µg/kg	TM089	652000	286000	231	23000	66000	22400						
			3 @	3 @	@	♦	♦	♦						
Aromatics >EC12-EC16	<100 µg/kg	TM173	96000	61800	2110	6670	23300	34400						
Aromatics >EC16-EC21	<100 µg/kg	TM173	74900	38100	2290	8280	56400	51000						
Aromatics >EC21-EC35	<100 µg/kg	TM173	50500	29700	3110	2760	14800	9500						
Aromatics >EC35-EC44	<100 µg/kg	TM173	12200	8890	2830	<100	2110	<100						
Aromatics >EC40-EC44	<100 µg/kg	TM173	5100	4230	1650	<100	776	<100						
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	233000	139000	10300	17700	96500	94800						
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	5030000	2900000	33200	168000	1090000	698000						



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

TPH CWG (S)

Results Legend			Customer Sample R		TPE 2091	TPE 2111	TPE 2111	TPE 2111	TPE 2115	TPE 2115
#	ISO17025 accredited.		Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference		3.50	0.50	1.50	2.50	0.50	1.50
M	mCERTS accredited.				Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
aq	Aqueous / settled sample.				29/04/2015	29/04/2015	29/04/2015	29/04/2015	29/04/2015	29/04/2015
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				01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015
(F)	Trigger breach confirmed				150501-93	150501-93	150501-93	150501-93	150501-93	150501-93
1-5&\$@	Sample deviation (see appendix)				11293390	11293115	11293121	11293125	11293095	11293100
Component	LOD/Units	Method								
GRO Surrogate % recovery**	%	TM089			112	24	124	64	109	77
					♦	♦	♦	♦	♦	♦
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089			8210	21100	225000	30400	722000	134000
					♦ M	♦ M	♦ M	♦ M	♦ M	♦ M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089			<20	<20	<20	<20	<50	<20
					♦ M	♦ M	♦ M	♦ M	♦ M	♦ M
Benzene	<10 µg/kg	TM089			<40	<40	<40	<40	445	57.5
					♦ M	♦ M	♦ M	♦ M	♦ M	♦ M
Toluene	<2 µg/kg	TM089			<8	<8	<8	<8	<20	<8
					♦ M	♦ M	♦ M	♦ M	♦ M	♦ M
Ethylbenzene	<3 µg/kg	TM089			<12	<12	<12	<12	<30	<12
					♦ M	♦ M	♦ M	♦ M	♦ M	♦ M
m,p-Xylene	<6 µg/kg	TM089			<24	<24	<24	<24	<60	<24
					♦ M	♦ M	♦ M	♦ M	♦ M	♦ M
o-Xylene	<3 µg/kg	TM089			<12	<12	<12	<12	<30	<12
					♦ M	♦ M	♦ M	♦ M	♦ M	♦ M
sum of detected mpo xylene by GC	<9 µg/kg	TM089			<9	<9	<9	<9	<9	<9
					♦	♦	♦	♦	♦	♦
sum of detected BTEX by GC	<24 µg/kg	TM089			<24	<24	<24	<24	445	57.5
					♦	♦	♦	♦	♦	♦
Aliphatics >C5-C6	<10 µg/kg	TM089			886	42.9	249	43.7	13100	100
					♦	♦	♦	♦	♦	♦
Aliphatics >C6-C8	<10 µg/kg	TM089			4270	358	5600	760	162000	3980
					♦	♦	♦	♦	♦	♦
Aliphatics >C8-C10	<10 µg/kg	TM089			1330	2800	59600	5650	165000	29200
					♦	♦	♦	♦	♦	♦
Aliphatics >C10-C12	<10 µg/kg	TM089			494	9610	71800	12100	162000	48900
					♦	♦	♦	♦	♦	♦
Aliphatics >C12-C16	<100 µg/kg	TM173			<100	2740000	503000	564000	361000	209000
Aliphatics >C16-C21	<100 µg/kg	TM173			<100	5190000	238000	1030000	307000	182000
Aliphatics >C21-C35	<100 µg/kg	TM173			<100	6070000	1060000	1560000	145000	79800
Aliphatics >C35-C44	<100 µg/kg	TM173			<100	818000	1110000	528000	13100	9890
Total Aliphatics >C12-C44	<100 µg/kg	TM173			<100	14800000	2910000	3690000	826000	481000
Aromatics >EC5-EC7	<10 µg/kg	TM089			<40	<40	<40	<40	445	57.5
					♦	♦	♦	♦	♦	♦
Aromatics >EC7-EC8	<10 µg/kg	TM089			<40	<40	<40	<40	<100	<40
					♦	♦	♦	♦	♦	♦
Aromatics >EC8-EC10	<10 µg/kg	TM089			885	1870	39800	3770	110000	19400
					♦	♦	♦	♦	♦	♦
Aromatics >EC10-EC12	<10 µg/kg	TM089			329	6410	47800	8070	108000	32600
					♦	♦	♦	♦	♦	♦
Aromatics >EC12-EC16	<100 µg/kg	TM173			<100	375000	14400	33600	99500	42300
Aromatics >EC16-EC21	<100 µg/kg	TM173			<100	1830000	40500	208000	119000	68600
Aromatics >EC21-EC35	<100 µg/kg	TM173			<100	3410000	213000	623000	118000	54700
Aromatics >EC35-EC44	<100 µg/kg	TM173			<100	769000	202000	223000	27700	13000
Aromatics >EC40-EC44	<100 µg/kg	TM173			<100	285000	92000	85900	10800	5320
Total Aromatics >EC12-EC44	<100 µg/kg	TM173			<100	6380000	470000	1090000	364000	179000
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173			8200	21200000	3610000	4810000	1910000	794000



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

TPH CWG (S)

Results Legend			Customer Sample R		TPE 2115	TPE 2115	TPE 2124	TPE 2124	TPE 2124	TPE 2124
#	ISO17025 accredited.		Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference		2.50	3.50	0.50	1.50	3.00	4.50
M	mCERTS accredited.				Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
aq	Aqueous / settled sample.				29/04/2015	29/04/2015	29/04/2015	29/04/2015	29/04/2015	29/04/2015
diss.filt	Dissolved / filtered sample.									
tot.unfilt	Total / unfiltered sample.									
*	Subcontracted test.				01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015
**	% 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				150501-93	150501-93	150501-93	150501-93	150501-93	150501-93
(F)	Trigger breach confirmed				11293105	11293109	11293413	11293422	11293428	11293432
1-5&*&@	Sample deviation (see appendix)									
Component	LOD/Units	Method								
GRO Surrogate % recovery**	%	TM089	110	81	85	89	93	92		
			♦	♦	♦	♦	♦	♦	♦	♦
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	173000	163000	8820	88600	3860	6820		
			♦ M	♦ M	♦ M	♦ M	♦ M	♦ M	♦ M	♦ M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20	<20	<20	<20	<20	<20		
			♦ M	♦ M	♦ M	♦ M	♦ M	♦ M	♦ M	♦ M
Benzene	<10 µg/kg	TM089	<40	86.6	<40	<40	<40	<40		
			♦ M	♦ M	♦ M	♦ M	♦ M	♦ M	♦ M	♦ M
Toluene	<2 µg/kg	TM089	<8	<8	<8	<8	<8	<8		
			♦ M	♦ M	♦ M	♦ M	♦ M	♦ M	♦ M	♦ M
Ethylbenzene	<3 µg/kg	TM089	<12	<12	<12	<12	<12	<12		
			♦ M	♦ M	♦ M	♦ M	♦ M	♦ M	♦ M	♦ M
m,p-Xylene	<6 µg/kg	TM089	<24	<24	<24	<24	<24	<24		
			♦ M	♦ M	♦ M	♦ M	♦ M	♦ M	♦ M	♦ M
o-Xylene	<3 µg/kg	TM089	<12	<12	<12	<12	<12	<12		
			♦ M	♦ M	♦ M	♦ M	♦ M	♦ M	♦ M	♦ M
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	<9	<9	<9	<9	<9		
			♦	♦	♦	♦	♦	♦	♦	♦
sum of detected BTEX by GC	<24 µg/kg	TM089	<24	86.6	<24	<24	<24	<24		
			♦	♦	♦	♦	♦	♦	♦	♦
Aliphatics >C5-C6	<10 µg/kg	TM089	6300	291	91.6	141	<40	100		
			♦	♦	♦	♦	♦	♦	♦	♦
Aliphatics >C6-C8	<10 µg/kg	TM089	44700	5560	545	1720	132	450		
			♦	♦	♦	♦	♦	♦	♦	♦
Aliphatics >C8-C10	<10 µg/kg	TM089	43600	32500	953	14800	499	1190		
			♦	♦	♦	♦	♦	♦	♦	♦
Aliphatics >C10-C12	<10 µg/kg	TM089	29500	61700	3950	37200	1730	2580		
			♦	♦	♦	♦	♦	♦	♦	♦
Aliphatics >C12-C16	<100 µg/kg	TM173	562000	430000	112000	305000	31500	32900		
Aliphatics >C16-C21	<100 µg/kg	TM173	415000	317000	87300	256000	32200	30800		
Aliphatics >C21-C35	<100 µg/kg	TM173	175000	94100	23300	71200	11200	4290		
Aliphatics >C35-C44	<100 µg/kg	TM173	32400	4710	1990	9160	<100	<100		
Total Aliphatics >C12-C44	<100 µg/kg	TM173	1180000	846000	225000	641000	74900	68000		
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40	86.6	<40	<40	<40	<40		
			♦	♦	♦	♦	♦	♦	♦	♦
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40		
			♦	♦	♦	♦	♦	♦	♦	♦
Aromatics >EC8-EC10	<10 µg/kg	TM089	29100	21700	635	9840	333	791		
			♦	♦	♦	♦	♦	♦	♦	♦
Aromatics >EC10-EC12	<10 µg/kg	TM089	19700	41100	2630	24800	1150	1720		
			♦	♦	♦	♦	♦	♦	♦	♦
Aromatics >EC12-EC16	<100 µg/kg	TM173	24500	102000	22500	40100	5320	5400		
Aromatics >EC16-EC21	<100 µg/kg	TM173	79000	136000	27500	81400	11200	8700		
Aromatics >EC21-EC35	<100 µg/kg	TM173	63300	44300	8740	39900	3720	<100		
Aromatics >EC35-EC44	<100 µg/kg	TM173	17200	1120	<100	9290	905	<100		
Aromatics >EC40-EC44	<100 µg/kg	TM173	7360	<100	<100	3590	<100	1730		
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	184000	283000	58700	171000	21200	14100		
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	1540000	1290000	292000	901000	100000	88900		



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R	TPE 2127		TPE 2127		TPE 2127		TPE 2129		TPE 2129		TPE 2143	
#	ISO17025 accredited.		0.50	Soil/Solid	1.50	Soil/Solid	2.50	Soil/Solid	1.00	Soil/Solid	3.00	Soil/Solid	0.50	Soil/Solid
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	28/04/2015	27/04/2015	27/04/2015	27/04/2015	27/04/2015	29/04/2015	29/04/2015
aq	Aqueous / settled sample.		01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015
diss.filt	Dissolved / filtered sample.		150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93	150501-93
tot.unfilt	Total / unfiltered sample.		11293511	11293515	11293515	11293515	11293519	11293519	11293489	11293489	11293493	11293493	11293130	11293130
*	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	TPE 2127		TPE 2127		TPE 2127		TPE 2129		TPE 2129		TPE 2143	
GRO Surrogate % recovery**	%	TM089	52	@	37	@	42	@	52	@	55	@	55	♦
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	<176	@	<176	@	<176	@	<176	@ M	<176	@ M	4220	♦ M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20	@	<20	@	<20	@	<20	@ M	<20	@ M	<20	♦ M
Benzene	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@ M	<40	@ M	<40	♦ M
Toluene	<2 µg/kg	TM089	<8	@	<8	@	<8	@	<8	@ M	<8	@ M	<8	♦ M
Ethylbenzene	<3 µg/kg	TM089	<12	@	<12	@	<12	@	<12	@ M	<12	@ M	<12	♦ M
m,p-Xylene	<6 µg/kg	TM089	<24	@	<24	@	<24	@	<24	@ M	<24	@ M	<24	♦ M
o-Xylene	<3 µg/kg	TM089	<12	@	<12	@	<12	@	<12	@ M	<12	@ M	<12	♦ M
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	@	<9	@	<9	@	<9	@	<9	@	<9	♦
sum of detected BTEX by GC	<24 µg/kg	TM089	<24	@	<24	@	<24	@	<24	@	<24	@	<24	♦
Aliphatics >C5-C6	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@	<40	@	57.2	♦
Aliphatics >C6-C8	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@	<40	@	117	♦
Aliphatics >C8-C10	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@	<40	@	533	♦
Aliphatics >C10-C12	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@	<40	@	1890	♦
Aliphatics >C12-C16	<100 µg/kg	TM173	11900		27200		52300		8530		24000		3590000	
Aliphatics >C16-C21	<100 µg/kg	TM173	35100		62800		1200000		97800		187000		4230000	
Aliphatics >C21-C35	<100 µg/kg	TM173	35200		50100		51800000		36300		111000		4970000	
Aliphatics >C35-C44	<100 µg/kg	TM173	3180		15100		372000		4970		17700		1090000	
Total Aliphatics >C12-C44	<100 µg/kg	TM173	85400		155000		53400000		148000		340000		13900000	
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@	<40	@	<40	♦
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@	<40	@	<40	♦
Aromatics >EC8-EC10	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@	<40	@	359	♦
Aromatics >EC10-EC12	<10 µg/kg	TM089	<40	@	<40	@	<40	@	<40	@	<40	@	1260	♦
Aromatics >EC12-EC16	<100 µg/kg	TM173	1280		<100		2230		<100		10500		659000	
Aromatics >EC16-EC21	<100 µg/kg	TM173	7660		5010		23200		10400		226000		1980000	
Aromatics >EC21-EC35	<100 µg/kg	TM173	33500		21900		155000		16200		644000		3590000	
Aromatics >EC35-EC44	<100 µg/kg	TM173	17400		13600		66600		8760		138000		1070000	
Aromatics >EC40-EC44	<100 µg/kg	TM173	6630		5570		23200		4460		41300		415000	
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	59900		40500		247000		35300		1020000		7300000	
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	145000		196000		53700000		183000		1360000		21200000	



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R						
#	ISO17025 accredited.		TPE 2143		TPE 2143		TPE 2147	
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	1.50	Soil/Solid	2.50	Soil/Solid	0.50	Soil/Solid
aq	Aqueous / settled sample.		29/04/2015	29/04/2015	29/04/2015	29/04/2015	29/04/2015	29/04/2015
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		01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015
(F)	Trigger breach confirmed		150501-93	150501-93	150501-93	150501-93	150501-93	150501-93
1-5&\$@	Sample deviation (see appendix)		11293134	11293138	11293195	11293201	11293207	11293231
Component	LOD/Units	Method						
GRO Surrogate % recovery**	%	TM089	85	76	80	94	103	107
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	278000	500000	106000	84500	143000	63900
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20	<100	<20	<20	<20	<20
Benzene	<10 µg/kg	TM089	76.8	<200	<40	<40	<40	175
Toluene	<2 µg/kg	TM089	<8	<40	<8	<8	<8	<8
Ethylbenzene	<3 µg/kg	TM089	<12	<60	<12	<12	<12	<12
m,p-Xylene	<6 µg/kg	TM089	<24	<120	<24	<24	<24	<24
o-Xylene	<3 µg/kg	TM089	<12	<60	<12	<12	<12	<12
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	<9	<9	<9	<9	<9
sum of detected BTEX by GC	<24 µg/kg	TM089	76.8	<24	<24	<24	<24	175
Aliphatics >C5-C6	<10 µg/kg	TM089	436	449	111	372	1020	108
Aliphatics >C6-C8	<10 µg/kg	TM089	15100	10600	1640	13600	21600	1470
Aliphatics >C8-C10	<10 µg/kg	TM089	56700	80100	25500	26500	40100	15300
Aliphatics >C10-C12	<10 µg/kg	TM089	101000	213000	36900	15800	32400	21900
Aliphatics >C12-C16	<100 µg/kg	TM173	1170000	523000	162000	51700	199000	40900
Aliphatics >C16-C21	<100 µg/kg	TM173	665000	207000	181000	56900	166000	28200
Aliphatics >C21-C35	<100 µg/kg	TM173	474000	103000	182000	59700	95400	16900
Aliphatics >C35-C44	<100 µg/kg	TM173	58300	12100	21700	8450	9210	<100
Total Aliphatics >C12-C44	<100 µg/kg	TM173	2370000	845000	546000	177000	470000	86000
Aromatics >EC5-EC7	<10 µg/kg	TM089	76.8	<200	<40	<40	<40	175
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40	<200	<40	<40	<40	<40
Aromatics >EC8-EC10	<10 µg/kg	TM089	37800	53400	17000	17700	26700	10200
Aromatics >EC10-EC12	<10 µg/kg	TM089	67300	142000	24600	10500	21600	14600
Aromatics >EC12-EC16	<100 µg/kg	TM173	95700	34900	32200	2700	7770	8060
Aromatics >EC16-EC21	<100 µg/kg	TM173	222000	63400	72600	11100	35600	13100
Aromatics >EC21-EC35	<100 µg/kg	TM173	324000	57900	114000	32600	58500	16000
Aromatics >EC35-EC44	<100 µg/kg	TM173	94100	19000	31000	10000	18400	6040
Aromatics >EC40-EC44	<100 µg/kg	TM173	40000	8610	11800	3420	7100	2340
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	735000	175000	250000	56400	120000	43200
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	3380000	1520000	902000	318000	733000	193000



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R						
#	ISO17025 accredited.		TPE 2149		TPE 2149		TPE 2151	
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.50	1.50	2.50	3.50	0.50	1.50
aq	Aqueous / settled sample.		Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
diss.filt	Dissolved / filtered sample.		29/04/2015	29/04/2015	29/04/2015	29/04/2015	29/04/2015	29/04/2015
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		01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015
(F)	Trigger breach confirmed		150501-93	150501-93	150501-93	150501-93	150501-93	150501-93
1-5&*&@	Sample deviation (see appendix)		11293237	11293245	11293251	11293257	11293328	11293337
Component	LOD/Units	Method						
GRO Surrogate % recovery**	%	TM089	100	87	71	75	81	93
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	130000	275000	136000	72500	187000	93400
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20	<20	<20	<20	<20	<20
Benzene	<10 µg/kg	TM089	<40	120	<40	<40	88.1	517
Toluene	<2 µg/kg	TM089	<8	<8	<8	<8	<8	114
Ethylbenzene	<3 µg/kg	TM089	<12	<12	<12	<12	<12	<12
m,p-Xylene	<6 µg/kg	TM089	<24	<24	<24	<24	<24	<24
o-Xylene	<3 µg/kg	TM089	<12	<12	<12	<12	<12	<12
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	<9	<9	<9	<9	<9
sum of detected BTEX by GC	<24 µg/kg	TM089	<24	120	<24	<24	88.1	631
Aliphatics >C5-C6	<10 µg/kg	TM089	54.1	3330	123	63.3	4480	1960
Aliphatics >C6-C8	<10 µg/kg	TM089	1640	32900	3620	578	11400	4220
Aliphatics >C8-C10	<10 µg/kg	TM089	39000	60200	38800	15300	32900	18600
Aliphatics >C10-C12	<10 µg/kg	TM089	38100	83000	40600	27900	69600	33400
Aliphatics >C12-C16	<100 µg/kg	TM173	749000	750000	456000	461000	1050000	169000
Aliphatics >C16-C21	<100 µg/kg	TM173	480000	720000	289000	307000	987000	166000
Aliphatics >C21-C35	<100 µg/kg	TM173	122000	499000	120000	87900	221000	51900
Aliphatics >C35-C44	<100 µg/kg	TM173	8030	75300	17300	5230	7010	2320
Total Aliphatics >C12-C44	<100 µg/kg	TM173	1360000	2040000	883000	862000	2260000	389000
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40	120	<40	<40	88.1	517
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40	<40	<40	<40	<40	114
Aromatics >EC8-EC10	<10 µg/kg	TM089	26000	40100	25900	10200	22000	12400
Aromatics >EC10-EC12	<10 µg/kg	TM089	25400	55300	27000	18600	46400	22300
Aromatics >EC12-EC16	<100 µg/kg	TM173	91200	77800	65200	93600	105000	101000
Aromatics >EC16-EC21	<100 µg/kg	TM173	120000	234000	110000	125000	255000	100000
Aromatics >EC21-EC35	<100 µg/kg	TM173	55400	286000	74700	50900	105000	57500
Aromatics >EC35-EC44	<100 µg/kg	TM173	18800	70100	21200	10900	18500	15600
Aromatics >EC40-EC44	<100 µg/kg	TM173	8230	28300	8900	4570	7490	6960
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	286000	668000	271000	281000	483000	275000
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	1770000	2990000	1290000	1210000	2930000	757000



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

TPH CWG (S)

Results Legend			Customer Sample R		TPE 2151	TPE 2153	TPE 2153	TPE 2153	TPE 2153	TPE 2155
#	ISO17025 accredited.		Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference		2.50	0.50	1.50	2.50	3.50	0.50
M	mCERTS accredited.				Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
aq	Aqueous / settled sample.				29/04/2015	29/04/2015	29/04/2015	29/04/2015	29/04/2015	29/04/2015
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				01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015
(F)	Trigger breach confirmed				150501-93	150501-93	150501-93	150501-93	150501-93	150501-93
1-5&*&@	Sample deviation (see appendix)				11293349	11293395	11293400	11293405	11293409	11293436
Component	LOD/Units	Method								
GRO Surrogate % recovery**	%	TM089			55	106	82	93	68	42
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089			<176	30900	10100	65700	351000	3090
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089			<20	<20	<20	<20	<50	<20
Benzene	<10 µg/kg	TM089			<40	<40	<40	88.4	130	76.2
Toluene	<2 µg/kg	TM089			<8	<8	<8	<8	<20	26.7
Ethylbenzene	<3 µg/kg	TM089			<12	<12	<12	<12	<30	<12
m,p-Xylene	<6 µg/kg	TM089			<24	<24	<24	<24	<60	<24
o-Xylene	<3 µg/kg	TM089			<12	<12	<12	<12	<30	22.9
sum of detected mpo xylene by GC	<9 µg/kg	TM089			<9	<9	<9	<9	<9	22.9
sum of detected BTEX by GC	<24 µg/kg	TM089			<24	<24	<24	88.4	130	126
Aliphatics >C5-C6	<10 µg/kg	TM089			<40	71.7	113	754	1570	311
Aliphatics >C6-C8	<10 µg/kg	TM089			<40	525	1450	5110	8560	596
Aliphatics >C8-C10	<10 µg/kg	TM089			<40	5250	2140	14000	41200	532
Aliphatics >C10-C12	<10 µg/kg	TM089			<40	12900	2960	21800	163000	688
Aliphatics >C12-C16	<100 µg/kg	TM173			306000	72900	20300	973000	502000	71600
Aliphatics >C16-C21	<100 µg/kg	TM173			284000	65900	7510	445000	354000	99800
Aliphatics >C21-C35	<100 µg/kg	TM173			84800	44400	5710	92100	121000	153000
Aliphatics >C35-C44	<100 µg/kg	TM173			5250	11300	<100	3180	7750	24700
Total Aliphatics >C12-C44	<100 µg/kg	TM173			680000	194000	33600	1510000	985000	349000
Aromatics >EC5-EC7	<10 µg/kg	TM089			<40	<40	<40	88.4	130	76.2
Aromatics >EC7-EC8	<10 µg/kg	TM089			<40	<40	<40	<40	<100	<40
Aromatics >EC8-EC10	<10 µg/kg	TM089			<40	3500	1430	9360	27500	408
Aromatics >EC10-EC12	<10 µg/kg	TM089			<40	8630	1970	14500	109000	458
Aromatics >EC12-EC16	<100 µg/kg	TM173			41300	3700	4090	165000	79000	13000
Aromatics >EC16-EC21	<100 µg/kg	TM173			77300	12500	1580	157000	125000	38700
Aromatics >EC21-EC35	<100 µg/kg	TM173			49100	32100	4090	49400	84700	135000
Aromatics >EC35-EC44	<100 µg/kg	TM173			14500	15200	4100	7630	23700	43700
Aromatics >EC40-EC44	<100 µg/kg	TM173			6450	6380	2440	3200	9990	16300
Total Aromatics >EC12-EC44	<100 µg/kg	TM173			182000	63500	13900	378000	312000	230000
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173			863000	289000	57500	1960000	1650000	582000



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

TPH CWG (S)

Results Legend			Customer Sample R		TPE 2155	TPE 2155	TPE 2155	TPE 2159	TPE 2159	TPE 2159
#	ISO17025 accredited.		Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference		1.50	2.50	3.50	0.50	2.00	3.50
M	mCERTS accredited.				Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
aq	Aqueous / settled sample.				29/04/2015	29/04/2015	29/04/2015	27/04/2015	27/04/2015	27/04/2015
diss.filt	Dissolved / filtered sample.									
tot.unfilt	Total / unfiltered sample.									
*	Subcontracted test.				01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015
**	% 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				150501-93	150501-93	150501-93	150501-93	150501-93	150501-93
(F)	Trigger breach confirmed				11293440	11293445	11293449	11293362	11293417	11293468
1-5&\$@	Sample deviation (see appendix)									
Component	LOD/Units	Method								
GRO Surrogate % recovery**	%	TM089	52	93	73	31	50	104		
			♦	♦	♦	@	@	@		
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	7320	1390000	482000	821	<176	<176		
			♦ M	♦ M	♦ M	@ #	@	@ M		
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20	<100	<50	<20	<20	<20		
			♦ M	♦ M	♦ M	@ #	@	@ M		
Benzene	<10 µg/kg	TM089	81.8	<200	<100	<40	<40	<40		
			♦ M	♦ M	♦ M	@ #	@	@ M		
Toluene	<2 µg/kg	TM089	31.7	<40	<20	<8	<8	<8		
			♦ M	♦ M	♦ M	@ #	@	@ M		
Ethylbenzene	<3 µg/kg	TM089	<12	<60	<30	<12	<12	<12		
			♦ M	♦ M	♦ M	@ #	@	@ M		
m,p-Xylene	<6 µg/kg	TM089	<24	<120	<60	<24	<24	<24		
			♦ M	♦ M	♦ M	@ #	@	@ M		
o-Xylene	<3 µg/kg	TM089	30.4	<60	<30	<12	<12	<12		
			♦ M	♦ M	♦ M	@ #	@	@ M		
sum of detected mpo xylene by GC	<9 µg/kg	TM089	30.4	<9	<9	<9	<9	<9		
			♦	♦	♦	@	@	@		
sum of detected BTEX by GC	<24 µg/kg	TM089	144	<24	<24	<24	<24	<24		
			♦	♦	♦	@	@	@		
Aliphatics >C5-C6	<10 µg/kg	TM089	358	864	203	<40	<40	<40		
			♦	♦	♦	@	@	@		
Aliphatics >C6-C8	<10 µg/kg	TM089	583	80000	14100	81.6	<40	<40		
			♦	♦	♦	@	@	@		
Aliphatics >C8-C10	<10 µg/kg	TM089	616	342000	93500	199	<40	<40		
			♦	♦	♦	@	@	@		
Aliphatics >C10-C12	<10 µg/kg	TM089	3100	444000	187000	198	<40	<40		
			♦	♦	♦	@	@	@		
Aliphatics >C12-C16	<100 µg/kg	TM173	192000	2270000	1050000	7150	24600	<100		
Aliphatics >C16-C21	<100 µg/kg	TM173	418000	2380000	606000	12900	49900	<100		
Aliphatics >C21-C35	<100 µg/kg	TM173	853000	1430000	322000	12300	47900	148		
Aliphatics >C35-C44	<100 µg/kg	TM173	164000	68900	28600	2200	10800	<100		
Total Aliphatics >C12-C44	<100 µg/kg	TM173	1630000	6140000	2010000	34600	133000	148		
Aromatics >EC5-EC7	<10 µg/kg	TM089	81.8	237	<100	<40	<40	<40		
			♦	♦	♦	@	@	@		
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40	<200	<100	<40	<40	<40		
			♦	♦	♦	@	@	@		
Aromatics >EC8-EC10	<10 µg/kg	TM089	475	228000	62300	169	<40	<40		
			♦	♦	♦	@	@	@		
Aromatics >EC10-EC12	<10 µg/kg	TM089	2070	296000	125000	132	<40	<40		
			♦	♦	♦	@	@	@		
Aromatics >EC12-EC16	<100 µg/kg	TM173	18600	95000	177000	312	1660	<100		
Aromatics >EC16-EC21	<100 µg/kg	TM173	118000	258000	230000	631	10100	<100		
Aromatics >EC21-EC35	<100 µg/kg	TM173	490000	254000	204000	7330	36500	5250		
Aromatics >EC35-EC44	<100 µg/kg	TM173	140000	28500	45500	5080	17400	3170		
Aromatics >EC40-EC44	<100 µg/kg	TM173	47500	10400	17200	2570	7220	1460		
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	766000	636000	657000	13400	65700	8410		
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	2400000	8170000	3150000	48800	199000	8580		



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

TPH CWG (S)

Results Legend			Customer Sample R		TPE 2161	TPE 2161	TPE 2161	TPE 2174	TPE 2174	TPE 2174
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.50 - 0.50	2.00 - 2.00	3.50 - 3.50	0.50	1.50	2.50		
M	mCERTS accredited.		Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid		
aq	Aqueous / settled sample.		27/04/2015	27/04/2015	27/04/2015	29/04/2015	29/04/2015	29/04/2015		
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							
GRO Surrogate % recovery**	%	TM089	44 @	40 @	83 @	93 ♦	90 ♦	62 ♦		
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	<176 @ M	<176 @	1480 @ M	23000 ♦ M	44000 ♦ M	139000 ♦ M		
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20 @ M	<20 @	<20 @ M	<20 ♦ M	<20 ♦ M	<20 ♦ M		
Benzene	<10 µg/kg	TM089	<40 @ M	<40 @	<40 @ M	54.7 ♦ M	<40 ♦ M	<40 ♦ M		
Toluene	<2 µg/kg	TM089	<8 @ M	<8 @	<8 @ M	<8 ♦ M	<8 ♦ M	<8 ♦ M		
Ethylbenzene	<3 µg/kg	TM089	<12 @ M	<12 @	<12 @ M	<12 ♦ M	<12 ♦ M	<12 ♦ M		
m,p-Xylene	<6 µg/kg	TM089	<24 @ M	<24 @	<24 @ M	<24 ♦ M	<24 ♦ M	<24 ♦ M		
o-Xylene	<3 µg/kg	TM089	<12 @ M	<12 @	<12 @ M	<12 ♦ M	<12 ♦ M	<12 ♦ M		
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9 @	<9 @	<9 @	<9 ♦	<9 ♦	<9 ♦		
sum of detected BTEX by GC	<24 µg/kg	TM089	<24 @	<24 @	<24 @	54.7 ♦	<24 ♦	<24 ♦		
Aliphatics >C5-C6	<10 µg/kg	TM089	<40 @	<40 @	<40 @	651 ♦	220 ♦	367 ♦		
Aliphatics >C6-C8	<10 µg/kg	TM089	<40 @	<40 @	54.6 @	4400 ♦	2210 ♦	5910 ♦		
Aliphatics >C8-C10	<10 µg/kg	TM089	<40 @	<40 @	222 @	5610 ♦	6180 ♦	19900 ♦		
Aliphatics >C10-C12	<10 µg/kg	TM089	<40 @	<40 @	620 @	5140 ♦	18800 ♦	59800 ♦		
Aliphatics >C12-C16	<100 µg/kg	TM173	26700	28700	106000	10700	386000	513000		
Aliphatics >C16-C21	<100 µg/kg	TM173	89000	60600	211000	7780	190000	356000		
Aliphatics >C21-C35	<100 µg/kg	TM173	93700	43600	332000	14900	184000	381000		
Aliphatics >C35-C44	<100 µg/kg	TM173	16500	7390	33600	1670	37700	84300		
Total Aliphatics >C12-C44	<100 µg/kg	TM173	226000	140000	683000	35100	798000	1330000		
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40 @	<40 @	<40 @	54.7 ♦	<40 ♦	<40 ♦		
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40 @	<40 @	<40 @	<40 ♦	<40 ♦	<40 ♦		
Aromatics >EC8-EC10	<10 µg/kg	TM089	<40 @	<40 @	149 @	3740 ♦	4120 ♦	13300 ♦		
Aromatics >EC10-EC12	<10 µg/kg	TM089	<40 @	<40 @	414 @	3430 ♦	12500 ♦	39900 ♦		
Aromatics >EC12-EC16	<100 µg/kg	TM173	2010	1630	23500	475	8250	12300		
Aromatics >EC16-EC21	<100 µg/kg	TM173	16400	8460	99400	530	35100	58100		
Aromatics >EC21-EC35	<100 µg/kg	TM173	75600	28000	228000	3230	75500	149000		
Aromatics >EC35-EC44	<100 µg/kg	TM173	26900	10900	37700	2060	24100	48300		
Aromatics >EC40-EC44	<100 µg/kg	TM173	9360	4270	10500	1400	9430	18500		
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	121000	49000	389000	6300	143000	268000		
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	347000	189000	1070000	64400	985000	1740000		



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

TPH CWG (S)

Results Legend			Customer Sample R		TPE 2174	TPE 2208	TPE 2208	TPE 2208	TPE 2210	TPE 2210
#	ISO17025 accredited.		Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference		3.50	0.50	1.50	2.50	0.50	1.50
M	mCERTS accredited.				Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
aq	Aqueous / settled sample.				29/04/2015	29/04/2015	29/04/2015	29/04/2015	29/04/2015	29/04/2015
diss.filt	Dissolved / filtered sample.									
tot.unfilt	Total / unfiltered sample.									
*	Subcontracted test.				01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015
**	% 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				150501-93	150501-93	150501-93	150501-93	150501-93	150501-93
(F)	Trigger breach confirmed				11293161	11293261	11293266	11293271	11293275	11293292
1-5&*\$@	Sample deviation (see appendix)									
Component	LOD/Units	Method								
GRO Surrogate % recovery**	%	TM089			70	86	93	77	94	103
					♦	2	♦	♦	♦	♦
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089			392000	21900	33000	23100	79700	66300
					♦ M	2 M	♦ M	♦ M	♦ M	♦ M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089			<50	<5	<20	<20	<20	<20
					♦ M	2 M	♦ M	♦ M	♦ M	♦ M
Benzene	<10 µg/kg	TM089			<100	<10	<40	<40	<40	<40
					♦ M	2 M	♦ M	♦ M	♦ M	♦ M
Toluene	<2 µg/kg	TM089			<20	<2	<8	<8	<8	<8
					♦ M	2 M	♦ M	♦ M	♦ M	♦ M
Ethylbenzene	<3 µg/kg	TM089			<30	<3	<12	<12	<12	<12
					♦ M	2 M	♦ M	♦ M	♦ M	♦ M
m,p-Xylene	<6 µg/kg	TM089			<60	<6	<24	<24	<24	<24
					♦ M	2 M	♦ M	♦ M	♦ M	♦ M
o-Xylene	<3 µg/kg	TM089			<30	<3	<12	<12	<12	<12
					♦ M	2 M	♦ M	♦ M	♦ M	♦ M
sum of detected mpo xylene by GC	<9 µg/kg	TM089			<9	<9	<9	<9	<9	<9
					♦	2	♦	♦	♦	♦
sum of detected BTEX by GC	<24 µg/kg	TM089			<24	<24	<24	<24	<24	<24
					♦	2	♦	♦	♦	♦
Aliphatics >C5-C6	<10 µg/kg	TM089			377	20.2	83.1	63.6	107	263
					♦	2	♦	♦	♦	♦
Aliphatics >C6-C8	<10 µg/kg	TM089			9560	451	1050	552	1670	3510
					♦	2	♦	♦	♦	♦
Aliphatics >C8-C10	<10 µg/kg	TM089			46000	3950	6180	4150	22400	17300
					♦	2	♦	♦	♦	♦
Aliphatics >C10-C12	<10 µg/kg	TM089			183000	8920	12900	9320	24300	20200
					♦	2	♦	♦	♦	♦
Aliphatics >C12-C16	<100 µg/kg	TM173			784000	493000	91600	187000	576000	242000
Aliphatics >C16-C21	<100 µg/kg	TM173			246000	404000	53800	173000	635000	272000
Aliphatics >C21-C35	<100 µg/kg	TM173			187000	376000	48000	209000	1840000	325000
Aliphatics >C35-C44	<100 µg/kg	TM173			37100	18800	1880	28500	116000	12100
Total Aliphatics >C12-C44	<100 µg/kg	TM173			1250000	1290000	195000	596000	3160000	852000
Aromatics >EC5-EC7	<10 µg/kg	TM089			<100	<10	<40	<40	<40	46
					♦	2	♦	♦	♦	♦
Aromatics >EC7-EC8	<10 µg/kg	TM089			<100	<10	<40	<40	<40	<40
					♦	2	♦	♦	♦	♦
Aromatics >EC8-EC10	<10 µg/kg	TM089			30700	2640	4120	2770	15000	11600
					♦	2	♦	♦	♦	♦
Aromatics >EC10-EC12	<10 µg/kg	TM089			122000	5940	8630	6210	16200	13400
					♦	2	♦	♦	♦	♦
Aromatics >EC12-EC16	<100 µg/kg	TM173			7440	24200	28600	25800	17000	60800
Aromatics >EC16-EC21	<100 µg/kg	TM173			20000	102000	21000	69400	109000	151000
Aromatics >EC21-EC35	<100 µg/kg	TM173			56800	108000	14300	101000	250000	155000
Aromatics >EC35-EC44	<100 µg/kg	TM173			20600	26700	2150	24500	40800	24000
Aromatics >EC40-EC44	<100 µg/kg	TM173			8210	<100	2890	10700	16900	11000
Total Aromatics >EC12-EC44	<100 µg/kg	TM173			105000	261000	66100	221000	417000	391000
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173			1750000	1580000	294000	840000	3660000	1310000



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R						
#	ISO17025 accredited.		TPE 2210	TPE 2210	TPE 2212	TPE 2212	TPE 2212	TPE 2214
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	2.50	3.50	0.50	1.50	2.50	0.50
aq	Aqueous / settled sample.		Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
diss.filt	Dissolved / filtered sample.		29/04/2015	29/04/2015	29/04/2015	29/04/2015	29/04/2015	29/04/2015
tot.unfilt	Total / unfiltered sample.							
*	Subcontracted test.		01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015
**	% 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		150501-93	150501-93	150501-93	150501-93	150501-93	150501-93
(F)	Trigger breach confirmed		11293301	11293306	11293311	11293318	11293323	11293354
1-5&\$@	Sample deviation (see appendix)							
Component	LOD/Units	Method						
GRO Surrogate % recovery**	%	TM089	107	104	79	77	79	73
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	81900	167000	168000	11400	81400	50800
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20	<20	<20	<20	<20	<20
Benzene	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
Toluene	<2 µg/kg	TM089	<8	<8	<8	<8	<8	<8
Ethylbenzene	<3 µg/kg	TM089	<12	<12	<12	<12	<12	<12
m,p-Xylene	<6 µg/kg	TM089	<24	<24	<24	<24	<24	<24
o-Xylene	<3 µg/kg	TM089	<12	<12	<12	<12	<12	<12
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	<9	<9	<9	<9	<9
sum of detected BTEX by GC	<24 µg/kg	TM089	<24	<24	<24	<24	<24	<24
Aliphatics >C5-C6	<10 µg/kg	TM089	1930	231	3150	128	181	86.2
Aliphatics >C6-C8	<10 µg/kg	TM089	8550	14300	14500	384	3850	2900
Aliphatics >C8-C10	<10 µg/kg	TM089	20400	56100	35600	1470	16100	8760
Aliphatics >C10-C12	<10 µg/kg	TM089	22400	35400	54500	5070	30300	19900
Aliphatics >C12-C16	<100 µg/kg	TM173	30900	821000	101000	48200	446000	635000
Aliphatics >C16-C21	<100 µg/kg	TM173	23200	978000	230000	66700	551000	982000
Aliphatics >C21-C35	<100 µg/kg	TM173	24700	679000	269000	10000	153000	777000
Aliphatics >C35-C44	<100 µg/kg	TM173	<100	61700	52200	<100	28200	120000
Total Aliphatics >C12-C44	<100 µg/kg	TM173	78900	2540000	652000	125000	1180000	2510000
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<40
Aromatics >EC8-EC10	<10 µg/kg	TM089	13600	37400	23800	981	10800	5840
Aromatics >EC10-EC12	<10 µg/kg	TM089	15000	23600	36300	3380	20200	13300
Aromatics >EC12-EC16	<100 µg/kg	TM173	14700	157000	7130	39800	17900	38600
Aromatics >EC16-EC21	<100 µg/kg	TM173	20900	345000	47600	31900	77100	236000
Aromatics >EC21-EC35	<100 µg/kg	TM173	17600	292000	92300	965	38800	343000
Aromatics >EC35-EC44	<100 µg/kg	TM173	919	34500	31800	<100	10900	94800
Aromatics >EC40-EC44	<100 µg/kg	TM173	<100	14800	12500	<100	4150	35400
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	54100	828000	179000	72600	145000	712000
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	215000	3530000	999000	209000	1410000	3280000



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

TPH CWG (S)

Results Legend			Customer Sample R		TPE 2214	TPE 2214	TPE 2216	TPE 2216	TPE 2216	TPE 2216
#	ISO17025 accredited.		Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference		1.50	3.00	0.50	1.50	2.50	3.50
M	mCERTS accredited.				Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid	Soil/Solid
aq	Aqueous / settled sample.				29/04/2015	29/04/2015	29/04/2015	29/04/2015	29/04/2015	29/04/2015
diss.filt	Dissolved / filtered sample.									
tot.unfilt	Total / unfiltered sample.				01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015	01/05/2015
*	Subcontracted test.				150501-93	150501-93	150501-93	150501-93	150501-93	150501-93
**	% 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				11293358	11293368	11293455	11293459	11293464	11293472
(F)	Trigger breach confirmed									
1-55*%@	Sample deviation (see appendix)									
Component	LOD/Units	Method								
GRO Surrogate % recovery**	%	TM089			73	79	78	88	111	74
					♦	♦	♦	♦	♦	♦
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089			90600	9470	62400	73700	78400	22000
					♦ M	♦ M	♦ M	♦ M	♦ M	♦ M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089			<20	<20	<20	<20	<20	<20
					♦ M	♦ M	♦ M	♦ M	♦ M	♦ M
Benzene	<10 µg/kg	TM089			<40	<40	<40	<40	<40	<40
					♦ M	♦ M	♦ M	♦ M	♦ M	♦ M
Toluene	<2 µg/kg	TM089			<8	<8	<8	<8	<8	<8
					♦ M	♦ M	♦ M	♦ M	♦ M	♦ M
Ethylbenzene	<3 µg/kg	TM089			<12	<12	<12	<12	<12	<12
					♦ M	♦ M	♦ M	♦ M	♦ M	♦ M
m,p-Xylene	<6 µg/kg	TM089			<24	<24	<24	<24	<24	<24
					♦ M	♦ M	♦ M	♦ M	♦ M	♦ M
o-Xylene	<3 µg/kg	TM089			<12	<12	<12	<12	<12	<12
					♦ M	♦ M	♦ M	♦ M	♦ M	♦ M
sum of detected mpo xylene by GC	<9 µg/kg	TM089			<9	<9	<9	<9	<9	<9
					♦	♦	♦	♦	♦	♦
sum of detected BTEX by GC	<24 µg/kg	TM089			<24	<24	<24	<24	<24	<24
					♦	♦	♦	♦	♦	♦
Aliphatics >C5-C6	<10 µg/kg	TM089			66.6	598	56.9	82.5	192	542
					♦	♦	♦	♦	♦	♦
Aliphatics >C6-C8	<10 µg/kg	TM089			2570	2240	2070	4410	6630	3940
					♦	♦	♦	♦	♦	♦
Aliphatics >C8-C10	<10 µg/kg	TM089			15100	1360	14900	21400	16000	4840
					♦	♦	♦	♦	♦	♦
Aliphatics >C10-C12	<10 µg/kg	TM089			37700	2600	21300	20100	27000	5630
					♦	♦	♦	♦	♦	♦
Aliphatics >C12-C16	<100 µg/kg	TM173			356000	4050	306000	983000	359000	91200
Aliphatics >C16-C21	<100 µg/kg	TM173			356000	15600	1130000	2960000	879000	260000
Aliphatics >C21-C35	<100 µg/kg	TM173			103000	40200	445000	906000	341000	137000
Aliphatics >C35-C44	<100 µg/kg	TM173			14700	13700	44200	63900	34900	19900
Total Aliphatics >C12-C44	<100 µg/kg	TM173			830000	73500	1930000	4910000	1610000	508000
Aromatics >EC5-EC7	<10 µg/kg	TM089			<40	<40	<40	<40	<40	<40
					♦	♦	♦	♦	♦	♦
Aromatics >EC7-EC8	<10 µg/kg	TM089			<40	<40	<40	<40	<40	<40
					♦	♦	♦	♦	♦	♦
Aromatics >EC8-EC10	<10 µg/kg	TM089			10000	909	9910	14300	10600	3220
					♦	♦	♦	♦	♦	♦
Aromatics >EC10-EC12	<10 µg/kg	TM089			25200	1730	14200	13400	18000	3750
					♦	♦	♦	♦	♦	♦
Aromatics >EC12-EC16	<100 µg/kg	TM173			71700	209	72400	35900	28000	16300
Aromatics >EC16-EC21	<100 µg/kg	TM173			129000	2720	428000	281000	161000	100000
Aromatics >EC21-EC35	<100 µg/kg	TM173			54200	26100	200000	139000	86600	70000
Aromatics >EC35-EC44	<100 µg/kg	TM173			12500	19400	21400	16600	14000	11900
Aromatics >EC40-EC44	<100 µg/kg	TM173			5280	8200	7580	5930	5660	6140
Total Aromatics >EC12-EC44	<100 µg/kg	TM173			268000	48500	722000	472000	290000	199000
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173			1190000	131000	2710000	5460000	1980000	729000



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R						
#	ISO17025 accredited.		TPE 2218	TPE 2218	TPE 2218	TPE 2220	TPE 2220	TPE 2220
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.50 Soil/Solid 29/04/2015	1.50 Soil/Solid 29/04/2015	2.50 Soil/Solid 29/04/2015	0.50 Soil/Solid 27/04/2015	1.50 Soil/Solid 27/04/2015	2.50 Soil/Solid 27/04/2015
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						
GRO Surrogate % recovery**	%	TM089	68	84	83	51	87	114
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	13500	196000	46200	29400	<176	6530
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20	<20	<20	<20	<20	<5
Benzene	<10 µg/kg	TM089	<40	47.3	<40	<40	<40	<10
Toluene	<2 µg/kg	TM089	<8	<8	<8	<8	<8	<2
Ethylbenzene	<3 µg/kg	TM089	<12	<12	<12	<12	<12	<3
m,p-Xylene	<6 µg/kg	TM089	<24	<24	<24	<24	<24	<6
o-Xylene	<3 µg/kg	TM089	<12	<12	<12	<12	<12	<3
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9	<9	<9	<9	<9	<9
sum of detected BTEX by GC	<24 µg/kg	TM089	<24	47.3	<24	<24	<24	<24
Aliphatics >C5-C6	<10 µg/kg	TM089	52.8	1010	1550	<40	<40	24.6
Aliphatics >C6-C8	<10 µg/kg	TM089	262	30200	7090	221	<40	629
Aliphatics >C8-C10	<10 µg/kg	TM089	1900	58200	8810	5760	<40	1510
Aliphatics >C10-C12	<10 µg/kg	TM089	5980	40500	13700	11800	<40	2010
Aliphatics >C12-C16	<100 µg/kg	TM173	769000	1670000	259000	776000	6500	105000
Aliphatics >C16-C21	<100 µg/kg	TM173	2720000	3890000	554000	2160000	32700	333000
Aliphatics >C21-C35	<100 µg/kg	TM173	508000	1580000	253000	3470000	125000	1160000
Aliphatics >C35-C44	<100 µg/kg	TM173	50100	143000	26100	520000	15900	143000
Total Aliphatics >C12-C44	<100 µg/kg	TM173	4050000	7280000	1090000	6930000	180000	1740000
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40	47.3	<40	<40	<40	<10
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40	<40	<40	<40	<40	<10
Aromatics >EC8-EC10	<10 µg/kg	TM089	1270	38800	5880	3840	<40	1010
Aromatics >EC10-EC12	<10 µg/kg	TM089	3990	27000	9140	7830	<40	1340
Aromatics >EC12-EC16	<100 µg/kg	TM173	89900	127000	24500	82900	1620	3510
Aromatics >EC16-EC21	<100 µg/kg	TM173	580000	396000	133000	718000	18500	47300
Aromatics >EC21-EC35	<100 µg/kg	TM173	153000	218000	90900	1500000	88300	308000
Aromatics >EC35-EC44	<100 µg/kg	TM173	25400	36700	14000	278000	13500	54400
Aromatics >EC40-EC44	<100 µg/kg	TM173	9900	12400	4960	80700	3660	15400
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	848000	778000	263000	2580000	122000	414000
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	4910000	8250000	1400000	9540000	302000	2160000



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R						
#	ISO17025 accredited.		TPE 2222	TPE 2222	TPE 2222	TPE 2222	TPE 2223	TPE 2223
M	mCERTS accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	0.50 Soil/Solid 27/04/2015	1.50 Soil/Solid 27/04/2015	2.50 Soil/Solid 27/04/2015	3.50 Soil/Solid 27/04/2015	0.50 Soil/Solid 27/04/2015	1.50 Soil/Solid 27/04/2015
aq	Aqueous / settled sample.		01/05/2015 150501-93 11293610	01/05/2015 150501-93 11293669	01/05/2015 150501-93 11293725	01/05/2015 150501-93 11293789	01/05/2015 150501-93 11293087	01/05/2015 150501-93 11293502
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						
GRO Surrogate % recovery**	%	TM089	51 @	100 @	104 @	120 @	77 @	77 @
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	278 @ M	64600 @ M	7710 @ M	200000 @ M	<176 @ M	<176 @ M
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20 @ M	<20 @ M	<20 @ M	<20 @ M	<20 @ M	<20 @ M
Benzene	<10 µg/kg	TM089	<40 @ M	<40 @ M	<40 @ M	265 @ M	<40 @ M	<40 @ M
Toluene	<2 µg/kg	TM089	<8 @ M	<8 @ M	<8 @ M	<8 @ M	<8 @ M	<8 @ M
Ethylbenzene	<3 µg/kg	TM089	<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ M
m,p-Xylene	<6 µg/kg	TM089	<24 @ M	<24 @ M	<24 @ M	<24 @ M	<24 @ M	<24 @ M
o-Xylene	<3 µg/kg	TM089	<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ M	<12 @ M
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9 @	<9 @	<9 @	<9 @	<9 @	<9 @
sum of detected BTEX by GC	<24 µg/kg	TM089	<24 @	<24 @	<24 @	265 @	<24 @	<24 @
Aliphatics >C5-C6	<10 µg/kg	TM089	<40 @	94.1 @	127 @	10800 @	<40 @	<40 @
Aliphatics >C6-C8	<10 µg/kg	TM089	<40 @	8070 @	1510 @	82400 @	<40 @	<40 @
Aliphatics >C8-C10	<10 µg/kg	TM089	57.1 @	20000 @	1760 @	45800 @	<40 @	<40 @
Aliphatics >C10-C12	<10 µg/kg	TM089	76.2 @	13800 @	1880 @	18000 @	<40 @	<40 @
Aliphatics >C12-C16	<100 µg/kg	TM173	6200	352000	319000	70700	<100	<100
Aliphatics >C16-C21	<100 µg/kg	TM173	57200	1230000	1160000	276000	<100	<100
Aliphatics >C21-C35	<100 µg/kg	TM173	165000	5300000	4850000	1140000	<100	<100
Aliphatics >C35-C44	<100 µg/kg	TM173	46000	1080000	908000	216000	<100	<100
Total Aliphatics >C12-C44	<100 µg/kg	TM173	274000	7960000	7240000	1700000	<100	<100
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40 @	<40 @	<40 @	265 @	<40 @	<40 @
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40 @	<40 @	<40 @	<40 @	<40 @	<40 @
Aromatics >EC8-EC10	<10 µg/kg	TM089	47.6 @	13300 @	1180 @	30500 @	<40 @	<40 @
Aromatics >EC10-EC12	<10 µg/kg	TM089	51.2 @	9220 @	1250 @	12000 @	<40 @	<40 @
Aromatics >EC12-EC16	<100 µg/kg	TM173	281	110000	27300	15500	<100	<100
Aromatics >EC16-EC21	<100 µg/kg	TM173	16400	692000	328000	144000	998	<100
Aromatics >EC21-EC35	<100 µg/kg	TM173	101000	3720000	1940000	742000	5500	<100
Aromatics >EC35-EC44	<100 µg/kg	TM173	57400	892000	471000	162000	5570	<100
Aromatics >EC40-EC44	<100 µg/kg	TM173	26700	281000	144000	50400	2690	<100
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	175000	5420000	2760000	1060000	12100	<100
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	450000	13400000	10000000	2960000	12100	<100



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

TPH CWG (S)

Results Legend		Customer Sample R	TPE 2223				
#	ISO17025 accredited.	Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	2.50				
M	mCERTS accredited.		Soil/Solid				
aq	Aqueous / settled sample.		27/04/2015				
diss.filt	Dissolved / filtered sample.		.				
tot.unfilt	Total / unfiltered sample.		01/05/2015				
*	Subcontracted test.		150501-93				
**	% 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		11293547				
(F)	Trigger breach confirmed						
1-5&*\$@	Sample deviation (see appendix)						
Component	LOD/Units	Method					
GRO Surrogate % recovery**	%	TM089	124 @				
GRO TOT (Moisture Corrected)	<44 µg/kg	TM089	264 @ M				
Methyl tertiary butyl ether (MTBE)	<5 µg/kg	TM089	<20 @ M				
Benzene	<10 µg/kg	TM089	<40 @ M				
Toluene	<2 µg/kg	TM089	<8 @ M				
Ethylbenzene	<3 µg/kg	TM089	<12 @ M				
m,p-Xylene	<6 µg/kg	TM089	<24 @ M				
o-Xylene	<3 µg/kg	TM089	<12 @ M				
sum of detected mpo xylene by GC	<9 µg/kg	TM089	<9 @				
sum of detected BTEX by GC	<24 µg/kg	TM089	<24 @				
Aliphatics >C5-C6	<10 µg/kg	TM089	<40 @				
Aliphatics >C6-C8	<10 µg/kg	TM089	<40 @				
Aliphatics >C8-C10	<10 µg/kg	TM089	46.3 @				
Aliphatics >C10-C12	<10 µg/kg	TM089	105 @				
Aliphatics >C12-C16	<100 µg/kg	TM173	11200				
Aliphatics >C16-C21	<100 µg/kg	TM173	12000				
Aliphatics >C21-C35	<100 µg/kg	TM173	20500				
Aliphatics >C35-C44	<100 µg/kg	TM173	3140				
Total Aliphatics >C12-C44	<100 µg/kg	TM173	46900				
Aromatics >EC5-EC7	<10 µg/kg	TM089	<40 @				
Aromatics >EC7-EC8	<10 µg/kg	TM089	<40 @				
Aromatics >EC8-EC10	<10 µg/kg	TM089	<40 @				
Aromatics >EC10-EC12	<10 µg/kg	TM089	70.1 @				
Aromatics >EC12-EC16	<100 µg/kg	TM173	718				
Aromatics >EC16-EC21	<100 µg/kg	TM173	4090				
Aromatics >EC21-EC35	<100 µg/kg	TM173	13800				
Aromatics >EC35-EC44	<100 µg/kg	TM173	5190				
Aromatics >EC40-EC44	<100 µg/kg	TM173	1920				
Total Aromatics >EC12-EC44	<100 µg/kg	TM173	23800				
Total Aliphatics & Aromatics >C5-C44	<100 µg/kg	TM173	71000				



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

VOC MS (S)

Results Legend		Customer Sample R Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference	TPE 2069		TPE 2220					
#	ISO17025 accredited.		0.50		2.50					
M	mCERTS accredited.		Soil/Solid		Soil/Solid					
aq	Aqueous / settled sample.		28/04/2015		27/04/2015					
diss.filt	Dissolved / filtered sample.									
tot.unfilt	Total / unfiltered sample.									
*	Subcontracted test.		01/05/2015		01/05/2015					
**	% 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		150501-93		150501-93					
(F)	Trigger breach confirmed		11293523		11293091					
1-5&*\$@	Sample deviation (see appendix)									
Component	LOD/Units	Method								
Dibromofluoromethane**	%	TM116	123		114					
			@		@					
Toluene-d8**	%	TM116	101		100					
			@		@					
4-Bromofluorobenzene**	%	TM116	77.7		91.6					
			@		@					
Dichlorodifluoromethane	<6 µg/kg	TM116	<60		<60					
			@ M		@ M					
Chloromethane	<7 µg/kg	TM116	<70		<70					
			@ #		@ #					
Vinyl Chloride	<6 µg/kg	TM116	<60		<60					
			@ M		@ M					
Bromomethane	<10 µg/kg	TM116	<100		<100					
			@ M		@ M					
Chloroethane	<10 µg/kg	TM116	<100		<100					
			@ M		@ M					
Trichlorofluoromethane	<6 µg/kg	TM116	<60		<60					
			@ M		@ M					
1,1-Dichloroethene	<10 µg/kg	TM116	<100		<100					
			@ #		@ #					
Carbon Disulphide	<7 µg/kg	TM116	<70		<70					
			@ M		@ M					
Dichloromethane	<10 µg/kg	TM116	<100		<100					
			@ #		@ #					
Methyl Tertiary Butyl Ether	<10 µg/kg	TM116	<100		<100					
			@ M		@ M					
trans-1,2-Dichloroethene	<10 µg/kg	TM116	<100		<100					
			@ M		@ M					
1,1-Dichloroethane	<8 µg/kg	TM116	<80		<80					
			@ M		@ M					
cis-1,2-Dichloroethene	<6 µg/kg	TM116	<60		<60					
			@ M		@ M					
2,2-Dichloropropane	<10 µg/kg	TM116	<100		<100					
			@ M		@ M					
Bromochloromethane	<10 µg/kg	TM116	<100		<100					
			@ M		@ M					
Chloroform	<8 µg/kg	TM116	<80		<80					
			@ M		@ M					
1,1,1-Trichloroethane	<7 µg/kg	TM116	<70		<70					
			@ M		@ M					
1,1-Dichloropropene	<10 µg/kg	TM116	<100		<100					
			@ M		@ M					
Carbontetrachloride	<10 µg/kg	TM116	<100		<100					
			@ M		@ M					
1,2-Dichloroethane	<5 µg/kg	TM116	<50		<50					
			@ M		@ M					
Benzene	<9 µg/kg	TM116	<90		<90					
			@ M		@ M					
Trichloroethene	<9 µg/kg	TM116	<90		<90					
			@ #		@ #					
1,2-Dichloropropane	<10 µg/kg	TM116	<100		<100					
			@ M		@ M					
Dibromomethane	<9 µg/kg	TM116	<90		<90					
			@ M		@ M					
Bromodichloromethane	<7 µg/kg	TM116	<70		<70					
			@ M		@ M					
cis-1,3-Dichloropropene	<10 µg/kg	TM116	<100		<100					
			@ M		@ M					
Toluene	<7 µg/kg	TM116	<70		<70					
			@ M		@ M					
trans-1,3-Dichloropropene	<10 µg/kg	TM116	<100		<100					
			@		@					
1,1,2-Trichloroethane	<10 µg/kg	TM116	<100		<100					
			@ M		@ M					



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

VOC MS (S)

Results Legend			Customer Sample R		TPE 2069	TPE 2220			
#	ISO17025 accredited.		Depth (m) Sample Type Date Sampled Sample Time Date Received SDG Ref Lab Sample No.(s) AGS Reference						
M	mCERTS accredited.								
aq	Aqueous / settled sample.				0.50	2.50			
diss.filt	Dissolved / filtered sample.				Soil/Solid	Soil/Solid			
tot.unfilt	Total / unfiltered sample.				28/04/2015	27/04/2015			
*	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				01/05/2015	01/05/2015			
(F)	Trigger breach confirmed				150501-93	150501-93			
1-5&5@	Sample deviation (see appendix)				11293523	11293091			
Component	LOD/Units	Method							
1,3-Dichloropropane	<7 µg/kg	TM116			<70	<70			
					@ M	@ M			
Tetrachloroethene	<5 µg/kg	TM116			<50	<50			
					@ M	@ M			
Dibromochloromethane	<10 µg/kg	TM116			<100	<100			
					@ M	@ M			
1,2-Dibromoethane	<10 µg/kg	TM116			<100	<100			
					@ M	@ M			
Chlorobenzene	<5 µg/kg	TM116			<50	<50			
					@ M	@ M			
1,1,1,2-Tetrachloroethane	<10 µg/kg	TM116			<100	<100			
					@ M	@ M			
Ethylbenzene	<4 µg/kg	TM116			<40	<40			
					@ M	@ M			
p/m-Xylene	<10 µg/kg	TM116			<100	<100			
					@ #	@ #			
o-Xylene	<10 µg/kg	TM116			<100	<100			
					@ M	@ M			
Styrene	<10 µg/kg	TM116			<100	<100			
					@ #	@ #			
Bromoform	<10 µg/kg	TM116			<100	<100			
					@ M	@ M			
Isopropylbenzene	<5 µg/kg	TM116			<50	<50			
					@ #	@ #			
1,1,2,2-Tetrachloroethane	<10 µg/kg	TM116			<100	<100			
					@ M	@ M			
1,2,3-Trichloropropane	<16 µg/kg	TM116			<160	<160			
					@ M	@ M			
Bromobenzene	<10 µg/kg	TM116			<100	<100			
					@ M	@ M			
Propylbenzene	<10 µg/kg	TM116			<100	<100			
					@ M	@ M			
2-Chlorotoluene	<9 µg/kg	TM116			<90	<90			
					@ M	@ M			
1,3,5-Trimethylbenzene	<8 µg/kg	TM116			<80	<80			
					@ M	@ M			
4-Chlorotoluene	<10 µg/kg	TM116			<100	<100			
					@ M	@ M			
tert-Butylbenzene	<14 µg/kg	TM116			<140	<140			
					@ M	@ M			
1,2,4-Trimethylbenzene	<9 µg/kg	TM116			<90	<90			
					@ #	@ #			
sec-Butylbenzene	<10 µg/kg	TM116			<100	<100			
					@ M	@ M			
4-Isopropyltoluene	<10 µg/kg	TM116			<100	<100			
					@ M	@ M			
1,3-Dichlorobenzene	<8 µg/kg	TM116			<80	<80			
					@ M	@ M			
1,4-Dichlorobenzene	<5 µg/kg	TM116			<50	<50			
					@ M	@ M			
n-Butylbenzene	<11 µg/kg	TM116			<110	<110			
					@	@			
1,2-Dichlorobenzene	<10 µg/kg	TM116			<100	<100			
					@ M	@ M			
1,2-Dibromo-3-chloroprop ane	<14 µg/kg	TM116			<140	<140			
					@ M	@ M			
Tert-amyl methyl ether	<10 µg/kg	TM116			<100	<100			
					@ #	@ #			
1,2,4-Trichlorobenzene	<20 µg/kg	TM116			<200	<200			
					@	@			
Hexachlorobutadiene	<20 µg/kg	TM116			<200	<200			
					@	@			
Naphthalene	<13 µg/kg	TM116			<130	<130			
					@ M	@ M			

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CERTIFICATE OF ANALYSIS

SDG:	150501-93	Location:	Coed Darcy	Order Number:	CD1197
Job:	H_ATKINS_LDC-350	Customer:	Atkins Global Ltd	Report Number:	317645
Client Reference:	Railhead TPs	Attention:	Alex Mann	Superseded Report:	

Asbestos Identification - Solid Samples

Date of Analysis	Analysed By	Comments	Amosite (Brown) Asbestos	Chrysotile (White) Asbestos	Crocidolite (Blue) Asbestos	Fibrous Actinolite	Fibrous Anthophyllite	Fibrous Tremolite	Non-Asbestos Fibre
16/06/15	Martin Cotterell	-	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected (#)	Not Detected



SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
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Asbestos Quantification - Full

		Additional Asbestos Components (Using TM048)	Analysts Comments	Asbestos Quantification - Detailed Gravimetric - %	Asbestos Quantification - Gravimetric - %	Asbestos Quantification - Total - %
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TPE 2014 0.50 SOLID 29/04/2015 00:00:00 29/05/2015 10:14:52 150501-93 11293166 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TPE 2016 0.50 SOLID 28/04/2015 00:00:00 03/06/2015 11:59:46 150501-93 11293751 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TPE 2026 0.50 SOLID 28/04/2015 00:00:00 29/05/2015 11:38:11 150501-93 11293824 TM 304	None (#)	N/C	0.0327 (#)	<0.001 (#)	0.0327 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TPE 2028 0.50 SOLID 28/04/2015 00:00:00 29/05/2015 10:17:17 150501-93 11293777 TM 304	None (#)	N/C	0.0274 (#)	<0.001 (#)	0.0274 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TPE 2034 0.50 SOLID 28/04/2015 00:00:00 01/06/2015 10:59:37 150501-93 11293673 TM 304	None (#)	N/C	0.0376 (#)	<0.001 (#)	0.0376 (#)



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railroad TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

		Additional Asbestos Components (Using TM048)	Analysts Comments	Asbestos Quantification - Detailed Gravimetric - %	Asbestos Quantification - Gravimetric - %	Asbestos Quantification - Total - %
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TPE 2036 0.50 SOLID 28/04/2015 00:00:00 03/06/2015 11:34:48 150501-93 11293603 TM 304	None (#)	Soil containing fibre bundles, ACM debris & Asbestos bitumin debris.	0.0334 (#)	0.5749 (#)	0.6083 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TPE 2038 0.50 SOLID 28/04/2015 00:00:00 29/05/2015 11:48:19 150501-93 11293582 TM 304	None (#)	N/C	0.4557 (#)	<0.001 (#)	0.4557 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TPE 2040 0.50 SOLID 28/04/2015 00:00:00 03/06/2015 11:01:34 150501-93 11293560 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TPE 2079 0.50 SOLID 29/04/2015 00:00:00 29/05/2015 10:12:00 150501-93 11293995 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TPE 2081 0.50 SOLID 29/04/2015 00:00:00 03/06/2015 11:53:44 150501-93 11294021 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TPE 2083 0.50 SOLID 29/04/2015 00:00:00 03/06/2015 11:03:47 150501-93 11294046 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
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Location: Coed Darcy
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Order Number: CD1197
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		Additional Asbestos Components (Using TM048)	Analysts Comments	Asbestos Quantification - Detailed Gravimetric - %	Asbestos Quantification - Gravimetric - %	Asbestos Quantification - Total - %
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TPE 2087 0.50 SOLID 28/04/2015 00:00:00 03/06/2015 11:55:48 150501-93 11293644 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TPE 2159 0.50 SOLID 27/04/2015 00:00:00 03/06/2015 11:11:41 150501-93 11293362 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)
Cust. Sample Ref. Depth (m) Sample Type Date Sampled Date Received SDG Original Sample Method Number	TPE 2161 0.50 - 0.50 SOLID 27/04/2015 00:00:00 29/05/2015 12:00:17 150501-93 11293144 TM 304	None (#)	N/C	<0.001 (#)	<0.001 (#)	<0.001 (#)



CERTIFICATE OF ANALYSIS

Validated

SDG:	150501-93	Location:	Coed Darcy	Order Number:	CD1197
Job:	H_ATKINS_LDC-350	Customer:	Atkins Global Ltd	Report Number:	317645
Client Reference:	Railhead TPs	Attention:	Alex Mann	Superseded Report:	

Notification of NDPs (No determination possible)

Date Received : 01/05/2015 13:25:15

Sample No	Customer Sample Ref.	Depth (m)	Test	Comment
11293436	TPE 2155	0.50	Asbestos Quant. Detail Gravimetric	Insufficient Sample



SDG: 150501-93
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Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

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Superseded Report:

Table of Results - Appendix

Method No	Reference	Description	Wet/Dry Sample ¹	Surrogate Corrected
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		
SUB (ASB)				
TM 304				
TM048	HSG 248, Asbestos: The analysts' guide for sampling, analysis and clearance procedures	Identification of Asbestos in Bulk Material		
TM089	Modified: US EPA Methods 8020 & 602	Determination of Gasoline Range Hydrocarbons (GRO) and BTEX (MTBE) compounds 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		
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		
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	Microwave extraction – EPA method 3546	Microwave extraction - EPA method 3546		

¹ Applies to Solid samples only. DRY indicates samples have been dried at 35°C. NA = not applicable.



CERTIFICATE OF ANALYSIS

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Test Completion Dates

Lab Sample No(s) Customer Sample Ref.	11293166	11293171	11293177	11293751	11293756	11293761	11293767	11293903	11293919	11293929
	TPE 2014	TPE 2014	TPE 2014	TPE 2016	TPE 2016	TPE 2016	TPE 2016	TPE 2018	TPE 2018	TPE 2018
AGS Ref.										
Depth	0.50	1.50	2.50	0.50	1.50	2.50	3.50	0.50	1.50	3.00
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos fibres in Soil*	13-May-2015			13-May-2015				13-May-2015		
Asbestos Quant. Detail Gravimetric	17-Jun-2015			18-Jun-2015						
EPH CWG (Aliphatic) GC (S)	18-May-2015	18-May-2015	14-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	18-May-2015	18-May-2015
EPH CWG (Aromatic) GC (S)	18-May-2015	18-May-2015	14-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	18-May-2015	18-May-2015
GRO by GC-FID (S)	18-May-2015	18-May-2015	18-May-2015	18-May-2015	19-May-2015	18-May-2015	19-May-2015	18-May-2015	18-May-2015	18-May-2015
Metals in solid samples by OES	18-May-2015	18-May-2015	14-May-2015	19-May-2015	14-May-2015	14-May-2015	14-May-2015	19-May-2015	19-May-2015	19-May-2015
PAH by GCMS	18-May-2015	15-May-2015	14-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015
pH	18-May-2015	18-May-2015	18-May-2015	18-May-2015	19-May-2015	19-May-2015	19-May-2015	18-May-2015	18-May-2015	19-May-2015
Sample description	12-May-2015	12-May-2015	08-May-2015	12-May-2015	08-May-2015	08-May-2015	08-May-2015	11-May-2015	08-May-2015	08-May-2015
Total Organic Carbon					20-May-2015					14-May-2015
TPH CWG GC (S)	18-May-2015	18-May-2015	18-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	18-May-2015	18-May-2015
Lab Sample No(s) Customer Sample Ref.	11293809	11293814	11293818	11293849	11293864	11293876	11293888	11293824	11293830	11293837
	TPE 2020	TPE 2020	TPE 2020	TPE 2022	TPE 2022	TPE 2022	TPE 2022	TPE 2026	TPE 2026	TPE 2026
AGS Ref.										
Depth	0.50	1.50	2.50	0.50	1.50	2.50	4.00	0.50	2.00	3.50
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos fibres in Soil*	13-May-2015			13-May-2015				13-May-2015		
Asbestos Quant. Detail Gravimetric								18-Jun-2015		
EPH CWG (Aliphatic) GC (S)	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015
EPH CWG (Aromatic) GC (S)	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015
GRO by GC-FID (S)	19-May-2015	19-May-2015	19-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015		18-May-2015	18-May-2015
Metals in solid samples by OES	14-May-2015	15-May-2015	15-May-2015	19-May-2015	14-May-2015	19-May-2015	19-May-2015	19-May-2015	14-May-2015	14-May-2015
PAH by GCMS	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	14-May-2015	18-May-2015
pH	18-May-2015	19-May-2015	19-May-2015	18-May-2015	19-May-2015	18-May-2015	19-May-2015	18-May-2015	18-May-2015	19-May-2015
Sample description	08-May-2015	08-May-2015	08-May-2015	11-May-2015	08-May-2015	08-May-2015	08-May-2015	11-May-2015	08-May-2015	08-May-2015
Total Organic Carbon		14-May-2015				14-May-2015				14-May-2015
TPH CWG GC (S)	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015
Lab Sample No(s) Customer Sample Ref.	11293844	11293777	11293783	11293798	11293803	11293736	11293740	11293745	11293691	11293695
	TPE 2026	TPE 2028	TPE 2028	TPE 2028	TPE 2028	TPE 2030	TPE 2030	TPE 2030	TPE 2032	TPE 2032
AGS Ref.										
Depth	4.50	0.50	1.50	2.50	3.50	0.50	1.50	2.50	0.50	1.50
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos fibres in Soil*		13-May-2015				13-May-2015			13-May-2015	
Asbestos Quant. Detail Gravimetric		18-Jun-2015								
EPH CWG (Aliphatic) GC (S)	19-May-2015	18-May-2015	19-May-2015	19-May-2015	19-May-2015	18-May-2015	19-May-2015	19-May-2015	18-May-2015	19-May-2015
EPH CWG (Aromatic) GC (S)	19-May-2015	18-May-2015	19-May-2015	19-May-2015	19-May-2015	18-May-2015	19-May-2015	19-May-2015	18-May-2015	19-May-2015
GRO by GC-FID (S)	18-May-2015	18-May-2015	18-May-2015	18-May-2015	19-May-2015	18-May-2015	19-May-2015	19-May-2015	18-May-2015	18-May-2015
Metals in solid samples by OES	18-May-2015	19-May-2015	14-May-2015	18-May-2015	14-May-2015	19-May-2015	14-May-2015	18-May-2015	19-May-2015	18-May-2015
PAH by GCMS	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015
pH	18-May-2015	18-May-2015	19-May-2015	19-May-2015	19-May-2015	18-May-2015	19-May-2015	19-May-2015	18-May-2015	19-May-2015
Sample description	08-May-2015	12-May-2015	08-May-2015	08-May-2015	08-May-2015	12-May-2015	08-May-2015	08-May-2015	11-May-2015	08-May-2015
Total Organic Carbon			14-May-2015			20-May-2015				
TPH CWG GC (S)	19-May-2015	18-May-2015	19-May-2015	19-May-2015	19-May-2015	18-May-2015	19-May-2015	19-May-2015	18-May-2015	19-May-2015
Lab Sample No(s) Customer Sample Ref.	11293699	11293704	11293673	11293677	11293681	11293686	11293603	11293615	11293620	11293582
	TPE 2032	TPE 2032	TPE 2034	TPE 2034	TPE 2034	TPE 2034	TPE 2036	TPE 2036	TPE 2036	TPE 2038
AGS Ref.										
Depth	2.50	3.50	0.50	1.50	2.60	3.80	0.50	2.00	3.50	0.50
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos fibres in Soil*			13-May-2015				13-May-2015			13-May-2015
Asbestos Quant. Detail Gravimetric			18-Jun-2015				17-Jun-2015			17-Jun-2015
EPH CWG (Aliphatic) GC (S)	19-May-2015	19-May-2015	18-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	18-May-2015
EPH CWG (Aromatic) GC (S)	19-May-2015	19-May-2015	18-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	18-May-2015
GRO by GC-FID (S)	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015		18-May-2015	18-May-2015
Metals in solid samples by OES	18-May-2015	15-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	19-May-2015	19-May-2015	15-May-2015	19-May-2015
PAH by GCMS	18-May-2015	18-May-2015	18-May-2015	18-May-2015	15-May-2015	15-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015
pH	19-May-2015	18-May-2015	18-May-2015	19-May-2015	18-May-2015	19-May-2015	18-May-2015	19-May-2015	19-May-2015	18-May-2015
Sample description	08-May-2015	08-May-2015	11-May-2015	08-May-2015	08-May-2015	08-May-2015	11-May-2015	08-May-2015	08-May-2015	12-May-2015
Total Organic Carbon		20-May-2015				14-May-2015			20-May-2015	
TPH CWG GC (S)	19-May-2015	19-May-2015	18-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	18-May-2015



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
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Order Number: CD1197
Report Number: 317645
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Lab Sample No(s)	11293586	11293592	11293597	11293560	11293566	11293572	11293577	11293938	11293947	11293964
Customer Sample Ref.	TPE 2038	TPE 2038	TPE 2038	TPE 2040	TPE 2040	TPE 2040	TPE 2040	TPE 2051	TPE 2051	TPE 2051
AGS Ref.										
Depth	1.50	2.50	3.50	0.50	1.50	2.50	3.50	0.50	1.50	2.80
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos fibres in Soil*				13-May-2015				13-May-2015		
Asbestos Quant. Detail Gravimetric				17-Jun-2015						
EPH CWG (Aliphatic) GC (S)	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015
EPH CWG (Aromatic) GC (S)	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015
GRO by GC-FID (S)	19-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015
Metals in solid samples by OES	19-May-2015	19-May-2015	19-May-2015	18-May-2015	18-May-2015	19-May-2015	19-May-2015	19-May-2015	14-May-2015	15-May-2015
PAH by GCMS	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015
pH	19-May-2015	19-May-2015	19-May-2015	18-May-2015	19-May-2015	19-May-2015	19-May-2015	18-May-2015	19-May-2015	19-May-2015
Sample description	08-May-2015	08-May-2015	08-May-2015	11-May-2015	08-May-2015	08-May-2015	08-May-2015	11-May-2015	08-May-2015	08-May-2015
Total Organic Carbon		14-May-2015				14-May-2015				
TPH CWG GC (S)	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015

Lab Sample No(s)	11293977	11293713	11293717	11293731	11293539	11293543	11293551	11293523	11293527	11293531
Customer Sample Ref.	TPE 2051	TPE 2059	TPE 2059	TPE 2059	TPE 2067	TPE 2067	TPE 2067	TPE 2069	TPE 2069	TPE 2069
AGS Ref.										
Depth	4.00	0.50	1.50	3.00	0.50	1.60	2.70	0.50	1.50	2.50
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos fibres in Soil*		13-May-2015			13-May-2015			13-May-2015		
EPH CWG (Aliphatic) GC (S)	18-May-2015	19-May-2015	19-May-2015	19-May-2015	14-May-2015	14-May-2015	19-May-2015	18-May-2015	15-May-2015	14-May-2015
EPH CWG (Aromatic) GC (S)	18-May-2015	19-May-2015	19-May-2015	19-May-2015	14-May-2015	14-May-2015	19-May-2015	18-May-2015	15-May-2015	14-May-2015
GRO by GC-FID (S)	18-May-2015	18-May-2015	19-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	20-May-2015	18-May-2015	18-May-2015
Metals in solid samples by OES	19-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	15-May-2015	18-May-2015	18-May-2015	15-May-2015	15-May-2015
PAH by GCMS	18-May-2015	15-May-2015	15-May-2015	18-May-2015	14-May-2015	14-May-2015	18-May-2015	14-May-2015	14-May-2015	14-May-2015
pH	19-May-2015	18-May-2015	19-May-2015	19-May-2015	18-May-2015	18-May-2015	19-May-2015	18-May-2015	18-May-2015	18-May-2015
Sample description	08-May-2015	11-May-2015	08-May-2015	08-May-2015	11-May-2015	08-May-2015	08-May-2015	11-May-2015	08-May-2015	08-May-2015
Semi Volatile Organic Compounds								15-May-2015		
Total Organic Carbon	14-May-2015					14-May-2015			14-May-2015	
TPH CWG GC (S)	18-May-2015	19-May-2015	19-May-2015	19-May-2015	18-May-2015	18-May-2015	19-May-2015	20-May-2015	18-May-2015	18-May-2015
VOC MS (S)								24-May-2015		

Lab Sample No(s)	11293535	11293497	11293507	11293995	11294004	11294013	11294021	11294028	11294037	11294046
Customer Sample Ref.	TPE 2069	TPE 2071	TPE 2071	TPE 2079	TPE 2079	TPE 2079	TPE 2081	TPE 2081	TPE 2081	TPE 2083
AGS Ref.										
Depth	3.50	0.50	2.50	0.50	1.50	2.50	0.50	1.50	3.00	0.50
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos fibres in Soil*		13-May-2015		13-May-2015			13-May-2015			13-May-2015
Asbestos Quant. Detail Gravimetric				18-Jun-2015			18-Jun-2015			18-Jun-2015
EPH CWG (Aliphatic) GC (S)	14-May-2015	18-May-2015	15-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015
EPH CWG (Aromatic) GC (S)	14-May-2015	18-May-2015	15-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015
GRO by GC-FID (S)	18-May-2015	18-May-2015	18-May-2015	19-May-2015	19-May-2015	20-May-2015	19-May-2015	20-May-2015	21-May-2015	19-May-2015
Metals in solid samples by OES	15-May-2015	18-May-2015	14-May-2015	18-May-2015	14-May-2015	14-May-2015	18-May-2015	14-May-2015	18-May-2015	19-May-2015
PAH by GCMS	14-May-2015	18-May-2015	15-May-2015	15-May-2015	18-May-2015	18-May-2015	15-May-2015	18-May-2015	15-May-2015	18-May-2015
pH	18-May-2015	18-May-2015	18-May-2015	18-May-2015	19-May-2015	19-May-2015	18-May-2015	19-May-2015	19-May-2015	18-May-2015
Sample description	08-May-2015	12-May-2015	08-May-2015	11-May-2015	08-May-2015	08-May-2015	11-May-2015	08-May-2015	08-May-2015	11-May-2015
Total Organic Carbon							18-May-2015			
TPH CWG GC (S)	18-May-2015	18-May-2015	18-May-2015	19-May-2015	19-May-2015	20-May-2015	19-May-2015	20-May-2015	21-May-2015	19-May-2015

Lab Sample No(s)	11294056	11294063	11294071	11293644	11293652	11293658	11293664	11293625	11293629	11293634
Customer Sample Ref.	TPE 2083	TPE 2083	TPE 2083	TPE 2087	TPE 2087	TPE 2087	TPE 2087	TPE 2089	TPE 2089	TPE 2089
AGS Ref.										
Depth	1.50	2.50	3.50	0.50	1.50	2.50	3.50	0.50	1.50	2.50
Type	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos fibres in Soil*				13-May-2015						
Asbestos Quant. Detail Gravimetric				18-Jun-2015						
EPH CWG (Aliphatic) GC (S)	19-May-2015	19-May-2015	19-May-2015	18-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015
EPH CWG (Aromatic) GC (S)	19-May-2015	19-May-2015	19-May-2015	18-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015
GRO by GC-FID (S)	19-May-2015	19-May-2015	18-May-2015	19-May-2015	18-May-2015	19-May-2015	19-May-2015	18-May-2015	21-May-2015	21-May-2015
Metals in solid samples by OES	18-May-2015	18-May-2015	18-May-2015	19-May-2015	19-May-2015	18-May-2015	18-May-2015	19-May-2015	19-May-2015	18-May-2015
PAH by GCMS	18-May-2015	15-May-2015	18-May-2015	19-May-2015	15-May-2015	18-May-2015	15-May-2015	15-May-2015	18-May-2015	15-May-2015
pH	19-May-2015	19-May-2015	18-May-2015	18-May-2015	18-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015
Sample description	08-May-2015	08-May-2015	08-May-2015	12-May-2015	08-May-2015	08-May-2015	08-May-2015	08-May-2015	08-May-2015	08-May-2015
Total Organic Carbon	14-May-2015						14-May-2015			
TPH CWG GC (S)	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	21-May-2015	21-May-2015



CERTIFICATE OF ANALYSIS

SDG:	150501-93	Location:	Coed Darcy	Order Number:		CD1197				
Job:	H_ATKINS_LDC-350	Customer:	Atkins Global Ltd	Report Number:		317645				
Client Reference:	Railhead TPs	Attention:	Alex Mann	Superseded Report:						
Lab Sample No(s) Customer Sample Ref. AGS Ref. Depth Type	11293638	11293372	11293377	11293382	11293390	11293115	11293121	11293125	11293095	11293100
	TPE 2089	TPE 2091	TPE 2091	TPE 2091	TPE 2091	TPE 2111	TPE 2111	TPE 2111	TPE 2115	TPE 2115
	3.50	0.50	1.50	2.50	3.50	0.50	1.50	2.50	0.50	1.50
	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos fibres in Soil*		13-May-2015				13-May-2015			13-May-2015	
EPH CWG (Aliphatic) GC (S)	19-May-2015	18-May-2015	14-May-2015	16-May-2015	15-May-2015	15-May-2015	14-May-2015	18-May-2015	18-May-2015	16-May-2015
EPH CWG (Aromatic) GC (S)	19-May-2015	18-May-2015	14-May-2015	18-May-2015	15-May-2015	15-May-2015	14-May-2015	18-May-2015	18-May-2015	16-May-2015
GRO by GC-FID (S)	18-May-2015	18-May-2015	19-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	19-May-2015	18-May-2015
Metals in solid samples by OES	19-May-2015	18-May-2015	15-May-2015	15-May-2015	18-May-2015	18-May-2015	15-May-2015	14-May-2015	18-May-2015	15-May-2015
PAH by GCMS	15-May-2015	15-May-2015	14-May-2015	15-May-2015	15-May-2015	18-May-2015	14-May-2015	14-May-2015	15-May-2015	14-May-2015
pH	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015
Sample description	08-May-2015	11-May-2015	08-May-2015	08-May-2015	08-May-2015	11-May-2015	08-May-2015	08-May-2015	12-May-2015	08-May-2015
Total Organic Carbon	14-May-2015	18-May-2015					14-May-2015			14-May-2015
TPH CWG GC (S)	19-May-2015	18-May-2015	19-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	19-May-2015	18-May-2015
Lab Sample No(s) Customer Sample Ref. AGS Ref. Depth Type	11293105	11293109	11293413	11293422	11293428	11293432	11293511	11293515	11293519	11293489
	TPE 2115	TPE 2115	TPE 2124	TPE 2124	TPE 2124	TPE 2124	TPE 2127	TPE 2127	TPE 2127	TPE 2129
	2.50	3.50	0.50	1.50	3.00	4.50	0.50	1.50	2.50	1.00
	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos fibres in Soil*			13-May-2015				13-May-2015			13-May-2015
EPH CWG (Aliphatic) GC (S)	14-May-2015	16-May-2015	18-May-2015	16-May-2015	16-May-2015	15-May-2015	18-May-2015	14-May-2015	16-May-2015	18-May-2015
EPH CWG (Aromatic) GC (S)	14-May-2015	16-May-2015	18-May-2015	16-May-2015	16-May-2015	15-May-2015	18-May-2015	14-May-2015	15-May-2015	18-May-2015
GRO by GC-FID (S)	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015
Metals in solid samples by OES	15-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	14-May-2015	18-May-2015	15-May-2015	14-May-2015	18-May-2015
PAH by GCMS	14-May-2015	14-May-2015	18-May-2015	14-May-2015	14-May-2015	14-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015
pH	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015
Sample description	08-May-2015	08-May-2015	12-May-2015	08-May-2015	08-May-2015	08-May-2015	11-May-2015	08-May-2015	08-May-2015	12-May-2015
Total Organic Carbon			18-May-2015				18-May-2015			18-May-2015
TPH CWG GC (S)	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015
Lab Sample No(s) Customer Sample Ref. AGS Ref. Depth Type	11293493	11293130	11293134	11293138	11293195	11293201	11293207	11293231	11293237	11293245
	TPE 2129	TPE 2143	TPE 2143	TPE 2143	TPE 2147	TPE 2147	TPE 2147	TPE 2147	TPE 2149	TPE 2149
	3.00	0.50	1.50	2.50	0.50	1.50	2.50	3.50	0.50	1.50
	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos fibres in Soil*		13-May-2015			13-May-2015				14-May-2015	
EPH CWG (Aliphatic) GC (S)	14-May-2015	15-May-2015	16-May-2015	15-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	15-May-2015
EPH CWG (Aromatic) GC (S)	14-May-2015	15-May-2015	15-May-2015	15-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	15-May-2015
GRO by GC-FID (S)	18-May-2015	18-May-2015	18-May-2015	19-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	19-May-2015
Metals in solid samples by OES	15-May-2015	18-May-2015	14-May-2015	15-May-2015	18-May-2015	14-May-2015	18-May-2015	18-May-2015	18-May-2015	14-May-2015
PAH by GCMS	15-May-2015	15-May-2015	14-May-2015	14-May-2015	18-May-2015	14-May-2015	14-May-2015	14-May-2015	15-May-2015	14-May-2015
pH	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015
Sample description	08-May-2015	11-May-2015	08-May-2015	08-May-2015	12-May-2015	06-May-2015	08-May-2015	08-May-2015	11-May-2015	06-May-2015
Total Organic Carbon				14-May-2015	18-May-2015				18-May-2015	
TPH CWG GC (S)	18-May-2015	18-May-2015	18-May-2015	19-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	19-May-2015
Lab Sample No(s) Customer Sample Ref. AGS Ref. Depth Type	11293251	11293257	11293328	11293337	11293349	11293395	11293400	11293405	11293409	11293436
	TPE 2149	TPE 2149	TPE 2151	TPE 2151	TPE 2151	TPE 2153	TPE 2153	TPE 2153	TPE 2153	TPE 2155
	2.50	3.50	0.50	1.50	2.50	0.50	1.50	2.50	3.50	0.50
	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID	SOLID
Asbestos fibres in Soil*			14-May-2015			14-May-2015				14-May-2015
EPH CWG (Aliphatic) GC (S)	18-May-2015	16-May-2015	18-May-2015	15-May-2015	15-May-2015	18-May-2015	15-May-2015	15-May-2015	15-May-2015	18-May-2015
EPH CWG (Aromatic) GC (S)	18-May-2015	16-May-2015	18-May-2015	15-May-2015	15-May-2015	18-May-2015	15-May-2015	15-May-2015	15-May-2015	18-May-2015
GRO by GC-FID (S)	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	19-May-2015	18-May-2015
Metals in solid samples by OES	18-May-2015	15-May-2015	18-May-2015	15-May-2015	14-May-2015	18-May-2015	15-May-2015	18-May-2015	18-May-2015	18-May-2015
PAH by GCMS	14-May-2015	14-May-2015	18-May-2015	15-May-2015	15-May-2015	15-May-2015	15-May-2015	14-May-2015	14-May-2015	15-May-2015
pH	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015
Sample description	08-May-2015	08-May-2015	11-May-2015	08-May-2015	08-May-2015	11-May-2015	08-May-2015	08-May-2015	08-May-2015	11-May-2015
Total Organic Carbon					14-May-2015	18-May-2015				18-May-2015
TPH CWG GC (S)	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	19-May-2015	18-May-2015



CERTIFICATE OF ANALYSIS

SDG: 150501-93
Job: H_ATKINS_LDC-350
Client Reference: Railhead TPs

Location: Coed Darcy
Customer: Atkins Global Ltd
Attention: Alex Mann

Order Number: CD1197
Report Number: 317645
Superseded Report:

Lab Sample No(s) Customer Sample Ref. AGS Ref. Depth Type	11293440	11293445	11293449	11293362	11293417	11293468	11293144	11293218	11293297	11293149
	TPE 2155	TPE 2155	TPE 2155	TPE 2159	TPE 2159	TPE 2159	TPE 2161	TPE 2161	TPE 2161	TPE 2174
	1.50	2.50	3.50	0.50	2.00	3.50	0.50 - 0.50	3.50 - 3.50	2.00 - 2.00	0.50
Asbestos fibres in Soil*		14-May-2015		14-May-2015			14-May-2015			14-May-2015
Asbestos Quant. Detail Gravimetric				17-Jun-2015			17-Jun-2015			
EPH CWG (Aliphatic) GC (S)	15-May-2015	18-May-2015	15-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	16-May-2015
EPH CWG (Aromatic) GC (S)	15-May-2015	18-May-2015	15-May-2015	15-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	15-May-2015
GRO by GC-FID (S)	18-May-2015	19-May-2015	19-May-2015	19-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015
Metals in solid samples by OES	14-May-2015	18-May-2015	18-May-2015	18-May-2015	14-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015
PAH by GCMS	14-May-2015	15-May-2015	14-May-2015	18-May-2015	18-May-2015	15-May-2015	18-May-2015	15-May-2015	15-May-2015	15-May-2015
pH	18-May-2015	18-May-2015	18-May-2015	15-May-2015	18-May-2015	18-May-2015	15-May-2015	18-May-2015	18-May-2015	18-May-2015
Sample description	08-May-2015	11-May-2015	08-May-2015	12-May-2015	08-May-2015	08-May-2015	12-May-2015	08-May-2015	08-May-2015	12-May-2015
Total Organic Carbon									14-May-2015	
TPH CWG GC (S)	18-May-2015	19-May-2015	19-May-2015	19-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015

Lab Sample No(s) Customer Sample Ref. AGS Ref. Depth Type	11293153	11293157	11293161	11293261	11293266	11293271	11293275	11293292	11293301	11293306
	TPE 2174	TPE 2174	TPE 2174	TPE 2208	TPE 2208	TPE 2208	TPE 2210	TPE 2210	TPE 2210	TPE 2210
	1.50	2.50	3.50	0.50	1.50	2.50	0.50	1.50	2.50	3.50
Asbestos fibres in Soil*				14-May-2015			14-May-2015			
EPH CWG (Aliphatic) GC (S)	14-May-2015	14-May-2015	14-May-2015	18-May-2015	15-May-2015	15-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015
EPH CWG (Aromatic) GC (S)	14-May-2015	14-May-2015	14-May-2015	18-May-2015	15-May-2015	15-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015
GRO by GC-FID (S)	18-May-2015	18-May-2015	19-May-2015	19-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015
Metals in solid samples by OES	15-May-2015	15-May-2015	14-May-2015	18-May-2015	14-May-2015	14-May-2015	18-May-2015	18-May-2015	15-May-2015	15-May-2015
PAH by GCMS	14-May-2015	14-May-2015	14-May-2015	14-May-2015	14-May-2015	14-May-2015	14-May-2015	14-May-2015	14-May-2015	14-May-2015
pH	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015
Sample description	08-May-2015	08-May-2015	08-May-2015	11-May-2015	06-May-2015	06-May-2015	11-May-2015	08-May-2015	08-May-2015	08-May-2015
Total Organic Carbon			14-May-2015	18-May-2015				14-May-2015		
TPH CWG GC (S)	18-May-2015	18-May-2015	19-May-2015	19-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015

Lab Sample No(s) Customer Sample Ref. AGS Ref. Depth Type	11293311	11293318	11293323	11293354	11293358	11293368	11293455	11293459	11293464	11293472
	TPE 2212	TPE 2212	TPE 2212	TPE 2214	TPE 2214	TPE 2214	TPE 2216	TPE 2216	TPE 2216	TPE 2216
	0.50	1.50	2.50	0.50	1.50	3.00	0.50	1.50	2.50	3.50
Asbestos fibres in Soil*	14-May-2015			14-May-2015						
Asbestos ID in Solid Samples							17-Jun-2015			
EPH CWG (Aliphatic) GC (S)	18-May-2015	15-May-2015	14-May-2015	18-May-2015	15-May-2015	18-May-2015	18-May-2015	14-May-2015	14-May-2015	15-May-2015
EPH CWG (Aromatic) GC (S)	18-May-2015	15-May-2015	14-May-2015	18-May-2015	15-May-2015	18-May-2015	18-May-2015	14-May-2015	14-May-2015	15-May-2015
GRO by GC-FID (S)	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	19-May-2015
Metals in solid samples by OES	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	15-May-2015	14-May-2015	14-May-2015
PAH by GCMS	18-May-2015	18-May-2015	15-May-2015	15-May-2015	15-May-2015	15-May-2015	15-May-2015	15-May-2015	14-May-2015	14-May-2015
pH	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	15-May-2015	18-May-2015	18-May-2015	18-May-2015
Sample description	11-May-2015	08-May-2015	08-May-2015	11-May-2015	08-May-2015	08-May-2015	11-May-2015	08-May-2015	08-May-2015	08-May-2015
Total Organic Carbon		14-May-2015					18-May-2015			
TPH CWG GC (S)	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	19-May-2015

Lab Sample No(s) Customer Sample Ref. AGS Ref. Depth Type	11293477	11293481	11293485	11293091	11293855	11293987	11293610	11293669	11293725	11293789
	TPE 2218	TPE 2218	TPE 2218	TPE 2220	TPE 2220	TPE 2220	TPE 2222	TPE 2222	TPE 2222	TPE 2222
	0.50	1.50	2.50	2.50	0.50	1.50	0.50	1.50	2.50	3.50
Asbestos fibres in Soil*	14-May-2015				14-May-2015		14-May-2015			
EPH CWG (Aliphatic) GC (S)	18-May-2015	18-May-2015	14-May-2015	14-May-2015	19-May-2015	19-May-2015	18-May-2015	19-May-2015	19-May-2015	19-May-2015
EPH CWG (Aromatic) GC (S)	18-May-2015	18-May-2015	14-May-2015	14-May-2015	19-May-2015	19-May-2015	18-May-2015	19-May-2015	19-May-2015	19-May-2015
GRO by GC-FID (S)	18-May-2015	18-May-2015	18-May-2015	21-May-2015	19-May-2015	18-May-2015	19-May-2015	18-May-2015	19-May-2015	18-May-2015
Metals in solid samples by OES	18-May-2015	14-May-2015	14-May-2015	15-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015
PAH by GCMS	15-May-2015	15-May-2015	14-May-2015	14-May-2015	18-May-2015	15-May-2015	18-May-2015	15-May-2015	15-May-2015	14-May-2015
pH	18-May-2015	18-May-2015	18-May-2015	18-May-2015	18-May-2015	19-May-2015	18-May-2015	19-May-2015	19-May-2015	19-May-2015
Sample description	11-May-2015	08-May-2015	08-May-2015	08-May-2015	12-May-2015	08-May-2015	12-May-2015	08-May-2015	08-May-2015	08-May-2015
Semi Volatile Organic Compounds				15-May-2015						
Total Organic Carbon	18-May-2015					14-May-2015		14-May-2015		
TPH CWG GC (S)	18-May-2015	18-May-2015	26-May-2015	21-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015	19-May-2015
VOC MS (S)				20-May-2015						



CERTIFICATE OF ANALYSIS

SDG:	150501-93	Location:	Coed Darcy	Order Number:	CD1197
Job:	H_ATKINS_LDC-350	Customer:	Atkins Global Ltd	Report Number:	317645
Client Reference:	Railhead TPs	Attention:	Alex Mann	Superseded Report:	

Lab Sample No(s)	11293087	11293502	11293547
Customer Sample Ref.	TPE 2223	TPE 2223	TPE 2223
AGS Ref.			
Depth	0.50	1.50	2.50
Type	SOLID	SOLID	SOLID
Asbestos fibres in Soil*	14-May-2015		
EPH CWG (Aliphatic) GC (S)	18-May-2015	18-May-2015	16-May-2015
EPH CWG (Aromatic) GC (S)	18-May-2015	18-May-2015	16-May-2015
GRO by GC-FID (S)	18-May-2015	18-May-2015	18-May-2015
Metals in solid samples by OES	18-May-2015	15-May-2015	15-May-2015
PAH by GCMS	14-May-2015	14-May-2015	14-May-2015
pH	18-May-2015	18-May-2015	18-May-2015
Sample description	11-May-2015	08-May-2015	08-May-2015
Total Organic Carbon	18-May-2015		
TPH CWG GC (S)	18-May-2015	18-May-2015	18-May-2015



Certificate of Analysis

Certificate Number 15-34289

12-May-15

Client Alcontrol Laboratories
Units 7 & 8
Hawarden Business Park
Manor Road
Hawarden
Deeside
CH5 3US

Our Reference 15-34289

Client Reference 150501-93

Contract Title 150501-93

Description 46 Soil samples.

Date Received 07-May-15

Date Started 07-May-15

Date Completed 12-May-15

Test Procedures Asbestos Analysis DETSC 1101.

Notes Opinions and interpretations are outside the scope of UKAS accreditation. This certificate is issued in accordance with the accreditation requirements of the United Kingdom Accreditation Service. The results reported herein relate only to the material supplied to the laboratory. Observations and interpretations are outside the scope of ISO 17025. This certificate shall not be reproduced except in full, without the prior written approval of the laboratory.

Approved By

A handwritten signature in black ink, appearing to read 'Rob Brown'.

Rob Brown
Business Manager



Summary of Asbestos Analysis Soil Samples

Our Ref 15-34289
Client Ref 150501-93
Contract Title 150501-93

Lab No	Sample ID	Material Type	Result	Comment*	Analyst
807504	11312700	SOIL	Amosite	Bundle of Amosite fibres present	Andrew Little
807505	11312355	SOIL	Amosite Chrysotile	Bundle of Amosite/Chrysotile present	Andrew Little
807506	11312594	SOIL	NAD	none	Andrew Little
807507	11312773	SOIL	NAD	none	Andrew Little
807508	11312502	SOIL	NAD	none	Andrew Little
807509	11312829	SOIL	Chrysotile	Clumps of Chrysotile insulation present	Andrew Little
807510	11312755	SOIL	Chrysotile	Clumps of Chrysotile insulation present	Andrew Little
807511	11312386	SOIL	NAD	none	Andrew Little
807512	11312925	SOIL	NAD	none	Andrew Little
807513	11312863	SOIL	Chrysotile	Clumps of Chrysotile insulation present	Andrew Little
807514	11312418	SOIL	Crocidolite Chrysotile	Crocidolite and Chrysotile Insulation present	Andrew Little
807515	11312846	SOIL	Crocidolite Chrysotile	Crocidolite and Chrysotile Insulation present	Andrew Little
807516	11312491	SOIL	Crocidolite Chrysotile	Crocidolite and Chrysotile Insulation present	Andrew Little
807517	11312596	SOIL	NAD	none	Andrew Little
807518	11312913	SOIL	NAD	none	Andrew Little
807519	11312378	SOIL	NAD	none	Andrew Little
807520	11312380	SOIL	NAD	none	Andrew Little
807521	11312528	SOIL	NAD	none	Andrew Little
807522	11312665	SOIL	Chrysotile	Bundles of Chrysotile fibres present	Andrew Little
807523	11312438	SOIL	Crocidolite Chrysotile	Bundles of Crocidolite and Chrysotile present	Andrew Little
807524	11312448	SOIL	Amosite Chrysotile	Bundle of Amosite/Chrysotile present	Andrew Little
807525	11312420	SOIL	Chrysotile	Bundle of chrysotile fibre present	Andrew Little
807526	11312735	SOIL	NAD	none	Andrew Little
807527	11312551	SOIL	NAD	none	Andrew Little
807528	11312363	SOIL	NAD	none	Andrew Little
807529	11312578	SOIL	NAD	none	Andrew Little
807530	11312522	SOIL	NAD	none	Andrew Little
807531	11312534	SOIL	NAD	none	Andrew Little
807532	11312565	SOIL	NAD	none	Andrew Little
807533	11312632	SOIL	NAD	none	D Wilkinson
807534	11312628	SOIL	NAD	none	D Wilkinson
807535	11312720	SOIL	NAD	none	D Wilkinson
807536	11312726	SOIL	NAD	none	D Wilkinson
807537	11312814	SOIL	Chrysotile	Chrysotile present as small fibre bundle	D Wilkinson
807538	11312808	SOIL	NAD	none	D Wilkinson
807539	11312661	SOIL	Chrysotile	Chrysotile present as fibre bundle	D Wilkinson
807540	11312785	SOIL	Amosite	Amosite present as fibre bundles	D Wilkinson
807541	11312561	SOIL	NAD	none	D Wilkinson
807542	11312647	SOIL	NAD	none	D Wilkinson

Summary of Asbestos Analysis

Soil Samples

Our Ref 15-34289
 Client Ref 150501-93
 Contract Title 150501-93

Lab No	Sample ID	Material Type	Result	Comment*	Analyst
807543	11312474	SOIL	NAD	none	D Wilkinson
807544	11312766	SOIL	NAD	none	D Wilkinson
807545	11312399	SOIL	NAD	none	D Wilkinson
807546	11312688	SOIL	NAD	none	D Wilkinson
807547	11312782	SOIL	NAD	none	D Wilkinson
807548	11312790	SOIL	NAD	none	D Wilkinson
807549	11312788	SOIL	NAD	none	D Wilkinson

Crocidolite = Blue Asbestos, Amosite = Brown Asbestos, Chrysotile = White Asbestos. Anthophyllite, Actinolite and Tremolite are other forms of Asbestos. Samples are analysed by DETSC 1101 using polarised light microscopy in accordance with HSG248 and documented in-house methods. NAD = No Asbestos Detected. Where a sample is NAD, the result is based on analysis of at least 2 sub-samples and should be taken to mean 'no asbestos detected in sample'. Key: * -not included in laboratory scope of accreditation.