



SAMPLE RECEIPT ADVICE

SE153761

CLIENT DETAILS

Contact Ben Seaford
Client GOLDER ASSOCIATES PTY LTD
Address PO BOX 1302
CROWS NEST NSW 1585

Telephone 02 9478 3900
Facsimile 02 9478 3901
Email bseaford@golder.com.au

Project **1648232 - Minto**
Order Number (Not specified)
Samples 30

LABORATORY DETAILS

Manager Huong Crawford
Laboratory SGS Alexandria Environmental
Address Unit 16, 33 Maddox St
Alexandria NSW 2015

Telephone +61 2 8594 0400
Facsimile +61 2 8594 0499
Email au.environmental.sydney@sgs.com

Samples Received Fri 17/6/2016
Report Due Mon 27/6/2016
SGS Reference **SE153761**

SUBMISSION DETAILS

This is to confirm that 30 samples were received on Friday 17/6/2016. Results are expected to be ready by Monday 27/6/2016. Please quote SGS reference SE153761 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Sample counts by matrix	22 Soil, 8 Water	Type of documentation received	COC
Date documentation received	20/6/16@9:01am	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	1.2°C
Sample container provider	Other Lab	Turnaround time requested	Standard
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice	Samples clearly labelled	Yes
Complete documentation received	Yes		

Samples will be held for one month for water samples and two months for soil samples from date of report, unless otherwise instructed.

COMMENTS

59 soil samples have been placed on hold.

To the extent not inconsistent with the other provisions of this document and unless specifically agreed otherwise in writing by SGS, all SGS services are rendered in accordance with the applicable SGS General Conditions of Service accessible at <http://www.sgs.com/en/terms-and-conditions>, as at the date of this document. Attention is drawn to the limitations of liability and to the clauses of indemnification.

CLIENT DETAILS

Client **GOLDER ASSOCIATES PTY LTD**

Project **1648232 - Minto**

SUMMARY OF ANALYSIS

No.	Sample ID	Full 8270 SVOC in Soil	Mercury in Soil	Total Recoverable Metals in Soil/Waste	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	MW1_01 0.04-0.1	170	1	7	10	79	8
002	MW1_08 4.2-4.4	170	1	7	10	79	8
003	MW2_01 0.2-0.3	170	1	7	10	79	8
004	MW2_08 5.1-5.3	170	1	7	10	79	8
005	MW3_02 0.5-0.7	170	1	7	10	79	8
006	MW3_08 3.8-4.0	170	1	7	10	79	8
007	MW3_09 4.0-4.45	170	1	7	10	79	8
008	MW4_01 0.16-0.2	170	1	7	10	79	8
009	MW4_02 0.5-0.6	170	1	7	10	79	8
010	MW4_06 6.5-6.6	170	1	7	10	79	8
011	MW5_02 0.18-0.2	170	1	7	10	79	8
012	MW5_08 5.2-5.3	170	1	7	10	79	8
013	SB1_01 0.19-0.21	170	1	7	10	79	8
014	SB2_01 0.2-0.3	170	1	7	10	79	8
015	SB3_01 0.2-0.3	170	1	7	10	79	8
016	SB4_01 0.2-0.3	170	1	7	10	79	8
017	SB5_02 0.7-0.9	170	1	7	10	79	8
018	SB5_05 2.1-2.3	170	1	7	10	79	8
019	SB6_01 0.18-0.25	170	1	7	10	79	8
020	SB6_03 1.0-1.1	170	1	7	10	79	8
021	SB6_05 2.0-2.1	170	1	7	10	79	8
022	DUPB	170	1	7	10	79	8

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.

The numbers shown in the table indicate the number of results requested in each package.

Please indicate as soon as possible should your request differ from these details .

Testing as per this table shall commence immediately unless the client intervenes with a correction .

CLIENT DETAILS

Client **GOLDER ASSOCIATES PTY LTD**

Project **1648232 - Minto**

SUMMARY OF ANALYSIS

No.	Sample ID	Gravimetric Determination of Asbestos in Soil	Mercury (dissolved) in Water	Moisture Content	Trace Metals (Dissolved) in Water by ICPMS	TRH (Total Recoverable Hydrocarbons) in Water	VOCs in Water	Volatile Petroleum Hydrocarbons in Water
001	MW1_01 0.04-0.1	9	-	1	-	-	-	-
002	MW1_08 4.2-4.4	-	-	1	-	-	-	-
003	MW2_01 0.2-0.3	9	-	1	-	-	-	-
004	MW2_08 5.1-5.3	-	-	1	-	-	-	-
005	MW3_02 0.5-0.7	-	-	1	-	-	-	-
006	MW3_08 3.8-4.0	-	-	1	-	-	-	-
007	MW3_09 4.0-4.45	-	-	1	-	-	-	-
008	MW4_01 0.16-0.2	-	-	1	-	-	-	-
009	MW4_02 0.5-0.6	-	-	1	-	-	-	-
010	MW4_06 6.5-6.6	-	-	1	-	-	-	-
011	MW5_02 0.18-0.2	9	-	1	-	-	-	-
012	MW5_08 5.2-5.3	-	-	1	-	-	-	-
013	SB1_01 0.19-0.21	-	-	1	-	-	-	-
014	SB2_01 0.2-0.3	-	-	1	-	-	-	-
015	SB3_01 0.2-0.3	-	-	1	-	-	-	-
016	SB4_01 0.2-0.3	-	-	1	-	-	-	-
017	SB5_02 0.7-0.9	-	-	1	-	-	-	-
018	SB5_05 2.1-2.3	-	-	1	-	-	-	-
019	SB6_01 0.18-0.25	-	-	1	-	-	-	-
020	SB6_03 1.0-1.1	-	-	1	-	-	-	-
021	SB6_05 2.0-2.1	-	-	1	-	-	-	-
022	DUPB	-	-	1	-	-	-	-
023	FB001	-	1	-	7	9	12	8
024	FB002	-	1	-	7	9	12	8

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.

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Please indicate as soon as possible should your request differ from these details .

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SAMPLE RECEIPT ADVICE

SE153761

CLIENT DETAILS

Client **GOLDER ASSOCIATES PTY LTD**

Project **1648232 - Minto**

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury (dissolved) in Water	Trace Metals (Dissolved) in Water by ICPMS	TRH (Total Recoverable Hydrocarbons) in Water	VOCs in Water	Volatile Petroleum Hydrocarbons in Water
025	FB003	1	7	9	12	8
026	FB10	1	7	9	12	8
027	RB001	1	7	9	12	8
028	RB002	1	7	9	12	8
029	RB003	1	7	9	12	8
030	RB10	1	7	9	12	8

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
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Testing as per this table shall commence immediately unless the client intervenes with a correction .

Sheet 14

SGS Alexandria Environmental

SE153761 COC
Received: 17-Jun-2016

Project No: 1648232		Lab Name: SGS		GOLDER ASSOCIATES PTY LTD												
Site Location: Minto		Quote No:		Phone: (02) 9476 1900												
Sampled By: Natalie Sandy		Order No:		Fax: (02) 9476 1902												
Turnaround Time: 24hrs ☐ 48hrs ☐ 7 days ☐ Standard ☒		Date Requested By:		Project Manager: <u>Natalie Sandy</u>												
Delivery Option: HARD ☐ FAX ☐ EMAIL ☒ BULLETIN BOARD ☐		Job Contact: <u>Natalie Sandy</u>		Phone: (02) 9476 1900												
Report Format: PDF ☒ EXCEL ☐ ENDAT ☐				Analyst: <u>157136/26</u>												
Computer Special Instructions:		ANALYSIS REQUIRED:														
		☐ On field ☐ Asbestos (Bonded, Friable, Free fibres to TRIU/TEV) ☐ PAHs ☐ Phenols ☐ VOCs ☐ SVOCs ☐ OC/POPs ☐ Heavy metals ☐ Please forward to ALS														
TAX ID	SAMPLE ID	SAMPLE DEPTH	DATE	TYPE	MATRIX	NO CONTAINERS	Level of Contamination (Low/High/Unknown)	On field	Asbestos (Bonded, Friable, Free fibres to TRIU/TEV)	PAHs	Phenols	VOCs	SVOCs	OC/POPs	Heavy metals	Please forward to ALS
13	SB1_01	0.19-0.21	9/06/2016	DS	Soil	3	U		X			X	X	X		
	SB1_02	0.5-0.6	9/06/2016	DS	Soil	1	U	X								
	SB1_03	1.0-1.1	9/06/2016	DS	Soil	1	U	X								
	SB1_04	1.5-1.6	9/06/2016	DS	Soil	1	U	X								
	SB1_05	1.8-1.9	9/06/2016	DS	Soil	1	U	X								
14	SB2_01	0.2-0.3	9/06/2016	DS	Soil	3	U		X			X	X	X		
	SB2_02	0.4-0.5	9/06/2016	DS	Soil	1	U	X								
	SB2_03	0.9-1.0	9/06/2016	DS	Soil	1	U	X								
	SB2_04	1.2-1.3	9/06/2016	DS	Soil	1	U	X								
	SB2_05	1.9-2.0	9/06/2016	DS	Soil	1	U	X								
15	SB3_01	0.2-0.3	9/06/2016	DS	Soil	3	U		X			X	X	X		
	SB3_02	0.5-0.6	9/06/2016	DS	Soil	1	U	X								
	SB3_03	0.9-1.0	9/06/2016	DS	Soil	1	U	X								
	SB3_04	1.4-1.5	9/06/2016	DS	Soil	1	U	X								
	SB3_05	1.9-2.0	9/06/2016	DS	Soil	1	U	X								
16	SB4_01	0.2-0.3	9/06/2016	DS	Soil	3	U		X			X	X	X		
	SB4_02	0.4-0.5	9/06/2016	DS	Soil	1	U	X								
	SB5_01	0.05-0.1	8/06/2016	DS	Soil	3	U	X								
17	SB5_02	0.7-0.9	8/06/2016	DS	Soil	1	U	X				X	X	X		
	SB5_03	1.1-1.4	8/06/2016	DS	Soil	1	U	X								
	SB5_04	1.6-1.7	8/06/2016	DS	Soil	1	U	X								
18	SB5_05	2.1-2.3	8/06/2016	DS	Soil	1	U		X			X	X	X		
19	SB6_01	0.18-0.25	7/06/2016	DS	Soil	3	U		X			X	X	X		
	SB6_02	0.5-0.6	7/06/2016	DS	Soil	1	U	X								
20	SB6_03	1.0-1.1	7/06/2016	DS	Soil	1	U		X			X	X	X		
	SB6_04	1.5-1.6	7/06/2016	DS	Soil	1	U	X								
21	SB6_05	2.0-2.1	7/06/2016	DS	Soil	1	U		X			X	X	X		
	DUPA				Soil	1	U	X								
22	TRIPA				Soil	1	U	X								
	DUPB				Soil	1	U		X			X	X	X		
	TRIPB				Soil	1	U		X			X	X	X	X	
	DUPC				Soil	1	U	X								
	TRIPC				Soil	1	U	X								
	DUPD				Soil	1	U	X								
	TRIPD				Soil	1	U	X								
	DUPE				Soil	1	U	X								
	TRIPE				Soil	1	U	X								
	DUPF				Soil	1	U	X								
	TRIPF				Soil	1	U	X								
	DUPZ				Soil	1	U	X								
	TRIPZ				Soil	1	U	X								
23	FB001		7/06/2016		Water	3	U	X	X					X		
24	FB002		8/06/2016		Water	3	U	X	X					X		
25	FB003		9/06/2016		Water	3	U	X	X					X		
26	FB10		14/05/2016		Water	3	U	X	X					X		
27	RB001		7/06/2016		Water	4	U	X	X					X		
28	RB002		8/06/2016		Water	4	U	X	X					X		
29	RB003		9/06/2016		Water	4	U	X	X					X		
30	RB10		14/05/2016		Water	4	U	X	X					X		

SAMPLE MATRIX: Soil/Sediment/Water		SAMPLE TYPE: Composite Element (Dissolved/Total) (1:1) (1:10) (1:100) (1:1000)		HIGH CONCENTRATION: (1:10) (1:100) (1:1000) (1:10000)	
RECEIVED BY	SIGNATURE	COMPANY	DATE	TIME	Method of Storage
RECEIVED BY	<u>A. Colisho</u>	<u>SGS</u>	<u>17/16</u>	<u>11:00</u>	
RECEIVED BY					
RECEIVED BY					
RECEIVED BY					
RECEIVED BY					

To Be Filled Out By Analysing Laboratory		LAB BATCH NUMBER	
Security Seal	Chilled	Room	Substrate
Stable Container	Flame		
Cold Box	Ambient		



STATEMENT OF QA/QC PERFORMANCE

SE153761 R0

CLIENT DETAILS

Contact Ben Seaford
Client GOLDER ASSOCIATES PTY LTD
Address PO BOX 1302
CROWS NEST NSW 1585

Telephone 02 9478 3900
Facsimile 02 9478 3901
Email bseaford@golder.com.au

Project **1648232 - Minto**
Order Number (Not specified)
Samples 30

LABORATORY DETAILS

Manager Huong Crawford
Laboratory SGS Alexandria Environmental
Address Unit 16, 33 Maddox St
Alexandria NSW 2015

Telephone +61 2 8594 0400
Facsimile +61 2 8594 0499
Email au.environmental.sydney@sgs.com

SGS Reference **SE153761 R0**
Date Received 17 Jun 2016
Date Reported 29 Jun 2016

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document and was supplied by the Client.

This QA/QC Statement must be read in conjunction with the referenced Analytical Report.

The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	TRH (Total Recoverable Hydrocarbons) in Water	6 items
	VOCs in Water	6 items
	Volatile Petroleum Hydrocarbons in Water	6 items

SAMPLE SUMMARY

Sample counts by matrix	22 Soil, 8 Water	Type of documentation received	COC
Date documentation received	20/6/16@9:01am	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	1.2°C
Sample container provider	Other Lab	Turnaround time requested	Standard
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice	Samples clearly labelled	Yes
Complete documentation received	Yes		

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Full 8270 SVOC in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
MW1_01 0.04-0.1	SE153761.001	LB103985	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	28 Jun 2016
MW1_08 4.2-4.4	SE153761.002	LB103985	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	28 Jun 2016
MW2_01 0.2-0.3	SE153761.003	LB103985	08 Jun 2016	17 Jun 2016	22 Jun 2016	21 Jun 2016	31 Jul 2016	28 Jun 2016
MW2_08 5.1-5.3	SE153761.004	LB103985	08 Jun 2016	17 Jun 2016	22 Jun 2016	21 Jun 2016	31 Jul 2016	28 Jun 2016
MW3_02 0.5-0.7	SE153761.005	LB103985	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	28 Jun 2016
MW3_08 3.8-4.0	SE153761.006	LB103985	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	28 Jun 2016
MW3_09 4.0-4.45	SE153761.007	LB103985	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	28 Jun 2016
MW4_01 0.16-0.2	SE153761.008	LB103985	14 Jun 2016	17 Jun 2016	28 Jun 2016	21 Jun 2016	31 Jul 2016	28 Jun 2016
MW4_02 0.5-0.6	SE153761.009	LB103985	14 Jun 2016	17 Jun 2016	28 Jun 2016	21 Jun 2016	31 Jul 2016	28 Jun 2016
MW4_06 6.5-6.6	SE153761.010	LB103985	14 Jun 2016	17 Jun 2016	28 Jun 2016	21 Jun 2016	31 Jul 2016	28 Jun 2016
MW5_02 0.18-0.2	SE153761.011	LB103985	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	28 Jun 2016
MW5_08 5.2-5.3	SE153761.012	LB103985	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	28 Jun 2016
SB1_01 0.19-0.21	SE153761.013	LB103985	09 Jun 2016	17 Jun 2016	23 Jun 2016	21 Jun 2016	31 Jul 2016	28 Jun 2016
SB2_01 0.2-0.3	SE153761.014	LB103985	09 Jun 2016	17 Jun 2016	23 Jun 2016	21 Jun 2016	31 Jul 2016	28 Jun 2016
SB3_01 0.2-0.3	SE153761.015	LB103985	09 Jun 2016	17 Jun 2016	23 Jun 2016	21 Jun 2016	31 Jul 2016	28 Jun 2016
SB4_01 0.2-0.3	SE153761.016	LB103985	09 Jun 2016	17 Jun 2016	23 Jun 2016	21 Jun 2016	31 Jul 2016	28 Jun 2016
SB5_02 0.7-0.9	SE153761.017	LB103985	08 Jun 2016	17 Jun 2016	22 Jun 2016	21 Jun 2016	31 Jul 2016	28 Jun 2016
SB5_05 2.1-2.3	SE153761.018	LB103985	08 Jun 2016	17 Jun 2016	22 Jun 2016	21 Jun 2016	31 Jul 2016	28 Jun 2016
SB6_01 0.18-0.25	SE153761.019	LB103985	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	28 Jun 2016
SB6_03 1.0-1.1	SE153761.020	LB103985	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	28 Jun 2016
SB6_05 2.0-2.1	SE153761.021	LB103985	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	28 Jun 2016
DUPB	SE153761.022	LB103985	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	28 Jun 2016

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
MW1_01 0.04-0.1	SE153761.001	LB104050	07 Jun 2016	17 Jun 2016	04 Dec 2016	24 Jun 2016	04 Dec 2016	27 Jun 2016
MW2_01 0.2-0.3	SE153761.003	LB104050	08 Jun 2016	17 Jun 2016	05 Dec 2016	24 Jun 2016	05 Dec 2016	27 Jun 2016
MW5_02 0.18-0.2	SE153761.011	LB104050	07 Jun 2016	17 Jun 2016	04 Dec 2016	24 Jun 2016	04 Dec 2016	27 Jun 2016

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311/AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
FB001	SE153761.023	LB104021	07 Jun 2016	17 Jun 2016	05 Jul 2016	24 Jun 2016	05 Jul 2016	27 Jun 2016
FB002	SE153761.024	LB104021	08 Jun 2016	17 Jun 2016	06 Jul 2016	24 Jun 2016	06 Jul 2016	27 Jun 2016
FB003	SE153761.025	LB104021	09 Jun 2016	17 Jun 2016	07 Jul 2016	24 Jun 2016	07 Jul 2016	27 Jun 2016
FB10	SE153761.026	LB104021	14 Jun 2016	17 Jun 2016	12 Jul 2016	24 Jun 2016	12 Jul 2016	27 Jun 2016
RB001	SE153761.027	LB104021	07 Jun 2016	17 Jun 2016	05 Jul 2016	24 Jun 2016	05 Jul 2016	27 Jun 2016
RB002	SE153761.028	LB104021	08 Jun 2016	17 Jun 2016	06 Jul 2016	24 Jun 2016	06 Jul 2016	27 Jun 2016
RB003	SE153761.029	LB104021	09 Jun 2016	17 Jun 2016	07 Jul 2016	24 Jun 2016	07 Jul 2016	27 Jun 2016
RB10	SE153761.030	LB104021	14 Jun 2016	17 Jun 2016	12 Jul 2016	24 Jun 2016	12 Jul 2016	27 Jun 2016

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
MW1_01 0.04-0.1	SE153761.001	LB104030	07 Jun 2016	17 Jun 2016	05 Jul 2016	24 Jun 2016	05 Jul 2016	27 Jun 2016
MW1_08 4.2-4.4	SE153761.002	LB104030	07 Jun 2016	17 Jun 2016	05 Jul 2016	24 Jun 2016	05 Jul 2016	27 Jun 2016
MW2_01 0.2-0.3	SE153761.003	LB104030	08 Jun 2016	17 Jun 2016	06 Jul 2016	24 Jun 2016	06 Jul 2016	27 Jun 2016
MW2_08 5.1-5.3	SE153761.004	LB104030	08 Jun 2016	17 Jun 2016	06 Jul 2016	24 Jun 2016	06 Jul 2016	27 Jun 2016
MW3_02 0.5-0.7	SE153761.005	LB104030	07 Jun 2016	17 Jun 2016	05 Jul 2016	24 Jun 2016	05 Jul 2016	27 Jun 2016
MW3_08 3.8-4.0	SE153761.006	LB104030	07 Jun 2016	17 Jun 2016	05 Jul 2016	24 Jun 2016	05 Jul 2016	27 Jun 2016
MW3_09 4.0-4.45	SE153761.007	LB104030	07 Jun 2016	17 Jun 2016	05 Jul 2016	24 Jun 2016	05 Jul 2016	27 Jun 2016
MW4_01 0.16-0.2	SE153761.008	LB104030	14 Jun 2016	17 Jun 2016	12 Jul 2016	24 Jun 2016	12 Jul 2016	27 Jun 2016
MW4_02 0.5-0.6	SE153761.009	LB104031	14 Jun 2016	17 Jun 2016	12 Jul 2016	24 Jun 2016	12 Jul 2016	27 Jun 2016
MW4_06 6.5-6.6	SE153761.010	LB104031	14 Jun 2016	17 Jun 2016	12 Jul 2016	24 Jun 2016	12 Jul 2016	27 Jun 2016
MW5_02 0.18-0.2	SE153761.011	LB104031	07 Jun 2016	17 Jun 2016	05 Jul 2016	24 Jun 2016	05 Jul 2016	27 Jun 2016
MW5_08 5.2-5.3	SE153761.012	LB104031	07 Jun 2016	17 Jun 2016	05 Jul 2016	24 Jun 2016	05 Jul 2016	27 Jun 2016
SB1_01 0.19-0.21	SE153761.013	LB104031	09 Jun 2016	17 Jun 2016	07 Jul 2016	24 Jun 2016	07 Jul 2016	27 Jun 2016
SB2_01 0.2-0.3	SE153761.014	LB104031	09 Jun 2016	17 Jun 2016	07 Jul 2016	24 Jun 2016	07 Jul 2016	27 Jun 2016
SB3_01 0.2-0.3	SE153761.015	LB104031	09 Jun 2016	17 Jun 2016	07 Jul 2016	24 Jun 2016	07 Jul 2016	27 Jun 2016
SB4_01 0.2-0.3	SE153761.016	LB104031	09 Jun 2016	17 Jun 2016	07 Jul 2016	24 Jun 2016	07 Jul 2016	27 Jun 2016
SB5_02 0.7-0.9	SE153761.017	LB104031	08 Jun 2016	17 Jun 2016	06 Jul 2016	24 Jun 2016	06 Jul 2016	27 Jun 2016
SB5_05 2.1-2.3	SE153761.018	LB104031	08 Jun 2016	17 Jun 2016	06 Jul 2016	24 Jun 2016	06 Jul 2016	27 Jun 2016
SB6_01 0.18-0.25	SE153761.019	LB104031	07 Jun 2016	17 Jun 2016	05 Jul 2016	24 Jun 2016	05 Jul 2016	27 Jun 2016

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Mercury in Soil (continued)

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
SB6_03 1.0-1.1	SE153761.020	LB104031	07 Jun 2016	17 Jun 2016	05 Jul 2016	24 Jun 2016	05 Jul 2016	27 Jun 2016
SB6_05 2.0-2.1	SE153761.021	LB104031	07 Jun 2016	17 Jun 2016	05 Jul 2016	24 Jun 2016	05 Jul 2016	27 Jun 2016
DUPB	SE153761.022	LB104031	07 Jun 2016	17 Jun 2016	05 Jul 2016	24 Jun 2016	05 Jul 2016	27 Jun 2016

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
MW1_01 0.04-0.1	SE153761.001	LB103901	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	26 Jun 2016	25 Jun 2016
MW1_08 4.2-4.4	SE153761.002	LB103901	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	26 Jun 2016	25 Jun 2016
MW2_01 0.2-0.3	SE153761.003	LB103901	08 Jun 2016	17 Jun 2016	22 Jun 2016	21 Jun 2016	26 Jun 2016	25 Jun 2016
MW2_08 5.1-5.3	SE153761.004	LB103901	08 Jun 2016	17 Jun 2016	22 Jun 2016	21 Jun 2016	26 Jun 2016	25 Jun 2016
MW3_02 0.5-0.7	SE153761.005	LB103901	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	26 Jun 2016	25 Jun 2016
MW3_08 3.8-4.0	SE153761.006	LB103901	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	26 Jun 2016	25 Jun 2016
MW3_09 4.0-4.45	SE153761.007	LB103901	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	26 Jun 2016	25 Jun 2016
MW4_01 0.16-0.2	SE153761.008	LB103901	14 Jun 2016	17 Jun 2016	28 Jun 2016	21 Jun 2016	26 Jun 2016	25 Jun 2016
MW4_02 0.5-0.6	SE153761.009	LB103901	14 Jun 2016	17 Jun 2016	28 Jun 2016	21 Jun 2016	26 Jun 2016	25 Jun 2016
MW4_06 6.5-6.6	SE153761.010	LB103901	14 Jun 2016	17 Jun 2016	28 Jun 2016	21 Jun 2016	26 Jun 2016	25 Jun 2016
MW5_02 0.18-0.2	SE153761.011	LB103901	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	26 Jun 2016	25 Jun 2016
MW5_08 5.2-5.3	SE153761.012	LB103901	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	26 Jun 2016	25 Jun 2016
SB1_01 0.19-0.21	SE153761.013	LB103901	09 Jun 2016	17 Jun 2016	23 Jun 2016	21 Jun 2016	26 Jun 2016	25 Jun 2016
SB2_01 0.2-0.3	SE153761.014	LB103901	09 Jun 2016	17 Jun 2016	23 Jun 2016	21 Jun 2016	26 Jun 2016	25 Jun 2016
SB3_01 0.2-0.3	SE153761.015	LB103901	09 Jun 2016	17 Jun 2016	23 Jun 2016	21 Jun 2016	26 Jun 2016	25 Jun 2016
SB4_01 0.2-0.3	SE153761.016	LB103901	09 Jun 2016	17 Jun 2016	23 Jun 2016	21 Jun 2016	26 Jun 2016	25 Jun 2016
SB5_02 0.7-0.9	SE153761.017	LB103901	08 Jun 2016	17 Jun 2016	22 Jun 2016	21 Jun 2016	26 Jun 2016	25 Jun 2016
SB5_05 2.1-2.3	SE153761.018	LB103901	08 Jun 2016	17 Jun 2016	22 Jun 2016	21 Jun 2016	26 Jun 2016	25 Jun 2016
SB6_01 0.18-0.25	SE153761.019	LB103901	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	26 Jun 2016	25 Jun 2016
SB6_03 1.0-1.1	SE153761.020	LB103901	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	26 Jun 2016	25 Jun 2016
SB6_05 2.0-2.1	SE153761.021	LB103901	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	26 Jun 2016	25 Jun 2016
DUPB	SE153761.022	LB103901	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	26 Jun 2016	25 Jun 2016

Total Recoverable Metals in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
MW1_01 0.04-0.1	SE153761.001	LB104004	07 Jun 2016	17 Jun 2016	04 Dec 2016	24 Jun 2016	04 Dec 2016	27 Jun 2016
MW1_08 4.2-4.4	SE153761.002	LB104004	07 Jun 2016	17 Jun 2016	04 Dec 2016	24 Jun 2016	04 Dec 2016	27 Jun 2016
MW2_01 0.2-0.3	SE153761.003	LB104004	08 Jun 2016	17 Jun 2016	05 Dec 2016	24 Jun 2016	05 Dec 2016	27 Jun 2016
MW2_08 5.1-5.3	SE153761.004	LB104004	08 Jun 2016	17 Jun 2016	05 Dec 2016	24 Jun 2016	05 Dec 2016	27 Jun 2016
MW3_02 0.5-0.7	SE153761.005	LB104004	07 Jun 2016	17 Jun 2016	04 Dec 2016	24 Jun 2016	04 Dec 2016	27 Jun 2016
MW3_08 3.8-4.0	SE153761.006	LB104004	07 Jun 2016	17 Jun 2016	04 Dec 2016	24 Jun 2016	04 Dec 2016	27 Jun 2016
MW3_09 4.0-4.45	SE153761.007	LB104004	07 Jun 2016	17 Jun 2016	04 Dec 2016	24 Jun 2016	04 Dec 2016	27 Jun 2016
MW4_01 0.16-0.2	SE153761.008	LB104004	14 Jun 2016	17 Jun 2016	11 Dec 2016	24 Jun 2016	11 Dec 2016	27 Jun 2016
MW4_02 0.5-0.6	SE153761.009	LB104005	14 Jun 2016	17 Jun 2016	11 Dec 2016	24 Jun 2016	11 Dec 2016	27 Jun 2016
MW4_06 6.5-6.6	SE153761.010	LB104005	14 Jun 2016	17 Jun 2016	11 Dec 2016	24 Jun 2016	11 Dec 2016	27 Jun 2016
MW5_02 0.18-0.2	SE153761.011	LB104005	07 Jun 2016	17 Jun 2016	04 Dec 2016	24 Jun 2016	04 Dec 2016	27 Jun 2016
MW5_08 5.2-5.3	SE153761.012	LB104005	07 Jun 2016	17 Jun 2016	04 Dec 2016	24 Jun 2016	04 Dec 2016	27 Jun 2016
SB1_01 0.19-0.21	SE153761.013	LB104005	09 Jun 2016	17 Jun 2016	06 Dec 2016	24 Jun 2016	06 Dec 2016	27 Jun 2016
SB2_01 0.2-0.3	SE153761.014	LB104005	09 Jun 2016	17 Jun 2016	06 Dec 2016	24 Jun 2016	06 Dec 2016	27 Jun 2016
SB3_01 0.2-0.3	SE153761.015	LB104005	09 Jun 2016	17 Jun 2016	06 Dec 2016	24 Jun 2016	06 Dec 2016	27 Jun 2016
SB4_01 0.2-0.3	SE153761.016	LB104005	09 Jun 2016	17 Jun 2016	06 Dec 2016	24 Jun 2016	06 Dec 2016	27 Jun 2016
SB5_02 0.7-0.9	SE153761.017	LB104005	08 Jun 2016	17 Jun 2016	05 Dec 2016	24 Jun 2016	05 Dec 2016	27 Jun 2016
SB5_05 2.1-2.3	SE153761.018	LB104005	08 Jun 2016	17 Jun 2016	05 Dec 2016	24 Jun 2016	05 Dec 2016	27 Jun 2016
SB6_01 0.18-0.25	SE153761.019	LB104005	07 Jun 2016	17 Jun 2016	04 Dec 2016	24 Jun 2016	04 Dec 2016	27 Jun 2016
SB6_03 1.0-1.1	SE153761.020	LB104005	07 Jun 2016	17 Jun 2016	04 Dec 2016	24 Jun 2016	04 Dec 2016	27 Jun 2016
SB6_05 2.0-2.1	SE153761.021	LB104005	07 Jun 2016	17 Jun 2016	04 Dec 2016	24 Jun 2016	04 Dec 2016	27 Jun 2016
DUPB	SE153761.022	LB104005	07 Jun 2016	17 Jun 2016	04 Dec 2016	24 Jun 2016	04 Dec 2016	27 Jun 2016

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
FB001	SE153761.023	LB103735	07 Jun 2016	17 Jun 2016	04 Dec 2016	21 Jun 2016	04 Dec 2016	22 Jun 2016
FB002	SE153761.024	LB103735	08 Jun 2016	17 Jun 2016	05 Dec 2016	21 Jun 2016	05 Dec 2016	22 Jun 2016
FB003	SE153761.025	LB103735	09 Jun 2016	17 Jun 2016	06 Dec 2016	21 Jun 2016	06 Dec 2016	22 Jun 2016
FB10	SE153761.026	LB103735	14 Jun 2016	17 Jun 2016	11 Dec 2016	21 Jun 2016	11 Dec 2016	22 Jun 2016
RB001	SE153761.027	LB103735	07 Jun 2016	17 Jun 2016	04 Dec 2016	21 Jun 2016	04 Dec 2016	22 Jun 2016

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Trace Metals (Dissolved) in Water by ICPMS (continued)

Method: ME-(AU)-ENVJAN318

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
RB002	SE153761.028	LB103735	08 Jun 2016	17 Jun 2016	05 Dec 2016	21 Jun 2016	05 Dec 2016	22 Jun 2016
RB003	SE153761.029	LB103735	09 Jun 2016	17 Jun 2016	06 Dec 2016	21 Jun 2016	06 Dec 2016	22 Jun 2016
RB10	SE153761.030	LB103735	14 Jun 2016	17 Jun 2016	11 Dec 2016	21 Jun 2016	11 Dec 2016	22 Jun 2016

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-ENVJAN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
MW1_01 0.04-0.1	SE153761.001	LB103985	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW1_08 4.2-4.4	SE153761.002	LB103985	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW2_01 0.2-0.3	SE153761.003	LB103985	08 Jun 2016	17 Jun 2016	22 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW2_08 5.1-5.3	SE153761.004	LB103985	08 Jun 2016	17 Jun 2016	22 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW3_02 0.5-0.7	SE153761.005	LB103985	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW3_08 3.8-4.0	SE153761.006	LB103985	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW3_09 4.0-4.45	SE153761.007	LB103985	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW4_01 0.16-0.2	SE153761.008	LB103985	14 Jun 2016	17 Jun 2016	28 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW4_02 0.5-0.6	SE153761.009	LB103985	14 Jun 2016	17 Jun 2016	28 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW4_06 6.5-6.6	SE153761.010	LB103985	14 Jun 2016	17 Jun 2016	28 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW5_02 0.18-0.2	SE153761.011	LB103985	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW5_08 5.2-5.3	SE153761.012	LB103985	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
SB1_01 0.19-0.21	SE153761.013	LB103985	09 Jun 2016	17 Jun 2016	23 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
SB2_01 0.2-0.3	SE153761.014	LB103985	09 Jun 2016	17 Jun 2016	23 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
SB3_01 0.2-0.3	SE153761.015	LB103985	09 Jun 2016	17 Jun 2016	23 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
SB4_01 0.2-0.3	SE153761.016	LB103985	09 Jun 2016	17 Jun 2016	23 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
SB5_02 0.7-0.9	SE153761.017	LB103985	08 Jun 2016	17 Jun 2016	22 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
SB5_05 2.1-2.3	SE153761.018	LB103985	08 Jun 2016	17 Jun 2016	22 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
SB6_01 0.18-0.25	SE153761.019	LB103985	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
SB6_03 1.0-1.1	SE153761.020	LB103985	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
SB6_05 2.0-2.1	SE153761.021	LB103985	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
DUPB	SE153761.022	LB103985	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-ENVJAN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
FB001	SE153761.023	LB103791	07 Jun 2016	17 Jun 2016	14 Jun 2016	21 Jun 2016†	31 Jul 2016	23 Jun 2016
FB002	SE153761.024	LB103791	08 Jun 2016	17 Jun 2016	15 Jun 2016	21 Jun 2016†	31 Jul 2016	23 Jun 2016
FB003	SE153761.025	LB103791	09 Jun 2016	17 Jun 2016	16 Jun 2016	21 Jun 2016†	31 Jul 2016	23 Jun 2016
FB10	SE153761.026	LB103791	14 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	23 Jun 2016
RB001	SE153761.027	LB103791	07 Jun 2016	17 Jun 2016	14 Jun 2016	21 Jun 2016†	31 Jul 2016	23 Jun 2016
RB002	SE153761.028	LB103791	08 Jun 2016	17 Jun 2016	15 Jun 2016	21 Jun 2016†	31 Jul 2016	23 Jun 2016
RB003	SE153761.029	LB103791	09 Jun 2016	17 Jun 2016	16 Jun 2016	21 Jun 2016†	31 Jul 2016	23 Jun 2016
RB10	SE153761.030	LB103791	14 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	23 Jun 2016

VOC's in Soil

Method: ME-(AU)-ENVJAN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
MW1_01 0.04-0.1	SE153761.001	LB103874	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW1_08 4.2-4.4	SE153761.002	LB103874	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW2_01 0.2-0.3	SE153761.003	LB103874	08 Jun 2016	17 Jun 2016	22 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW2_08 5.1-5.3	SE153761.004	LB103874	08 Jun 2016	17 Jun 2016	22 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW3_02 0.5-0.7	SE153761.005	LB103874	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW3_08 3.8-4.0	SE153761.006	LB103874	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW3_09 4.0-4.45	SE153761.007	LB103874	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW4_01 0.16-0.2	SE153761.008	LB103874	14 Jun 2016	17 Jun 2016	28 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW4_02 0.5-0.6	SE153761.009	LB103874	14 Jun 2016	17 Jun 2016	28 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW4_06 6.5-6.6	SE153761.010	LB103874	14 Jun 2016	17 Jun 2016	28 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW5_02 0.18-0.2	SE153761.011	LB103874	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW5_08 5.2-5.3	SE153761.012	LB103874	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
SB1_01 0.19-0.21	SE153761.013	LB103874	09 Jun 2016	17 Jun 2016	23 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
SB2_01 0.2-0.3	SE153761.014	LB103874	09 Jun 2016	17 Jun 2016	23 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
SB3_01 0.2-0.3	SE153761.015	LB103874	09 Jun 2016	17 Jun 2016	23 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
SB4_01 0.2-0.3	SE153761.016	LB103874	09 Jun 2016	17 Jun 2016	23 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
SB5_02 0.7-0.9	SE153761.017	LB103875	08 Jun 2016	17 Jun 2016	22 Jun 2016	21 Jun 2016	31 Jul 2016	28 Jun 2016
SB5_05 2.1-2.3	SE153761.018	LB103875	08 Jun 2016	17 Jun 2016	22 Jun 2016	21 Jun 2016	31 Jul 2016	28 Jun 2016
SB6_01 0.18-0.25	SE153761.019	LB103875	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	28 Jun 2016

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

VOC's in Soil (continued)

Method: ME-(AU)-ENVJAN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
SB6_03 1.0-1.1	SE153761.020	LB103875	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	28 Jun 2016
SB6_05 2.0-2.1	SE153761.021	LB103875	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	28 Jun 2016
DUPB	SE153761.022	LB103875	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	28 Jun 2016

VOCs in Water

Method: ME-(AU)-ENVJAN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
FB001	SE153761.023	LB103877	07 Jun 2016	17 Jun 2016	14 Jun 2016	20 Jun 2016†	30 Jul 2016	27 Jun 2016
FB002	SE153761.024	LB103877	08 Jun 2016	17 Jun 2016	15 Jun 2016	20 Jun 2016†	30 Jul 2016	27 Jun 2016
FB003	SE153761.025	LB103877	09 Jun 2016	17 Jun 2016	16 Jun 2016	20 Jun 2016†	30 Jul 2016	27 Jun 2016
FB10	SE153761.026	LB103877	14 Jun 2016	17 Jun 2016	21 Jun 2016	20 Jun 2016	30 Jul 2016	27 Jun 2016
RB001	SE153761.027	LB103877	07 Jun 2016	17 Jun 2016	14 Jun 2016	20 Jun 2016†	30 Jul 2016	27 Jun 2016
RB002	SE153761.028	LB103877	08 Jun 2016	17 Jun 2016	15 Jun 2016	20 Jun 2016†	30 Jul 2016	27 Jun 2016
RB003	SE153761.029	LB103877	09 Jun 2016	17 Jun 2016	16 Jun 2016	20 Jun 2016†	30 Jul 2016	27 Jun 2016
RB10	SE153761.030	LB103877	14 Jun 2016	17 Jun 2016	21 Jun 2016	20 Jun 2016	30 Jul 2016	27 Jun 2016

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-ENVJAN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
MW1_01 0.04-0.1	SE153761.001	LB103874	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW1_08 4.2-4.4	SE153761.002	LB103874	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW2_01 0.2-0.3	SE153761.003	LB103874	08 Jun 2016	17 Jun 2016	22 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW2_08 5.1-5.3	SE153761.004	LB103874	08 Jun 2016	17 Jun 2016	22 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW3_02 0.5-0.7	SE153761.005	LB103874	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW3_08 3.8-4.0	SE153761.006	LB103874	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW3_09 4.0-4.45	SE153761.007	LB103874	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW4_01 0.16-0.2	SE153761.008	LB103874	14 Jun 2016	17 Jun 2016	28 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW4_02 0.5-0.6	SE153761.009	LB103874	14 Jun 2016	17 Jun 2016	28 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW4_06 6.5-6.6	SE153761.010	LB103874	14 Jun 2016	17 Jun 2016	28 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW5_02 0.18-0.2	SE153761.011	LB103874	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
MW5_08 5.2-5.3	SE153761.012	LB103874	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
SB1_01 0.19-0.21	SE153761.013	LB103874	09 Jun 2016	17 Jun 2016	23 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
SB2_01 0.2-0.3	SE153761.014	LB103874	09 Jun 2016	17 Jun 2016	23 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
SB3_01 0.2-0.3	SE153761.015	LB103874	09 Jun 2016	17 Jun 2016	23 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
SB4_01 0.2-0.3	SE153761.016	LB103874	09 Jun 2016	17 Jun 2016	23 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
SB5_02 0.7-0.9	SE153761.017	LB103875	08 Jun 2016	17 Jun 2016	22 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
SB5_05 2.1-2.3	SE153761.018	LB103875	08 Jun 2016	17 Jun 2016	22 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
SB6_01 0.18-0.25	SE153761.019	LB103875	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
SB6_03 1.0-1.1	SE153761.020	LB103875	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	28 Jun 2016
SB6_05 2.0-2.1	SE153761.021	LB103875	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016
DUPB	SE153761.022	LB103875	07 Jun 2016	17 Jun 2016	21 Jun 2016	21 Jun 2016	31 Jul 2016	27 Jun 2016

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-ENVJAN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
FB001	SE153761.023	LB103877	07 Jun 2016	17 Jun 2016	14 Jun 2016	20 Jun 2016†	30 Jul 2016	27 Jun 2016
FB002	SE153761.024	LB103877	08 Jun 2016	17 Jun 2016	15 Jun 2016	20 Jun 2016†	30 Jul 2016	27 Jun 2016
FB003	SE153761.025	LB103877	09 Jun 2016	17 Jun 2016	16 Jun 2016	20 Jun 2016†	30 Jul 2016	27 Jun 2016
FB10	SE153761.026	LB103877	14 Jun 2016	17 Jun 2016	21 Jun 2016	20 Jun 2016	30 Jul 2016	27 Jun 2016
RB001	SE153761.027	LB103877	07 Jun 2016	17 Jun 2016	14 Jun 2016	20 Jun 2016†	30 Jul 2016	27 Jun 2016
RB002	SE153761.028	LB103877	08 Jun 2016	17 Jun 2016	15 Jun 2016	20 Jun 2016†	30 Jul 2016	27 Jun 2016
RB003	SE153761.029	LB103877	09 Jun 2016	17 Jun 2016	16 Jun 2016	20 Jun 2016†	30 Jul 2016	27 Jun 2016
RB10	SE153761.030	LB103877	14 Jun 2016	17 Jun 2016	21 Jun 2016	20 Jun 2016	30 Jul 2016	27 Jun 2016

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Full 8270 SVOC in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-tribromophenol (Surrogate)	MW1_01 0.04-0.1	SE153761.001	%	70 - 130%	74
	MW1_08 4.2-4.4	SE153761.002	%	70 - 130%	79
	MW2_01 0.2-0.3	SE153761.003	%	70 - 130%	70
	MW2_08 5.1-5.3	SE153761.004	%	70 - 130%	72
	MW3_02 0.5-0.7	SE153761.005	%	70 - 130%	72
	MW3_08 3.8-4.0	SE153761.006	%	70 - 130%	71
	MW3_09 4.0-4.45	SE153761.007	%	70 - 130%	70
	MW4_01 0.16-0.2	SE153761.008	%	70 - 130%	75
	MW4_02 0.5-0.6	SE153761.009	%	70 - 130%	72
	MW4_06 6.5-6.6	SE153761.010	%	70 - 130%	74
	MW5_02 0.18-0.2	SE153761.011	%	70 - 130%	71
	MW5_08 5.2-5.3	SE153761.012	%	70 - 130%	74
	SB1_01 0.19-0.21	SE153761.013	%	70 - 130%	73
	SB2_01 0.2-0.3	SE153761.014	%	70 - 130%	70
	SB3_01 0.2-0.3	SE153761.015	%	70 - 130%	70
	SB4_01 0.2-0.3	SE153761.016	%	70 - 130%	70
	SB5_02 0.7-0.9	SE153761.017	%	70 - 130%	71
	SB5_05 2.1-2.3	SE153761.018	%	70 - 130%	71
	SB6_01 0.18-0.25	SE153761.019	%	70 - 130%	72
	SB6_03 1.0-1.1	SE153761.020	%	70 - 130%	71
	SB6_05 2.0-2.1	SE153761.021	%	70 - 130%	77
	DUPB	SE153761.022	%	70 - 130%	73
2-fluorobiphenyl (Surrogate)	MW1_01 0.04-0.1	SE153761.001	%	70 - 130%	74
	MW1_08 4.2-4.4	SE153761.002	%	70 - 130%	72
	MW2_01 0.2-0.3	SE153761.003	%	70 - 130%	70
	MW2_08 5.1-5.3	SE153761.004	%	70 - 130%	70
	MW3_02 0.5-0.7	SE153761.005	%	70 - 130%	78
	MW3_08 3.8-4.0	SE153761.006	%	70 - 130%	70
	MW3_09 4.0-4.45	SE153761.007	%	70 - 130%	70
	MW4_01 0.16-0.2	SE153761.008	%	70 - 130%	70
	MW4_02 0.5-0.6	SE153761.009	%	70 - 130%	70
	MW4_06 6.5-6.6	SE153761.010	%	70 - 130%	74
	MW5_02 0.18-0.2	SE153761.011	%	70 - 130%	70
	MW5_08 5.2-5.3	SE153761.012	%	70 - 130%	70
	SB1_01 0.19-0.21	SE153761.013	%	70 - 130%	82
	SB2_01 0.2-0.3	SE153761.014	%	70 - 130%	78
	SB3_01 0.2-0.3	SE153761.015	%	70 - 130%	74
	SB4_01 0.2-0.3	SE153761.016	%	70 - 130%	74
	SB5_02 0.7-0.9	SE153761.017	%	70 - 130%	74
	SB5_05 2.1-2.3	SE153761.018	%	70 - 130%	74
	SB6_01 0.18-0.25	SE153761.019	%	70 - 130%	84
	SB6_03 1.0-1.1	SE153761.020	%	70 - 130%	80
	SB6_05 2.0-2.1	SE153761.021	%	70 - 130%	82
	DUPB	SE153761.022	%	70 - 130%	80
d14-p-terphenyl (Surrogate)	MW1_01 0.04-0.1	SE153761.001	%	70 - 130%	74
	MW1_08 4.2-4.4	SE153761.002	%	70 - 130%	78
	MW2_01 0.2-0.3	SE153761.003	%	70 - 130%	70
	MW2_08 5.1-5.3	SE153761.004	%	70 - 130%	72
	MW3_02 0.5-0.7	SE153761.005	%	70 - 130%	70
	MW3_08 3.8-4.0	SE153761.006	%	70 - 130%	76
	MW3_09 4.0-4.45	SE153761.007	%	70 - 130%	70
	MW4_01 0.16-0.2	SE153761.008	%	70 - 130%	70
	MW4_02 0.5-0.6	SE153761.009	%	70 - 130%	70
	MW4_06 6.5-6.6	SE153761.010	%	70 - 130%	72
	MW5_02 0.18-0.2	SE153761.011	%	70 - 130%	76
	MW5_08 5.2-5.3	SE153761.012	%	70 - 130%	70
	SB1_01 0.19-0.21	SE153761.013	%	70 - 130%	74
	SB2_01 0.2-0.3	SE153761.014	%	70 - 130%	70
	SB3_01 0.2-0.3	SE153761.015	%	70 - 130%	70
	SB4_01 0.2-0.3	SE153761.016	%	70 - 130%	74
	SB5_02 0.7-0.9	SE153761.017	%	70 - 130%	70

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Full 8270 SVOC In Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	SB5_05 2.1-2.3	SE153761.018	%	70 - 130%	72
	SB6_01 0.18-0.25	SE153761.019	%	70 - 130%	72
	SB6_03 1.0-1.1	SE153761.020	%	70 - 130%	72
	SB6_05 2.0-2.1	SE153761.021	%	70 - 130%	70
	DUPB	SE153761.022	%	70 - 130%	70
d5-nitrobenzene (Surrogate)	MW1_01 0.04-0.1	SE153761.001	%	70 - 130%	70
	MW1_08 4.2-4.4	SE153761.002	%	70 - 130%	76
	MW2_01 0.2-0.3	SE153761.003	%	70 - 130%	70
	MW2_08 5.1-5.3	SE153761.004	%	70 - 130%	78
	MW3_02 0.5-0.7	SE153761.005	%	70 - 130%	78
	MW3_08 3.8-4.0	SE153761.006	%	70 - 130%	92
	MW3_09 4.0-4.45	SE153761.007	%	70 - 130%	76
	MW4_01 0.16-0.2	SE153761.008	%	70 - 130%	96
	MW4_02 0.5-0.6	SE153761.009	%	70 - 130%	78
	MW4_06 6.5-6.6	SE153761.010	%	70 - 130%	76
	MW5_02 0.18-0.2	SE153761.011	%	70 - 130%	70
	MW5_08 5.2-5.3	SE153761.012	%	70 - 130%	70
	SB1_01 0.19-0.21	SE153761.013	%	70 - 130%	72
	SB2_01 0.2-0.3	SE153761.014	%	70 - 130%	74
	SB3_01 0.2-0.3	SE153761.015	%	70 - 130%	70
	SB4_01 0.2-0.3	SE153761.016	%	70 - 130%	72
	SB5_02 0.7-0.9	SE153761.017	%	70 - 130%	70
	SB5_05 2.1-2.3	SE153761.018	%	70 - 130%	72
	SB6_01 0.18-0.25	SE153761.019	%	70 - 130%	98
	SB6_03 1.0-1.1	SE153761.020	%	70 - 130%	88
	SB6_05 2.0-2.1	SE153761.021	%	70 - 130%	98
	DUPB	SE153761.022	%	70 - 130%	78
d5-phenol (Surrogate)	MW1_01 0.04-0.1	SE153761.001	%	70 - 130%	77
	MW1_08 4.2-4.4	SE153761.002	%	70 - 130%	73
	MW2_01 0.2-0.3	SE153761.003	%	70 - 130%	72
	MW2_08 5.1-5.3	SE153761.004	%	70 - 130%	75
	MW3_02 0.5-0.7	SE153761.005	%	70 - 130%	72
	MW3_08 3.8-4.0	SE153761.006	%	70 - 130%	73
	MW3_09 4.0-4.45	SE153761.007	%	70 - 130%	74
	MW4_01 0.16-0.2	SE153761.008	%	70 - 130%	76
	MW4_02 0.5-0.6	SE153761.009	%	70 - 130%	75
	MW4_06 6.5-6.6	SE153761.010	%	70 - 130%	74
	MW5_02 0.18-0.2	SE153761.011	%	70 - 130%	72
	MW5_08 5.2-5.3	SE153761.012	%	70 - 130%	73
	SB1_01 0.19-0.21	SE153761.013	%	70 - 130%	79
	SB2_01 0.2-0.3	SE153761.014	%	70 - 130%	73
	SB3_01 0.2-0.3	SE153761.015	%	70 - 130%	70
	SB4_01 0.2-0.3	SE153761.016	%	70 - 130%	74
	SB5_02 0.7-0.9	SE153761.017	%	70 - 130%	76
	SB5_05 2.1-2.3	SE153761.018	%	70 - 130%	71
	SB6_01 0.18-0.25	SE153761.019	%	70 - 130%	77
	SB6_03 1.0-1.1	SE153761.020	%	70 - 130%	72
	SB6_05 2.0-2.1	SE153761.021	%	70 - 130%	76
	DUPB	SE153761.022	%	70 - 130%	77

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	MW1_01 0.04-0.1	SE153761.001	%	60 - 130%	80
	MW1_08 4.2-4.4	SE153761.002	%	60 - 130%	76
	MW2_01 0.2-0.3	SE153761.003	%	60 - 130%	77
	MW2_08 5.1-5.3	SE153761.004	%	60 - 130%	75
	MW3_02 0.5-0.7	SE153761.005	%	60 - 130%	77
	MW3_08 3.8-4.0	SE153761.006	%	60 - 130%	111
	MW3_09 4.0-4.45	SE153761.007	%	60 - 130%	105
	MW4_01 0.16-0.2	SE153761.008	%	60 - 130%	115
	MW4_02 0.5-0.6	SE153761.009	%	60 - 130%	92

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	MW4_06 6.5-6.6	SE153761.010	%	60 - 130%	90
	MW5_02 0.18-0.2	SE153761.011	%	60 - 130%	76
	MW5_08 5.2-5.3	SE153761.012	%	60 - 130%	83
	SB1_01 0.19-0.21	SE153761.013	%	60 - 130%	77
	SB2_01 0.2-0.3	SE153761.014	%	60 - 130%	92
	SB3_01 0.2-0.3	SE153761.015	%	60 - 130%	89
	SB4_01 0.2-0.3	SE153761.016	%	60 - 130%	86
	SB5_02 0.7-0.9	SE153761.017	%	60 - 130%	75
	SB5_05 2.1-2.3	SE153761.018	%	60 - 130%	92
	SB6_01 0.18-0.25	SE153761.019	%	60 - 130%	120
	SB6_03 1.0-1.1	SE153761.020	%	60 - 130%	109
	SB6_05 2.0-2.1	SE153761.021	%	60 - 130%	89
	DUPB	SE153761.022	%	60 - 130%	72
d4-1,2-dichloroethane (Surrogate)	MW1_01 0.04-0.1	SE153761.001	%	60 - 130%	87
	MW1_08 4.2-4.4	SE153761.002	%	60 - 130%	90
	MW2_01 0.2-0.3	SE153761.003	%	60 - 130%	89
	MW2_08 5.1-5.3	SE153761.004	%	60 - 130%	75
	MW3_02 0.5-0.7	SE153761.005	%	60 - 130%	89
	MW3_08 3.8-4.0	SE153761.006	%	60 - 130%	88
	MW3_09 4.0-4.45	SE153761.007	%	60 - 130%	70
	MW4_01 0.16-0.2	SE153761.008	%	60 - 130%	86
	MW4_02 0.5-0.6	SE153761.009	%	60 - 130%	77
	MW4_06 6.5-6.6	SE153761.010	%	60 - 130%	83
	MW5_02 0.18-0.2	SE153761.011	%	60 - 130%	76
	MW5_08 5.2-5.3	SE153761.012	%	60 - 130%	83
	SB1_01 0.19-0.21	SE153761.013	%	60 - 130%	73
	SB2_01 0.2-0.3	SE153761.014	%	60 - 130%	78
	SB3_01 0.2-0.3	SE153761.015	%	60 - 130%	72
	SB4_01 0.2-0.3	SE153761.016	%	60 - 130%	86
	SB5_02 0.7-0.9	SE153761.017	%	60 - 130%	87
	SB5_05 2.1-2.3	SE153761.018	%	60 - 130%	89
	SB6_01 0.18-0.25	SE153761.019	%	60 - 130%	75
	SB6_03 1.0-1.1	SE153761.020	%	60 - 130%	80
	SB6_05 2.0-2.1	SE153761.021	%	60 - 130%	71
	DUPB	SE153761.022	%	60 - 130%	76
d8-toluene (Surrogate)	MW1_01 0.04-0.1	SE153761.001	%	60 - 130%	77
	MW1_08 4.2-4.4	SE153761.002	%	60 - 130%	82
	MW2_01 0.2-0.3	SE153761.003	%	60 - 130%	80
	MW2_08 5.1-5.3	SE153761.004	%	60 - 130%	79
	MW3_02 0.5-0.7	SE153761.005	%	60 - 130%	71
	MW3_08 3.8-4.0	SE153761.006	%	60 - 130%	78
	MW3_09 4.0-4.45	SE153761.007	%	60 - 130%	70
	MW4_01 0.16-0.2	SE153761.008	%	60 - 130%	73
	MW4_02 0.5-0.6	SE153761.009	%	60 - 130%	75
	MW4_06 6.5-6.6	SE153761.010	%	60 - 130%	77
	MW5_02 0.18-0.2	SE153761.011	%	60 - 130%	77
	MW5_08 5.2-5.3	SE153761.012	%	60 - 130%	79
	SB1_01 0.19-0.21	SE153761.013	%	60 - 130%	74
	SB2_01 0.2-0.3	SE153761.014	%	60 - 130%	71
	SB3_01 0.2-0.3	SE153761.015	%	60 - 130%	77
	SB4_01 0.2-0.3	SE153761.016	%	60 - 130%	73
	SB5_02 0.7-0.9	SE153761.017	%	60 - 130%	72
	SB5_05 2.1-2.3	SE153761.018	%	60 - 130%	89
	SB6_01 0.18-0.25	SE153761.019	%	60 - 130%	78
	SB6_03 1.0-1.1	SE153761.020	%	60 - 130%	88
	SB6_05 2.0-2.1	SE153761.021	%	60 - 130%	72
	DUPB	SE153761.022	%	60 - 130%	89
Dibromofluoromethane (Surrogate)	MW1_01 0.04-0.1	SE153761.001	%	60 - 130%	70
	MW1_08 4.2-4.4	SE153761.002	%	60 - 130%	77
	MW2_01 0.2-0.3	SE153761.003	%	60 - 130%	75
	MW2_08 5.1-5.3	SE153761.004	%	60 - 130%	70

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Dibromofluoromethane (Surrogate)	MW3_02 0.5-0.7	SE153761.005	%	60 - 130%	80
	MW3_08 3.8-4.0	SE153761.006	%	60 - 130%	81
	MW3_09 4.0-4.45	SE153761.007	%	60 - 130%	75
	MW4_01 0.16-0.2	SE153761.008	%	60 - 130%	73
	MW4_02 0.5-0.6	SE153761.009	%	60 - 130%	75
	MW4_06 6.5-6.6	SE153761.010	%	60 - 130%	78
	MW5_02 0.18-0.2	SE153761.011	%	60 - 130%	74
	MW5_08 5.2-5.3	SE153761.012	%	60 - 130%	79
	SB1_01 0.19-0.21	SE153761.013	%	60 - 130%	76
	SB2_01 0.2-0.3	SE153761.014	%	60 - 130%	85
	SB3_01 0.2-0.3	SE153761.015	%	60 - 130%	76
	SB4_01 0.2-0.3	SE153761.016	%	60 - 130%	72
	SB5_02 0.7-0.9	SE153761.017	%	60 - 130%	71
	SB5_05 2.1-2.3	SE153761.018	%	60 - 130%	76
	SB6_01 0.18-0.25	SE153761.019	%	60 - 130%	71
	SB6_03 1.0-1.1	SE153761.020	%	60 - 130%	75
	SB6_05 2.0-2.1	SE153761.021	%	60 - 130%	79
	DUPB	SE153761.022	%	60 - 130%	75

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	FB001	SE153761.023	%	40 - 130%	100
	FB002	SE153761.024	%	40 - 130%	84
	FB003	SE153761.025	%	40 - 130%	94
	FB10	SE153761.026	%	40 - 130%	75
	RB001	SE153761.027	%	40 - 130%	80
	RB002	SE153761.028	%	40 - 130%	82
	RB003	SE153761.029	%	40 - 130%	91
	RB10	SE153761.030	%	40 - 130%	97
d4-1,2-dichloroethane (Surrogate)	FB001	SE153761.023	%	40 - 130%	129
	FB002	SE153761.024	%	40 - 130%	119
	FB003	SE153761.025	%	40 - 130%	110
	FB10	SE153761.026	%	40 - 130%	107
	RB001	SE153761.027	%	40 - 130%	128
	RB002	SE153761.028	%	40 - 130%	116
	RB003	SE153761.029	%	40 - 130%	115
	RB10	SE153761.030	%	40 - 130%	111
d8-toluene (Surrogate)	FB001	SE153761.023	%	40 - 130%	109
	FB002	SE153761.024	%	40 - 130%	95
	FB003	SE153761.025	%	40 - 130%	100
	FB10	SE153761.026	%	40 - 130%	112
	RB001	SE153761.027	%	40 - 130%	93
	RB002	SE153761.028	%	40 - 130%	102
	RB003	SE153761.029	%	40 - 130%	113
	RB10	SE153761.030	%	40 - 130%	98
Dibromofluoromethane (Surrogate)	FB001	SE153761.023	%	40 - 130%	125
	FB002	SE153761.024	%	40 - 130%	122
	FB003	SE153761.025	%	40 - 130%	113
	FB10	SE153761.026	%	40 - 130%	113
	RB001	SE153761.027	%	40 - 130%	121
	RB002	SE153761.028	%	40 - 130%	113
	RB003	SE153761.029	%	40 - 130%	117
	RB10	SE153761.030	%	40 - 130%	117

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	MW1_01 0.04-0.1	SE153761.001	%	60 - 130%	79
	MW1_08 4.2-4.4	SE153761.002	%	60 - 130%	76
	MW2_01 0.2-0.3	SE153761.003	%	60 - 130%	76
	MW2_08 5.1-5.3	SE153761.004	%	60 - 130%	75
	MW3_02 0.5-0.7	SE153761.005	%	60 - 130%	73
	MW3_08 3.8-4.0	SE153761.006	%	60 - 130%	116

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons In Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	MW3_09 4.0-4.45	SE153761.007	%	60 - 130%	83
	MW4_01 0.16-0.2	SE153761.008	%	60 - 130%	105
	MW4_02 0.5-0.6	SE153761.009	%	60 - 130%	94
	MW4_06 6.5-6.6	SE153761.010	%	60 - 130%	96
	MW5_02 0.18-0.2	SE153761.011	%	60 - 130%	79
	MW5_08 5.2-5.3	SE153761.012	%	60 - 130%	86
	SB1_01 0.19-0.21	SE153761.013	%	60 - 130%	82
	SB2_01 0.2-0.3	SE153761.014	%	60 - 130%	96
	SB3_01 0.2-0.3	SE153761.015	%	60 - 130%	94
	SB4_01 0.2-0.3	SE153761.016	%	60 - 130%	94
	SB5_02 0.7-0.9	SE153761.017	%	60 - 130%	82
	SB5_05 2.1-2.3	SE153761.018	%	60 - 130%	109
	SB6_01 0.18-0.25	SE153761.019	%	60 - 130%	124
	SB6_03 1.0-1.1	SE153761.020	%	60 - 130%	126
	SB6_05 2.0-2.1	SE153761.021	%	60 - 130%	114
	DUPB	SE153761.022	%	60 - 130%	121
d4-1,2-dichloroethane (Surrogate)	MW1_01 0.04-0.1	SE153761.001	%	60 - 130%	78
	MW1_08 4.2-4.4	SE153761.002	%	60 - 130%	72
	MW2_01 0.2-0.3	SE153761.003	%	60 - 130%	88
	MW2_08 5.1-5.3	SE153761.004	%	60 - 130%	78
	MW3_02 0.5-0.7	SE153761.005	%	60 - 130%	74
	MW3_08 3.8-4.0	SE153761.006	%	60 - 130%	71
	MW3_09 4.0-4.45	SE153761.007	%	60 - 130%	76
	MW4_01 0.16-0.2	SE153761.008	%	60 - 130%	79
	MW4_02 0.5-0.6	SE153761.009	%	60 - 130%	78
	MW4_06 6.5-6.6	SE153761.010	%	60 - 130%	73
	MW5_02 0.18-0.2	SE153761.011	%	60 - 130%	73
	MW5_08 5.2-5.3	SE153761.012	%	60 - 130%	78
	SB1_01 0.19-0.21	SE153761.013	%	60 - 130%	79
	SB2_01 0.2-0.3	SE153761.014	%	60 - 130%	72
	SB3_01 0.2-0.3	SE153761.015	%	60 - 130%	76
	SB4_01 0.2-0.3	SE153761.016	%	60 - 130%	71
	SB5_02 0.7-0.9	SE153761.017	%	60 - 130%	86
	SB5_05 2.1-2.3	SE153761.018	%	60 - 130%	88
	SB6_01 0.18-0.25	SE153761.019	%	60 - 130%	75
	SB6_03 1.0-1.1	SE153761.020	%	60 - 130%	79
	SB6_05 2.0-2.1	SE153761.021	%	60 - 130%	70
	DUPB	SE153761.022	%	60 - 130%	75
d8-toluene (Surrogate)	MW1_01 0.04-0.1	SE153761.001	%	60 - 130%	72
	MW1_08 4.2-4.4	SE153761.002	%	60 - 130%	78
	MW2_01 0.2-0.3	SE153761.003	%	60 - 130%	78
	MW2_08 5.1-5.3	SE153761.004	%	60 - 130%	73
	MW3_02 0.5-0.7	SE153761.005	%	60 - 130%	80
	MW3_08 3.8-4.0	SE153761.006	%	60 - 130%	80
	MW3_09 4.0-4.45	SE153761.007	%	60 - 130%	70
	MW4_01 0.16-0.2	SE153761.008	%	60 - 130%	82
	MW4_02 0.5-0.6	SE153761.009	%	60 - 130%	74
	MW4_06 6.5-6.6	SE153761.010	%	60 - 130%	73
	MW5_02 0.18-0.2	SE153761.011	%	60 - 130%	70
	MW5_08 5.2-5.3	SE153761.012	%	60 - 130%	70
	SB1_01 0.19-0.21	SE153761.013	%	60 - 130%	75
	SB2_01 0.2-0.3	SE153761.014	%	60 - 130%	86
	SB3_01 0.2-0.3	SE153761.015	%	60 - 130%	77
	SB4_01 0.2-0.3	SE153761.016	%	60 - 130%	81
	SB5_02 0.7-0.9	SE153761.017	%	60 - 130%	77
	SB5_05 2.1-2.3	SE153761.018	%	60 - 130%	89
	SB6_01 0.18-0.25	SE153761.019	%	60 - 130%	76
	SB6_03 1.0-1.1	SE153761.020	%	60 - 130%	89
	SB6_05 2.0-2.1	SE153761.021	%	60 - 130%	71
	DUPB	SE153761.022	%	60 - 130%	85
Dibromofluoromethane (Surrogate)	MW1_01 0.04-0.1	SE153761.001	%	60 - 130%	78

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatiles Petroleum Hydrocarbons in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Dibromofluoromethane (Surrogate)	MW1_08 4.2-4.4	SE153761.002	%	60 - 130%	72
	MW2_01 0.2-0.3	SE153761.003	%	60 - 130%	72
	MW2_08 5.1-5.3	SE153761.004	%	60 - 130%	76
	MW3_02 0.5-0.7	SE153761.005	%	60 - 130%	74
	MW3_08 3.8-4.0	SE153761.006	%	60 - 130%	75
	MW3_09 4.0-4.45	SE153761.007	%	60 - 130%	76
	MW4_01 0.16-0.2	SE153761.008	%	60 - 130%	72
	MW4_02 0.5-0.6	SE153761.009	%	60 - 130%	74
	MW4_06 6.5-6.6	SE153761.010	%	60 - 130%	77
	MW5_02 0.18-0.2	SE153761.011	%	60 - 130%	76
	MW5_08 5.2-5.3	SE153761.012	%	60 - 130%	74
	SB1_01 0.19-0.21	SE153761.013	%	60 - 130%	72
	SB2_01 0.2-0.3	SE153761.014	%	60 - 130%	80
	SB3_01 0.2-0.3	SE153761.015	%	60 - 130%	73
	SB4_01 0.2-0.3	SE153761.016	%	60 - 130%	72
	SB5_02 0.7-0.9	SE153761.017	%	60 - 130%	76
	SB5_05 2.1-2.3	SE153761.018	%	60 - 130%	75
	SB6_01 0.18-0.25	SE153761.019	%	60 - 130%	71
	SB6_03 1.0-1.1	SE153761.020	%	60 - 130%	75
	SB6_05 2.0-2.1	SE153761.021	%	60 - 130%	86
	DUPB	SE153761.022	%	60 - 130%	74

Volatiles Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	FB001	SE153761.023	%	40 - 130%	100
	FB002	SE153761.024	%	40 - 130%	84
	FB003	SE153761.025	%	40 - 130%	94
	FB10	SE153761.026	%	40 - 130%	75
	RB001	SE153761.027	%	40 - 130%	80
	RB002	SE153761.028	%	40 - 130%	82
	RB003	SE153761.029	%	40 - 130%	91
	RB10	SE153761.030	%	40 - 130%	97
	FB001	SE153761.023	%	60 - 130%	129
	FB002	SE153761.024	%	60 - 130%	119
d4-1,2-dichloroethane (Surrogate)	FB003	SE153761.025	%	60 - 130%	110
	FB10	SE153761.026	%	60 - 130%	107
	RB001	SE153761.027	%	60 - 130%	128
	RB002	SE153761.028	%	60 - 130%	116
	RB003	SE153761.029	%	60 - 130%	115
	RB10	SE153761.030	%	60 - 130%	111
	FB001	SE153761.023	%	40 - 130%	109
	FB002	SE153761.024	%	40 - 130%	95
	FB003	SE153761.025	%	40 - 130%	100
	FB10	SE153761.026	%	40 - 130%	112
d8-toluene (Surrogate)	RB001	SE153761.027	%	40 - 130%	93
	RB002	SE153761.028	%	40 - 130%	102
	RB003	SE153761.029	%	40 - 130%	113
	RB10	SE153761.030	%	40 - 130%	98
	FB001	SE153761.023	%	40 - 130%	125
	FB002	SE153761.024	%	40 - 130%	122
	FB003	SE153761.025	%	40 - 130%	113
	FB10	SE153761.026	%	40 - 130%	113
	RB001	SE153761.027	%	40 - 130%	121
	RB002	SE153761.028	%	40 - 130%	113
Dibromofluoromethane (Surrogate)	RB003	SE153761.029	%	40 - 130%	117
	RB10	SE153761.030	%	40 - 130%	117

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC In Soil

Method: ME-(AU)-ENVJAN420

Sample Number	Parameter	Units	LOR	Result
LB103985.001	01-PAHs	Acenaphthene	mg/kg	0.1
		Acenaphthylene	mg/kg	0.1
		Anthracene	mg/kg	0.1
		Benzo(a)anthracene	mg/kg	0.1
		Benzo(b&j&k)fluoranthene	mg/kg	0.2
		Benzo(ghi)perylene	mg/kg	0.1
		Benzo(a)pyrene	mg/kg	0.1
		Chrysene	mg/kg	0.1
		Dibenzo(ah)anthracene	mg/kg	0.1
		Fluoranthene	mg/kg	0.1
		Fluorene	mg/kg	0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1
		1-methylnaphthalene	mg/kg	0.1
		2-methylnaphthalene	mg/kg	0.1
		Naphthalene	mg/kg	0.1
		Phenanthrene	mg/kg	0.1
		Pyrene	mg/kg	0.1
		2-acetylamino fluorene	mg/kg	0.5
		7,12-dimethyl-benz(a)anthracene	mg/kg	0.5
		3-methylcholanthrene	mg/kg	0.5
	02-OCs	Aldrin	mg/kg	0.1
		Alpha-BHC	mg/kg	0.1
		Beta-BHC	mg/kg	0.5
		Delta-BHC	mg/kg	0.1
		Gamma-BHC (Lindane)	mg/kg	0.1
		p,p-DDD	mg/kg	0.1
		p,p-DDE	mg/kg	0.1
		p,p-DDT	mg/kg	0.1
		Dieldrin	mg/kg	0.2
		Alpha-endosulfan	mg/kg	0.2
		Beta-endosulfan	mg/kg	0.2
		Endosulfan sulphate	mg/kg	0.1
		Endrin	mg/kg	0.2
		Heptachlor	mg/kg	0.1
		Heptachlor epoxide	mg/kg	0.1
		Isodrin	mg/kg	0.1
		Methoxychlor	mg/kg	0.1
		Mirex	mg/kg	0.1
		Alpha-chlordane	mg/kg	0.1
		Gamma-chlordane	mg/kg	0.1
	03-OPs	Endrin ketone	mg/kg	0.1
		Azinphos-methyl (Guthion)	mg/kg	0.2
		Bromophos ethyl	mg/kg	0.2
		Carbophenothion	mg/kg	0.5
		Chlorfenvinphos-cis	mg/kg	2
		Chlorfenvinphos-trans	mg/kg	0.5
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2
		Chlorpyrifos-methyl	mg/kg	0.5
		Co-Ral (Coumaphos)	mg/kg	0.5
		Diazinon (Dimpylate)	mg/kg	0.5
		Dichlorvos	mg/kg	0.5
		Demeton-S-methyl	mg/kg	0.5
		Dimethoate	mg/kg	0.5
		Disulfoton (Di-syston)	mg/kg	0.5
		EPN*	mg/kg	0.5
		Ethion	mg/kg	0.2
		Ethoprophos (ethoprop or propfos)	mg/kg	0.5
		Famphur (Famophos)	mg/kg	0.5
		Fenamiphos (Phenamiphos)	mg/kg	0.5
		Fenchlorophos (Ronneil)	mg/kg	0.5
		Fenitrothion	mg/kg	0.2

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Full 8270 SVOC In Soil (continued)

Method: ME-(AU)-ENVJAN420

Sample Number	Parameter	Units	LOR	Result
LB103985.001	03-OPs	Fenthion	mg/kg	0.5
		Malathion (Maldison)	mg/kg	0.2
		Methidathion	mg/kg	0.5
		Mevinphos-cis/trans	mg/kg	1
		o,o,o-triethyl phosphorothioate	mg/kg	0.5
		Parathion ethyl (Parathion)	mg/kg	0.2
		Parathion methyl	mg/kg	0.5
		Phorate	mg/kg	0.5
		Pirimiphos-ethyl	mg/kg	0.5
		Pirimiphos-methyl	mg/kg	0.5
	04-PCB UPAC(7) Congeners	Profenofos	mg/kg	0.5
		Prothiophos (Tokuthion)*	mg/kg	0.5
		Sulfotepp	mg/kg	0.5
		Tetrachlorvinphos (Stiropfos)*	mg/kg	0.5
		PCB Congener C28	mg/kg	0.1
		PCB Congener C52	mg/kg	0.1
		PCB Congener C101	mg/kg	0.1
		PCB Congener C118	mg/kg	0.1
		PCB Congener C138	mg/kg	0.1
		PCB Congener C153	mg/kg	0.1
	05-SVCH (CI Benzenes, Hydrocarbons & VOCs)	PCB Congener C180	mg/kg	0.1
		Hexachlorobenzene (HCB)	mg/kg	0.1
		1,2-dichlorobenzene	mg/kg	0.5
		1,3-dichlorobenzene	mg/kg	0.5
		1,4-dichlorobenzene	mg/kg	0.5
		Hexachlorobutadiene	mg/kg	0.5
		Hexachlorocyclopentadiene	mg/kg	1
		Hexachloroethane	mg/kg	0.5
		Hexachloropropene	mg/kg	0.5
		Pentachlorobenzene	mg/kg	0.5
	06-Phthalates	Pentachloroethane	mg/kg	0.5
		1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1
		1,2,3,4-tetrachlorobenzene	mg/kg	0.5
		1/2-Chloronaphthalene	mg/kg	1
		1,2,4-trichlorobenzene	mg/kg	0.5
		Bis(2-ethylhexyl)phthalate	mg/kg	5
		Bis(2-ethylhexyl)adipate	mg/kg	0.5
		Butyl benzyl phthalate	mg/kg	0.5
		Di-n-butyl phthalate	mg/kg	0.5
		Diethyl phthalate	mg/kg	0.5
	07-Carbamates	Dimethyl phthalate	mg/kg	0.5
		Diethyl phthalate	mg/kg	0.5
		Carbofuran	mg/kg	0.5
		Carbaryl	mg/kg	0.5
		Trifluralin	mg/kg	0.5
		N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5
		N-nitroso-diethylamine (NDEA)	mg/kg	1
		N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5
		N-nitroso-morpholine (NMOR)	mg/kg	0.5
		N-nitroso-piperidine (NPIP)	mg/kg	0.5
	08-Herbicides (normal) 09-Nitrosamines	N-nitroso-pyrrolidine (NPYR)	mg/kg	1
		4-amino biphenyl	mg/kg	1
		Acetophenone	mg/kg	0.5
		1,3-dinitrobenzene	mg/kg	1
		2,4-dinitrotoluene	mg/kg	0.5
		2,6-dinitrotoluene	mg/kg	0.5
		Isophorone	mg/kg	0.5
		Nitrobenzene	mg/kg	0.5
		p-(dimethylamino) azobenzene	mg/kg	1
		Phenacetin	mg/kg	1
	10-Nitroaromatics and Ketones	Pentachloronitrobenzene (quintozone)	mg/kg	0.5

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC In Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB103985.001	11-Anilines and Amines	Aniline	mg/kg	3
		4-chloroaniline	mg/kg	1
		2-nitroaniline	mg/kg	1
		3-nitroaniline	mg/kg	1
		4-nitroaniline	mg/kg	1
		Diphenylamine	mg/kg	0.5
		o-toluidine	mg/kg	1
		5-nitro-o-toluidine	mg/kg	1
		1-naphthylamine	mg/kg	1
		2-naphthylamine	mg/kg	1
	12-Haloethers	Bis(2-chloroethoxy) methane	mg/kg	0.5
		Bis(2-chloroethyl) ether	mg/kg	0.5
		Bis(2-chloroisopropyl) ether	mg/kg	0.5
		4-chlorophenyl phenyl ether	mg/kg	0.5
		4-bromophenyl phenyl ether	mg/kg	0.5
	13-Other SVOCs	Methyl methanesulfonate	mg/kg	1
		Ethyl methanesulfonate	mg/kg	1
		Dibenzofuran	mg/kg	0.5
		Benzyl alcohol	mg/kg	1
		Safrole	mg/kg	0.5
		Isosafrole Isomer 1	mg/kg	1
		Isosafrole Isomer 2	mg/kg	1
		1,4-naphthoquinone	mg/kg	0.5
		Thionazin	mg/kg	1
	14-Speciated Routine Phenols	3/4-methyl phenol (m/p-cresol)	mg/kg	1
		2-methyl phenol (o-cresol)	mg/kg	0.5
		2,6-dichlorophenol	mg/kg	0.5
		2,4,5-trichlorophenol	mg/kg	0.5
		4-chloro-3-methylphenol	mg/kg	2
		2-chlorophenol	mg/kg	0.5
		2,4-dichlorophenol	mg/kg	0.5
		2,4-dimethylphenol	mg/kg	0.5
		2-nitrophenol	mg/kg	0.5
		Phenol	mg/kg	0.5
	Surrogates	2,4,6-trichlorophenol	mg/kg	0.5
		Pentachlorophenol	mg/kg	0.5
		4-nitrophenol	mg/kg	1
		d5-phenol (Surrogate)	%	-
		d5-nitrobenzene (Surrogate)	%	-
		2-fluorobiphenyl (Surrogate)	%	-
		2,4,6-tribromophenol (Surrogate)	%	-
		d14-p-terphenyl (Surrogate)	%	-

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311/AN312

Sample Number	Parameter	Units	LOR	Result
LB104021.001	Mercury	mg/L	0.0001	<0.0001

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB104030.001	Mercury	mg/kg	0.01	<0.01
LB104031.001	Mercury	mg/kg	0.01	<0.01

Total Recoverable Metals in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB104004.001	Arsenic, As	mg/kg	3	<3
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.3	<0.3
	Copper, Cu	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Total Recoverable Metals in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB104004.001	Nickel, Ni	mg/kg	0.5	<0.5
	Zinc, Zn	mg/kg	0.5	<0.5
LB104005.001	Arsenic, As	mg/kg	3	<3
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.3	<0.3
	Copper, Cu	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Nickel, Ni	mg/kg	0.5	<0.5
	Zinc, Zn	mg/kg	0.5	<0.5

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result
LB103735.001	Arsenic, As	µg/L	1	<1
	Cadmium, Cd	µg/L	0.1	<0.1
	Chromium, Cr	µg/L	1	<1
	Copper, Cu	µg/L	1	<1
	Lead, Pb	µg/L	1	<1
	Nickel, Ni	µg/L	1	<1
	Zinc, Zn	µg/L	5	<5

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB103985.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB103791.001	TRH C10-C14	µg/L	50	<50
	TRH C15-C28	µg/L	200	<200
	TRH C29-C36	µg/L	200	<200
	TRH C37-C40	µg/L	200	<200

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB103874.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene - TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-ENVJAN433

Sample Number		Parameter	Units	LOR	Result
LB103874.001	Halogenated Aliphatics	1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
	Halogenated Aromatics	Hexachlorobutadiene	mg/kg	0.1	<0.1
		Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
		Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	Dibromofluoromethane (Surrogate)	%	-	101
		d4-1,2-dichloroethane (Surrogate)	%	-	109
		d8-toluene (Surrogate)	%	-	89
		Bromofluorobenzene (Surrogate)	%	-	97
	Totals	Total BTEX	mg/kg	0.6	<0.6
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1
LB103875.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-ENVJAN433

Sample Number		Parameter	Units	LOR	Result
LB103875.001	Halogenated Aliphatics	Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
	Hydrocarbons	Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
	Oxygenated Compounds	2-nitropropane	mg/kg	10	<10
		Acetone (2-propanone)	mg/kg	10	<10
		MTBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
	Polycyclic VOCs	2-hexanone (MBK)	mg/kg	5	<5
		Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	Dibromofluoromethane (Surrogate)	%	-	84
		d4-1,2-dichloroethane (Surrogate)	%	-	100
		d8-toluene (Surrogate)	%	-	96

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR	Result
LB103875.001	Surrogates	Bromofluorobenzene (Surrogate)	%	-
	Totals	Total BTEX	mg/kg	0.6
	Trihalomethanes	Chloroform	mg/kg	0.1
		Bromodichloromethane	mg/kg	0.1
		Chlorodibromomethane	mg/kg	0.1
		Bromoform	mg/kg	0.1

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR	Result
LB103877.001	Monocyclic Aromatic Hydrocarbons	Benzene	µg/L	0.5
		Toluene	µg/L	0.5
		Ethylbenzene	µg/L	0.5
		m/p-xylene	µg/L	1
		o-xylene	µg/L	0.5
	Polycyclic VOCs	Naphthalene	µg/L	0.5
	Surrogates	Dibromofluoromethane (Surrogate)	%	-
		d4-1,2-dichloroethane (Surrogate)	%	-
		d8-toluene (Surrogate)	%	-
		Bromofluorobenzene (Surrogate)	%	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR	Result
LB103874.001	Surrogates	TRH C6-C9	mg/kg	20
		Dibromofluoromethane (Surrogate)	%	-
		d4-1,2-dichloroethane (Surrogate)	%	-
		d8-toluene (Surrogate)	%	-
LB103875.001	Surrogates	TRH C6-C9	mg/kg	20
		Dibromofluoromethane (Surrogate)	%	-
		d4-1,2-dichloroethane (Surrogate)	%	-
		d8-toluene (Surrogate)	%	-

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR	Result
LB103877.001	Surrogates	TRH C6-C9	µg/L	40
		Dibromofluoromethane (Surrogate)	%	-
		d4-1,2-dichloroethane (Surrogate)	%	-
		d8-toluene (Surrogate)	%	-
		Bromofluorobenzene (Surrogate)	%	-

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Full 8270 SVOC in Soil

Method: ME-(AU)-ENVJAN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %	
SE153761.010	LB103985.014	01-PAHs	Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0	
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0	
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0	
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0	
			Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	<0.2	200	0	
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0	
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0	
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0	
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0	
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0	
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0	
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0	
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0	
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0	
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0	
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0	
			Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0	
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0	
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0	
			2-acetylaminofluorene	mg/kg	0.5	<0.5	<0.5	200	0	
			7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5	<0.5	200	0	
			3-methylcholanthrene	mg/kg	0.5	<0.5	<0.5	200	0	
			02-OCs	Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
				Alpha-BHC	mg/kg	0.1	<0.1	<0.1	200	0
				Beta-BHC	mg/kg	0.5	<0.5	<0.1	200	0
				Delta-BHC	mg/kg	0.1	<0.1	<0.1	200	0
				Gamma-BHC (Lindane)	mg/kg	0.1	<0.1	<0.1	200	0
				p,p-DDD	mg/kg	0.1	<0.1	<0.1	200	0
		p,p-DDE		mg/kg	0.1	<0.1	<0.1	200	0	
		p,p-DDT		mg/kg	0.1	<0.1	<0.1	200	0	
		Dieldrin		mg/kg	0.2	<0.2	<0.2	200	0	
		Alpha-endosulfan		mg/kg	0.2	<0.2	<0.2	200	0	
		Beta-endosulfan		mg/kg	0.2	<0.2	<0.2	200	0	
		Endosulfan sulphate		mg/kg	0.1	<0.1	<0.1	200	0	
		Endrin		mg/kg	0.2	<0.2	<0.2	200	0	
		Heptachlor		mg/kg	0.1	<0.1	<0.1	200	0	
		Heptachlor epoxide		mg/kg	0.1	<0.1	<0.1	200	0	
		Isodrin		mg/kg	0.1	<0.1	<0.1	200	0	
		Methoxychlor		mg/kg	0.1	<0.1	<0.1	200	0	
		Mirex		mg/kg	0.1	<0.1	<0.1	200	0	
		Alpha-chlordane		mg/kg	0.1	<0.1	<0.1	200	0	
		Gamma-chlordane		mg/kg	0.1	<0.1	<0.1	200	0	
		Endrin ketone		mg/kg	0.1	<0.1	<0.1	200	0	
		03-OPs		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
				Bromophos ethyl	mg/kg	0.2	<0.2	<0.2	200	0
				Carbophenothion	mg/kg	0.5	<0.5	<0.5	200	0
				Chlorfenvinphos-cis	mg/kg	2	<2	<2	200	0
				Chlorfenvinphos-trans	mg/kg	0.5	<0.5	<0.5	200	0
				Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
				Chlorpyrifos-methyl	mg/kg	0.5	<0.5	<0.5	200	0
			Co-Ral (Coumaphos)	mg/kg	0.5	<0.5	<0.5	200	0	
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0	
			Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0	
			Demeton-S-methyl	mg/kg	0.5	<0.5	<0.5	200	0	
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0	
			Disulfoton (Di-syston)	mg/kg	0.5	<0.5	<0.5	200	0	
			EPN*	mg/kg	0.5	<0.5	<0.5	200	0	
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0	
			Ethoprophos (ethoprop or prophos)	mg/kg	0.5	<0.5	<0.5	200	0	
			Famphur (Famophos)	mg/kg	0.5	<0.5	<0.5	200	0	
			Fenamiphos (Phenamiphos)	mg/kg	0.5	<0.5	<0.5	200	0	

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Full 8270 SVOC in Soil (continued)

Method: ME-(AU)-ENVJAN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE153761.010	LB103985.014	03-OPs	Fenchlorophos (Ronnel)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Fenthion	mg/kg	0.5	<0.5	<0.5	200	0
			Malathion (Maldison)	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Mevinphos-cis/trans	mg/kg	1	<1	<1	200	0
			o.o.o-triethyl phosphorothioate	mg/kg	0.5	<0.5	<0.5	200	0
			Parathion ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion methyl	mg/kg	0.5	<0.5	<0.5	200	0
			Phorate	mg/kg	0.5	<0.5	<0.5	200	0
			Pirimiphos-ethyl	mg/kg	0.5	<0.5	<0.5	200	0
			Pirimiphos-methyl	mg/kg	0.5	<0.5	<0.5	200	0
			Profenofos	mg/kg	0.5	<0.5	<0.5	200	0
			Prothiophos (Tokuthion)*	mg/kg	0.5	<0.5	<0.5	200	0
			Sulfotepp	mg/kg	0.5	<0.5	<0.5	200	0
		Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	<0.5	<0.5	200	0	
		04-PCB UPAC(7)	PCB Congener C28	mg/kg	0.1	<0.1	<0.1	200	0
			PCB Congener C52	mg/kg	0.1	<0.1	<0.1	200	0
			PCB Congener C101	mg/kg	0.1	<0.1	<0.1	200	0
			PCB Congener C118	mg/kg	0.1	<0.1	<0.1	200	0
			PCB Congener C138	mg/kg	0.1	<0.1	<0.1	200	0
			PCB Congener C153	mg/kg	0.1	<0.1	<0.1	200	0
			PCB Congener C180	mg/kg	0.1	<0.1	<0.1	200	0
		05-SVCH (CI Benzenes,	Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	200	0
			1,3-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	200	0
			1,4-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	200	0
			Hexachlorobutadiene	mg/kg	0.5	<0.5	<0.5	200	0
			Hexachlorocyclopentadiene	mg/kg	1	<1	<1	200	0
			Hexachloroethane	mg/kg	0.5	<0.5	<0.5	200	0
			Hexachloropropene	mg/kg	0.5	<0.5	<0.5	200	0
			Pentachlorobenzene	mg/kg	0.5	<0.5	<0.5	200	0
			Pentachloroethane	mg/kg	0.5	<0.5	<0.5	200	0
			1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1	<1	200	0
			1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5	<0.5	200	0
			1/2-Chloronaphthalene	mg/kg	1	<1	<1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.5	<0.5	<0.5	200	0
			06-Phthalates	Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	<5	200
		Bis(2-ethylhexyl)adipate		mg/kg	0.5	<0.5	<0.5	200	0
		Butyl benzyl phthalate		mg/kg	0.5	<0.5	<0.5	200	0
		Di-n-butyl phthalate		mg/kg	0.5	<0.5	<0.5	200	0
		Diethyl phthalate		mg/kg	0.5	<0.5	<0.5	200	0
		Dimethyl phthalate		mg/kg	0.5	<0.5	<0.5	200	0
		Diethyl phthalate		mg/kg	0.5	<0.5	<0.5	200	0
		07-Carbamates	Carbofuran	mg/kg	0.5	<0.5	<0.5	200	0
			Carbaryl	mg/kg	0.5	<0.5	<0.5	200	0
		08-Herbicides	Trifluralin	mg/kg	0.5	<0.5	<0.5	200	0
		09-Nitrosamine s	N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5	<0.5	200	0
			N-nitroso-diethylamine (NDEA)	mg/kg	1	<1	<1	200	0
			N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	<0.5	<0.5	200	0
N-nitroso-morpholine (NMOR)	mg/kg		0.5	<0.5	<0.5	200	0		
N-nitroso-piperidine (NPIP)	mg/kg		0.5	<0.5	<0.5	200	0		
N-nitroso-pyrrolidine (NPYR)	mg/kg		1	<1	<1	200	0		
4-amino biphenyl	mg/kg		1	<1	<1	200	0		
10-Nitroaromati cs and	Acetophenone	mg/kg	0.5	<0.5	<0.5	200	0		
	1,3-dinitrobenzene	mg/kg	1	<1	<1	200	0		
	2,4-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	200	0		
	2,6-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	200	0		
	Isophorone	mg/kg	0.5	<0.5	<0.5	200	0		
	Nitrobenzene	mg/kg	0.5	<0.5	<0.5	200	0		
	p-(dimethylamino) azobenzene	mg/kg	1	<1	<1	200	0		

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Full 8270 SVOC in Soil (continued)

Method: ME-(AU)-ENVJAN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE153761.010	LB103985.014	10-Nitroaromati	Phenacetin	mg/kg	1	<1	200	0
		cs and	Pentachloronitrobenzene (quintozone)	mg/kg	0.5	<0.5	200	0
		11-Anilines	Aniline	mg/kg	3	<3	200	0
		and Amines	4-chloroaniline	mg/kg	1	<1	200	0
			2-nitroaniline	mg/kg	1	<1	200	0
			3-nitroaniline	mg/kg	1	<1	200	0
			4-nitroaniline	mg/kg	1	<1	200	0
			Diphenylamine	mg/kg	0.5	<0.5	200	0
			o-toluidine	mg/kg	1	<1	200	0
			5-nitro-o-toluidine	mg/kg	1	<1	200	0
			1-naphthylamine	mg/kg	1	<1	200	0
			2-naphthylamine	mg/kg	1	<1	200	0
		12-Haloethers	Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5	200	0
			Bis(2-chloroethyl) ether	mg/kg	0.5	<0.5	200	0
			Bis(2-chloroisopropyl) ether	mg/kg	0.5	<0.5	200	0
			4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5	200	0
			4-bromophenyl phenyl ether	mg/kg	0.5	<0.5	200	0
		13-Other	Methyl methanesulfonate	mg/kg	1	<1	200	0
		SVOCs	Ethyl methanesulfonate	mg/kg	1	<1	200	0
			Dibenzofuran	mg/kg	0.5	<0.5	200	0
			Benzyl alcohol	mg/kg	1	<1	200	0
			Safrole	mg/kg	0.5	<0.5	200	0
			Isosafrole Isomer 1	mg/kg	1	<1	200	0
			Isosafrole Isomer 2	mg/kg	1	<1	200	0
			1,4-naphthoquinone	mg/kg	0.5	<0.5	200	0
			Thionazin	mg/kg	1	<1	200	0
		14-Speciated	3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	200	0
		Routine	2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	200	0
			Phenol	mg/kg	0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	200	0
			2,3,4,6-tetrachlorophenol	mg/kg	0.5	<0.5	200	0
		Surrogates	d5-phenol (Surrogate)	mg/kg	-	1.5	30	6
			d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	30	8
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	30	6
			2,4,6-tribromophenol (Surrogate)	mg/kg	-	3.7	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	30	3
SE153761.021	LB103985.034	01-PAHs	Acenaphthene	mg/kg	0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	200	0
			Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	1.2	39	12
			2-methylnaphthalene	mg/kg	0.1	2.0	35	12

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Full 8270 SVOC in Soil (continued)

Method: ME-(AU)-ENVJAN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE153761.021	LB103985.034	01-PAHs	Naphthalene	mg/kg	0.1	1.4	38	10
			Phenanthrene	mg/kg	0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	200	0
			2-acetylaminofluorene	mg/kg	0.5	<0.5	200	0
			7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5	200	0
			3-methylcholanthrene	mg/kg	0.5	<0.5	200	0
		02-OCs	Aldrin	mg/kg	0.1	<0.1	200	0
			Alpha-BHC	mg/kg	0.1	<0.1	200	0
			Beta-BHC	mg/kg	0.5	<0.5	200	0
			Delta-BHC	mg/kg	0.1	<0.1	200	0
			Gamma-BHC (Lindane)	mg/kg	0.1	<0.1	200	0
			p,p-DDD	mg/kg	0.1	<0.1	200	0
			p,p-DDE	mg/kg	0.1	<0.1	200	0
			p,p-DDT	mg/kg	0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	200	0
			Alpha-endosulfan	mg/kg	0.2	<0.2	200	0
			Beta-endosulfan	mg/kg	0.2	<0.2	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	200	0
			Endrin	mg/kg	0.2	<0.2	200	0
			Heptachlor	mg/kg	0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	200	0
			Alpha-chlordane	mg/kg	0.1	<0.1	200	0
			Gamma-chlordane	mg/kg	0.1	<0.1	200	0
			Endrin ketone	mg/kg	0.1	<0.1	200	0
		03-OPs	Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	200	0
			Bromophos ethyl	mg/kg	0.2	<0.2	200	0
			Carbophenothion	mg/kg	0.5	<0.5	200	0
			Chlorfenvinphos-cis	mg/kg	2	<2	200	0
			Chlorfenvinphos-trans	mg/kg	0.5	<0.5	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	200	0
			Chlorpyrifos-methyl	mg/kg	0.5	<0.5	200	0
			Co-Ral (Coumaphos)	mg/kg	0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	200	0
			Dichlorvos	mg/kg	0.5	<0.5	200	0
			Demeton-S-methyl	mg/kg	0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	200	0
			Disulfoton (Di-syston)	mg/kg	0.5	<0.5	200	0
			EPN*	mg/kg	0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	200	0
			Ethoprophos (ethoprop or prophos)	mg/kg	0.5	<0.5	200	0
			Famphur (Famophos)	mg/kg	0.5	<0.5	200	0
			Fenamiphos (Phenamiphos)	mg/kg	0.5	<0.5	200	0
			Fenchlorophos (Ronnell)	mg/kg	0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	200	0
			Fenthion	mg/kg	0.5	<0.5	200	0
			Malathion (Maldison)	mg/kg	0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	200	0
			Mevinphos-cis/trans	mg/kg	1	<1	200	0
			o,o,o-triethyl phosphorothioate	mg/kg	0.5	<0.5	200	0
			Parathion ethyl (Parathion)	mg/kg	0.2	<0.2	200	0
			Parathion methyl	mg/kg	0.5	<0.5	200	0
			Phorate	mg/kg	0.5	<0.5	200	0
			Pirimiphos-ethyl	mg/kg	0.5	<0.5	200	0
			Pirimiphos-methyl	mg/kg	0.5	<0.5	200	0
			Profenofos	mg/kg	0.5	<0.5	200	0
			Prothiophos (Tokuthion)*	mg/kg	0.5	<0.5	200	0
			Sulfotepp	mg/kg	0.5	<0.5	200	0
			Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	<0.5	200	0

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The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Full 8270 SVOC in Soil (continued)

Method: ME-(AU)-ENVJAN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %		
SE153761.021	LB103985.034	04-PCB UPAC(7)	PCB Congener C28	mg/kg	0.1	<0.1	<0.1	200	0		
			PCB Congener C52	mg/kg	0.1	<0.1	<0.1	200	0		
			PCB Congener C101	mg/kg	0.1	<0.1	<0.1	200	0		
			PCB Congener C118	mg/kg	0.1	<0.1	<0.1	200	0		
			PCB Congener C138	mg/kg	0.1	<0.1	<0.1	200	0		
			PCB Congener C153	mg/kg	0.1	<0.1	<0.1	200	0		
					PCB Congener C180	mg/kg	0.1	<0.1	<0.1	200	0
		05-SVCH (CI Benzenes,		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0	
				1,2-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	200	0	
				1,3-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	200	0	
				1,4-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	200	0	
				Hexachlorobutadiene	mg/kg	0.5	<0.5	<0.5	200	0	
				Hexachlorocyclopentadiene	mg/kg	1	<1	<1	200	0	
				Hexachloroethane	mg/kg	0.5	<0.5	<0.5	200	0	
				Hexachloropropene	mg/kg	0.5	<0.5	<0.5	200	0	
				Pentachlorobenzene	mg/kg	0.5	<0.5	<0.5	200	0	
				Pentachloroethane	mg/kg	0.5	<0.5	<0.5	200	0	
				1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1	<1	200	0	
				1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5	<0.5	200	0	
				1/2-Chloronaphthalene	mg/kg	1	<1	<1	200	0	
				1,2,4-trichlorobenzene	mg/kg	0.5	<0.5	<0.5	200	0	
			06-Phthalates		Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	<5	200	0
				Bis(2-ethylhexyl)adipate	mg/kg	0.5	<0.5	<0.5	200	0	
				Butyl benzyl phthalate	mg/kg	0.5	<0.5	<0.5	200	0	
				Di-n-butyl phthalate	mg/kg	0.5	<0.5	<0.5	200	0	
				Diethyl phthalate	mg/kg	0.5	<0.5	<0.5	200	0	
				Dimethyl phthalate	mg/kg	0.5	<0.5	<0.5	200	0	
				Diethyl phthalate	mg/kg	0.5	<0.5	<0.5	200	0	
				Diethyl phthalate	mg/kg	0.5	<0.5	<0.5	200	0	
		07-Carbamates		Carbofuran	mg/kg	0.5	<0.5	<0.5	200	0	
				Carbaryl	mg/kg	0.5	<0.5	<0.5	200	0	
		08-Herbicides		Trifluralin	mg/kg	0.5	<0.5	<0.5	200	0	
		09-Nitrosamine s		N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5	<0.5	200	0	
				N-nitroso-diethylamine (NDEA)	mg/kg	1	<1	<1	200	0	
				N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	<0.5	<0.5	200	0	
				N-nitroso-morpholine (NMOR)	mg/kg	0.5	<0.5	<0.5	200	0	
				N-nitroso-piperidine (NPIP)	mg/kg	0.5	<0.5	<0.5	200	0	
				N-nitroso-pyrrolidine (NPYR)	mg/kg	1	<1	<1	200	0	
		10-Nitroaromati cs and		4-amino biphenyl	mg/kg	1	<1	<1	200	0	
				Acetophenone	mg/kg	0.5	<0.5	<0.5	200	0	
				1,3-dinitrobenzene	mg/kg	1	<1	<1	200	0	
				2,4-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	200	0	
				2,6-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	200	0	
				Isophorone	mg/kg	0.5	<0.5	<0.5	200	0	
				Nitrobenzene	mg/kg	0.5	<0.5	<0.5	200	0	
				p-(dimethylamino) azobenzene	mg/kg	1	<1	<1	200	0	
				Phenacetin	mg/kg	1	<1	<1	200	0	
				Pentachloronitrobenzene (quintozene)	mg/kg	0.5	<0.5	<0.5	200	0	
				Aniline	mg/kg	3	<3	<3	200	0	
			11-Anilines and Amines		4-chloroaniline	mg/kg	1	<1	<1	200	0
					2-nitroaniline	mg/kg	1	<1	<1	200	0
					3-nitroaniline	mg/kg	1	<1	<1	200	0
					4-nitroaniline	mg/kg	1	<1	<1	200	0
				Diphenylamine	mg/kg	0.5	<0.5	<0.5	200	0	
				o-toluidine	mg/kg	1	<1	<1	200	0	
				5-nitro-o-toluidine	mg/kg	1	<1	<1	200	0	
				1-naphthylamine	mg/kg	1	<1	<1	200	0	
				2-naphthylamine	mg/kg	1	<1	<1	200	0	
		12-Haloethers		Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5	<0.5	200	0	
				Bis(2-chloroethyl) ether	mg/kg	0.5	<0.5	<0.5	200	0	
	Bis(2-chloroisopropyl) ether		mg/kg	0.5	<0.5	<0.5	200	0			
	4-chlorophenyl phenyl ether		mg/kg	0.5	<0.5	<0.5	200	0			

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

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Full 8270 SVOC in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE153761.021	LB103985.034	12-Haloethers	4-bromophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	200	0
		13-Other	Methyl methanesulfonate	mg/kg	1	<1	<1	200	0
		SVOCs	Ethyl methanesulfonate	mg/kg	1	<1	<1	200	0
			Dibenzofuran	mg/kg	0.5	<0.5	<0.5	200	0
			Benzyl alcohol	mg/kg	1	<1	<1	200	0
			Safrole	mg/kg	0.5	<0.5	<0.5	200	0
			Isosafrole Isomer 1	mg/kg	1	<1	<1	200	0
			Isosafrole Isomer 2	mg/kg	1	<1	<1	200	0
			1,4-naphthoquinone	mg/kg	0.5	<0.5	<0.5	200	0
			Thionazin	mg/kg	1	<1	<1	200	0
		14-Speciated	3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
		Routine	2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,3,4,6-tetrachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d5-phenol (Surrogate)	mg/kg	-	1.5	1.6	30	3
			d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.4	30	18
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	0
			2,4,6-tribromophenol (Surrogate)	mg/kg	-	3.9	3.7	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	3

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311/AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE153771.001	LB104021.014	Mercury	µg/L	0.0001	<0.0001	<0.0001	200	0
SE153807.005	LB104021.025	Mercury	µg/L	0.0001	<0.0001	<0.0001	200	0

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE153742.001	LB104030.014	Mercury	mg/kg	0.01	0.04	0.04	153	0
SE153761.008	LB104030.024	Mercury	mg/kg	0.01	<0.01	<0.01	200	0
SE153761.018	LB104031.014	Mercury	mg/kg	0.01	0.01	0.01	200	0
SE153770.005	LB104031.024	Mercury	mg/kg	0.01	0.02	0.02	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE153761.010	LB103901.011	% Moisture	%w/w	0.5	16	16	36	2
SE153761.020	LB103901.022	% Moisture	%w/w	0.5	17	17	36	2
SE153770.008	LB103901.033	% Moisture	%w/w	0.5	22.9	22.8	34	1

Total Recoverable Metals in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE153742.001	LB104004.014	Arsenic, As	mg/kg	3	<3	3	62	14
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.3	4.1	4.2	42	2
		Copper, Cu	mg/kg	0.5	23	28	32	20
		Lead, Pb	mg/kg	1	22	26	34	18
		Nickel, Ni	mg/kg	0.5	2.6	1.7	53	39
		Zinc, Zn	mg/kg	0.5	60	66	33	10
SE153761.008	LB104004.024	Arsenic, As	mg/kg	3	<3	<3	70	5
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	182	0
		Chromium, Cr	mg/kg	0.3	9.2	8.9	36	4
		Copper, Cu	mg/kg	0.5	11	9.6	35	13

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Metals in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE153761.008	LB104004.024	Lead, Pb	mg/kg	1	8	11	40	28
		Nickel, Ni	mg/kg	0.5	27	28	32	2
		Zinc, Zn	mg/kg	0.5	27	27	37	0
SE153761.018	LB104005.014	Arsenic, As	mg/kg	3	5	6	48	18
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	168	0
		Chromium, Cr	mg/kg	0.3	8.4	9.3	36	10
		Copper, Cu	mg/kg	0.5	19	21	33	9
		Lead, Pb	mg/kg	1	14	15	37	6
		Nickel, Ni	mg/kg	0.5	9.9	10	35	6
		Zinc, Zn	mg/kg	0.5	37	41	35	9
		Cadmium, Cd	mg/kg	0.3	0.1	0.2	200	0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %	
SE153761.010	LB103985.014	TRH C10-C14	mg/kg	20	<20	<20	200	0	
		TRH C15-C28	mg/kg	45	<45	<45	200	0	
		TRH C29-C36	mg/kg	45	<45	<45	200	0	
		TRH C37-C40	mg/kg	100	<100	<100	200	0	
		TRH C10-C36 Total	mg/kg	110	<110	<110	200	0	
		TRH C10-C40 Total	mg/kg	210	<210	<210	200	0	
		TRH F Bands	TRH >C10-C16 (F2)	mg/kg	25	<25	<25	200	0
		TRH >C10-C16 (F2) - Naphthalene	mg/kg	25	<25	<25	200	0	
		TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0	
		TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0	
SE153761.021	LB103985.033	TRH C10-C14	mg/kg	20	180	180	41	3	
		TRH C15-C28	mg/kg	45	<45	<45	200	0	
		TRH C29-C36	mg/kg	45	<45	<45	200	0	
		TRH C37-C40	mg/kg	100	<100	<100	200	0	
		TRH C10-C36 Total	mg/kg	110	180	180	92	3	
		TRH C10-C40 Total	mg/kg	210	<210	<210	148	0	
		TRH F Bands	TRH >C10-C16 (F2)	mg/kg	25	180	170	44	2
		TRH >C10-C16 (F2) - Naphthalene	mg/kg	25	180	170	44	1	
		TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0	
		TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0	

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE153761.006	LB103874.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
			Aliphatics	Chloromethane	mg/kg	1	<1	<1	200
		Vinyl chloride (Chloroethene)		mg/kg	0.1	<0.1	<0.1	200	0
		Bromomethane		mg/kg	1	<1	<1	200	0
		Chloroethane		mg/kg	1	<1	<1	200	0
		Trichlorofluoromethane		mg/kg	1	<1	<1	200	0
		Iodomethane		mg/kg	5	<5	<5	200	0
		1,1-dichloroethene		mg/kg	0.1	<0.1	<0.1	200	0
		Dichloromethane (Methylene chloride)		mg/kg	0.5	<0.5	<0.5	200	0
		Allyl chloride		mg/kg	0.1	<0.1	<0.1	200	0
		trans-1,2-dichloroethene		mg/kg	0.1	<0.1	<0.1	200	0
		1,1-dichloroethane		mg/kg	0.1	<0.1	<0.1	200	0
		cis-1,2-dichloroethene		mg/kg	0.1	<0.1	<0.1	200	0
		Bromochloromethane		mg/kg	0.1	<0.1	<0.1	200	0
		1,2-dichloroethane		mg/kg	0.1	<0.1	<0.1	200	0
		1,1,1-trichloroethane		mg/kg	0.1	<0.1	<0.1	200	0
		1,1-dichloropropene		mg/kg	0.1	<0.1	<0.1	200	0
		Carbon tetrachloride		mg/kg	0.1	<0.1	<0.1	200	0
		Dibromomethane		mg/kg	0.1	<0.1	<0.1	200	0
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0	

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-ENVJAN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %	
SE153761.006	LB103874.014	Halogenated	1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0	
			Aliphatics	1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0	
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0	
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0	
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0	
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0	
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0	
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0	
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0	
			Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	173	0
				Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200
			2-chlorotoluene		mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene		mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene		mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene		mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene		mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene		mg/kg	0.1	<0.1	<0.1	184	0
			1,2,3-trichlorobenzene		mg/kg	0.1	<0.1	<0.1	200	0
			Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic		Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0	
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0	
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0	
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0	
			Isopropylbenzene (Cumene)	mg/kg	0.1	1.7	2.0	35	14	
			n-propylbenzene	mg/kg	0.1	3.8	4.4	32	16	
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0	
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0	
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0	
			sec-butylbenzene	mg/kg	0.1	3.4	4.0	33	15	
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	163	0	
		n-butylbenzene	mg/kg	0.1	4.0	4.8	32	20		
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0	
			Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated		Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
			Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	1.3	1.4	37	5
		Vinyl acetate		mg/kg	10	<10	<10	200	0	
		MEK (2-butanone)		mg/kg	10	<10	<10	200	0	
		MIBK (4-methyl-2-pentanone)		mg/kg	1	<1	<1	200	0	
		2-hexanone (MBK)		mg/kg	5	<5	<5	200	0	
		Polycyclic		Naphthalene	mg/kg	0.1	13	14	31	9
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0	
		Surrogates	Dibromofluoromethane (Surrogate)	mg/kg	-	4.1	3.6	50	12	
			d4-1,2-dichloroethane (Surrogate)	mg/kg	-	4.4	4.3	50	3	
			d8-toluene (Surrogate)	mg/kg	-	3.9	3.5	50	10	
			Bromofluorobenzene (Surrogate)	mg/kg	-	5.6	6.4	50	14	
		Totals	Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0	
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0	
		Trihalomethanes	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0	
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0	
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0	
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0	
SE153761.016	LB103874.025	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0	
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0	
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0	
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0	
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0	
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0	
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0	
Vinyl chloride (Chloroethene)	mg/kg		0.1	<0.1	<0.1	200	0			

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-ENVJAN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE153761.016	LB103874.025	Halogenated	Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
		Aliphatics	Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	197	0
			Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	Dibromofluoromethane (Surrogate)	mg/kg	-	3.6	3.8	50	6

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-ENVJAN433

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE153761.016	LB103874.025	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	4.3	4.2	50
			d8-toluene (Surrogate)	mg/kg	-	3.6	3.7	50
			Bromofluorobenzene (Surrogate)	mg/kg	-	4.3	4.7	50
		Totals	Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200
		Trihalomethanes	Chloroform	mg/kg	0.1	<0.1	<0.1	200
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200
			Bromoform	mg/kg	0.1	<0.1	<0.1	200
SE153812.004	LB103875.014	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200
			Toluene	mg/kg	0.1	<0.1	<0.1	200
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200
			o-xylene	mg/kg	0.1	<0.1	<0.1	200
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200
		Surrogates	Dibromofluoromethane (Surrogate)	mg/kg	-	3.7	3.9	50
			d4-1,2-dichloroethane (Surrogate)	mg/kg	-	4.2	4.4	50
			d8-toluene (Surrogate)	mg/kg	-	4.6	4.8	50
			Bromofluorobenzene (Surrogate)	mg/kg	-	5.3	5.1	50
		Totals	Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200
SE153812.017	LB103875.025	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200
			Toluene	mg/kg	0.1	<0.1	<0.1	200
			Ethylbenzene	mg/kg	0.1	<0.1	0.1	148
			m/p-xylene	mg/kg	0.2	<0.2	0.3	119
			o-xylene	mg/kg	0.1	<0.1	<0.1	200
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	163
		Surrogates	Dibromofluoromethane (Surrogate)	mg/kg	-	3.7	3.5	50
			d4-1,2-dichloroethane (Surrogate)	mg/kg	-	4.2	3.9	50
			d8-toluene (Surrogate)	mg/kg	-	4.5	4.2	50
			Bromofluorobenzene (Surrogate)	mg/kg	-	5.5	5.3	50
		Totals	Total Xylenes*	mg/kg	0.3	<0.3	0.3	158
			Total BTEX	mg/kg	0.6	<0.6	<0.6	121

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-ENVJAN433

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE153761.006	LB103874.014	TRH C6-C10	mg/kg	25	140	140	48	3
		TRH C6-C9	mg/kg	20	35	39	84	10
		Surrogates	Dibromofluoromethane (Surrogate)	mg/kg	-	3.8	3.7	30
			d4-1,2-dichloroethane (Surrogate)	mg/kg	-	3.6	3.4	30
			d8-toluene (Surrogate)	mg/kg	-	4.0	4.2	30
			Bromofluorobenzene (Surrogate)	mg/kg	-	5.8	6.3	30
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	140	140	48
			TRH C6-C9	mg/kg	20	<20	<20	200
SE153761.016	LB103874.025	Surrogates	Dibromofluoromethane (Surrogate)	mg/kg	-	3.6	3.8	30
			d4-1,2-dichloroethane (Surrogate)	mg/kg	-	3.5	3.6	30
			d8-toluene (Surrogate)	mg/kg	-	4.1	4.2	30
			Bromofluorobenzene (Surrogate)	mg/kg	-	4.7	5.0	30
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200
			TRH C6-C9	mg/kg	20	<20	<20	200
SE153812.004	LB103875.014	TRH C6-C10	mg/kg	25	<25	<25	200	0
		TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	Dibromofluoromethane (Surrogate)	mg/kg	-	3.7	3.9	30
			d4-1,2-dichloroethane (Surrogate)	mg/kg	-	4.2	4.4	30
			d8-toluene (Surrogate)	mg/kg	-	4.6	4.8	30
			Bromofluorobenzene (Surrogate)	mg/kg	-	5.3	5.1	30
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200
			TRH C6-C9	mg/kg	20	<20	<20	200
SE153812.017	LB103875.025	TRH C6-C10	mg/kg	25	<25	<25	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued)

Method: ME-(AU)-ENVJAN433

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE153812.017	LB103875.025	TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates						
		Dibromofluoromethane (Surrogate)	mg/kg	-	3.7	3.5	30	6
		d4-1,2-dichloroethane (Surrogate)	mg/kg	-	4.2	3.9	30	8
		d8-toluene (Surrogate)	mg/kg	-	4.5	4.2	30	6
		Bromofluorobenzene (Surrogate)	mg/kg	-	5.5	5.3	30	5
		VPH F Bands						
		Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
		TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB103985.002	01-PAHs	Acenaphthene	mg/kg	0.1	3.3	4	70 - 130
		Acenaphthylene	mg/kg	0.1	3.3	4	70 - 130
		Anthracene	mg/kg	0.1	3.0	4	70 - 130
		Benzo(a)pyrene	mg/kg	0.1	3.7	4	70 - 130
		Fluoranthene	mg/kg	0.1	3.2	4	70 - 130
		Naphthalene	mg/kg	0.1	3.3	4	70 - 130
		Phenanthrene	mg/kg	0.1	3.1	4	70 - 130
	02-OCs	Pyrene	mg/kg	0.1	3.0	4	70 - 130
		Aldrin	mg/kg	0.1	0.7	1	70 - 130
		Delta-BHC	mg/kg	0.1	1.0	1	70 - 130
		p,p-DDT	mg/kg	0.1	0.7	1	70 - 130
		Dieldrin	mg/kg	0.2	0.9	1	70 - 130
		Endrin	mg/kg	0.2	0.9	1	70 - 130
	03-OPs	Heptachlor	mg/kg	0.1	0.9	1	70 - 130
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.4	2	70 - 130
		Diazinon (Dimpylate)	mg/kg	0.5	1.5	2	70 - 130
		Dichlorvos	mg/kg	0.5	1.6	2	70 - 130
	05-SVCH (CI Benzenes,	Ethion	mg/kg	0.2	1.4	2	70 - 130
		Hexachlorobenzene (HCB)	mg/kg	0.1	0.8	1	70 - 130
		Hexachlorobutadiene	mg/kg	0.5	1.0	1	70 - 130
		Hexachloroethane	mg/kg	0.5	0.9	1	70 - 130
		Pentachlorobenzene	mg/kg	0.5	0.8	1	70 - 130
	06-Phthalates	1,2,3,4-tetrachlorobenzene	mg/kg	0.5	0.9	1	70 - 130
		Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	4	70 - 130
		Butyl benzyl phthalate	mg/kg	0.5	3.2	4	70 - 130
		Di-n-butyl phthalate	mg/kg	0.5	2.9	4	70 - 130
		Diethyl phthalate	mg/kg	0.5	3.1	4	70 - 130
	07-Carbamates	Dimethyl phthalate	mg/kg	0.5	3.2	4	70 - 130
		Diethyl phthalate	mg/kg	0.5	3.6	4	70 - 130
		Carbofuran	mg/kg	0.5	1.3	1	70 - 130
		09-Nitrosamine	mg/kg	0.5	1.6	2	70 - 130
		10-Nitroaromati	mg/kg	0.5	0.7	1	70 - 130
	14-Speciati	Pentachloronitrobenzene (quintozene)	mg/kg	0.5	0.8	1	70 - 130
		2,4-dichlorophenol	mg/kg	0.5	0.8	1	70 - 130
		Phenol	mg/kg	0.5	0.8	1	70 - 130
	Routine	2,4,6-trichlorophenol	mg/kg	0.5	0.8	1	70 - 130
		Pentachlorophenol	mg/kg	0.5	1.0	1	70 - 130
		d5-phenol (Surrogate)	mg/kg	-	1.5	2	40 - 130
		d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130
		2,4,6-tribromophenol (Surrogate)	mg/kg	-	3.6	5	40 - 130
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB104030.002	Mercury	mg/kg	0.01	0.19	0.2	70 - 130	97
LB104031.002	Mercury	mg/kg	0.01	0.20	0.2	70 - 130	99

Total Recoverable Metals in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB104004.002	Arsenic, As	mg/kg	3	51	50	80 - 120	101
	Cadmium, Cd	mg/kg	0.3	50	50	80 - 120	99
	Chromium, Cr	mg/kg	0.3	48	50	80 - 120	96
	Copper, Cu	mg/kg	0.5	49	50	80 - 120	98
	Lead, Pb	mg/kg	1	49	50	80 - 120	99
	Nickel, Ni	mg/kg	0.5	49	50	80 - 120	98
	Zinc, Zn	mg/kg	0.5	49	50	80 - 120	99
LB104005.002	Arsenic, As	mg/kg	3	52	50	80 - 120	104
	Cadmium, Cd	mg/kg	0.3	52	50	80 - 120	103
	Chromium, Cr	mg/kg	0.3	51	50	80 - 120	103
	Copper, Cu	mg/kg	0.5	53	50	80 - 120	106
	Lead, Pb	mg/kg	1	52	50	80 - 120	103

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Total Recoverable Metals in Soil/Waste Solids/Materials by ICPOES (continued)
Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB104005.002	Nickel, Ni	mg/kg	0.5	51	50	80 - 120	102
	Zinc, Zn	mg/kg	0.5	52	50	80 - 120	105

Trace Metals (Dissolved) in Water by ICPMS
Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB103735.002	Arsenic, As	µg/L	1	20	20	80 - 120	102
	Cadmium, Cd	µg/L	0.1	21	20	80 - 120	105
	Chromium, Cr	µg/L	1	21	20	80 - 120	106
	Copper, Cu	µg/L	1	22	20	80 - 120	111
	Lead, Pb	µg/L	1	22	20	80 - 120	112
	Nickel, Ni	µg/L	1	22	20	80 - 120	108
	Zinc, Zn	µg/L	5	22	20	80 - 120	109

TRH (Total Recoverable Hydrocarbons) in Soil
Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB103985.002	TRH C10-C14	mg/kg	20	38	40	60 - 140	95
	TRH C15-C28	mg/kg	45	<45	40	60 - 140	98
	TRH C29-C36	mg/kg	45	<45	40	60 - 140	88
	TRH F Bands	TRH >C10-C16 (F2)	mg/kg	25	39	60 - 140	98
	TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	98
	TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	85

TRH (Total Recoverable Hydrocarbons) in Water
Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB103791.002	TRH C10-C14	µg/L	50	1100	1200	60 - 140	93
	TRH C15-C28	µg/L	200	1200	1200	60 - 140	97
	TRH C29-C36	µg/L	200	1200	1200	60 - 140	97
	TRH F Bands	TRH >C10-C16 (F2)	µg/L	60	1200	60 - 140	97
	TRH >C16-C34 (F3)	µg/L	500	1200	1200	60 - 140	96
	TRH >C34-C40 (F4)	µg/L	500	580	600	60 - 140	97

VOC's in Soil
Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %	
LB103874.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	2.4	2.56	60 - 140	93	
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	2.5	2.56	60 - 140	96	
		Trichloroethene (Trichloroethylene -TCE)		mg/kg	0.1	1.9	2.56	60 - 140	73
	Halogenated	Chlorobenzene	mg/kg	0.1	2.9	2.56	60 - 140	114	
	Monocyclic	Benzene	mg/kg	0.1	2.6	2.9	60 - 140	90	
	Aromatic	Toluene	mg/kg	0.1	3.0	2.9	60 - 140	102	
		Ethylbenzene	mg/kg	0.1	2.4	2.9	60 - 140	82	
		m/p-xylene	mg/kg	0.2	4.7	5.8	60 - 140	81	
		o-xylene	mg/kg	0.1	2.6	2.9	60 - 140	91	
	Surrogates	Dibromofluoromethane (Surrogate)		mg/kg	-	4.7	5	60 - 140	95
		d4-1,2-dichloroethane (Surrogate)		mg/kg	-	4.7	5	60 - 140	95
		d8-toluene (Surrogate)		mg/kg	-	4.5	5	60 - 140	91
		Bromofluorobenzene (Surrogate)		mg/kg	-	4.8	5	60 - 140	96
	Trihalomethan	Chloroform		mg/kg	0.1	2.5	2.56	60 - 140	96
LB103875.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	1.9	2.56	60 - 140	75	
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	2.8	2.56	60 - 140	111	
		Trichloroethene (Trichloroethylene -TCE)		mg/kg	0.1	2.5	2.56	60 - 140	98
	Halogenated	Chlorobenzene	mg/kg	0.1	2.6	2.56	60 - 140	102	
	Monocyclic	Benzene	mg/kg	0.1	1.9	2.9	60 - 140	65	
	Aromatic	Toluene	mg/kg	0.1	3.0	2.9	60 - 140	103	
		Ethylbenzene	mg/kg	0.1	2.2	2.9	60 - 140	74	
		m/p-xylene	mg/kg	0.2	4.5	5.8	60 - 140	78	
		o-xylene	mg/kg	0.1	2.2	2.9	60 - 140	75	
	Surrogates	Dibromofluoromethane (Surrogate)		mg/kg	-	4.8	5	60 - 140	97
		d4-1,2-dichloroethane (Surrogate)		mg/kg	-	5.2	5	60 - 140	104
		d8-toluene (Surrogate)		mg/kg	-	4.5	5	60 - 140	89
		Bromofluorobenzene (Surrogate)		mg/kg	-	5.1	5	60 - 140	101
	Trihalomethan	Chloroform		mg/kg	0.1	2.7	2.56	60 - 140	107

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB103877.002	Monocyclic	Benzene	µg/L	0.5	51	45.45	60 - 140 112
	Aromatic	Toluene	µg/L	0.5	51	45.45	60 - 140 112
		Ethylbenzene	µg/L	0.5	51	45.45	60 - 140 112
		m/p-xylene	µg/L	1	100	90.9	60 - 140 113
		o-xylene	µg/L	0.5	51	45.45	60 - 140 112
	Surrogates	Dibromofluoromethane (Surrogate)	µg/L	-	5.0	5	60 - 140 100
		d4-1,2-dichloroethane (Surrogate)	µg/L	-	5.0	5	60 - 140 99
		d8-toluene (Surrogate)	µg/L	-	5.0	5	60 - 140 100
		Bromofluorobenzene (Surrogate)	µg/L	-	5.2	5	60 - 140 104

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %	
LB103874.002	TRH C6-C10	mg/kg	25	<25	24.65	60 - 140	92	
	TRH C6-C9	mg/kg	20	22	23.2	60 - 140	96	
	Surrogates	Dibromofluoromethane (Surrogate)	mg/kg	-	4.3	5	60 - 140	85
		d4-1,2-dichloroethane (Surrogate)	mg/kg	-	4.5	5	60 - 140	89
		d8-toluene (Surrogate)	mg/kg	-	4.8	5	60 - 140	96
		Bromofluorobenzene (Surrogate)	mg/kg	-	4.7	5	60 - 140	94
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	7.25	60 - 140	102
	LB103875.002	TRH C6-C10	mg/kg	25	<25	24.65	60 - 140	94
TRH C6-C9		mg/kg	20	<20	23.2	60 - 140	86	
Surrogates		Dibromofluoromethane (Surrogate)	mg/kg	-	4.4	5	60 - 140	89
		d4-1,2-dichloroethane (Surrogate)	mg/kg	-	5.2	5	60 - 140	105
		d8-toluene (Surrogate)	mg/kg	-	5.1	5	60 - 140	101
		Bromofluorobenzene (Surrogate)	mg/kg	-	5.2	5	60 - 140	103
VPH F Bands		TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	7.25	60 - 140	130

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %	
LB103877.002	TRH C6-C10	µg/L	50	940	946.63	60 - 140	99	
	TRH C6-C9	µg/L	40	770	818.71	60 - 140	94	
	Surrogates	Dibromofluoromethane (Surrogate)	µg/L	-	5.0	5	60 - 140	100
		d4-1,2-dichloroethane (Surrogate)	µg/L	-	5.0	5	60 - 140	99
		d8-toluene (Surrogate)	µg/L	-	5.0	5	60 - 140	100
		Bromofluorobenzene (Surrogate)	µg/L	-	5.2	5	60 - 140	104
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	630	639.67	60 - 140	99

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Full 8270 SVOC in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE153761.001	LB103985.033	01-PAHs	Acenaphthene	mg/kg	0.1	3.2	<0.1	4	81
			Acenaphthylene	mg/kg	0.1	3.2	<0.1	4	80
			Anthracene	mg/kg	0.1	3.6	<0.1	4	89
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	<0.2	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	3.6	<0.1	4	90
			Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Fluoranthene	mg/kg	0.1	3.5	<0.1	4	87
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			Naphthalene	mg/kg	0.1	3.2	<0.1	4	81
			Phenanthrene	mg/kg	0.1	3.4	<0.1	4	86
			Pyrene	mg/kg	0.1	3.3	<0.1	4	82
			2-acetylaminofluorene	mg/kg	0.5	<0.5	<0.5	-	-
		7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5	<0.5	-	-	
		3-methylcholanthrene	mg/kg	0.5	<0.5	<0.5	-	-	
		02-OCs	Aldrin	mg/kg	0.1	0.8	<0.1	1	79
			Alpha-BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Beta-BHC	mg/kg	0.5	<0.1	<0.5	-	-
			Delta-BHC	mg/kg	0.1	0.8	<0.1	1	75
			Gamma-BHC (Lindane)	mg/kg	0.1	<0.1	<0.1	-	-
			p,p-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			p,p-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			p,p-DDT	mg/kg	0.1	0.7	<0.1	1	72
			Dieldrin	mg/kg	0.2	0.7	<0.2	1	71
			Alpha-endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			Beta-endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin	mg/kg	0.2	0.9	<0.2	1	92
			Heptachlor	mg/kg	0.1	0.8	<0.1	1	83
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha-chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Gamma-chlordane	mg/kg	0.1	<0.1	<0.1	-	-
		Endrin ketone	mg/kg	0.1	<0.1	<0.1	-	-	
03-OPs	Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-		
	Bromophos ethyl	mg/kg	0.2	<0.2	<0.2	-	-		
	Carbophenothion	mg/kg	0.5	<0.5	<0.5	-	-		
	Chlorfenvinphos-cis	mg/kg	2	<2	<2	-	-		
	Chlorfenvinphos-trans	mg/kg	0.5	<0.5	<0.5	-	-		
	Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.8	<0.2	2	91		
	Chlorpyrifos-methyl	mg/kg	0.5	<0.5	<0.5	-	-		
	Co-Ral (Coumaphos)	mg/kg	0.5	<0.5	<0.5	-	-		
	Diazinon (Dimpylate)	mg/kg	0.5	1.5	<0.5	2	75		
	Dichlorvos	mg/kg	0.5	1.4	<0.5	2	71		
	Demeton-S-methyl	mg/kg	0.5	<0.5	<0.5	-	-		
	Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-		
	Disulfoton (Di-syston)	mg/kg	0.5	<0.5	<0.5	-	-		
	EPN*	mg/kg	0.5	<0.5	<0.5	-	-		
	Ethion	mg/kg	0.2	1.4	<0.2	2	72		
	Ethoprophos (ethoprop or prophos)	mg/kg	0.5	<0.5	<0.5	-	-		
	Famphur (Famophos)	mg/kg	0.5	<0.5	<0.5	-	-		
	Fenamiphos (Phenamiphos)	mg/kg	0.5	<0.5	<0.5	-	-		

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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Full 8270 SVOC in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE153761.001	LB103985.033	03-OPs	Fenchlorophos (Ronnell)	mg/kg	0.5	<0.5	<0.5	-
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	-
			Fenthion	mg/kg	0.5	<0.5	<0.5	-
			Malathion (Maldison)	mg/kg	0.2	<0.2	<0.2	-
			Methidathion	mg/kg	0.5	<0.5	<0.5	-
			Mevinphos-cis/trans	mg/kg	1	<1	<1	-
			o,o,o-triethyl phosphorothioate	mg/kg	0.5	<0.5	<0.5	-
			Parathion ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-
			Parathion methyl	mg/kg	0.5	<0.5	<0.5	-
			Phorate	mg/kg	0.5	<0.5	<0.5	-
			Pirimiphos-ethyl	mg/kg	0.5	<0.5	<0.5	-
			Pirimiphos-methyl	mg/kg	0.5	<0.5	<0.5	-
			Profenofos	mg/kg	0.5	<0.5	<0.5	-
			Prothiophos (Tokuthion)*	mg/kg	0.5	<0.5	<0.5	-
			Sulfotepp	mg/kg	0.5	<0.5	<0.5	-
UPAC(7)	04-PCB		Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	<0.5	<0.5	-
			PCB Congener C28	mg/kg	0.1	<0.1	<0.1	-
			PCB Congener C52	mg/kg	0.1	<0.1	<0.1	-
			PCB Congener C101	mg/kg	0.1	<0.1	<0.1	-
			PCB Congener C118	mg/kg	0.1	<0.1	<0.1	-
			PCB Congener C138	mg/kg	0.1	<0.1	<0.1	-
			PCB Congener C153	mg/kg	0.1	<0.1	<0.1	-
05-SVCH (CI Benzenes,	05-SVCH (CI Benzenes,		PCB Congener C180	mg/kg	0.1	<0.1	<0.1	-
			Hexachlorobenzene (HCB)	mg/kg	0.1	0.9	<0.1	1
			1,2-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	-
			1,3-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	-
			1,4-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	-
			Hexachlorobutadiene	mg/kg	0.5	1.0	<0.5	1
			Hexachlorocyclopentadiene	mg/kg	1	<1	<1	-
			Hexachloroethane	mg/kg	0.5	0.9	<0.5	1
			Hexachloropropene	mg/kg	0.5	1.0	<0.5	-
			Pentachlorobenzene	mg/kg	0.5	0.8	<0.5	1
			Pentachloroethane	mg/kg	0.5	0.9	<0.5	-
			1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1	<1	-
			1,2,3,4-tetrachlorobenzene	mg/kg	0.5	0.9	<0.5	1
			1/2-Chloronaphthalene	mg/kg	1	<1	<1	-
			1,2,4-trichlorobenzene	mg/kg	0.5	<0.5	<0.5	-
06-Phthalates	06-Phthalates		Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	<5	4
			Bis(2-ethylhexyl)adipate	mg/kg	0.5	<0.5	<0.5	-
			Butyl benzyl phthalate	mg/kg	0.5	3.4	<0.5	4
			Di-n-butyl phthalate	mg/kg	0.5	3.1	<0.5	4
			Diethyl phthalate	mg/kg	0.5	3.1	<0.5	4
			Dimethyl phthalate	mg/kg	0.5	3.4	<0.5	4
			Dioctyl phthalate	mg/kg	0.5	3.2	<0.5	4
07-Carbamates	07-Carbamates		Carbofuran	mg/kg	0.5	1.2	<0.5	1
			Carbaryl	mg/kg	0.5	<0.5	<0.5	-
08-Herbicide	08-Herbicide		Trifluralin	mg/kg	0.5	<0.5	<0.5	-
09-Nitrosamines	09-Nitrosamines		N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5	<0.5	-
			N-nitroso-diethylamine (NDEA)	mg/kg	1	<1	<1	-
			N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	1.6	<0.5	-
			N-nitroso-morpholine (NMOR)	mg/kg	0.5	<0.5	<0.5	-
			N-nitroso-piperidine (NPIP)	mg/kg	0.5	<0.5	<0.5	-
			N-nitroso-pyrrolidine (NPYR)	mg/kg	1	<1	<1	-
			4-amino biphenyl	mg/kg	1	<1	<1	-
10-Nitroaromatics and	10-Nitroaromatics and		Acetophenone	mg/kg	0.5	<0.5	<0.5	-
			1,3-dinitrobenzene	mg/kg	1	<1	<1	-
			2,4-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	-
			2,6-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	-
			Isophorone	mg/kg	0.5	<0.5	<0.5	-
			Nitrobenzene	mg/kg	0.5	<0.5	<0.5	-
			p-(dimethylamino) azobenzene	mg/kg	1	<1	<1	-

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Full 8270 SVOC in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE153761.001	LB103985.033	10-Nitroaromatics and Amines	Phenacetin	mg/kg	1	<1	<1	-
			Pentachloronitrobenzene (quintozene)	mg/kg	0.5	0.7	<0.5	72
		11-Anilines	Aniline	mg/kg	3	<3	<3	-
			4-chloroaniline	mg/kg	1	<1	<1	-
			2-nitroaniline	mg/kg	1	<1	<1	-
			3-nitroaniline	mg/kg	1	<1	<1	-
			4-nitroaniline	mg/kg	1	<1	<1	-
			Diphenylamine	mg/kg	0.5	<0.5	<0.5	-
			o-toluidine	mg/kg	1	<1	<1	-
			5-nitro-o-toluidine	mg/kg	1	<1	<1	-
			1-naphthylamine	mg/kg	1	<1	<1	-
			2-naphthylamine	mg/kg	1	<1	<1	-
		12-Haloethers	Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5	<0.5	-
			Bis(2-chloroethyl) ether	mg/kg	0.5	<0.5	<0.5	-
			Bis(2-chloroisopropyl) ether	mg/kg	0.5	<0.5	<0.5	-
			4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	-
			4-bromophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	-
		13-Other SVOCs	Methyl methanesulfonate	mg/kg	1	<1	<1	-
			Ethyl methanesulfonate	mg/kg	1	<1	<1	-
			Dibenzofuran	mg/kg	0.5	<0.5	<0.5	-
			Benzyl alcohol	mg/kg	1	<1	<1	-
			Safrrole	mg/kg	0.5	<0.5	<0.5	-
			Isosafrole Isomer 1	mg/kg	1	<1	<1	-
			Isosafrole Isomer 2	mg/kg	1	<1	<1	-
			1,4-naphthoquinone	mg/kg	0.5	<0.5	<0.5	-
			Thionazin	mg/kg	1	<1	<1	-
		14-Speciated Routine	3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	-
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	-
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	-
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	-
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	-
			2,4-dichlorophenol	mg/kg	0.5	0.8	<0.5	78
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	-
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	-
			Phenol	mg/kg	0.5	0.7	<0.5	71
			2,4,6-trichlorophenol	mg/kg	0.5	0.7	<0.5	73
			Pentachlorophenol	mg/kg	0.5	0.7	<0.5	73
			4-nitrophenol	mg/kg	1	<1	<1	-
			2,3,4,6-tetrachlorophenol	mg/kg	0.5	<0.5	<0.5	-
		Surrogates	d5-phenol (Surrogate)	mg/kg	-	1.5	1.5	75
			d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	76
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	70
			2,4,6-tribromophenol (Surrogate)	mg/kg	-	3.5	3.7	70
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	70

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311/AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE153771.005	LB104021.019	Mercury	mg/L	0.0001	0.0077	<0.0001	0.008	97

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE153761.009	LB104031.004	Mercury	mg/kg	0.01	0.19	<0.01	0.2	94

Total Recoverable Metals in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR
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Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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Total Recoverable Metals in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE153761.009	LB104005.004	Arsenic, As	mg/kg	3	52	3	50	98
		Cadmium, Cd	mg/kg	0.3	48	<0.3	50	96
		Chromium, Cr	mg/kg	0.3	56	8.8	50	94
		Copper, Cu	mg/kg	0.5	54	5.0	50	98
		Lead, Pb	mg/kg	1	56	16	50	80
		Nickel, Ni	mg/kg	0.5	53	7.8	50	90
		Zinc, Zn	mg/kg	0.5	74	29	50	90

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE153761.001	LB103985.032	TRH C10-C14	mg/kg	20	36	<20	40	90
		TRH C15-C28	mg/kg	45	<45	<45	40	88
		TRH C29-C36	mg/kg	45	<45	<45	40	93
		TRH C37-C40	mg/kg	100	<100	<100	-	-
		TRH C10-C36 Total	mg/kg	110	<110	<110	-	-
		TRH C10-C40 Total	mg/kg	210	<210	<210	-	-
		TRH F Bands	mg/kg	25	36	<25	40	90
		TRH >C10-C16 (F2) - Naphthalene	mg/kg	25	36	<25	-	-
		TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	90
		TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%	
SE153689.001	LB103874.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-	
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-	
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-	
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-	
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-	
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-	
			Aliphatics	Chloromethane	mg/kg	1	<1	<1	-	-
		Vinyl chloride (Chloroethene)		mg/kg	0.1	<0.1	<0.1	-	-	
		Bromomethane		mg/kg	1	<1	<1	-	-	
		Chloroethane		mg/kg	1	<1	<1	-	-	
		Trichlorofluoromethane		mg/kg	1	<1	<1	-	-	
		Iodomethane		mg/kg	5	<5	<5	-	-	
		1,1-dichloroethene		mg/kg	0.1	2.2	<0.1	2.56	87	
		Dichloromethane (Methylene chloride)		mg/kg	0.5	<0.5	<0.5	-	-	
		Allyl chloride		mg/kg	0.1	<0.1	<0.1	-	-	
		trans-1,2-dichloroethene		mg/kg	0.1	<0.1	<0.1	-	-	
		1,1-dichloroethane		mg/kg	0.1	<0.1	<0.1	-	-	
		cis-1,2-dichloroethene		mg/kg	0.1	<0.1	<0.1	-	-	
		Bromochloromethane		mg/kg	0.1	<0.1	<0.1	-	-	
		1,2-dichloroethane		mg/kg	0.1	2.3	<0.1	2.56	88	
		1,1,1-trichloroethane		mg/kg	0.1	<0.1	<0.1	-	-	
		1,1-dichloropropene		mg/kg	0.1	<0.1	<0.1	-	-	
		Carbon tetrachloride		mg/kg	0.1	<0.1	<0.1	-	-	
		Dibromomethane		mg/kg	0.1	<0.1	<0.1	-	-	
		Trichloroethene (Trichloroethylene -TCE)		mg/kg	0.1	1.8	<0.1	2.56	71	
		1,1,2-trichloroethane		mg/kg	0.1	<0.1	<0.1	-	-	
		1,3-dichloropropane		mg/kg	0.1	<0.1	<0.1	-	-	
		Tetrachloroethene (Perchloroethylene,PCE)		mg/kg	0.1	<0.1	<0.1	-	-	
		1,1,1,2-tetrachloroethane		mg/kg	0.1	<0.1	<0.1	-	-	
		cis-1,4-dichloro-2-butene		mg/kg	1	<1	<1	-	-	
		1,1,2,2-tetrachloroethane		mg/kg	0.1	<0.1	<0.1	-	-	
		1,2,3-trichloropropane		mg/kg	0.1	<0.1	<0.1	-	-	
		trans-1,4-dichloro-2-butene		mg/kg	1	<1	<1	-	-	
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-		
		Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-		
		Halogenated	Chlorobenzene	mg/kg	0.1	2.9	<0.1	2.56	109	
			Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
				2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
				4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE153689.001	LB103874.004	Halogenated	1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			Aromatics	1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-
		Monocyclic Aromatic	1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzene	mg/kg	0.1	2.5	<0.1	2.9	87
			Toluene	mg/kg	0.1	2.9	<0.1	2.9	100
			Ethylbenzene	mg/kg	0.1	2.3	<0.1	2.9	79
			m/p-xylene	mg/kg	0.2	4.5	<0.2	5.8	78
			o-xylene	mg/kg	0.1	2.5	<0.1	2.9	87
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-
		Compounds	2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	Dibromofluoromethane (Surrogate)	mg/kg	-	4.7	4.8	-	93
			d4-1,2-dichloroethane (Surrogate)	mg/kg	-	4.6	5.4	-	92
			d8-toluene (Surrogate)	mg/kg	-	4.7	4.4	-	94
			Bromofluorobenzene (Surrogate)	mg/kg	-	5.2	4.6	-	103
			Totals	Total Xylenes*	mg/kg	0.3	7.1	<0.3	-
			Total BTEX	mg/kg	0.6	15	<0.6	-	-
Trihalomethanes	Chloroform	mg/kg	0.1	2.4	<0.1	2.56	92		
	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-		
	Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-		
	Bromoform	mg/kg	0.1	<0.1	<0.1	-	-		
SE153761.017	LB103875.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
			Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	2.2	<0.1	2.56	86
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	3.2	<0.1	2.56	123
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE153761.017	LB103875.004	Halogenated	Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-
		Aliphatics	Dibromomethane	mg/kg	0.1	<0.1	<0.1	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	2.2	<0.1	2.56
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-
			1,1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-
		Halogenated	Chlorobenzene	mg/kg	0.1	2.4	<0.1	2.56
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-
		Monocyclic	Benzene	mg/kg	0.1	1.8	<0.1	2.9
		Aromatic	Toluene	mg/kg	0.1	2.9	<0.1	2.9
			Ethylbenzene	mg/kg	0.1	2.0	<0.1	2.9
			m/p-xylene	mg/kg	0.2	4.2	<0.2	5.8
			o-xylene	mg/kg	0.1	2.1	<0.1	2.9
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-
		Compounds	2-nitropropane	mg/kg	10	<10	<10	-
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	-
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-
			Vinyl acetate	mg/kg	10	<10	<10	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-
		Surrogates	Dibromofluoromethane (Surrogate)	mg/kg	-	3.7	3.5	-
			d4-1,2-dichloroethane (Surrogate)	mg/kg	-	4.6	4.4	-
			d8-toluene (Surrogate)	mg/kg	-	3.9	3.6	-
			Bromofluorobenzene (Surrogate)	mg/kg	-	3.7	3.7	-
		Totals	Total Xylenes*	mg/kg	0.3	6.3	<0.3	-
			Total BTEX	mg/kg	0.6	13	<0.6	-
		Trihalomethanes	Chloroform	mg/kg	0.1	3.0	<0.1	2.56
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-
			Bromoform	mg/kg	0.1	<0.1	<0.1	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number	Parameter	Units	LOR
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Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE153689.001	LB103874.004	TRH C6-C10	mg/kg	25	<25	<25	24.65	100
		TRH C6-C9	mg/kg	20	21	<20	23.2	92
		Surrogates						
		Dibromofluoromethane (Surrogate)	mg/kg	-	5.0	4.7	-	100
		d4-1,2-dichloroethane (Surrogate)	mg/kg	-	5.5	5.1	-	109
		d8-toluene (Surrogate)	mg/kg	-	5.6	5.2	-	111
		Bromofluorobenzene (Surrogate)	mg/kg	-	4.9	4.5	-	98
		VPH F						
		Benzene (F0)	mg/kg	0.1	2.3	<0.1	-	-
		Bands						
SE153761.017	LB103875.004	TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	7.25	133
		TRH C6-C10	mg/kg	25	<25	<25	24.65	89
		TRH C6-C9	mg/kg	20	<20	<20	23.2	82
		Surrogates						
		Dibromofluoromethane (Surrogate)	mg/kg	-	3.5	3.8	-	71
		d4-1,2-dichloroethane (Surrogate)	mg/kg	-	4.3	4.3	-	85
		d8-toluene (Surrogate)	mg/kg	-	4.0	3.9	-	80
		Bromofluorobenzene (Surrogate)	mg/kg	-	4.6	4.1	-	92
		VPH F						
		Benzene (F0)	mg/kg	0.1	1.8	<0.1	-	-
		Bands						
		TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	7.25	126

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here : <http://www.sgs.com.au/~media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf>

- * NATA accreditation does not cover the performance of this service .
- Sample not analysed for this analyte.

IS Insufficient sample for analysis.
 LNR Sample listed, but not received.
 LOR Limit of reporting.
 QFH QC result is above the upper tolerance.
 QFL QC result is below the lower tolerance.

- ① At least 2 of 3 surrogates are within acceptance criteria.
- ② RPD failed acceptance criteria due to sample heterogeneity.
- ③ Results less than 5 times LOR preclude acceptance criteria for RPD.
- ④ Recovery failed acceptance criteria due to matrix interference.
- ⑤ Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
- ⑥ LOR was raised due to sample matrix interference.
- ⑦ LOR was raised due to dilution of significantly high concentration of analyte in sample.
- ⑧ Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
- ⑨ Recovery failed acceptance criteria due to sample heterogeneity.
- ⑩ LOR was raised due to high conductivity of the sample (required dilution).
- † Refer to Analytical Report comments for further information.

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Project **1648232 - Minto**
Order Number (Not specified)
Samples 30

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SGS Reference **SE153761 R0**
Date Received 17/6/2016
Date Reported 28/6/2016

COMMENTS

Accredited for compliance with ISO/IEC 17025. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all samples using trace analysis technique as per AS 4964-2004.

Asbestos analysed by Approved Identifier Yusuf Kuthpudin.

Hg analysis- can't be performed due to insufficient sample provided for # 23- 26.

8270 - The Limit of Reporting (LOR) has been raised due to interferences from the sample matrix.

SIGNATORIES



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Senior Organic Chemist



Dong Liang
Metals/Inorganics Team Leader



Kamrul Ahsan
Senior Chemist



Ly Kim Ha
Organic Section Head



Yusuf Kuthpudin
Asbestos Analyst

VOC's in Soil [AN433] Tested: 22/6/2016

PARAMETER	UOM	LOR	MW1_01 0.04-0.1	MW1_08 4.2-4.4	MW2_01 0.2-0.3	MW2_08 5.1-5.3	MW3_02 0.5-0.7
			SOIL	SOIL	SOIL	SOIL	SOIL
			7/6/2016 SE153761.001	7/6/2016 SE153761.002	8/6/2016 SE153761.003	8/6/2016 SE153761.004	7/6/2016 SE153761.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 22/6/2016 (continued)

PARAMETER	UOM	LOR	MW1_01 0.04-0.1	MW1_08 4.2-4.4	MW2_01 0.2-0.3	MW2_08 5.1-5.3	MW3_02 0.5-0.7
			SOIL	SOIL	SOIL	SOIL	SOIL
			7/6/2016 SE153761.001	7/6/2016 SE153761.002	8/6/2016 SE153761.003	8/6/2016 SE153761.004	7/6/2016 SE153761.005
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	-	-	-	-	-

VOC's in Soil [AN433] Tested: 22/6/2016 (continued)

PARAMETER	UOM	LOR	MW3_08 3.8-4.0	MW3_09 4.0-4.45	MW4_01 0.16-0.2	MW4_02 0.5-0.6	MW4_06 6.5-6.6
			SOIL	SOIL	SOIL	SOIL	SOIL
			7/6/2016 SE153761.006	7/6/2016 SE153761.007	14/6/2016 SE153761.008	14/6/2016 SE153761.009	14/6/2016 SE153761.010
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene	mg/kg	0.1	13	5.1	1.0	0.6	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	1.3	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 22/6/2016 (continued)

PARAMETER	UOM	LOR	MW3_08 3.8-4.0	MW3_09 4.0-4.45	MW4_01 0.16-0.2	MW4_02 0.5-0.6	MW4_06 6.5-6.6
			SOIL	SOIL	SOIL	SOIL	SOIL
			7/6/2016 SE153761.006	7/6/2016 SE153761.007	14/6/2016 SE153761.008	14/6/2016 SE153761.009	14/6/2016 SE153761.010
Isopropylbenzene (Cumene)	mg/kg	0.1	1.7	0.8	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	3.8	1.9	0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	0.3	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	3.4	1.7	0.3	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	4.0	2.0	0.3	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	-	-	-	-	-

VOC's in Soil [AN433] Tested: 22/6/2016 (continued)

PARAMETER	UOM	LOR	MW5_02 0.18-0.2	MW5_08 5.2-5.3	SB1_01 0.19-0.21	SB2_01 0.2-0.3	SB3_01 0.2-0.3
			SOIL	SOIL	SOIL	SOIL	SOIL
			7/6/2016 SE153761.011	7/6/2016 SE153761.012	9/6/2016 SE153761.013	9/6/2016 SE153761.014	9/6/2016 SE153761.015
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 22/6/2016 (continued)

PARAMETER	UOM	LOR	MW5_02 0.18-0.2	MW5_08 5.2-5.3	SB1_01 0.19-0.21	SB2_01 0.2-0.3	SB3_01 0.2-0.3
			SOIL	SOIL	SOIL	SOIL	SOIL
			7/6/2016 SE153761.011	7/6/2016 SE153761.012	9/6/2016 SE153761.013	9/6/2016 SE153761.014	9/6/2016 SE153761.015
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	-	-	-	-	-

VOC's in Soil [AN433] Tested: 22/6/2016 (continued)

PARAMETER	UOM	LOR	SB4_01 0.2-0.3	SB5_02 0.7-0.9	SB5_05 2.1-2.3	SB6_01 0.18-0.25	SB6_03 1.0-1.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			9/6/2016 SE153761.016	8/6/2016 SE153761.017	8/6/2016 SE153761.018	7/6/2016 SE153761.019	7/6/2016 SE153761.020
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	5.4	21
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 22/6/2016 (continued)

PARAMETER	UOM	LOR	SB4_01 0.2-0.3	SB5_02 0.7-0.9	SB5_05 2.1-2.3	SB6_01 0.18-0.25	SB6_03 1.0-1.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			9/6/2016 SE153761.016	8/6/2016 SE153761.017	8/6/2016 SE153761.018	7/6/2016 SE153761.019	7/6/2016 SE153761.020
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	0.1	1.8
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	0.3	3.9
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	0.3	0.6
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	0.8	3.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	0.3	2.8
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	-	-	-	-	-

VOC's in Soil [AN433] Tested: 22/6/2016 (continued)

PARAMETER	UOM	LOR	SB6_05 2.0-2.1	DUPB
			SOIL - 7/6/2016 SE153761.021	SOIL - 7/6/2016 SE153761.022
Benzene	mg/kg	0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1
Total Xylenes*	mg/kg	0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6
Naphthalene	mg/kg	0.1	2.8	1.7
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1
Chloromethane	mg/kg	1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1
Chloroethane	mg/kg	1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10
Iodomethane	mg/kg	5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1

VOC's in Soil [AN433] Tested: 22/6/2016 (continued)

PARAMETER	UOM	LOR	SB6_05 2.0-2.1	DUPB
			SOIL - 7/6/2016 SE153761.021	SOIL - 7/6/2016 SE153761.022
Isopropylbenzene (Cumene)	mg/kg	0.1	0.2	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	0.4	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	0.4	0.2
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	0.3	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1
Total VOC*	mg/kg	24	-	-

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 22/6/2016

PARAMETER	UOM	LOR	MW1_01 0.04-0.1	MW1_08 4.2-4.4	MW2_01 0.2-0.3	MW2_08 5.1-5.3	MW3_02 0.5-0.7
			SOIL	SOIL	SOIL	SOIL	SOIL
			7/6/2016 SE153761.001	7/6/2016 SE153761.002	8/6/2016 SE153761.003	8/6/2016 SE153761.004	7/6/2016 SE153761.005
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	MW3_08 3.8-4.0	MW3_09 4.0-4.45	MW4_01 0.16-0.2	MW4_02 0.5-0.6	MW4_06 6.5-6.6
			SOIL	SOIL	SOIL	SOIL	SOIL
			7/6/2016 SE153761.006	7/6/2016 SE153761.007	14/6/2016 SE153761.008	14/6/2016 SE153761.009	14/6/2016 SE153761.010
TRH C6-C9	mg/kg	20	35	22	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	140	95	63	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	140	95	63	<25	<25

PARAMETER	UOM	LOR	MW5_02 0.18-0.2	MW5_08 5.2-5.3	SB1_01 0.19-0.21	SB2_01 0.2-0.3	SB3_01 0.2-0.3
			SOIL	SOIL	SOIL	SOIL	SOIL
			7/6/2016 SE153761.011	7/6/2016 SE153761.012	9/6/2016 SE153761.013	9/6/2016 SE153761.014	9/6/2016 SE153761.015
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	SB4_01 0.2-0.3	SB5_02 0.7-0.9	SB5_05 2.1-2.3	SB6_01 0.18-0.25	SB6_03 1.0-1.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			9/6/2016 SE153761.016	8/6/2016 SE153761.017	8/6/2016 SE153761.018	7/6/2016 SE153761.019	7/6/2016 SE153761.020
TRH C6-C9	mg/kg	20	<20	<20	<20	71	87
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	400	430
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	400	430

PARAMETER	UOM	LOR	SB6_05 2.0-2.1	DUPB
			SOIL	SOIL
			7/6/2016 SE153761.021	7/6/2016 SE153761.022
TRH C6-C9	mg/kg	20	<20	29
Benzene (F0)	mg/kg	0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	77	160
TRH C6-C10 minus BTEX (F1)	mg/kg	25	77	160

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 23/6/2016

PARAMETER	UOM	LOR	MW1_01 0.04-0.1	MW1_08 4.2-4.4	MW2_01 0.2-0.3	MW2_08 5.1-5.3	MW3_02 0.5-0.7
			SOIL	SOIL	SOIL	SOIL	SOIL
			7/6/2016 SE153761.001	7/6/2016 SE153761.002	8/6/2016 SE153761.003	8/6/2016 SE153761.004	7/6/2016 SE153761.005
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16 (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 (F2) - Naphthalene	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH C10-C40 Total	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	MW3_08 3.8-4.0	MW3_09 4.0-4.45	MW4_01 0.16-0.2	MW4_02 0.5-0.6	MW4_06 6.5-6.6
			SOIL	SOIL	SOIL	SOIL	SOIL
			7/6/2016 SE153761.006	7/6/2016 SE153761.007	14/6/2016 SE153761.008	14/6/2016 SE153761.009	14/6/2016 SE153761.010
TRH C10-C14	mg/kg	20	<20	580	1100	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	140	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16 (F2)	mg/kg	25	<25	570	1200	<25	<25
TRH >C10-C16 (F2) - Naphthalene	mg/kg	25	<25	560	1200	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	580	1300	<110	<110
TRH C10-C40 Total	mg/kg	210	<210	580	1300	<210	<210

PARAMETER	UOM	LOR	MW5_02 0.18-0.2	MW5_08 5.2-5.3	SB1_01 0.19-0.21	SB2_01 0.2-0.3	SB3_01 0.2-0.3
			SOIL	SOIL	SOIL	SOIL	SOIL
			7/6/2016 SE153761.011	7/6/2016 SE153761.012	9/6/2016 SE153761.013	9/6/2016 SE153761.014	9/6/2016 SE153761.015
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16 (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 (F2) - Naphthalene	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH C10-C40 Total	mg/kg	210	<210	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 23/6/2016 (continued)

PARAMETER	UOM	LOR	SB4_01 0.2-0.3	SB5_02 0.7-0.9	SB5_05 2.1-2.3	SB6_01 0.18-0.25	SB6_03 1.0-1.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			9/6/2016 SE153761.016	8/6/2016 SE153761.017	8/6/2016 SE153761.018	7/6/2016 SE153761.019	7/6/2016 SE153761.020
TRH C10-C14	mg/kg	20	<20	<20	<20	2500	1600
TRH C15-C28	mg/kg	45	<45	<45	<45	170	110
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16 (F2)	mg/kg	25	<25	<25	<25	2500	1600
TRH >C10-C16 (F2) - Naphthalene	mg/kg	25	<25	<25	<25	2500	1600
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	2700	1700
TRH C10-C40 Total	mg/kg	210	<210	<210	<210	2700	1700

PARAMETER	UOM	LOR	SB6_05 2.0-2.1	DUPB
			SOIL	SOIL
			7/6/2016 SE153761.021	7/6/2016 SE153761.022
TRH C10-C14	mg/kg	20	180	540
TRH C15-C28	mg/kg	45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100
TRH >C10-C16 (F2)	mg/kg	25	180	550
TRH >C10-C16 (F2) - Naphthalene	mg/kg	25	180	540
TRH >C16-C34 (F3)	mg/kg	90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120
TRH C10-C36 Total	mg/kg	110	180	540
TRH C10-C40 Total	mg/kg	210	<210	540

Full 8270 SVOC in Soil [AN420] Tested: 23/6/2016

PARAMETER	UOM	LOR	MW1_01 0.04-0.1	MW1_08 4.2-4.4	MW2_01 0.2-0.3	MW2_08 5.1-5.3	MW3_02 0.5-0.7
			SOIL	SOIL	SOIL	SOIL	SOIL
			7/6/2016 SE153761.001	7/6/2016 SE153761.002	8/6/2016 SE153761.003	8/6/2016 SE153761.004	7/6/2016 SE153761.005
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ, <LOR=0	TEQ	0.2	-	-	-	-	-
2-acetylaminofluorene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3-methylcholanthrene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha-BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta-BHC	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Delta-BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma-BHC (Lindane)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Alpha-endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Beta-endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha-chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma-chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carbophenothion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorfenvinphos-cis	mg/kg	2	<2	<2	<2	<2	<2
Chlorfenvinphos-trans	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos-methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Co-Ral (Coumaphos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Demeton-S-methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Full 8270 SVOC in Soil [AN420] Tested: 23/6/2016 (continued)

PARAMETER	UOM	LOR	MW1_01 0.04-0.1	MW1_08 4.2-4.4	MW2_01 0.2-0.3	MW2_08 5.1-5.3	MW3_02 0.5-0.7
			SOIL	SOIL	SOIL	SOIL	SOIL
			7/6/2016 SE153761.001	7/6/2016 SE153761.002	8/6/2016 SE153761.003	8/6/2016 SE153761.004	7/6/2016 SE153761.005
Disulfoton (Di-syston)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
EPN*	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Ethoprophos (ethoprop or prophos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Famphur (Famophos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenamiphos (Phenamiphos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenchlorophos (Ronnel)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Fenthion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Malathion (Maldison)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Mevinphos-cis/trans	mg/kg	1	<1	<1	<1	<1	<1
o,o,o-triethyl phosphorothioate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Parathion ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phorate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pirimiphos-ethyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pirimiphos-methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Profenofos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Prothiophos (Tokuthion)*	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Sulfotepp	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PCB Congener C28	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C52	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C101	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C118	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C138	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C153	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C180	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorocyclopentadiene	mg/kg	1	<1	<1	<1	<1	<1
Hexachloroethane	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachloropropene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachloroethane	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1	<1	<1	<1	<1
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1/2-Chloronaphthalene	mg/kg	1	<1	<1	<1	<1	<1
1,2,4-trichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	<5	<5	<5	<5
Bis(2-ethylhexyl)adipate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Butyl benzyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Di-n-butyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diethyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diethyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbofuran	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbaryl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Trifluralin	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-diethylamine (NDEA)	mg/kg	1	<1	<1	<1	<1	<1
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5



ANALYTICAL RESULTS

SE153761 R0

Full 8270 SVOC in Soil [AN420] Tested: 23/6/2016 (continued)

PARAMETER	UOM	LOR	MW1_01 0.04-0.1	MW1_08 4.2-4.4	MW2_01 0.2-0.3	MW2_08 5.1-5.3	MW3_02 0.5-0.7
			SOIL	SOIL	SOIL	SOIL	SOIL
			7/6/2016 SE153761.001	7/6/2016 SE153761.002	8/6/2016 SE153761.003	8/6/2016 SE153761.004	7/6/2016 SE153761.005
N-nitroso-morpholine (NMOR)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-piperidine (NPIP)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	<1	<1	<1	<1	<1
4-amino biphenyl	mg/kg	1	<1	<1	<1	<1	<1
Acetophenone	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dinitrobenzene	mg/kg	1	<1	<1	<1	<1	<1
2,4-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Isophorone	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Nitrobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
p-(dimethylamino) azobenzene	mg/kg	1	<1	<1	<1	<1	<1
Phenacetin	mg/kg	1	<1	<1	<1	<1	<1
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Aniline	mg/kg	3	<3	<3	<3	<3	<3
4-chloroaniline	mg/kg	1	<1	<1	<1	<1	<1
2-nitroaniline	mg/kg	1	<1	<1	<1	<1	<1
3-nitroaniline	mg/kg	1	<1	<1	<1	<1	<1
4-nitroaniline	mg/kg	1	<1	<1	<1	<1	<1
Diphenylamine	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
o-toluidine	mg/kg	1	<1	<1	<1	<1	<1
5-nitro-o-toluidine	mg/kg	1	<1	<1	<1	<1	<1
1-naphthylamine	mg/kg	1	<1	<1	<1	<1	<1
2-naphthylamine	mg/kg	1	<1	<1	<1	<1	<1
Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bis(2-chloroethyl) ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bis(2-chloroisopropyl) ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-bromophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Methyl methanesulfonate	mg/kg	1	<1	<1	<1	<1	<1
Ethyl methanesulfonate	mg/kg	1	<1	<1	<1	<1	<1
Dibenzofuran	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzyl alcohol	mg/kg	1	<1	<1	<1	<1	<1
Safrole	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Isosafrole Isomer 1	mg/kg	1	<1	<1	<1	<1	<1
Isosafrole Isomer 2	mg/kg	1	<1	<1	<1	<1	<1
1,4-naphthoquinone	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thionazin	mg/kg	1	<1	<1	<1	<1	<1
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
Carcinogenic PAHs, BaP TEQ, <LOR=LOR*	TEQ (mg/kg)	0.3	-	-	-	-	-
Carcinogenic PAHs, BaP TEQ, <LOR=LOR/2*	TEQ (mg/kg)	0.2	-	-	-	-	-
2,3,4,6-tetrachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Full 8270 SVOC in Soil [AN420] Tested: 23/6/2016 (continued)

PARAMETER	UOM	LOR	MW3_08 3.8-4.0	MW3_09 4.0-4.45	MW4_01 0.16-0.2	MW4_02 0.5-0.6	MW4_06 6.5-6.6
			SOIL	SOIL	SOIL	SOIL	SOIL
			7/6/2016 SE153761.006	7/6/2016 SE153761.007	14/6/2016 SE153761.008	14/6/2016 SE153761.009	14/6/2016 SE153761.010
Acenaphthene	mg/kg	0.1	<0.3†	<0.1	<0.2†	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.2†	<0.1	<0.2†	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.2†	<0.1	<0.2†	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	6.4	1.6	2.5	0.4	<0.1
2-methylnaphthalene	mg/kg	0.1	9.8	2.3	3.3	0.8	<0.1
Naphthalene	mg/kg	0.1	8.2	2.1	<1.5†	0.9	<0.1
Phenanthrene	mg/kg	0.1	0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ, <LOR=0	TEQ	0.2	-	-	-	-	-
2-acetylaminofluorene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3-methylcholanthrene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha-BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta-BHC	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Delta-BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma-BHC (Lindane)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Alpha-endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Beta-endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha-chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma-chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carbophenothion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorfenvinphos-cis	mg/kg	2	<2	<2	<2	<2	<2
Chlorfenvinphos-trans	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos-methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Co-Ral (Coumaphos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Demeton-S-methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5



ANALYTICAL RESULTS

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Full 8270 SVOC in Soil [AN420] Tested: 23/6/2016 (continued)

PARAMETER	UOM	LOR	MW3_08 3.8-4.0	MW3_09 4.0-4.45	MW4_01 0.16-0.2	MW4_02 0.5-0.6	MW4_06 6.5-6.6
			SOIL	SOIL	SOIL	SOIL	SOIL
			7/6/2016 SE153761.006	7/6/2016 SE153761.007	14/6/2016 SE153761.008	14/6/2016 SE153761.009	14/6/2016 SE153761.010
Disulfoton (Di-syston)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
EPN*	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Ethoprophos (ethoprop or prophos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Famphur (Famophos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenamiphos (Phenamiphos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenchlorophos (Ronnel)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Fenthion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Malathion (Maldison)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Mevinphos-cis/trans	mg/kg	1	<4 †	<2 †	<3 †	<1	<1
o,o,o-triethyl phosphorothioate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Parathion ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phorate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pirimiphos-ethyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pirimiphos-methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Profenofos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Prothiophos (Tokuthion)*	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Sulfotepp	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PCB Congener C28	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C52	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C101	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C118	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C138	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C153	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C180	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorocyclopentadiene	mg/kg	1	<1	<1	<1	<1	<1
Hexachloroethane	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachloropropene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachloroethane	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1	<1	<1	<1	<1
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1/2-Chloronaphthalene	mg/kg	1	<1	<1	<1	<1	<1
1,2,4-trichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	<5	<5	<5	<5
Bis(2-ethylhexyl)adipate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Butyl benzyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Di-n-butyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diethyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diethyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbofuran	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbaryl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Trifluralin	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-diethylamine (NDEA)	mg/kg	1	<1	<1	<1	<1	<1
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5



ANALYTICAL RESULTS

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Full 8270 SVOC in Soil [AN420] Tested: 23/6/2016 (continued)

PARAMETER	UOM	LOR	MW3_08 3.8-4.0	MW3_09 4.0-4.45	MW4_01 0.16-0.2	MW4_02 0.5-0.6	MW4_06 6.5-6.6
			SOIL 7/6/2016 SE153761.006	SOIL 7/6/2016 SE153761.007	SOIL 14/6/2016 SE153761.008	SOIL 14/6/2016 SE153761.009	SOIL 14/6/2016 SE153761.010
N-nitroso-morpholine (NMOR)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-piperidine (NPIP)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	<1	<1	<1	<1	<1
4-amino biphenyl	mg/kg	1	<1	<1	<1	<1	<1
Acetophenone	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dinitrobenzene	mg/kg	1	<1	<1	<1	<1	<1
2,4-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Isophorone	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Nitrobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
p-(dimethylamino) azobenzene	mg/kg	1	<1	<1	<1	<1	<1
Phenacetin	mg/kg	1	<1	<1	<1	<1	<1
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Aniline	mg/kg	3	<3	<3	<3	<3	<3
4-chloroaniline	mg/kg	1	<1	<1	<1	<1	<1
2-nitroaniline	mg/kg	1	<1	<1	<1	<1	<1
3-nitroaniline	mg/kg	1	<1	<1	<1	<1	<1
4-nitroaniline	mg/kg	1	<1	<1	<1	<1	<1
Diphenylamine	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
o-toluidine	mg/kg	1	<1	<1	<1	<1	<1
5-nitro-o-toluidine	mg/kg	1	<1	<1	<1	<1	<1
1-naphthylamine	mg/kg	1	<1	<1	<1	<1	<1
2-naphthylamine	mg/kg	1	<1	<1	<1	<1	<1
Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bis(2-chloroethyl) ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bis(2-chloroisopropyl) ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-bromophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Methyl methanesulfonate	mg/kg	1	<1	<1	<1	<1	<1
Ethyl methanesulfonate	mg/kg	1	<1	<1	<1	<1	<1
Dibenzofuran	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzyl alcohol	mg/kg	1	<1	<1	<1	<1	<1
Safrole	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Isosafrole Isomer 1	mg/kg	1	<1	<1	<1	<1	<1
Isosafrole Isomer 2	mg/kg	1	<1	<1	<1	<1	<1
1,4-naphthoquinone	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thionazin	mg/kg	1	<1	<1	<1	<1	<1
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	0.8	<0.5	<0.6†	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
Carcinogenic PAHs, BaP TEQ, <LOR=LOR*	TEQ (mg/kg)	0.3	-	-	-	-	-
Carcinogenic PAHs, BaP TEQ, <LOR=LOR/2*	TEQ (mg/kg)	0.2	-	-	-	-	-
2,3,4,6-tetrachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Full 8270 SVOC in Soil [AN420] Tested: 23/6/2016 (continued)

PARAMETER	UOM	LOR	MW5_02 0.18-0.2	MW5_08 5.2-5.3	SB1_01 0.19-0.21	SB2_01 0.2-0.3	SB3_01 0.2-0.3
			SOIL	SOIL	SOIL	SOIL	SOIL
			7/6/2016 SE153761.011	7/6/2016 SE153761.012	9/6/2016 SE153761.013	9/6/2016 SE153761.014	9/6/2016 SE153761.015
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ, <LOR=0	TEQ	0.2	-	-	-	-	-
2-acetylaminofluorene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3-methylcholanthrene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha-BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta-BHC	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Delta-BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma-BHC (Lindane)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Alpha-endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Beta-endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha-chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma-chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carbophenothion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorfenvinphos-cis	mg/kg	2	<2	<2	<2	<2	<2
Chlorfenvinphos-trans	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos-methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Co-Ral (Coumaphos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Demeton-S-methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Full 8270 SVOC in Soil [AN420] Tested: 23/6/2016 (continued)

PARAMETER	UOM	LOR	MW5_02 0.18-0.2	MW5_08 5.2-5.3	SB1_01 0.19-0.21	SB2_01 0.2-0.3	SB3_01 0.2-0.3
			SOIL	SOIL	SOIL	SOIL	SOIL
			7/6/2016 SE153761.011	7/6/2016 SE153761.012	9/6/2016 SE153761.013	9/6/2016 SE153761.014	9/6/2016 SE153761.015
Disulfoton (Di-syston)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
EPN*	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Ethoprophos (ethoprop or prophos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Famphur (Famophos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenamiphos (Phenamiphos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenchlorophos (Ronnel)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Fenthion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Malathion (Maldison)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Mevinphos-cis/trans	mg/kg	1	<1	<1	<1	<1	<1
o,o,o-triethyl phosphorothioate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Parathion ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phorate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pirimiphos-ethyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pirimiphos-methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Profenofos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Prothiophos (Tokuthion)*	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Sulfotepp	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PCB Congener C28	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C52	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C101	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C118	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C138	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C153	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C180	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorocyclopentadiene	mg/kg	1	<1	<1	<1	<1	<1
Hexachloroethane	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachloropropene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachloroethane	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1	<1	<1	<1	<1
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1/2-Chloronaphthalene	mg/kg	1	<1	<1	<1	<1	<1
1,2,4-trichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	<5	<5	<5	<5
Bis(2-ethylhexyl)adipate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Butyl benzyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Di-n-butyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diethyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diethyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbofuran	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbaryl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Trifluralin	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-diethylamine (NDEA)	mg/kg	1	<1	<1	<1	<1	<1
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5



ANALYTICAL RESULTS

SE153761 R0

Full 8270 SVOC in Soil [AN420] Tested: 23/6/2016 (continued)

PARAMETER	UOM	LOR	MW5_02 0.18-0.2	MW5_08 5.2-5.3	SB1_01 0.19-0.21	SB2_01 0.2-0.3	SB3_01 0.2-0.3
			SOIL	SOIL	SOIL	SOIL	SOIL
			7/6/2016 SE153761.011	7/6/2016 SE153761.012	9/6/2016 SE153761.013	9/6/2016 SE153761.014	9/6/2016 SE153761.015
N-nitroso-morpholine (NMOR)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-piperidine (NPIP)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	<1	<1	<1	<1	<1
4-amino biphenyl	mg/kg	1	<1	<1	<1	<1	<1
Acetophenone	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dinitrobenzene	mg/kg	1	<1	<1	<1	<1	<1
2,4-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Isophorone	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Nitrobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
p-(dimethylamino) azobenzene	mg/kg	1	<1	<1	<1	<1	<1
Phenacetin	mg/kg	1	<1	<1	<1	<1	<1
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Aniline	mg/kg	3	<3	<3	<3	<3	<3
4-chloroaniline	mg/kg	1	<1	<1	<1	<1	<1
2-nitroaniline	mg/kg	1	<1	<1	<1	<1	<1
3-nitroaniline	mg/kg	1	<1	<1	<1	<1	<1
4-nitroaniline	mg/kg	1	<1	<1	<1	<1	<1
Diphenylamine	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
o-toluidine	mg/kg	1	<1	<1	<1	<1	<1
5-nitro-o-toluidine	mg/kg	1	<1	<1	<1	<1	<1
1-naphthylamine	mg/kg	1	<1	<1	<1	<1	<1
2-naphthylamine	mg/kg	1	<1	<1	<1	<1	<1
Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bis(2-chloroethyl) ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bis(2-chloroisopropyl) ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-bromophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Methyl methanesulfonate	mg/kg	1	<1	<1	<1	<1	<1
Ethyl methanesulfonate	mg/kg	1	<1	<1	<1	<1	<1
Dibenzofuran	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzyl alcohol	mg/kg	1	<1	<1	<1	<1	<1
Safrole	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Isosafrole Isomer 1	mg/kg	1	<1	<1	<1	<1	<1
Isosafrole Isomer 2	mg/kg	1	<1	<1	<1	<1	<1
1,4-naphthoquinone	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thionazin	mg/kg	1	<1	<1	<1	<1	<1
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
Carcinogenic PAHs, BaP TEQ, <LOR=LOR*	TEQ (mg/kg)	0.3	-	-	-	-	-
Carcinogenic PAHs, BaP TEQ, <LOR=LOR/2*	TEQ (mg/kg)	0.2	-	-	-	-	-
2,3,4,6-tetrachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Full 8270 SVOC in Soil [AN420] Tested: 23/6/2016 (continued)

PARAMETER	UOM	LOR	SB4_01 0.2-0.3	SB5_02 0.7-0.9	SB5_05 2.1-2.3	SB6_01 0.18-0.25	SB6_03 1.0-1.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			9/6/2016 SE153761.016	8/6/2016 SE153761.017	8/6/2016 SE153761.018	7/6/2016 SE153761.019	7/6/2016 SE153761.020
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.4†	<0.5†
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.2†	<0.2†
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.3†	<0.3†
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	0.2	5.4	11
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	7.8	18
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	2.6	14
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ, <LOR=0	TEQ	0.2	-	-	-	-	-
2-acetylaminofluorene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3-methylcholanthrene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha-BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta-BHC	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Delta-BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma-BHC (Lindane)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Alpha-endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Beta-endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha-chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma-chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carbophenothion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorfenvinphos-cis	mg/kg	2	<2	<2	<2	<2	<2
Chlorfenvinphos-trans	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos-methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Co-Ral (Coumaphos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Demeton-S-methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5



ANALYTICAL RESULTS

SE153761 R0

Full 8270 SVOC in Soil [AN420] Tested: 23/6/2016 (continued)

PARAMETER	UOM	LOR	SB4_01 0.2-0.3	SB5_02 0.7-0.9	SB5_05 2.1-2.3	SB6_01 0.18-0.25	SB6_03 1.0-1.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			9/6/2016 SE153761.016	8/6/2016 SE153761.017	8/6/2016 SE153761.018	7/6/2016 SE153761.019	7/6/2016 SE153761.020
Disulfoton (Di-syston)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
EPN*	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Ethoprophos (ethoprop or prophos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Famphur (Famophos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenamiphos (Phenamiphos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenchlorophos (Ronnel)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Fenthion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Malathion (Maldison)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Mevinphos-cis/trans	mg/kg	1	<1	<1	<1	<1	<1
o,o,o-triethyl phosphorothioate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Parathion ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phorate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pirimiphos-ethyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pirimiphos-methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Profenofos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Prothiophos (Tokuthion)*	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Sulfotepp	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PCB Congener C28	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C52	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C101	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C118	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C138	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C153	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C180	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorocyclopentadiene	mg/kg	1	<1	<1	<1	<1	<1
Hexachloroethane	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachloropropene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachloroethane	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1	<1	<1	<1	<1
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1/2-Chloronaphthalene	mg/kg	1	<1	<1	<1	<1	<1
1,2,4-trichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	<5	<5	<5	<5
Bis(2-ethylhexyl)adipate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Butyl benzyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Di-n-butyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diethyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diethyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbofuran	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbaryl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Trifluralin	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-diethylamine (NDEA)	mg/kg	1	<1	<1	<1	<1	<1
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5



ANALYTICAL RESULTS

SE153761 R0

Full 8270 SVOC in Soil [AN420] Tested: 23/6/2016 (continued)

PARAMETER	UOM	LOR	SB4_01 0.2-0.3	SB5_02 0.7-0.9	SB5_05 2.1-2.3	SB6_01 0.18-0.25	SB6_03 1.0-1.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			9/6/2016 SE153761.016	8/6/2016 SE153761.017	8/6/2016 SE153761.018	7/6/2016 SE153761.019	7/6/2016 SE153761.020
N-nitroso-morpholine (NMOR)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-piperidine (NPIP)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	<1	<1	<1	<1	<1
4-amino biphenyl	mg/kg	1	<1	<1	<1	<1	<1
Acetophenone	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dinitrobenzene	mg/kg	1	<1	<1	<1	<1	<1
2,4-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Isophorone	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Nitrobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
p-(dimethylamino) azobenzene	mg/kg	1	<1	<1	<1	<1	<1
Phenacetin	mg/kg	1	<1	<1	<1	<1	<1
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Aniline	mg/kg	3	<3	<3	<3	<3	<3
4-chloroaniline	mg/kg	1	<1	<1	<1	<1	<1
2-nitroaniline	mg/kg	1	<1	<1	<1	<1	<1
3-nitroaniline	mg/kg	1	<1	<1	<1	<1	<1
4-nitroaniline	mg/kg	1	<1	<1	<1	<1	<1
Diphenylamine	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
o-toluidine	mg/kg	1	<1	<1	<1	<1	<1
5-nitro-o-toluidine	mg/kg	1	<1	<1	<1	<1	<1
1-naphthylamine	mg/kg	1	<1	<1	<1	<1	<1
2-naphthylamine	mg/kg	1	<1	<1	<1	<1	<1
Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bis(2-chloroethyl) ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bis(2-chloroisopropyl) ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-bromophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Methyl methanesulfonate	mg/kg	1	<1	<1	<1	<1	<1
Ethyl methanesulfonate	mg/kg	1	<1	<1	<1	<1	<1
Dibenzofuran	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzyl alcohol	mg/kg	1	<1	<1	<1	<1	<1
Safrole	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Isosafrole Isomer 1	mg/kg	1	<1	<1	<1	<1	<1
Isosafrole Isomer 2	mg/kg	1	<1	<1	<1	<1	<1
1,4-naphthoquinone	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thionazin	mg/kg	1	<1	<1	<1	<1	<1
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.9†	<1.4†
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
Carcinogenic PAHs, BaP TEQ, <LOR=LOR*	TEQ (mg/kg)	0.3	-	-	-	-	-
Carcinogenic PAHs, BaP TEQ, <LOR=LOR/2*	TEQ (mg/kg)	0.2	-	-	-	-	-
2,3,4,6-tetrachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Full 8270 SVOC in Soil [AN420] Tested: 23/6/2016 (continued)

PARAMETER	UOM	LOR	SB6_05 2.0-2.1	DUPB
			SOIL	SOIL
			7/6/2016 SE153761.021	7/6/2016 SE153761.022
Acenaphthene	mg/kg	0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1
Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	<0.2
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	1.2	1.3
2-methylnaphthalene	mg/kg	0.1	2.0	1.9
Naphthalene	mg/kg	0.1	1.4	<0.7
Phenanthrene	mg/kg	0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ, <LOR=0	TEQ	0.2	-	-
2-acetylaminofluorene	mg/kg	0.5	<0.5	<0.5
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5	<0.5
3-methylcholanthrene	mg/kg	0.5	<0.5	<0.5
Aldrin	mg/kg	0.1	<0.1	<0.1
Alpha-BHC	mg/kg	0.1	<0.1	<0.1
Beta-BHC	mg/kg	0.5	<0.5	<0.5
Delta-BHC	mg/kg	0.1	<0.1	<0.1
Gamma-BHC (Lindane)	mg/kg	0.1	<0.1	<0.1
p,p-DDD	mg/kg	0.1	<0.1	<0.1
p,p-DDE	mg/kg	0.1	<0.1	<0.1
p,p-DDT	mg/kg	0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2
Alpha-endosulfan	mg/kg	0.2	<0.2	<0.2
Beta-endosulfan	mg/kg	0.2	<0.2	<0.2
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1
Endrin	mg/kg	0.2	<0.2	<0.2
Heptachlor	mg/kg	0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1
Alpha-chlordane	mg/kg	0.1	<0.1	<0.1
Gamma-chlordane	mg/kg	0.1	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2
Bromophos ethyl	mg/kg	0.2	<0.2	<0.2
Carbophenothion	mg/kg	0.5	<0.5	<0.5
Chlorfenvinphos-cis	mg/kg	2	<2	<2
Chlorfenvinphos-trans	mg/kg	0.5	<0.5	<0.5
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2
Chlorpyrifos-methyl	mg/kg	0.5	<0.5	<0.5
Co-Ral (Coumaphos)	mg/kg	0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5
Dichlorvos	mg/kg	0.5	<0.5	<0.5
Demeton-S-methyl	mg/kg	0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5

Full 8270 SVOC in Soil [AN420] Tested: 23/6/2016 (continued)

PARAMETER	UOM	LOR	SB6_05 2.0-2.1	DUPB
			SOIL - 7/6/2016 SE153761.021	SOIL - 7/6/2016 SE153761.022
Disulfoton (Di-syston)	mg/kg	0.5	<0.5	<0.5
EPN*	mg/kg	0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2
Ethoprophos (ethoprop or prophos)	mg/kg	0.5	<0.5	<0.5
Famphur (Famophos)	mg/kg	0.5	<0.5	<0.5
Fenamiphos (Phenamiphos)	mg/kg	0.5	<0.5	<0.5
Fenchlorophos (Ronnel)	mg/kg	0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2
Fenthion	mg/kg	0.5	<0.5	<0.5
Malathion (Maldison)	mg/kg	0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5
Mevinphos-cis/trans	mg/kg	1	<1	<2 †
o,o,o-triethyl phosphorothioate	mg/kg	0.5	<0.5	<0.5
Parathion ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2
Parathion methyl	mg/kg	0.5	<0.5	<0.5
Phorate	mg/kg	0.5	<0.5	<0.5
Pirimiphos-ethyl	mg/kg	0.5	<0.5	<0.5
Pirimiphos-methyl	mg/kg	0.5	<0.5	<0.5
Profenofos	mg/kg	0.5	<0.5	<0.5
Prothiophos (Tokuthion)*	mg/kg	0.5	<0.5	<0.5
Sulfotepp	mg/kg	0.5	<0.5	<0.5
Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	<0.5	<0.5
PCB Congener C28	mg/kg	0.1	<0.1	<0.1
PCB Congener C52	mg/kg	0.1	<0.1	<0.1
PCB Congener C101	mg/kg	0.1	<0.1	<0.1
PCB Congener C118	mg/kg	0.1	<0.1	<0.1
PCB Congener C138	mg/kg	0.1	<0.1	<0.1
PCB Congener C153	mg/kg	0.1	<0.1	<0.1
PCB Congener C180	mg/kg	0.1	<0.1	<0.1
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.5	<0.5	<0.5
1,3-dichlorobenzene	mg/kg	0.5	<0.5	<0.5
1,4-dichlorobenzene	mg/kg	0.5	<0.5	<0.5
Hexachlorobutadiene	mg/kg	0.5	<0.5	<0.5
Hexachlorocyclopentadiene	mg/kg	1	<1	<1
Hexachloroethane	mg/kg	0.5	<0.5	<0.5
Hexachloropropene	mg/kg	0.5	<0.5	<0.5
Pentachlorobenzene	mg/kg	0.5	<0.5	<0.5
Pentachloroethane	mg/kg	0.5	<0.5	<0.5
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1	<1
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5	<0.5
1/2-Chloronaphthalene	mg/kg	1	<1	<1
1,2,4-trichlorobenzene	mg/kg	0.5	<0.5	<0.5
Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	<5
Bis(2-ethylhexyl)adipate	mg/kg	0.5	<0.5	<0.5
Butyl benzyl phthalate	mg/kg	0.5	<0.5	<0.5
Di-n-butyl phthalate	mg/kg	0.5	<0.5	<0.5
Diethyl phthalate	mg/kg	0.5	<0.5	<0.5
Dimethyl phthalate	mg/kg	0.5	<0.5	<0.5
Dioctyl phthalate	mg/kg	0.5	<0.5	<0.5
Carbofuran	mg/kg	0.5	<0.5	<0.5
Carbaryl	mg/kg	0.5	<0.5	<0.5
Trifluralin	mg/kg	0.5	<0.5	<0.5
N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5	<0.5
N-nitroso-diethylamine (NDEA)	mg/kg	1	<1	<1
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	<0.5	<0.5

Full 8270 SVOC in Soil [AN420] Tested: 23/6/2016 (continued)

PARAMETER	UOM	LOR	SB6_05 2.0-2.1	DUPB
			SOIL - 7/6/2016 SE153761.021	SOIL - 7/6/2016 SE153761.022
N-nitroso-morpholine (NMOR)	mg/kg	0.5	<0.5	<0.5
N-nitroso-piperidine (NPIP)	mg/kg	0.5	<0.5	<0.5
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	<1	<1
4-amino biphenyl	mg/kg	1	<1	<1
Acetophenone	mg/kg	0.5	<0.5	<0.5
1,3-dinitrobenzene	mg/kg	1	<1	<1
2,4-dinitrotoluene	mg/kg	0.5	<0.5	<0.5
2,6-dinitrotoluene	mg/kg	0.5	<0.5	<0.5
Isophorone	mg/kg	0.5	<0.5	<0.5
Nitrobenzene	mg/kg	0.5	<0.5	<0.5
p-(dimethylamino) azobenzene	mg/kg	1	<1	<1
Phenacetin	mg/kg	1	<1	<1
Pentachloronitrobenzene (quintozone)	mg/kg	0.5	<0.5	<0.5
Aniline	mg/kg	3	<3	<3
4-chloroaniline	mg/kg	1	<1	<1
2-nitroaniline	mg/kg	1	<1	<1
3-nitroaniline	mg/kg	1	<1	<1
4-nitroaniline	mg/kg	1	<1	<1
Diphenylamine	mg/kg	0.5	<0.5	<0.5
o-toluidine	mg/kg	1	<1	<1
5-nitro-o-toluidine	mg/kg	1	<1	<1
1-naphthylamine	mg/kg	1	<1	<1
2-naphthylamine	mg/kg	1	<1	<1
Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5	<0.5
Bis(2-chloroethyl) ether	mg/kg	0.5	<0.5	<0.5
Bis(2-chloroisopropyl) ether	mg/kg	0.5	<0.5	<0.5
4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5
4-bromophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5
Methyl methanesulfonate	mg/kg	1	<1	<1
Ethyl methanesulfonate	mg/kg	1	<1	<1
Dibenzofuran	mg/kg	0.5	<0.5	<0.5
Benzyl alcohol	mg/kg	1	<1	<1
Safrole	mg/kg	0.5	<0.5	<0.5
Isosafrole Isomer 1	mg/kg	1	<1	<1
Isosafrole Isomer 2	mg/kg	1	<1	<1
1,4-naphthoquinone	mg/kg	0.5	<0.5	<0.5
Thionazin	mg/kg	1	<1	<1
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5
4-chloro-3-methylphenol	mg/kg	2	<2	<2
2-chlorophenol	mg/kg	0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5
Phenol	mg/kg	0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1
Carcinogenic PAHs, BaP TEQ, <LOR=LOR*	TEQ (mg/kg)	0.3	-	-
Carcinogenic PAHs, BaP TEQ, <LOR=LOR/2*	TEQ (mg/kg)	0.2	-	-
2,3,4,6-tetrachlorophenol	mg/kg	0.5	<0.5	<0.5

Total Recoverable Metals in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 24/6/2016

PARAMETER	UOM	LOR	MW1_01 0.04-0.1	MW1_08 4.2-4.4	MW2_01 0.2-0.3	MW2_08 5.1-5.3	MW3_02 0.5-0.7
			SOIL	SOIL	SOIL	SOIL	SOIL
			7/6/2016 SE153761.001	7/6/2016 SE153761.002	8/6/2016 SE153761.003	8/6/2016 SE153761.004	7/6/2016 SE153761.005
Arsenic, As	mg/kg	3	<3	6	<3	10	3
Cadmium, Cd	mg/kg	0.3	0.5	<0.3	1.4	0.4	<0.3
Chromium, Cr	mg/kg	0.3	12	9.0	6.2	13	11
Copper, Cu	mg/kg	0.5	40	20	7.0	30	3.1
Lead, Pb	mg/kg	1	5	17	5	29	12
Nickel, Ni	mg/kg	0.5	140	8.7	5.8	16	5.6
Zinc, Zn	mg/kg	0.5	51	37	25	68	24

PARAMETER	UOM	LOR	MW3_08 3.8-4.0	MW3_09 4.0-4.45	MW4_01 0.16-0.2	MW4_02 0.5-0.6	MW4_06 6.5-6.6
			SOIL	SOIL	SOIL	SOIL	SOIL
			7/6/2016 SE153761.006	7/6/2016 SE153761.007	14/6/2016 SE153761.008	14/6/2016 SE153761.009	14/6/2016 SE153761.010
Arsenic, As	mg/kg	3	3	5	<3	3	3
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.3	5.8	5.8	9.2	8.8	11
Copper, Cu	mg/kg	0.5	9.7	9.4	11	5.0	31
Lead, Pb	mg/kg	1	11	11	8	16	22
Nickel, Ni	mg/kg	0.5	7.2	7.3	27	7.8	14
Zinc, Zn	mg/kg	0.5	17	20	27	29	55

PARAMETER	UOM	LOR	MW5_02 0.18-0.2	MW5_08 5.2-5.3	SB1_01 0.19-0.21	SB2_01 0.2-0.3	SB3_01 0.2-0.3
			SOIL	SOIL	SOIL	SOIL	SOIL
			7/6/2016 SE153761.011	7/6/2016 SE153761.012	9/6/2016 SE153761.013	9/6/2016 SE153761.014	9/6/2016 SE153761.015
Arsenic, As	mg/kg	3	<3	13	<3	4	4
Cadmium, Cd	mg/kg	0.3	<0.3	0.5	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.3	11	11	9.4	9.6	8.8
Copper, Cu	mg/kg	0.5	12	31	8.1	27	9.5
Lead, Pb	mg/kg	1	12	30	14	15	13
Nickel, Ni	mg/kg	0.5	20	20	5.3	6.3	6.8
Zinc, Zn	mg/kg	0.5	29	77	28	34	31

PARAMETER	UOM	LOR	SB4_01 0.2-0.3	SB5_02 0.7-0.9	SB5_05 2.1-2.3	SB6_01 0.18-0.25	SB6_03 1.0-1.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			9/6/2016 SE153761.016	8/6/2016 SE153761.017	8/6/2016 SE153761.018	7/6/2016 SE153761.019	7/6/2016 SE153761.020
Arsenic, As	mg/kg	3	3	7	5	<3	4
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.3	8.7	11	8.4	9.0	7.0
Copper, Cu	mg/kg	0.5	45	22	19	10	9.0
Lead, Pb	mg/kg	1	14	17	14	12	13
Nickel, Ni	mg/kg	0.5	14	11	9.9	12	8.5
Zinc, Zn	mg/kg	0.5	33	48	37	30	29

Total Recoverable Metals in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 24/6/2016 (continued)

			SB6_05 2.0-2.1	DUPB
			SOIL	SOIL
			-	-
			7/6/2016	7/6/2016
			SE153761.021	SE153761.022
PARAMETER	UOM	LOR		
Arsenic, As	mg/kg	3	5	<3
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.3	9.7	8.7
Copper, Cu	mg/kg	0.5	13	6.7
Lead, Pb	mg/kg	1	13	11
Nickel, Ni	mg/kg	0.5	6.9	9.4
Zinc, Zn	mg/kg	0.5	31	25

Mercury in Soil [AN312] Tested: 24/6/2016

PARAMETER	UOM	LOR	MW1_01 0.04-0.1	MW1_08 4.2-4.4	MW2_01 0.2-0.3	MW2_08 5.1-5.3	MW3_02 0.5-0.7
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			7/6/2016 SE153761.001	7/6/2016 SE153761.002	8/6/2016 SE153761.003	8/6/2016 SE153761.004	7/6/2016 SE153761.005
Mercury	mg/kg	0.01	<0.01	<0.01	<0.01	0.04	<0.01

PARAMETER	UOM	LOR	MW3_08 3.8-4.0	MW3_09 4.0-4.45	MW4_01 0.16-0.2	MW4_02 0.5-0.6	MW4_06 6.5-6.6
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			7/6/2016 SE153761.006	7/6/2016 SE153761.007	14/6/2016 SE153761.008	14/6/2016 SE153761.009	14/6/2016 SE153761.010
Mercury	mg/kg	0.01	0.01	0.01	<0.01	<0.01	0.03

PARAMETER	UOM	LOR	MW5_02 0.18-0.2	MW5_08 5.2-5.3	SB1_01 0.19-0.21	SB2_01 0.2-0.3	SB3_01 0.2-0.3
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			7/6/2016 SE153761.011	7/6/2016 SE153761.012	9/6/2016 SE153761.013	9/6/2016 SE153761.014	9/6/2016 SE153761.015
Mercury	mg/kg	0.01	<0.01	0.02	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	SB4_01 0.2-0.3	SB5_02 0.7-0.9	SB5_05 2.1-2.3	SB6_01 0.18-0.25	SB6_03 1.0-1.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			9/6/2016 SE153761.016	8/6/2016 SE153761.017	8/6/2016 SE153761.018	7/6/2016 SE153761.019	7/6/2016 SE153761.020
Mercury	mg/kg	0.01	<0.01	0.02	0.01	<0.01	0.01

PARAMETER	UOM	LOR	SB6_05 2.0-2.1	DUPB
			SOIL	SOIL
			-	-
			7/6/2016 SE153761.021	7/6/2016 SE153761.022
Mercury	mg/kg	0.01	<0.01	<0.01

Moisture Content [AN002] Tested: 23/6/2016

PARAMETER	UOM	LOR	MW1_01 0.04-0.1	MW1_08 4.2-4.4	MW2_01 0.2-0.3	MW2_08 5.1-5.3	MW3_02 0.5-0.7
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			7/6/2016 SE153761.001	7/6/2016 SE153761.002	8/6/2016 SE153761.003	8/6/2016 SE153761.004	7/6/2016 SE153761.005
% Moisture	%w/w	0.5	8.1	17	8.6	18	8.4

PARAMETER	UOM	LOR	MW3_08 3.8-4.0	MW3_09 4.0-4.45	MW4_01 0.16-0.2	MW4_02 0.5-0.6	MW4_06 6.5-6.6
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			7/6/2016 SE153761.006	7/6/2016 SE153761.007	14/6/2016 SE153761.008	14/6/2016 SE153761.009	14/6/2016 SE153761.010
% Moisture	%w/w	0.5	15	15	12	8.6	16

PARAMETER	UOM	LOR	MW5_02 0.18-0.2	MW5_08 5.2-5.3	SB1_01 0.19-0.21	SB2_01 0.2-0.3	SB3_01 0.2-0.3
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			7/6/2016 SE153761.011	7/6/2016 SE153761.012	9/6/2016 SE153761.013	9/6/2016 SE153761.014	9/6/2016 SE153761.015
% Moisture	%w/w	0.5	22	18	9.9	17	12

PARAMETER	UOM	LOR	SB4_01 0.2-0.3	SB5_02 0.7-0.9	SB5_05 2.1-2.3	SB6_01 0.18-0.25	SB6_03 1.0-1.1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			9/6/2016 SE153761.016	8/6/2016 SE153761.017	8/6/2016 SE153761.018	7/6/2016 SE153761.019	7/6/2016 SE153761.020
% Moisture	%w/w	0.5	13	14	15	20	17

PARAMETER	UOM	LOR	SB6_05 2.0-2.1	DUPB
			SOIL	SOIL
			-	-
			7/6/2016 SE153761.021	7/6/2016 SE153761.022
% Moisture	%w/w	0.5	19	20

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 24/6/2016

PARAMETER	UOM	LOR	MW1_01 0.04-0.1	MW2_01 0.2-0.3	MW5_02 0.18-0.2
			SOIL	SOIL	SOIL
			-	-	-
			7/6/2016 SE153761.001	8/6/2016 SE153761.003	7/6/2016 SE153761.011
Total Sample Weight	g	1	463	622	717
ACM in >7mm Sample*	g	0.01	<0.01	<0.01	<0.01
AF/FA in >2mm to <7mm Sample*	g	0.0001	<0.0001	<0.0001	<0.0001
AF/FA in <2mm Sample*	g	0.0001	<0.0001	<0.0001	<0.0001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001
Fibre Type	No unit	-	NAD	NAD	NAD

VOCs in Water [AN433] Tested: 22/6/2016

PARAMETER	UOM	LOR	FB001	FB002	FB003	FB10	RB001
			WATER	WATER	WATER	WATER	WATER
			- 7/6/2016 SE153761.023	- 8/6/2016 SE153761.024	- 9/6/2016 SE153761.025	- 14/6/2016 SE153761.026	- 7/6/2016 SE153761.027
Benzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
m/p-xylene	µg/L	1	<1	<1	<1	<1	<1
o-xylene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Xylenes	µg/L	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
Total BTEX	µg/L	3	<3	<3	<3	<3	<3
Naphthalene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5

PARAMETER	UOM	LOR	RB002	RB003	RB10
			WATER	WATER	WATER
			- 8/6/2016 SE153761.028	- 9/6/2016 SE153761.029	- 14/6/2016 SE153761.030
Benzene	µg/L	0.5	<0.5	<0.5	<0.5
Toluene	µg/L	0.5	<0.5	<0.5	<0.5
Ethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5
m/p-xylene	µg/L	1	<1	<1	<1
o-xylene	µg/L	0.5	<0.5	<0.5	<0.5
Total Xylenes	µg/L	1.5	<1.5	<1.5	<1.5
Total BTEX	µg/L	3	<3	<3	<3
Naphthalene	µg/L	0.5	<0.5	<0.5	<0.5

Volatile Petroleum Hydrocarbons in Water [AN433] Tested: 22/6/2016

PARAMETER	UOM	LOR	FB001	FB002	FB003	FB10	RB001
			WATER	WATER	WATER	WATER	WATER
			-	-	-	-	-
			7/6/2016 SE153761.023	8/6/2016 SE153761.024	9/6/2016 SE153761.025	14/6/2016 SE153761.026	7/6/2016 SE153761.027
TRH C6-C9	µg/L	40	<40	<40	<40	<40	<40
Benzene (F0)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TRH C6-C10	µg/L	50	<50	<50	<50	<50	<50
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	<50	<50	<50

PARAMETER	UOM	LOR	RB002	RB003	RB10
			WATER	WATER	WATER
			-	-	-
			8/6/2016 SE153761.028	9/6/2016 SE153761.029	14/6/2016 SE153761.030
TRH C6-C9	µg/L	40	<40	<40	<40
Benzene (F0)	µg/L	0.5	<0.5	<0.5	<0.5
TRH C6-C10	µg/L	50	<50	<50	<50
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	<50

TRH (Total Recoverable Hydrocarbons) in Water [AN403] Tested: 22/6/2016

PARAMETER	UOM	LOR	FB001	FB002	FB003	FB10	RB001
			WATER	WATER	WATER	WATER	WATER
			- 7/6/2016 SE153761.023	- 8/6/2016 SE153761.024	- 9/6/2016 SE153761.025	- 14/6/2016 SE153761.026	- 7/6/2016 SE153761.027
TRH C10-C14	µg/L	50	<50	<50	<50	<50	<50
TRH C15-C28	µg/L	200	<200	<200	<200	<200	<200
TRH C29-C36	µg/L	200	<200	<200	<200	<200	<200
TRH C37-C40	µg/L	200	<200	<200	<200	<200	<200
TRH >C10-C16 (F2)	µg/L	60	<60	<60	<60	<60	<60
TRH >C16-C34 (F3)	µg/L	500	<500	<500	<500	<500	<500
TRH >C34-C40 (F4)	µg/L	500	<500	<500	<500	<500	<500
TRH C10-C36	µg/L	450	<450	<450	<450	<450	<450
TRH C10-C40	µg/L	650	<650	<650	<650	<650	<650

PARAMETER	UOM	LOR	RB002	RB003	RB10
			WATER	WATER	WATER
			- 8/6/2016 SE153761.028	- 9/6/2016 SE153761.029	- 14/6/2016 SE153761.030
TRH C10-C14	µg/L	50	<50	<50	<50
TRH C15-C28	µg/L	200	<200	<200	<200
TRH C29-C36	µg/L	200	<200	<200	<200
TRH C37-C40	µg/L	200	<200	<200	<200
TRH >C10-C16 (F2)	µg/L	60	<60	<60	<60
TRH >C16-C34 (F3)	µg/L	500	<500	<500	<500
TRH >C34-C40 (F4)	µg/L	500	<500	<500	<500
TRH C10-C36	µg/L	450	<450	<450	<450
TRH C10-C40	µg/L	650	<650	<650	<650

Trace Metals (Dissolved) in Water by ICPMS [AN318] Tested: 21/6/2016

PARAMETER	UOM	LOR	FB001	FB002	FB003	FB10	RB001
			WATER	WATER	WATER	WATER	WATER
			- 7/6/2016 SE153761.023	- 8/6/2016 SE153761.024	- 9/6/2016 SE153761.025	- 14/6/2016 SE153761.026	- 7/6/2016 SE153761.027
Arsenic, As	µg/L	1	<1	<1	<1	<1	<1
Cadmium, Cd	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chromium, Cr	µg/L	1	<1	<1	<1	<1	<1
Copper, Cu	µg/L	1	<1	<1	<1	<1	<1
Lead, Pb	µg/L	1	<1	<1	<1	<1	<1
Nickel, Ni	µg/L	1	<1	<1	<1	<1	<1
Zinc, Zn	µg/L	5	<5	<5	<5	<5	<5

PARAMETER	UOM	LOR	RB002	RB003	RB10
			WATER	WATER	WATER
			- 8/6/2016 SE153761.028	- 9/6/2016 SE153761.029	- 14/6/2016 SE153761.030
Arsenic, As	µg/L	1	<1	<1	<1
Cadmium, Cd	µg/L	0.1	<0.1	<0.1	<0.1
Chromium, Cr	µg/L	1	<1	<1	<1
Copper, Cu	µg/L	1	1	<1	<1
Lead, Pb	µg/L	1	<1	<1	<1
Nickel, Ni	µg/L	1	<1	1	<1
Zinc, Zn	µg/L	5	<5	6	<5

Mercury (dissolved) in Water [AN311/AN312] Tested: 24/6/2016

			RB001	RB002	RB003	RB10
			WATER	WATER	WATER	WATER
			-	-	-	-
			7/6/2016	8/6/2016	9/6/2016	14/6/2016
			SE153761.027	SE153761.028	SE153761.029	SE153761.030
PARAMETER	UOM	LOR				
Mercury	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001

METHOD

METHODOLOGY SUMMARY

AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN311/AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN318	Determination of elements at trace level in waters by ICP-MS technique, in accordance with USEPA 6020A.
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Petroleum Hydrocarbons (TPH) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	Carcinogenic PAHs may be expressed as Benzo(a)pyrene equivalents by applying the BaP toxicity equivalence factor (NEPM 1999, June 2013, B7). These can be reported as the individual PAHs and as a sum of carcinogenic PAHs. The sum is reported three ways, the first assuming all <LOR results are zero, the second assuming all <LOR results are half the LOR and the third assuming all <LOR results are the LOR.
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC's are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN605	This technique gravimetrically determines the mass of Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free fibres which are only observed by standard trace analysis as per AN 602.
AN605	AMO = Amosite Detected CRY = Chrysotile Detected CRO = Crocidolite Detected ORG = Organic Fibres Detected SMF = Synthetic Mineral Fibres Detected UMF = Unknown Mineral Fibres Detected NAD = No Asbestos Detected

AN605

Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
**	Indicative data, theoretical holding time exceeded.	NVL	Not validated.	LOR	Limit of Reporting.
		IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Samples analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the "Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.

Note that in terms of units of radioactivity:

- 1 Bq is equivalent to 27 pCi
- 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here : <http://www.sgs.com.au/~media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf>

This document is issued, on the Client's behalf, by the Company under its General Conditions of Service available on request and accessible at <http://www.sgs.com/en/terms-and-conditions>. The Client's attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

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SAMPLE CHAIN OF CUSTODY DOCUMENTATION

Sheet 1 of 1

Project No: 1648232		Lab Name: SGS	
Site Location: Culverston Rd, Minto		Quote No.:	
Sampled By: Natalie Sandy		Order No.:	
Turnaround Time: 24hrs ☐ 48hrs ☐ 5 Days ☐ 36hrs ☐	Standard ☒	Date Required By:	
Delivery Option: HARD ☐ FAX ☐ DISK ☐	EMAIL ☒	BULLETIN BOARD ☐	
Report Format: PDF ☒	EXCEL ☐	ESDAT ☐	

GOLDER ASSOCIATES PTY LTD 124 Pacific Highway, Greenwich Project Manager: Ben Seaford Job Contact: Natalie Sandy		Phone: (02) 9478 3900 Fax: (02) 9478 3901 Reviewed: 417770679 Email: 417770679
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GOLDER ASSOCIATES
www.golder.com.au
Baseford@golder.com.au

LAB ID		SAMPLE ID	SAMPLE DEPTH	SAMPLE DATE	SAMPLE TYPE	SAMPLE MATRIX	Level of Contamination (Low/High/Unknown)	ON HOLD (Until Further Instruction)	TRIIB/TEXN	VOCs	SVOCs	Metals (8 metals)	Please forward to ALS
1		MW1	-	21/06/2016		Water	4 U		X	X	X	X	
2		MW2	-	21/06/2016		Water	4 U		X	X	X	X	
3		MW3	-	21/06/2016		Water	4 U		X	X	X	X	
4		MW4	-	21/06/2016		Water	4 U		X	X	X	X	
5		MW5	-	21/06/2016		Water	4 U		X	X	X	X	
6		QC100	-	21/06/2016		Water	4 U		X	X	X	X	
7		QC200	-	21/06/2016		Water	4 U		X	X	X	X	
8		RB100	-	21/06/2016		Water	4 U		X			X	
9		FB100	-	21/06/2016		Water	4 U		X			X	

Comments/Special Instructions:

SAMPLE MATRIX = Soil/Sediment/Fill/Water/Other		SAMPLE TYPE = Composite (C)/Discrete (D)/Disturbed (DS)/Cont (CR), Grab Sample (GS)		HIGH CONCENTRATION: circle expected parameters in analysis list	
SIGNATURE	COMPANY	DATE	TIME	SIGNATURE	COMPANY
RELEASED BY: Natalie Sandy	Golder Associates	21/06/2016	2:30PM	RELEASED BY:	
RECEIVED BY: Frank	MS	22-6-16	16:40	RECEIVED BY:	
RECEIVED BY:				To Be Filled Out By Analysing Laboratory	
RECEIVED BY:				Security Seal	Chilled
RECEIVED BY:				Suitable Containers	Frozen
RECEIVED BY:				Cool Box	Ambient

LAB. BATCH NUMBER		Bill to:
		Address

**Environmental Division
Sydney
Work Order Reference
ES1613614**



Telephone : + 61-2-6764 8655

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : ES1613614

Client : GOLDER ASSOCIATES Contact : MR BEN SEAFORD Address : LEVEL 1, 124 PACIFIC HIGHWAY ST LEONARDS NSW, AUSTRALIA 2065 E-mail : bseaford@golder.com.au Telephone : +61 02 9478 3900 Facsimile : +61 02 9478 3901 Project : 1648232 Order number : 1648232 C-O-C number : ---- Site : CULVERSTON RD, MINTO Sampler : NATALIE SANDY	Laboratory : Environmental Division Sydney Contact : Address : 277-289 Woodpark Road Smithfield NSW Australia 2164 E-mail : Telephone : +61-2-8784 8555 Facsimile : +61-2-8784 8500 Page : 1 of 2 Quote number : EM2015GOLASS0592 (EN-002-15) QC Level : NEPM 2013 B3 & ALS QC Standard
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Dates

Date Samples Received : 22-Jun-2016 4:40 PM	Issue Date : 22-Jun-2016
Client Requested Due : 29-Jun-2016	Scheduled Reporting Date : 29-Jun-2016
Date :	

Delivery Details

Mode of Delivery : Undefined	Security Seal : Intact.
No. of coolers/boxes : 1	Temperature : 14.5'C - Ice Bricks present
Receipt Detail :	No. of samples received / analysed : 1 / 1

General Comments

- This report contains the following information:
 - Sample Container(s)/Preservation Non-Compliances
 - Summary of Sample(s) and Requested Analysis
 - Proactive Holding Time Report
 - Requested Deliverables
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- Please direct any queries you have regarding this work order to the above ALS laboratory contact.
- Analytical work for this work order will be conducted at ALS Sydney.
- Sample Disposal - Aqueous (14 days), Solid (60 days) from date of completion of work order.

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- ### Summary of Sample(s) and Requested Analysis

Laboratory sample ID	Client sampling date / time	Client sample ID	WATER TRH/BT	WATER SVOCs
ES1613614-001	[21-Jun-2016]	QC200	✓	✓

Email nsandy@golder.com.au

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: ES1613614	Page	: 1 of 5
Client	: GOLDER ASSOCIATES	Laboratory	: Environmental Division Sydney
Contact	: MR BEN SEAFORD	Telephone	: +61-2-8784 8555
Project	: 1648232	Date Samples Received	: 22-Jun-2016
Site	: CULVERSTON RD, MINTO	Issue Date	: 29-Jun-2016
Sampler	: NATALIE SANDY	No. of samples received	: 1
Order number	: 1648232	No. of samples analysed	: 1

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO** Method Blank value outliers occur.
- **NO** Duplicate outliers occur.
- **NO** Matrix Spike outliers occur.
- Laboratory Control outliers exist - please see following pages for full details.
- For all regular sample matrices, **NO** surrogate recovery outliers occur.

Outliers : Analysis Holding Time Compliance

- **NO** Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- Quality Control Sample Frequency Outliers exist - please see following pages for full details.



Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **WATER**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Laboratory Control Spike (LCS) Recoveries							
EP075A: Phenolic Compounds	QC-495876-002	----	2,6-Dichlorophenol	87-65-0	60.0 %	62-108%	Recovery less than lower control limit
EP075B: Polynuclear Aromatic Hydrocarbons	QC-495876-002	----	Anthracene	120-12-7	65.6 %	66-108%	Recovery less than lower control limit
EP075E: Nitroaromatics and Ketones	QC-495876-002	----	Acetophenone	98-86-2	67.9 %	68-112%	Recovery less than lower control limit
EP075E: Nitroaromatics and Ketones	QC-495876-002	----	Nitrobenzene	98-95-3	66.2 %	68-112%	Recovery less than lower control limit
EP075E: Nitroaromatics and Ketones	QC-495876-002	----	4-Aminobiphenyl	92-67-1	28.4 %	60-112%	Recovery less than lower control limit
EP075F: Haloethers	QC-495876-002	----	Bis(2-chloroethyl) ether	111-44-4	60.3 %	69-112%	Recovery less than lower control limit

Outliers : Frequency of Quality Control Samples

Matrix: **WATER**

Quality Control Sample Type	Count		Rate (%)		Quality Control Specification
Method	QC	Regular	Actual	Expected	
Laboratory Duplicates (DUP)					
Semivolatile Organic Compounds	0	3	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	1	0.00	10.00	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)					
Semivolatile Organic Compounds	0	3	0.00	5.00	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	0	1	0.00	5.00	NEPM 2013 B3 & ALS QC Standard

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for VOC in soils vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **WATER**

Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.

Method	Sample Date	Extraction / Preparation			Analysis		
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG020F: Dissolved Metals by ICP-MS							
Clear Plastic Bottle - Nitric Acid; Filtered (EG020A-F) QC200	21-Jun-2016	----	----	----	27-Jun-2016	18-Dec-2016	✓
EG035F: Dissolved Mercury by FIMS							
Clear Plastic Bottle - Nitric Acid; Filtered (EG035F) QC200	21-Jun-2016	----	----	----	28-Jun-2016	19-Jul-2016	✓
EP080/071: Total Petroleum Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP071) QC200	21-Jun-2016	23-Jun-2016	28-Jun-2016	✓	24-Jun-2016	02-Aug-2016	✓

Page : 3 of 5
 Work Order : ES1613614
 Client : GOLDER ASSOCIATES
 Project : 1648232



Matrix: **WATER**

Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.

Method	Sample Date	Extraction / Preparation			Analysis		
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074A: Monocyclic Aromatic Hydrocarbons							
Amber VOC Vial - Sulfuric Acid (EP074) QC200	21-Jun-2016	23-Jun-2016	05-Jul-2016	✓	23-Jun-2016	05-Jul-2016	✓
EP075A: Phenolic Compounds							
Amber Glass Bottle - Unpreserved (EP075) QC200	21-Jun-2016	23-Jun-2016	28-Jun-2016	✓	23-Jun-2016	02-Aug-2016	✓
EP080/071: Total Petroleum Hydrocarbons							
Amber VOC Vial - Sulfuric Acid (EP080) QC200	21-Jun-2016	23-Jun-2016	05-Jul-2016	✓	23-Jun-2016	05-Jul-2016	✓



Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **WATER**

Evaluation: ✖ = Quality Control frequency not within specification ; ✔ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Dissolved Mercury by FIMS	EG035F	2	14	14.29	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	2	17	11.76	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds	EP075	0	3	0.00	10.00	✗	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	1	0.00	10.00	✗	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	6	16.67	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	1	10	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Dissolved Mercury by FIMS	EG035F	1	14	7.14	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	17	5.88	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds	EP075	1	3	33.33	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	1	100.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	6	16.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	1	10	10.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Dissolved Mercury by FIMS	EG035F	1	14	7.14	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	17	5.88	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds	EP075	1	3	33.33	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	1	100.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	6	16.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	1	10	10.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Dissolved Mercury by FIMS	EG035F	1	14	7.14	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Dissolved Metals by ICP-MS - Suite A	EG020A-F	1	17	5.88	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds	EP075	0	3	0.00	5.00	✗	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	0	1	0.00	5.00	✗	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	6	16.67	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	1	10	10.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard



Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Dissolved Metals by ICP-MS - Suite A	EG020A-F	WATER	In house: Referenced to APHA 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020. Samples are 0.45µm filtered prior to analysis. The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.
Dissolved Mercury by FIMS	EG035F	WATER	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl ₂)(Cold Vapour generation) AAS) Samples are 0.45µm filtered prior to analysis. FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the filtered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl ₂ which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (2013) Schedule B(3)
TRH - Semivolatile Fraction	EP071	WATER	In house: Referenced to USEPA SW 846 - 8015A The sample extract is analysed by Capillary GC/FID and quantification is by comparison against an established 5 point calibration curve of n-Alkane standards. This method is compliant with the QC requirements of NEPM (2013) Schedule B(3)
Volatile Organic Compounds	EP074	WATER	In house: Referenced to USEPA SW 846 - 8260B Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (2013) Schedule B(3)
Semivolatile Organic Compounds	EP075	WATER	In house: Referenced to USEPA SW 846 - 8270D Sample extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (2013) Schedule B(3)
TRH Volatiles/BTEX	EP080	WATER	In house: Referenced to USEPA SW 846 - 8260B Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. Alternatively, a sample is equilibrated in a headspace vial and a portion of the headspace determined by GCMS analysis. This method is compliant with the QC requirements of NEPM (2013) Schedule B(3)
Preparation Methods	Method	Matrix	Method Descriptions
Separatory Funnel Extraction of Liquids	ORG14	WATER	In house: Referenced to USEPA SW 846 - 3510B 100 mL to 1L of sample is transferred to a separatory funnel and serially extracted three times using 60mL DCM for each extract. The resultant extracts are combined, dehydrated and concentrated for analysis. This method is compliant with NEPM (2013) Schedule B(3) . ALS default excludes sediment which may be resident in the container.
Volatiles Water Preparation	ORG16-W	WATER	A 5 mL aliquot or 5 mL of a diluted sample is added to a 40 mL VOC vial for sparging.

QUALITY CONTROL REPORT

Work Order : ES1613614

Page : 1 of 11

Client : GOLDER ASSOCIATES
Contact : MR BEN SEAFORD
Address : LEVEL 1, 124 PACIFIC HIGHWAY
ST LEONARDS NSW, AUSTRALIA 2065
Telephone : +61 02 9478 3900
Project : 1648232
Order number : 1648232
C-O-C number : ----
Sampler : NATALIE SANDY
Site : CULVERSTON RD, MINTO
Quote number : ----
No. of samples received : 1
No. of samples analysed : 1

Laboratory : Environmental Division Sydney
Contact :
Address : 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone : +61-2-8784 8555
Date Samples Received : 22-Jun-2016
Date Analysis Commenced : 23-Jun-2016
Issue Date : 29-Jun-2016



NATA Accredited Laboratory 825
 Accredited for compliance with
 ISO/IEC 17025.

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	Position	Accreditation Category
Celine Conceicao	Senior Spectroscopist	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjjar	Organic Coordinator	Sydney Organics, Smithfield, NSW



General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
 CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
 LOR = Limit of reporting
 RPD = Relative Percentage Difference
 # = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **WATER**

Sub-Matrix: WATER				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EG020F: Dissolved Metals by ICP-MS (QC Lot: 498669)									
ES1613482-001	Anonymous	EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	0.0003	0.0003	0.00	No Limit
		EG020A-F: Arsenic	7440-38-2	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Chromium	7440-47-3	0.001	mg/L	0.002	0.002	0.00	No Limit
		EG020A-F: Copper	7440-50-8	0.001	mg/L	0.046	0.046	0.00	0% - 20%
		EG020A-F: Lead	7439-92-1	0.001	mg/L	0.005	0.005	0.00	No Limit
		EG020A-F: Nickel	7440-02-0	0.001	mg/L	0.081	0.081	0.00	0% - 20%
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	0.118	0.121	1.94	0% - 20%
ES1613584-001	Anonymous	EG020A-F: Cadmium	7440-43-9	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
		EG020A-F: Arsenic	7440-38-2	0.001	mg/L	0.008	0.009	0.00	No Limit
		EG020A-F: Chromium	7440-47-3	0.001	mg/L	0.001	<0.001	0.00	No Limit
		EG020A-F: Copper	7440-50-8	0.001	mg/L	0.018	0.018	0.00	0% - 50%
		EG020A-F: Lead	7439-92-1	0.001	mg/L	<0.001	<0.001	0.00	No Limit
		EG020A-F: Nickel	7440-02-0	0.001	mg/L	0.015	0.016	0.00	0% - 50%
		EG020A-F: Zinc	7440-66-6	0.005	mg/L	0.006	<0.005	23.0	No Limit
EG035F: Dissolved Mercury by FIMS (QC Lot: 498668)									
ES1613500-001	Anonymous	EG035F: Mercury	7439-97-6	0.0001	mg/L	0.0001	0.0001	0.00	No Limit
ES1613584-001	Anonymous	EG035F: Mercury	7439-97-6	0.0001	mg/L	<0.0001	<0.0001	0.00	No Limit
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 495798)									
ES1613363-001	Anonymous	EP074: Styrene	100-42-5	5	µg/L	<5	<5	0.00	No Limit
		EP074: Isopropylbenzene	98-82-8	5	µg/L	<5	<5	0.00	No Limit
		EP074: n-Propylbenzene	103-65-1	5	µg/L	<5	<5	0.00	No Limit
		EP074: 1,3,5-Trimethylbenzene	108-67-8	5	µg/L	<5	<5	0.00	No Limit
		EP074: sec-Butylbenzene	135-98-8	5	µg/L	<5	<5	0.00	No Limit
		EP074: 1,2,4-Trimethylbenzene	95-63-6	5	µg/L	<5	<5	0.00	No Limit
		EP074: tert-Butylbenzene	98-06-6	5	µg/L	<5	<5	0.00	No Limit



Sub-Matrix: **WATER**

Sub-Matrix: WATER				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 495798) - continued									
ES1613363-001	Anonymous	EP074: p-Isopropyltoluene	99-87-6	5	µg/L	<5	<5	0.00	No Limit
		EP074: n-Butylbenzene	104-51-8	5	µg/L	<5	<5	0.00	No Limit
EP074B: Oxygenated Compounds (QC Lot: 495798)									
ES1613363-001	Anonymous	EP074: Vinyl Acetate	108-05-4	50	µg/L	<50	<50	0.00	No Limit
		EP074: 2-Butanone (MEK)	78-93-3	50	µg/L	<50	<50	0.00	No Limit
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	<50	0.00	No Limit
		EP074: 2-Hexanone (MBK)	591-78-6	50	µg/L	<50	<50	0.00	No Limit
EP074C: Sulfonated Compounds (QC Lot: 495798)									
ES1613363-001	Anonymous	EP074: Carbon disulfide	75-15-0	5	µg/L	<5	<5	0.00	No Limit
EP074D: Fumigants (QC Lot: 495798)									
ES1613363-001	Anonymous	EP074: 2,2-Dichloropropane	594-20-7	5	µg/L	<5	<5	0.00	No Limit
		EP074: 1,2-Dichloropropane	78-87-5	5	µg/L	<5	<5	0.00	No Limit
		EP074: cis-1,3-Dichloropropylene	10061-01-5	5	µg/L	<5	<5	0.00	No Limit
		EP074: trans-1,3-Dichloropropylene	10061-02-6	5	µg/L	<5	<5	0.00	No Limit
		EP074: 1,2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	<5	0.00	No Limit
EP074E: Halogenated Aliphatic Compounds (QC Lot: 495798)									
ES1613363-001	Anonymous	EP074: 1,1-Dichloroethene	75-35-4	5	µg/L	<5	<5	0.00	No Limit
		EP074: Iodomethane	74-88-4	5	µg/L	<5	<5	0.00	No Limit
		EP074: trans-1,2-Dichloroethene	156-60-5	5	µg/L	<5	<5	0.00	No Limit
		EP074: 1,1-Dichloroethane	75-34-3	5	µg/L	<5	<5	0.00	No Limit
		EP074: cis-1,2-Dichloroethene	156-59-2	5	µg/L	<5	<5	0.00	No Limit
		EP074: 1,1,1-Trichloroethane	71-55-6	5	µg/L	<5	<5	0.00	No Limit
		EP074: 1,1-Dichloropropylene	563-58-6	5	µg/L	<5	<5	0.00	No Limit
		EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	<5	0.00	No Limit
		EP074: 1,2-Dichloroethane	107-06-2	5	µg/L	<5	<5	0.00	No Limit
		EP074: Trichloroethene	79-01-6	5	µg/L	<5	<5	0.00	No Limit
		EP074: Dibromomethane	74-95-3	5	µg/L	<5	<5	0.00	No Limit
		EP074: 1,1,2-Trichloroethane	79-00-5	5	µg/L	<5	<5	0.00	No Limit
		EP074: 1,3-Dichloropropane	142-28-9	5	µg/L	<5	<5	0.00	No Limit
		EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	<5	0.00	No Limit
		EP074: 1,1,1,2-Tetrachloroethane	630-20-6	5	µg/L	<5	<5	0.00	No Limit
		EP074: trans-1,4-Dichloro-2-butene	110-57-6	5	µg/L	<5	<5	0.00	No Limit
		EP074: cis-1,4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	<5	0.00	No Limit
		EP074: 1,1,2,2-Tetrachloroethane	79-34-5	5	µg/L	<5	<5	0.00	No Limit
		EP074: 1,2,3-Trichloropropane	96-18-4	5	µg/L	<5	<5	0.00	No Limit
		EP074: Pentachloroethane	76-01-7	5	µg/L	<5	<5	0.00	No Limit
		EP074: 1,2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	<5	0.00	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	<50	0.00	No Limit
		EP074: Chloromethane	74-87-3	50	µg/L	<50	<50	0.00	No Limit

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 Work Order : ES1613614
 Client : GOLDER ASSOCIATES
 Project : 1648232



Sub-Matrix: **WATER**

Sub-Matrix: WATER				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP074E: Halogenated Aliphatic Compounds (QC Lot: 495798) - continued									
ES1613363-001	Anonymous	EP074: Vinyl chloride	75-01-4	50	µg/L	<50	<50	0.00	No Limit
		EP074: Bromomethane	74-83-9	50	µg/L	<50	<50	0.00	No Limit
		EP074: Chloroethane	75-00-3	50	µg/L	<50	<50	0.00	No Limit
		EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	<50	0.00	No Limit
EP074F: Halogenated Aromatic Compounds (QC Lot: 495798)									
ES1613363-001	Anonymous	EP074: Chlorobenzene	108-90-7	5	µg/L	<5	<5	0.00	No Limit
		EP074: Bromobenzene	108-86-1	5	µg/L	<5	<5	0.00	No Limit
		EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	<5	0.00	No Limit
		EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	<5	0.00	No Limit
		EP074: 1,2,3-Trichlorobenzene	87-61-6	5	µg/L	<5	<5	0.00	No Limit
EP074G: Trihalomethanes (QC Lot: 495798)									
ES1613363-001	Anonymous	EP074: Chloroform	67-66-3	5	µg/L	<5	<5	0.00	No Limit
		EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	<5	0.00	No Limit
		EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	<5	0.00	No Limit
		EP074: Bromoform	75-25-2	5	µg/L	<5	<5	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 495799)									
ES1613363-001	Anonymous	EP080: C6 - C9 Fraction	----	20	µg/L	<20	<20	0.00	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 495799)									
ES1613363-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	<20	0.00	No Limit
EP080: BTEXN (QC Lot: 495799)									
ES1613363-001	Anonymous	EP080: Benzene	71-43-2	1	µg/L	<1	<1	0.00	No Limit
		EP080: Toluene	108-88-3	2	µg/L	<2	<2	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	2	µg/L	<2	<2	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3	2	µg/L	<2	<2	0.00	No Limit
			106-42-3						
		EP080: ortho-Xylene	95-47-6	2	µg/L	<2	<2	0.00	No Limit
		EP080: Naphthalene	91-20-3	5	µg/L	<5	<5	0.00	No Limit

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
	Spike Concentration	Spike Recovery (%) LCS	Recovery Limits (%) LowHigh	
Result				
<0.001	0.1 mg/L	98.5	85	114
<0.0001	0.1 mg/L	96.6	84	110
<0.001	0.1 mg/L	99.7	85	111
<0.001	0.1 mg/L	96.9	81	111
<0.001	0.1 mg/L	96.2	83	111
<0.001	0.1 mg/L	96.4	82	112
<0.005	0.1 mg/L	97.0	81	117
<0.0001	0.01 mg/L	93.1	83	105
<5	10 µg/L	96.0	73	119
<5	10 µg/L	96.4	76	118
<5	10 µg/L	89.7	69	119
<5	10 µg/L	91.3	74	116
<5	10 µg/L	97.6	73	119
<5	10 µg/L	93.3	74	116
<5	10 µg/L	92.0	72	116
<5	10 µg/L	93.7	71	119
<5	10 µg/L	95.7	65	123
<50	100 µg/L	111	61	134
<50	100 µg/L	77.7	74	130
<50	100 µg/L	97.3	66	132
<50	100 µg/L	97.4	65	137
<5	10 µg/L	111	73	127
<5	10 µg/L	103	68	122
<5	10 µg/L	110	76	118
<5	10 µg/L	92.6	62	120
<5	10 µg/L	93.8	60	114
<5	10 µg/L	109	69	117



Sub-Matrix: **WATER**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%) LCS	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result			Low	High
EP074E: Halogenated Aliphatic Compounds (QCLot: 495798) - continued								
EP074: Dichlorodifluoromethane	75-71-8	50	µg/L	<50	100 µg/L	89.2	61	138
EP074: Chloromethane	74-87-3	50	µg/L	<50	100 µg/L	98.1	67	130
EP074: Vinyl chloride	75-01-4	50	µg/L	<50	100 µg/L	115	69	129
EP074: Bromomethane	74-83-9	50	µg/L	<50	100 µg/L	121	56	140
EP074: Chloroethane	75-00-3	50	µg/L	<50	100 µg/L	108	61	139
EP074: Trichlorofluoromethane	75-69-4	50	µg/L	<50	100 µg/L	114	69	131
EP074: 1,1-Dichloroethene	75-35-4	5	µg/L	<5	10 µg/L	109	70	124
EP074: Iodomethane	74-88-4	5	µg/L	<5	10 µg/L	84.8	70	128
EP074: trans-1,2-Dichloroethene	156-60-5	5	µg/L	<5	10 µg/L	109	74	118
EP074: 1,1-Dichloroethane	75-34-3	5	µg/L	<5	10 µg/L	111	74	120
EP074: cis-1,2-Dichloroethene	156-59-2	5	µg/L	<5	10 µg/L	103	77	119
EP074: 1,1,1-Trichloroethane	71-55-6	5	µg/L	<5	10 µg/L	101	67	119
EP074: 1,1-Dichloropropylene	563-58-6	5	µg/L	<5	10 µg/L	104	73	119
EP074: Carbon Tetrachloride	56-23-5	5	µg/L	<5	10 µg/L	104	62	120
EP074: 1,2-Dichloroethane	107-06-2	5	µg/L	<5	10 µg/L	113	73	123
EP074: Trichloroethene	79-01-6	5	µg/L	<5	10 µg/L	105	76	118
EP074: Dibromomethane	74-95-3	5	µg/L	<5	10 µg/L	114	73	119
EP074: 1,1,2-Trichloroethane	79-00-5	5	µg/L	<5	10 µg/L	112	72	126
EP074: 1,3-Dichloropropane	142-28-9	5	µg/L	<5	10 µg/L	108	71	129
EP074: Tetrachloroethene	127-18-4	5	µg/L	<5	10 µg/L	109	72	124
EP074: 1,1,1,2-Tetrachloroethane	630-20-6	5	µg/L	<5	10 µg/L	93.1	66	114
EP074: trans-1,4-Dichloro-2-butene	110-57-6	5	µg/L	<5	10 µg/L	105	60	120
EP074: cis-1,4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	10 µg/L	99.8	71	128
EP074: 1,1,2,2-Tetrachloroethane	79-34-5	5	µg/L	<5	10 µg/L	110	70	124
EP074: 1,2,3-Trichloropropane	96-18-4	5	µg/L	<5	10 µg/L	119	74	126
EP074: Pentachloroethane	76-01-7	5	µg/L	<5	10 µg/L	96.7	72	126
EP074: 1,2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	10 µg/L	96.7	66	136
EP074F: Halogenated Aromatic Compounds (QCLot: 495798)								
EP074: Chlorobenzene	108-90-7	5	µg/L	<5	10 µg/L	104	79	117
EP074: Bromobenzene	108-86-1	5	µg/L	<5	10 µg/L	99.9	76	116
EP074: 2-Chlorotoluene	95-49-8	5	µg/L	<5	10 µg/L	103	73	119
EP074: 4-Chlorotoluene	106-43-4	5	µg/L	<5	10 µg/L	103	73	119
EP074: 1,2,3-Trichlorobenzene	87-61-6	5	µg/L	<5	10 µg/L	109	67	123
EP074G: Trihalomethanes (QCLot: 495798)								
EP074: Chloroform	67-66-3	5	µg/L	<5	10 µg/L	110	72	120
EP074: Bromodichloromethane	75-27-4	5	µg/L	<5	10 µg/L	97.8	64	118
EP074: Dibromochloromethane	124-48-1	5	µg/L	<5	10 µg/L	102	65	115
EP074: Bromoform	75-25-2	5	µg/L	<5	10 µg/L	100	74	126



Sub-Matrix: **WATER**

Sub-Matrix: WATER				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%) LCS	Recovery Limits (%) Low High	
Method: Compound	CAS Number	LOR	Unit	Result				
EP075A: Phenolic Compounds (QCLot: 495876)								
EP075: Phenol	108-95-2	2	µg/L	<2	5 µg/L	34.5	26	64
EP075: 2-Chlorophenol	95-57-8	2	µg/L	<2	5 µg/L	62.8	52	88
EP075: 2-Methylphenol	95-48-7	2	µg/L	<2	5 µg/L	53.4	50	94
EP075: 3- & 4-Methylphenol	1319-77-3	4	µg/L	<4	10 µg/L	48.2	45	96
EP075: 2-Nitrophenol	88-75-5	2	µg/L	<2	5 µg/L	69.5	48	98
EP075: 2,4-Dimethylphenol	105-67-9	2	µg/L	<2	5 µg/L	72.6	50	94
EP075: 2,4-Dichlorophenol	120-83-2	2	µg/L	<2	5 µg/L	72.5	62	109
EP075: 2,6-Dichlorophenol	87-65-0	2	µg/L	<2	5 µg/L	# 60.0	62	108
EP075: 4-Chloro-3-methylphenol	59-50-7	2	µg/L	<2	5 µg/L	70.1	61	107
EP075: 2,4,6-Trichlorophenol	88-06-2	2	µg/L	<2	5 µg/L	80.8	58	112
EP075: 2,4,5-Trichlorophenol	95-95-4	2	µg/L	<2	5 µg/L	69.5	58	110
EP075: Pentachlorophenol	87-86-5	4	µg/L	<4	10 µg/L	67.8	13	95
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 495876)								
EP075: Naphthalene	91-20-3	2	µg/L	<2	5 µg/L	62.2	51	95
EP075: 2-Methylnaphthalene	91-57-6	2	µg/L	<2	5 µg/L	78.2	59	108
EP075: 2-Chloronaphthalene	91-58-7	2	µg/L	<2	5 µg/L	70.9	61	106
EP075: Acenaphthylene	208-96-8	2	µg/L	<2	5 µg/L	76.4	64	108
EP075: Acenaphthene	83-32-9	2	µg/L	<2	5 µg/L	68.3	65	108
EP075: Fluorene	86-73-7	2	µg/L	<2	5 µg/L	71.5	65	107
EP075: Phenanthrene	85-01-8	2	µg/L	<2	5 µg/L	74.3	67	108
EP075: Anthracene	120-12-7	2	µg/L	<2	5 µg/L	# 65.6	66	108
EP075: Fluoranthene	206-44-0	2	µg/L	<2	5 µg/L	66.3	65	109
EP075: Pyrene	129-00-0	2	µg/L	<2	5 µg/L	74.0	60	111
EP075: N-2-Fluorenyl Acetamide	53-96-3	2	µg/L	<2	5 µg/L	69.2	60	110
EP075: Benz(a)anthracene	56-55-3	2	µg/L	<2	5 µg/L	65.0	62	112
EP075: Chrysene	218-01-9	2	µg/L	<2	5 µg/L	64.6	59	114
EP075: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	4	µg/L	<4	10 µg/L	70.0	60	111
EP075: 7,12-Dimethylbenz(a)anthracene	57-97-6	2	µg/L	<2	5 µg/L	68.7	50	108
EP075: Benzo(a)pyrene	50-32-8	2	µg/L	<2	5 µg/L	62.7	59	112
EP075: 3-Methylcholanthrene	56-49-5	2	µg/L	<2	5 µg/L	81.4	60	110
EP075: Indeno(1,2,3.cd)pyrene	193-39-5	2	µg/L	<2	5 µg/L	74.0	60	110
EP075: Dibenz(a,h)anthracene	53-70-3	2	µg/L	<2	5 µg/L	74.1	57	109
EP075: Benzo(g,h,i)perylene	191-24-2	2	µg/L	<2	5 µg/L	81.4	61	110
EP075: Benzo(a)pyrene TEQ (zero)	----	2	µg/L	<2	----	----	----	----
EP075C: Phthalate Esters (QCLot: 495876)								
EP075: Dimethyl phthalate	131-11-3	2	µg/L	<2	5 µg/L	83.5	64	112
EP075: Diethyl phthalate	84-66-2	2	µg/L	<2	5 µg/L	76.5	67	111
EP075: Di-n-butyl phthalate	84-74-2	2	µg/L	<2	5 µg/L	79.2	68	122

Method Blank (MB) Report

Spike

Spike Recovery (%)

Recovery Limits (%)

CAS Number

LOR

Unit

Result

Concentration

LCS

Low

High

EP075C: Phthalate Esters (QCLot: 495876) - continued

EP075: Butyl benzyl phthalate	85-68-7	2	µg/L	<2	5 µg/L	65.8	61	114
EP075: bis(2-ethylhexyl) phthalate	117-81-7	----	µg/L	----	5 µg/L	86.4	60	132
EP075: Di-n-octylphthalate	117-84-0	2	µg/L	<2	5 µg/L	67.2	62	115

EP075D: Nitrosamines (QCLot: 495876)

EP075: N-Nitrosomethylethylamine	10595-95-6	2	µg/L	<2	5 µg/L	87.3	46	110
EP075: N-Nitrosodiethylamine	55-18-5	2	µg/L	<2	5 µg/L	68.2	61	113
EP075: N-Nitrosopyrrolidine	930-55-2	4	µg/L	<4	5 µg/L	63.3	45	91
EP075: N-Nitrosomorpholine	59-89-2	2	µg/L	<2	5 µg/L	62.5	42	100
EP075: N-Nitrosodi-n-propylamine	621-64-7	2	µg/L	<2	5 µg/L	70.4	64	108
EP075: N-Nitrosopiperidine	100-75-4	2	µg/L	<2	5 µg/L	62.6	62	107
EP075: N-Nitrosodibutylamine	924-16-3	2	µg/L	<2	5 µg/L	68.0	63	108
EP075: N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	4	µg/L	<4	10 µg/L	70.1	65	112
EP075: Methapyriline	91-80-5	2	µg/L	<2	5 µg/L	55.1	23	125

EP075E: Nitroaromatics and Ketones (QCLot: 495876)

EP075: 2-Picoline	109-06-8	2	µg/L	<2	5 µg/L	48.4	41	109
EP075: Acetophenone	98-86-2	2	µg/L	<2	5 µg/L	# 67.9	68	112
EP075: Nitrobenzene	98-95-3	2	µg/L	<2	5 µg/L	# 66.2	68	112
EP075: Isophorone	78-59-1	2	µg/L	<2	5 µg/L	76.7	68	111
EP075: 2,6-Dinitrotoluene	606-20-2	4	µg/L	<4	5 µg/L	86.1	64	113
EP075: 2,4-Dinitrotoluene	121-14-2	4	µg/L	<4	5 µg/L	73.5	60	109
EP075: 1-Naphthylamine	134-32-7	2	µg/L	<2	5 µg/L	69.3	47	102
EP075: 4-Nitroquinoline-N-oxide	56-57-5	2	µg/L	<2	5 µg/L	67.6	40	96
EP075: 5-Nitro-o-toluidine	99-55-8	2	µg/L	<2	5 µg/L	64.7	58	106
EP075: Azobenzene	103-33-3	2	µg/L	<2	5 µg/L	74.4	66	112
EP075: 1,3,5-Trinitrobenzene	99-35-4	2	µg/L	<2	5 µg/L	66.0	46	108
EP075: Phenacetin	62-44-2	2	µg/L	<2	5 µg/L	60.3	58	101
EP075: 4-Aminobiphenyl	92-67-1	2	µg/L	<2	5 µg/L	# 28.4	60	112
EP075: Pentachloronitrobenzene	82-68-8	2	µg/L	<2	5 µg/L	74.4	59	109
EP075: Pronamide	23950-58-5	2	µg/L	<2	5 µg/L	97.8	63	109
EP075: Dimethylaminoazobenzene	60-11-7	2	µg/L	<2	5 µg/L	66.7	59	108
EP075: Chlorobenzilate	510-15-6	2	µg/L	<2	5 µg/L	64.5	58	110

EP075F: Haloethers (QCLot: 495876)

EP075: Bis(2-chloroethyl) ether	111-44-4	2	µg/L	<2	5 µg/L	# 60.3	69	112
EP075: Bis(2-chloroethoxy) methane	111-91-1	2	µg/L	<2	5 µg/L	74.4	66	111
EP075: 4-Chlorophenyl phenyl ether	7005-72-3	2	µg/L	<2	5 µg/L	71.8	65	109
EP075: 4-Bromophenyl phenyl ether	101-55-3	2	µg/L	<2	5 µg/L	73.5	62	108

EP075G: Chlorinated Hydrocarbons (QCLot: 495876)



Sub-Matrix: **WATER**

Method: Compound				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%) LCS	Recovery Limits (%)	
							Low	High
CAS Number	LOR	Unit	Result					
EP075G: Chlorinated Hydrocarbons (QCLot: 495876) - continued								
EP075: 1,4-Dichlorobenzene	106-46-7	2	µg/L	<2	5 µg/L	64.6	41	97
EP075: 1,3-Dichlorobenzene	541-73-1	2	µg/L	<2	5 µg/L	64.9	40	96
EP075: 1,2-Dichlorobenzene	95-50-1	2	µg/L	<2	5 µg/L	66.9	41	95
EP075: Hexachloroethane	67-72-1	2	µg/L	<2	5 µg/L	65.6	46	88
EP075: 1,2,4-Trichlorobenzene	120-82-1	2	µg/L	<2	5 µg/L	69.0	46	96
EP075: Hexachloropropylene	1888-71-7	2	µg/L	<2	5 µg/L	42.1	34	96
EP075: Hexachlorobutadiene	87-68-3	2	µg/L	<2	5 µg/L	60.1	37	100
EP075: Hexachlorocyclopentadiene	77-47-4	10	µg/L	<10	5 µg/L	55.7	24	107
EP075: Pentachlorobenzene	608-93-5	2	µg/L	<2	5 µg/L	68.2	65	107
EP075: Hexachlorobenzene (HCB)	118-74-1	4	µg/L	<4	5 µg/L	82.4	66	110
EP075H: Anilines and Benzidines (QCLot: 495876)								
EP075: Aniline	62-53-3	2	µg/L	<2	5 µg/L	56.1	50	104
EP075: 4-Chloroaniline	106-47-8	2	µg/L	<2	5 µg/L	58.4	42	106
EP075: 2-Nitroaniline	88-74-4	4	µg/L	<4	5 µg/L	77.0	61	110
EP075: 3-Nitroaniline	99-09-2	4	µg/L	<4	5 µg/L	69.4	52	97
EP075: Dibenzofuran	132-64-9	2	µg/L	<2	5 µg/L	75.7	65	108
EP075: 4-Nitroaniline	100-01-6	2	µg/L	<2	5 µg/L	60.1	49	100
EP075: Carbazole	86-74-8	2	µg/L	<2	5 µg/L	68.3	64	107
EP075: 3,3'-Dichlorobenzidine	91-94-1	2	µg/L	<2	5 µg/L	65.0	60	119
EP075I: Organochlorine Pesticides (QCLot: 495876)								
EP075: alpha-BHC	319-84-6	2	µg/L	<2	5 µg/L	79.9	64	110
EP075: beta-BHC	319-85-7	2	µg/L	<2	5 µg/L	75.1	53	107
EP075: gamma-BHC	58-89-9	2	µg/L	<2	5 µg/L	72.8	51	111
EP075: delta-BHC	319-86-8	2	µg/L	<2	5 µg/L	66.6	57	111
EP075: Heptachlor	76-44-8	2	µg/L	<2	5 µg/L	72.8	58	108
EP075: Aldrin	309-00-2	2	µg/L	<2	5 µg/L	72.4	56	112
EP075: Heptachlor epoxide	1024-57-3	2	µg/L	<2	5 µg/L	73.8	50	118
EP075: alpha-Endosulfan	959-98-8	2	µg/L	<2	5 µg/L	73.5	59	111
EP075: 4,4'-DDE	72-55-9	2	µg/L	<2	5 µg/L	65.8	53	115
EP075: Dieldrin	60-57-1	2	µg/L	<2	5 µg/L	74.9	59	115
EP075: Endrin	72-20-8	2	µg/L	<2	5 µg/L	70.9	58	114
EP075: beta-Endosulfan	33213-65-9	2	µg/L	<2	5 µg/L	71.4	54	116
EP075: 4,4'-DDD	72-54-8	2	µg/L	<2	5 µg/L	70.0	55	115
EP075: Endosulfan sulfate	1031-07-8	2	µg/L	<2	5 µg/L	72.2	53	114
EP075: 4,4'-DDT	50-29-3	4	µg/L	<4	5 µg/L	68.9	56	114
EP075: Sum of Aldrin + Dieldrin	309-00-2/60-57-1	4	µg/L	<4	----	----	----	----
EP075: Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-29-3	4	µg/L	<4	----	----	----	----



Sub-Matrix: **WATER**

Method: Compound				Method Blank (MB) Report Result	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%)	Recovery Limits (%)	
						LCS	Low	High
CAS Number	LOR	Unit						
EP075J: Organophosphorus Pesticides (QCLot: 495876)								
EP075: Dichlorvos	62-73-7	2	µg/L	<2	5 µg/L	76.4	51	113
EP075: Dimethoate	60-51-5	2	µg/L	<2	5 µg/L	83.9	43	109
EP075: Diazinon	333-41-5	2	µg/L	<2	5 µg/L	74.5	49	113
EP075: Chlorpyrifos-methyl	5598-13-0	2	µg/L	<2	5 µg/L	72.2	54	116
EP075: Malathion	121-75-5	2	µg/L	<2	5 µg/L	89.6	54	1254
EP075: Fenthion	55-38-9	2	µg/L	<2	5 µg/L	69.6	57	115
EP075: Chlorpyrifos	2921-88-2	2	µg/L	<2	5 µg/L	68.5	53	109
EP075: Pirimphos-ethyl	23505-41-1	2	µg/L	<2	5 µg/L	66.8	55	111
EP075: Chlorfenvinphos	470-90-6	2	µg/L	<2	5 µg/L	64.5	50	116
EP075: Prothiofos	34643-46-4	2	µg/L	<2	5 µg/L	64.5	54	118
EP075: Ethion	563-12-2	2	µg/L	<2	5 µg/L	73.0	51	117
EP080/071: Total Petroleum Hydrocarbons (QCLot: 495799)								
EP080: C6 - C9 Fraction	----	20	µg/L	<20	260 µg/L	89.5	75	127
EP080/071: Total Petroleum Hydrocarbons (QCLot: 495878)								
EP071: C10 - C14 Fraction	----	50	µg/L	<50	2000 µg/L	103	76	116
EP071: C15 - C28 Fraction	----	100	µg/L	<100	3000 µg/L	98.6	83	109
EP071: C29 - C36 Fraction	----	50	µg/L	<50	2000 µg/L	103	75	113
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 495799)								
EP080: C6 - C10 Fraction	C6_C10	20	µg/L	<20	310 µg/L	92.0	75	127
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 495878)								
EP071: >C10 - C16 Fraction	----	100	µg/L	<100	2500 µg/L	102	76	114
EP071: >C16 - C34 Fraction	----	100	µg/L	<100	3500 µg/L	101	81	111
EP071: >C34 - C40 Fraction	----	100	µg/L	<100	1500 µg/L	102	77	119
EP080: BTEXN (QCLot: 495799)								
EP080: Benzene	71-43-2	1	µg/L	<1	10 µg/L	96.1	70	122
EP080: Toluene	108-88-3	2	µg/L	<2	10 µg/L	93.5	69	123
EP080: Ethylbenzene	100-41-4	2	µg/L	<2	10 µg/L	88.8	70	120
EP080: meta- & para-Xylene	108-38-3	2	µg/L	<2	10 µg/L	85.9	69	121
	106-42-3							
EP080: ortho-Xylene	95-47-6	2	µg/L	<2	10 µg/L	94.4	72	122
EP080: Naphthalene	91-20-3	5	µg/L	<5	10 µg/L	93.3	70	120

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **WATER**

Matrix Spike (MS) Report		
Spike	SpikeRecovery(%)	Recovery Limits (%)



Sub-Matrix: **WATER**

Sub-Matrix: WATER				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG020F: Dissolved Metals by ICP-MS (QCLot: 498669)							
ES1613500-001	Anonymous	EG020A-F: Arsenic	7440-38-2	1 mg/L	116	70	130
		EG020A-F: Cadmium	7440-43-9	0.25 mg/L	115	70	130
		EG020A-F: Chromium	7440-47-3	1 mg/L	113	70	130
		EG020A-F: Copper	7440-50-8	1 mg/L	109	70	130
		EG020A-F: Lead	7439-92-1	1 mg/L	102	70	130
		EG020A-F: Nickel	7440-02-0	1 mg/L	117	70	130
		EG020A-F: Zinc	7440-66-6	1 mg/L	119	70	130
EG035F: Dissolved Mercury by FIMS (QCLot: 498668)							
ES1613398-001	Anonymous	EG035F: Mercury	7439-97-6	0.01 mg/L	83.4	70	130
EP074E: Halogenated Aliphatic Compounds (QCLot: 495798)							
ES1613363-001	Anonymous	EP074: 1,1-Dichloroethene	75-35-4	25 µg/L	75.4	70	130
		EP074: Trichloroethene	79-01-6	25 µg/L	85.6	70	130
EP074F: Halogenated Aromatic Compounds (QCLot: 495798)							
ES1613363-001	Anonymous	EP074: Chlorobenzene	108-90-7	25 µg/L	94.2	70	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 495799)							
ES1613363-001	Anonymous	EP080: C6 - C9 Fraction	----	325 µg/L	102	70	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 495799)							
ES1613363-001	Anonymous	EP080: C6 - C10 Fraction	C6_C10	375 µg/L	103	70	130
EP080: BTEXN (QCLot: 495799)							
ES1613363-001	Anonymous	EP080: Benzene	71-43-2	25 µg/L	91.5	70	130
		EP080: Toluene	108-88-3	25 µg/L	94.7	70	130
		EP080: Ethylbenzene	100-41-4	25 µg/L	95.4	70	130
		EP080: meta- & para-Xylene	108-38-3	25 µg/L	94.0	70	130
			106-42-3				
		EP080: ortho-Xylene	95-47-6	25 µg/L	99.0	70	130
	EP080: Naphthalene	91-20-3	25 µg/L	93.7	70	130	

CERTIFICATE OF ANALYSIS

Work Order : **ES1613614**
Client : **GOLDER ASSOCIATES**
Contact : MR BEN SEAFORD
Address : LEVEL 1, 124 PACIFIC HIGHWAY
 ST LEONARDS NSW, AUSTRALIA 2065
Telephone : +61 02 9478 3900
Project : 1648232
Order number : 1648232
C-O-C number : ----
Sampler : NATALIE SANDY
Site : CULVERSTON RD, MINTO
Quote number : ----
No. of samples received : 1
No. of samples analysed : 1

Page : 1 of 11
Laboratory : Environmental Division Sydney
Contact :
Address : 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone : +61-2-8784 8555
Date Samples Received : 22-Jun-2016 16:40
Date Analysis Commenced : 23-Jun-2016
Issue Date : 29-Jun-2016 19:28

NATA Accredited Laboratory 825
 Accredited for compliance with
 ISO/IEC 17025.



This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Celine Conceicao	Senior Spectroscopist	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW



General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.

LOR = Limit of reporting

^ = This result is computed from individual analyte detections at or above the level of reporting

ø = ALS is not NATA accredited for these tests.

~ = Indicates an estimated value.

- EP075: 'Sum of PAH' is the sum of the USEPA 16 priority PAHs
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a,h)anthracene (1.0), Benzo(g,h,i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero.



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	QC200	----	----	----	----
Client sampling date / time				[21-Jun-2016]	----	----	----	----	----
Compound	CAS Number	LOR	Unit	ES1613614-001	-----	-----	-----	-----	-----
Result				----	----	----	----	----	----
EG020F: Dissolved Metals by ICP-MS									
Arsenic	7440-38-2	0.001	mg/L	0.001	----	----	----	----	----
Cadmium	7440-43-9	0.0001	mg/L	<0.0001	----	----	----	----	----
Chromium	7440-47-3	0.001	mg/L	<0.001	----	----	----	----	----
Copper	7440-50-8	0.001	mg/L	<0.001	----	----	----	----	----
Nickel	7440-02-0	0.001	mg/L	0.016	----	----	----	----	----
Lead	7439-92-1	0.001	mg/L	<0.001	----	----	----	----	----
Zinc	7440-66-6	0.005	mg/L	0.024	----	----	----	----	----
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L	<0.0001	----	----	----	----	----
EP074A: Monocyclic Aromatic Hydrocarbons									
Styrene	100-42-5	5	µg/L	<5	----	----	----	----	----
Isopropylbenzene	98-82-8	5	µg/L	5	----	----	----	----	----
n-Propylbenzene	103-65-1	5	µg/L	7	----	----	----	----	----
1,3,5-Trimethylbenzene	108-67-8	5	µg/L	<5	----	----	----	----	----
sec-Butylbenzene	135-98-8	5	µg/L	<5	----	----	----	----	----
1,2,4-Trimethylbenzene	95-63-6	5	µg/L	<5	----	----	----	----	----
tert-Butylbenzene	98-06-6	5	µg/L	<5	----	----	----	----	----
p-Isopropyltoluene	99-87-6	5	µg/L	<5	----	----	----	----	----
n-Butylbenzene	104-51-8	5	µg/L	<5	----	----	----	----	----
EP074B: Oxygenated Compounds									
Vinyl Acetate	108-05-4	50	µg/L	<50	----	----	----	----	----
2-Butanone (MEK)	78-93-3	50	µg/L	<50	----	----	----	----	----
4-Methyl-2-pentanone (MIBK)	108-10-1	50	µg/L	<50	----	----	----	----	----
2-Hexanone (MBK)	591-78-6	50	µg/L	<50	----	----	----	----	----
EP074C: Sulfonated Compounds									
Carbon disulfide	75-15-0	5	µg/L	<5	----	----	----	----	----
EP074D: Fumigants									
2,2-Dichloropropane	594-20-7	5	µg/L	<5	----	----	----	----	----
1,2-Dichloropropane	78-87-5	5	µg/L	<5	----	----	----	----	----
cis-1,3-Dichloropropylene	10061-01-5	5	µg/L	<5	----	----	----	----	----
trans-1,3-Dichloropropylene	10061-02-6	5	µg/L	<5	----	----	----	----	----
1,2-Dibromoethane (EDB)	106-93-4	5	µg/L	<5	----	----	----	----	----
EP074E: Halogenated Aliphatic Compounds									
Dichlorodifluoromethane	75-71-8	50	µg/L	<50	----	----	----	----	----



Analytical Results

Sub-Matrix: **WATER**
 (Matrix: **WATER**)

Client sample ID

				QC200	----	----	----	----
Client sampling date / time				[21-Jun-2016]	----	----	----	----
Compound	CAS Number	LOR	Unit	ES1613614-001	-----	-----	-----	-----
				Result	----	----	----	----

EP074E: Halogenated Aliphatic Compounds - Continued

Chloromethane	74-87-3	50	µg/L	<50	----	----	----	----
Vinyl chloride	75-01-4	50	µg/L	<50	----	----	----	----
Bromomethane	74-83-9	50	µg/L	<50	----	----	----	----
Chloroethane	75-00-3	50	µg/L	<50	----	----	----	----
Trichlorofluoromethane	75-69-4	50	µg/L	<50	----	----	----	----
1,1-Dichloroethene	75-35-4	5	µg/L	<5	----	----	----	----
Iodomethane	74-88-4	5	µg/L	<5	----	----	----	----
trans-1,2-Dichloroethene	156-60-5	5	µg/L	<5	----	----	----	----
1,1-Dichloroethane	75-34-3	5	µg/L	<5	----	----	----	----
cis-1,2-Dichloroethene	156-59-2	5	µg/L	<5	----	----	----	----
1,1,1-Trichloroethane	71-55-6	5	µg/L	<5	----	----	----	----
1,1-Dichloropropylene	563-58-6	5	µg/L	<5	----	----	----	----
Carbon Tetrachloride	56-23-5	5	µg/L	<5	----	----	----	----
1,2-Dichloroethane	107-06-2	5	µg/L	<5	----	----	----	----
Trichloroethene	79-01-6	5	µg/L	<5	----	----	----	----
Dibromomethane	74-95-3	5	µg/L	<5	----	----	----	----
1,1,2-Trichloroethane	79-00-5	5	µg/L	<5	----	----	----	----
1,3-Dichloropropane	142-28-9	5	µg/L	<5	----	----	----	----
Tetrachloroethene	127-18-4	5	µg/L	<5	----	----	----	----
1,1,1,2-Tetrachloroethane	630-20-6	5	µg/L	<5	----	----	----	----
trans-1,4-Dichloro-2-butene	110-57-6	5	µg/L	<5	----	----	----	----
cis-1,4-Dichloro-2-butene	1476-11-5	5	µg/L	<5	----	----	----	----
1,1,2,2-Tetrachloroethane	79-34-5	5	µg/L	<5	----	----	----	----
1,2,3-Trichloropropane	96-18-4	5	µg/L	<5	----	----	----	----
Pentachloroethane	76-01-7	5	µg/L	<5	----	----	----	----
1,2-Dibromo-3-chloropropane	96-12-8	5	µg/L	<5	----	----	----	----

EP074F: Halogenated Aromatic Compounds

Chlorobenzene	108-90-7	5	µg/L	<5	----	----	----	----
Bromobenzene	108-86-1	5	µg/L	<5	----	----	----	----
2-Chlorotoluene	95-49-8	5	µg/L	<5	----	----	----	----
4-Chlorotoluene	106-43-4	5	µg/L	<5	----	----	----	----
1,2,3-Trichlorobenzene	87-61-6	5	µg/L	<5	----	----	----	----

EP074G: Trihalomethanes

Chloroform	67-66-3	5	µg/L	<5	----	----	----	----
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Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	QC200	----	----	----	----
Client sampling date / time					[21-Jun-2016]	----	----	----	----
Compound	CAS Number	LOR	Unit		ES1613614-001	-----	-----	-----	-----
					Result	----	----	----	----
EP074G: Trihalomethanes - Continued									
Bromodichloromethane	75-27-4	5	µg/L		<5	----	----	----	----
Dibromochloromethane	124-48-1	5	µg/L		<5	----	----	----	----
Bromoform	75-25-2	5	µg/L		<5	----	----	----	----
EP075A: Phenolic Compounds									
Phenol	108-95-2	2	µg/L		<2	----	----	----	----
2-Chlorophenol	95-57-8	2	µg/L		<2	----	----	----	----
2-Methylphenol	95-48-7	2	µg/L		<2	----	----	----	----
3- & 4-Methylphenol	1319-77-3	4	µg/L		<4	----	----	----	----
2-Nitrophenol	88-75-5	2	µg/L		<2	----	----	----	----
2,4-Dimethylphenol	105-67-9	2	µg/L		<2	----	----	----	----
2,4-Dichlorophenol	120-83-2	2	µg/L		<2	----	----	----	----
2,6-Dichlorophenol	87-65-0	2	µg/L		<2	----	----	----	----
4-Chloro-3-methylphenol	59-50-7	2	µg/L		<2	----	----	----	----
2,4,6-Trichlorophenol	88-06-2	2	µg/L		<2	----	----	----	----
2,4,5-Trichlorophenol	95-95-4	2	µg/L		<2	----	----	----	----
Pentachlorophenol	87-86-5	4	µg/L		<4	----	----	----	----
EP075B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	2	µg/L		22	----	----	----	----
2-Methylnaphthalene	91-57-6	2	µg/L		22	----	----	----	----
2-Chloronaphthalene	91-58-7	2	µg/L		<2	----	----	----	----
Acenaphthylene	208-96-8	2	µg/L		<2	----	----	----	----
Acenaphthene	83-32-9	2	µg/L		<2	----	----	----	----
Fluorene	86-73-7	2	µg/L		<2	----	----	----	----
Phenanthrene	85-01-8	2	µg/L		<2	----	----	----	----
Anthracene	120-12-7	2	µg/L		<2	----	----	----	----
Fluoranthene	206-44-0	2	µg/L		<2	----	----	----	----
Pyrene	129-00-0	2	µg/L		<2	----	----	----	----
N-2-Fluorenyl Acetamide	53-96-3	2	µg/L		<2	----	----	----	----
Benz(a)anthracene	56-55-3	2	µg/L		<2	----	----	----	----
Chrysene	218-01-9	2	µg/L		<2	----	----	----	----
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	4	µg/L		<4	----	----	----	----
7,12-Dimethylbenz(a)anthracene	57-97-6	2	µg/L		<2	----	----	----	----
Benzo(a)pyrene	50-32-8	2	µg/L		<2	----	----	----	----
3-Methylcholanthrene	56-49-5	2	µg/L		<2	----	----	----	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	QC200	----	----	----	----
Client sampling date / time					[21-Jun-2016]	----	----	----	----
Compound	CAS Number	LOR	Unit		ES1613614-001	-----	-----	-----	-----
				Result	----	----	----	----	----
EP075B: Polynuclear Aromatic Hydrocarbons - Continued									
Indeno(1.2.3.cd)pyrene	193-39-5	2	µg/L	<2	----	----	----	----	----
Dibenz(a,h)anthracene	53-70-3	2	µg/L	<2	----	----	----	----	----
Benzo(g,h,i)perylene	191-24-2	2	µg/L	<2	----	----	----	----	----
^ Sum of PAHs	----	2	µg/L	22	----	----	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	2	µg/L	<2	----	----	----	----	----
EP075C: Phthalate Esters									
Dimethyl phthalate	131-11-3	2	µg/L	<2	----	----	----	----	----
Diethyl phthalate	84-66-2	2	µg/L	<2	----	----	----	----	----
Di-n-butyl phthalate	84-74-2	2	µg/L	<2	----	----	----	----	----
Butyl benzyl phthalate	85-68-7	2	µg/L	<2	----	----	----	----	----
bis(2-ethylhexyl) phthalate	117-81-7	10	µg/L	<10	----	----	----	----	----
Di-n-octylphthalate	117-84-0	2	µg/L	<2	----	----	----	----	----
EP075D: Nitrosamines									
N-Nitrosomethylethylamine	10595-95-6	2	µg/L	<2	----	----	----	----	----
N-Nitrosodiethylamine	55-18-5	2	µg/L	<2	----	----	----	----	----
N-Nitrosopyrrolidine	930-55-2	4	µg/L	<4	----	----	----	----	----
N-Nitrosomorpholine	59-89-2	2	µg/L	<2	----	----	----	----	----
N-Nitrosodi-n-propylamine	621-64-7	2	µg/L	<2	----	----	----	----	----
N-Nitrosopiperidine	100-75-4	2	µg/L	<2	----	----	----	----	----
N-Nitrosodibutylamine	924-16-3	2	µg/L	<2	----	----	----	----	----
N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	4	µg/L	<4	----	----	----	----	----
Methapyrilene	91-80-5	2	µg/L	<2	----	----	----	----	----
EP075E: Nitroaromatics and Ketones									
2-Picoline	109-06-8	2	µg/L	<2	----	----	----	----	----
Acetophenone	98-86-2	2	µg/L	<2	----	----	----	----	----
Nitrobenzene	98-95-3	2	µg/L	<2	----	----	----	----	----
Isophorone	78-59-1	2	µg/L	<2	----	----	----	----	----
2,6-Dinitrotoluene	606-20-2	4	µg/L	<4	----	----	----	----	----
2,4-Dinitrotoluene	121-14-2	4	µg/L	<4	----	----	----	----	----
1-Naphthylamine	134-32-7	2	µg/L	<2	----	----	----	----	----
4-Nitroquinoline-N-oxide	56-57-5	2	µg/L	<2	----	----	----	----	----
5-Nitro-o-toluidine	99-55-8	2	µg/L	<2	----	----	----	----	----
Azobenzene	103-33-3	2	µg/L	<2	----	----	----	----	----



Analytical Results

Sub-Matrix: **WATER**
 (Matrix: **WATER**)

Client sample ID

				QC200	----	----	----	----
Client sampling date / time				[21-Jun-2016]	----	----	----	----
Compound	CAS Number	LOR	Unit	ES1613614-001	-----	-----	-----	-----
				Result	----	----	----	----
EP075E: Nitroaromatics and Ketones - Continued								
1,3,5-Trinitrobenzene	99-35-4	2	µg/L	<2	----	----	----	----
Phenacetin	62-44-2	2	µg/L	<2	----	----	----	----
4-Aminobiphenyl	92-67-1	2	µg/L	<2	----	----	----	----
Pentachloronitrobenzene	82-68-8	2	µg/L	<2	----	----	----	----
Pronamide	23950-58-5	2	µg/L	<2	----	----	----	----
Dimethylaminoazobenzene	60-11-7	2	µg/L	<2	----	----	----	----
Chlorobenzilate	510-15-6	2	µg/L	<2	----	----	----	----
EP075F: Haloethers								
Bis(2-chloroethyl) ether	111-44-4	2	µg/L	<2	----	----	----	----
Bis(2-chloroethoxy) methane	111-91-1	2	µg/L	<2	----	----	----	----
4-Chlorophenyl phenyl ether	7005-72-3	2	µg/L	<2	----	----	----	----
4-Bromophenyl phenyl ether	101-55-3	2	µg/L	<2	----	----	----	----
EP075G: Chlorinated Hydrocarbons								
1,3-Dichlorobenzene	541-73-1	2	µg/L	<2	----	----	----	----
1,4-Dichlorobenzene	106-46-7	2	µg/L	<2	----	----	----	----
1,2-Dichlorobenzene	95-50-1	2	µg/L	<2	----	----	----	----
Hexachloroethane	67-72-1	2	µg/L	<2	----	----	----	----
1,2,4-Trichlorobenzene	120-82-1	2	µg/L	<2	----	----	----	----
Hexachloropropylene	1888-71-7	2	µg/L	<2	----	----	----	----
Hexachlorobutadiene	87-68-3	2	µg/L	<2	----	----	----	----
Hexachlorocyclopentadiene	77-47-4	10	µg/L	<10	----	----	----	----
Pentachlorobenzene	608-93-5	2	µg/L	<2	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	4	µg/L	<4	----	----	----	----
EP075H: Anilines and Benzidines								
Aniline	62-53-3	2	µg/L	<2	----	----	----	----
4-Chloroaniline	106-47-8	2	µg/L	<2	----	----	----	----
2-Nitroaniline	88-74-4	4	µg/L	<4	----	----	----	----
3-Nitroaniline	99-09-2	4	µg/L	<4	----	----	----	----
Dibenzofuran	132-64-9	2	µg/L	<2	----	----	----	----
4-Nitroaniline	100-01-6	2	µg/L	<2	----	----	----	----
Carbazole	86-74-8	2	µg/L	<2	----	----	----	----
3,3'-Dichlorobenzidine	91-94-1	2	µg/L	<2	----	----	----	----
EP075I: Organochlorine Pesticides								
alpha-BHC	319-84-6	2	µg/L	<2	----	----	----	----



Analytical Results

Sub-Matrix: **WATER**
 (Matrix: **WATER**)

Client sample ID

				QC200	----	----	----	----
Client sampling date / time				[21-Jun-2016]	----	----	----	----
Compound	CAS Number	LOR	Unit	ES1613614-001	-----	-----	-----	-----
				Result	----	----	----	----

EP075I: Organochlorine Pesticides - Continued

beta-BHC	319-85-7	2	µg/L	<2	----	----	----	----
gamma-BHC	58-89-9	2	µg/L	<2	----	----	----	----
delta-BHC	319-86-8	2	µg/L	<2	----	----	----	----
Heptachlor	76-44-8	2	µg/L	<2	----	----	----	----
Aldrin	309-00-2	2	µg/L	<2	----	----	----	----
Heptachlor epoxide	1024-57-3	2	µg/L	<2	----	----	----	----
alpha-Endosulfan	959-98-8	2	µg/L	<2	----	----	----	----
4,4'-DDE	72-55-9	2	µg/L	<2	----	----	----	----
Dieldrin	60-57-1	2	µg/L	<2	----	----	----	----
Endrin	72-20-8	2	µg/L	<2	----	----	----	----
beta-Endosulfan	33213-65-9	2	µg/L	<2	----	----	----	----
4,4'-DDD	72-54-8	2	µg/L	<2	----	----	----	----
Endosulfan sulfate	1031-07-8	2	µg/L	<2	----	----	----	----
4,4'-DDT	50-29-3	4	µg/L	<4	----	----	----	----
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	4	µg/L	<4	----	----	----	----
^ Sum of DDD + DDE + DDT	72-54-8/72-55-9/50-2	4	µg/L	<4	----	----	----	----

EP075J: Organophosphorus Pesticides

Dichlorvos	62-73-7	2	µg/L	<2	----	----	----	----
Dimethoate	60-51-5	2	µg/L	<2	----	----	----	----
Diazinon	333-41-5	2	µg/L	<2	----	----	----	----
Chlorpyrifos-methyl	5598-13-0	2	µg/L	<2	----	----	----	----
Malathion	121-75-5	2	µg/L	<2	----	----	----	----
Fenthion	55-38-9	2	µg/L	<2	----	----	----	----
Chlorpyrifos	2921-88-2	2	µg/L	<2	----	----	----	----
Pirimphos-ethyl	23505-41-1	2	µg/L	<2	----	----	----	----
Chlorfenvinphos	470-90-6	2	µg/L	<2	----	----	----	----
Prothiofos	34643-46-4	2	µg/L	<2	----	----	----	----
Ethion	563-12-2	2	µg/L	<2	----	----	----	----

EP080/071: Total Petroleum Hydrocarbons

C6 - C9 Fraction	----	20	µg/L	80	----	----	----	----
C10 - C14 Fraction	----	50	µg/L	310	----	----	----	----
C15 - C28 Fraction	----	100	µg/L	<100	----	----	----	----
C29 - C36 Fraction	----	50	µg/L	<50	----	----	----	----
^ C10 - C36 Fraction (sum)	----	50	µg/L	310	----	----	----	----



Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Client sample ID	QC200	----	----	----	----
Client sampling date / time					[21-Jun-2016]	----	----	----	----
Compound	CAS Number	LOR	Unit		ES1613614-001	-----	-----	-----	-----
					Result	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons - Continued									
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	20	µg/L		110	----	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	20	µg/L		110	----	----	----	----
>C10 - C16 Fraction	----	100	µg/L		300	----	----	----	----
>C16 - C34 Fraction	----	100	µg/L		<100	----	----	----	----
>C34 - C40 Fraction	----	100	µg/L		<100	----	----	----	----
^ >C10 - C40 Fraction (sum)	----	100	µg/L		300	----	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	100	µg/L		260	----	----	----	----
EP080: BTEXN									
Benzene	71-43-2	1	µg/L		<1	----	----	----	----
Toluene	108-88-3	2	µg/L		<2	----	----	----	----
Ethylbenzene	100-41-4	2	µg/L		<2	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	2	µg/L		<2	----	----	----	----
ortho-Xylene	95-47-6	2	µg/L		<2	----	----	----	----
^ Total Xylenes	1330-20-7	2	µg/L		<2	----	----	----	----
^ Sum of BTEX	----	1	µg/L		<1	----	----	----	----
Naphthalene	91-20-3	5	µg/L		43	----	----	----	----
EP074S: VOC Surrogates									
1,2-Dichloroethane-D4	17060-07-0	5	%		118	----	----	----	----
Toluene-D8	2037-26-5	5	%		110	----	----	----	----
4-Bromofluorobenzene	460-00-4	5	%		111	----	----	----	----
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	2	%		37.6	----	----	----	----
Phenol-d6	13127-88-3	2	%		25.8	----	----	----	----
2-Chlorophenol-D4	93951-73-6	2	%		44.9	----	----	----	----
2,4,6-Tribromophenol	118-79-6	2	%		33.6	----	----	----	----
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	2	%		60.7	----	----	----	----
1,2-Dichlorobenzene-D4	2199-69-1	2	%		56.8	----	----	----	----
2-Fluorobiphenyl	321-60-8	2	%		70.3	----	----	----	----
Anthracene-d10	1719-06-8	2	%		48.1	----	----	----	----
4-Terphenyl-d14	1718-51-0	2	%		66.1	----	----	----	----



Analytical Results

Sub-Matrix: **WATER**
 (Matrix: **WATER**)

Client sample ID

				QC200	----	----	----	----
				[21-Jun-2016]	----	----	----	----
<i>Compound</i>	<i>CAS Number</i>	<i>LOR</i>	<i>Unit</i>	ES1613614-001	-----	-----	-----	-----
				Result	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates								
1,2-Dichloroethane-D4	17060-07-0	2	%	107	----	----	----	----
Toluene-D8	2037-26-5	2	%	106	----	----	----	----
4-Bromofluorobenzene	460-00-4	2	%	116	----	----	----	----



Surrogate Control Limits

Sub-Matrix: WATER		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP074S: VOC Surrogates			
1,2-Dichloroethane-D4	17060-07-0	78	133
Toluene-D8	2037-26-5	79	129
4-Bromofluorobenzene	460-00-4	81	124
EP075S: Acid Extractable Surrogates			
2-Fluorophenol	367-12-4	10	117
Phenol-d6	13127-88-3	10	69
2-Chlorophenol-D4	93951-73-6	21	130
2,4,6-Tribromophenol	118-79-6	10	151
EP075T: Base/Neutral Extractable Surrogates			
Nitrobenzene-D5	4165-60-0	29	142
1,2-Dichlorobenzene-D4	2199-69-1	24	121
2-Fluorobiphenyl	321-60-8	27	135
Anthracene-d10	1719-06-8	27	113
4-Terphenyl-d14	1718-51-0	21	123
EP080S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17060-07-0	71	137
Toluene-D8	2037-26-5	79	131
4-Bromofluorobenzene	460-00-4	70	128

ID	Product	Accessories	Material	Type	Quantity	No. Containers		Level of Contamination (Low/Medium/Unknown)	On Hand	Adaptor (Rounded, Fridge, Free filters to)	THWATEX	PAHs	Phenols	VOCs	SVOCs	OCP/DDPPs	Heavy metals	Please forward to AHS
						Level	Quantity											
SH1-01	0.1-0.2	9/06/2016	DS	Soil	1	1	1	X										
SH1-02	0.3-0.6	9/06/2016	DS	Soil	1	1	1	X										
SH1-03	1.0-1.1	9/06/2016	DS	Soil	1	1	1	X										
SH1-04	1.5-1.6	9/06/2016	DS	Soil	1	1	1	X										
SH1-05	1.8-1.9	9/06/2016	DS	Soil	1	1	1	X										
SH2-01	0.2-0.3	9/06/2016	DS	Soil	1	1	1	X										
SH2-02	0.4-0.5	9/06/2016	DS	Soil	1	1	1	X										
SH2-03	0.6-0.7	9/06/2016	DS	Soil	1	1	1	X										
SH2-04	1.2-1.3	9/06/2016	DS	Soil	1	1	1	X										
SH2-05	1.9-2.0	9/06/2016	DS	Soil	1	1	1	X										
SH3-01	0.2-0.3	9/06/2016	DS	Soil	1	1	1	X										
SH3-02	0.4-0.5	9/06/2016	DS	Soil	1	1	1	X										
SH3-03	0.6-0.7	9/06/2016	DS	Soil	1	1	1	X										
SH3-04	1.4-1.5	9/06/2016	DS	Soil	1	1	1	X										
SH3-05	1.9-2.0	9/06/2016	DS	Soil	1	1	1	X										
SH4-01	0.2-0.3	9/06/2016	DS	Soil	1	1	1	X										
SH4-02	0.4-0.5	9/06/2016	DS	Soil	1	1	1	X										
SH4-03	0.6-0.7	9/06/2016	DS	Soil	1	1	1	X										
SH4-04	1.4-1.5	9/06/2016	DS	Soil	1	1	1	X										
SH4-05	1.9-2.0	9/06/2016	DS	Soil	1	1	1	X										
SH5-01	0.2-0.3	9/06/2016	DS	Soil	1	1	1	X										
SH5-02	0.4-0.5	9/06/2016	DS	Soil	1	1	1	X										
SH5-03	0.6-0.7	9/06/2016	DS	Soil	1	1	1	X										
SH5-04	1.4-1.5	9/06/2016	DS	Soil	1	1	1	X										
SH5-05	1.9-2.0	9/06/2016	DS	Soil	1	1	1	X										
SH6-01	0.2-0.3	9/06/2016	DS	Soil	1	1	1	X										
SH6-02	0.4-0.5	9/06/2016	DS	Soil	1	1	1	X										
SH6-03	0.6-0.7	9/06/2016	DS	Soil	1	1	1	X										
SH6-04	1.4-1.5	9/06/2016	DS	Soil	1	1	1	X										
SH6-05	1.9-2.0	9/06/2016	DS	Soil	1	1	1	X										
TRPA				Soil	1	1	1	X										
TRPA				Soil	1	1	1	X										
TRPA				Soil	1	1	1	X										
TRPA				Soil	1	1	1	X										
TRPA				Soil	1	1	1	X										
TRPA				Soil	1	1	1	X										
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[illegible]

**Environmental Division
Sydney
Work Order Reference
ES1613484**

SAMPLE RECEIPT NOTIFICATION (SRN)

Work Order : ES1613484

Client : GOLDER ASSOCIATES Contact : MS NATALIE SANDY Address : LEVEL 1, 124 PACIFIC HIGHWAY ST LEONARDS NSW, AUSTRALIA 2065 E-mail : nsandy@golder.com.au Telephone : +61 02 9478 3900 Facsimile : +61 02 9478 3901 Project : 1648232 Order number : ---- C-O-C number : ---- Site : MINTO Sampler : NATALIE SANDY	Laboratory : Environmental Division Sydney Contact : Address : 277-289 Woodpark Road Smithfield NSW Australia 2164 E-mail : Telephone : +61-2-8784 8555 Facsimile : +61-2-8784 8500 Page : 1 of 3 Quote number : EM2015GOLASS0592 (EN-002-15) QC Level : NEPM 2013 B3 & ALS QC Standard
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Dates

Date Samples Received : 21-Jun-2016 2:30 PM	Issue Date : 22-Jun-2016
Client Requested Due : 29-Jun-2016	Scheduled Reporting Date : 29-Jun-2016
Date :	

Delivery Details

Mode of Delivery : Undefined	Security Seal : Intact.
No. of coolers/boxes : 1	Temperature : 13.8°C - Ice Bricks present
Receipt Detail :	No. of samples received / analysed : 1 / 1

General Comments

- This report contains the following information:
 - Sample Container(s)/Preservation Non-Compliances
 - Summary of Sample(s) and Requested Analysis
 - Proactive Holding Time Report
 - Requested Deliverables
- **Please refer to the Proactive Holding Time Report table below which summarises breaches of recommended holding times that have occurred prior to samples/instructions being received at the laboratory. The absence of this summary table indicates that all samples have been received within the recommended holding times for the analysis requested.**
- **Sample(s) requiring volatile organic compound analysis received in airtight containers (ZHE).**
- Please direct any queries you have regarding this work order to the above ALS laboratory contact.
- Analytical work for this work order will be conducted at ALS Sydney.
- Sample Disposal - Aqueous (14 days), Solid (60 days) from date of completion of work order.



Sample Container(s)/Preservation Non-Compliances

All comparisons are made against pretreatment/preservation AS, APHA, USEPA standards.

- No sample container / preservation non-compliance exists.

Summary of Sample(s) and Requested Analysis

Some items described below may be part of a laboratory process necessary for the execution of client requested tasks. Packages may contain additional analyses, such as the determination of moisture content and preparation tasks, that are included in the package.

If no sampling time is provided, the sampling time will default to 15:00 on the date of sampling. If no sampling date is provided, the sampling date will be assumed by the laboratory for processing purposes and will be shown bracketed without a time component.

Matrix: **SOIL**

Laboratory sample ID	Client sampling date / time	Client sample ID	SOIL - EA055-103 Moisture Content	SOIL - S-05 TRH/BTEXN/8 Metals	SOIL - S-23 SVOC/VOC
ES1613484-001	[22-Jun-2016]	TRIPB	✓	✓	✓

Proactive Holding Time Report

Sample(s) have been received within the recommended holding times for the requested analysis.

[illegible]

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: ES1613484	Page	: 1 of 4
Client	: GOLDER ASSOCIATES	Laboratory	: Environmental Division Sydney
Contact	: MS NATALIE SANDY	Telephone	: +61-2-8784 8555
Project	: 1648232	Date Samples Received	: 21-Jun-2016
Site	: MINTO	Issue Date	: 29-Jun-2016
Sampler	: NATALIE SANDY	No. of samples received	: 1
Order number	: 1648232	No. of samples analysed	: 1

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO** Method Blank value outliers occur.
- **NO** Laboratory Control outliers occur.
- **NO** Matrix Spike outliers occur.
- Duplicate outliers exist - please see following pages for full details.
- For all regular sample matrices, **NO** surrogate recovery outliers occur.

Outliers : Analysis Holding Time Compliance

- **NO** Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- **NO** Quality Control Sample Frequency Outliers exist.



Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Duplicate (DUP) RPDs							
EP075B: Polynuclear Aromatic Hydrocarbons	ES1613484--001	TRIPB	2-Methylnaphthalene	91-57-6	21.2 %	0% - 20%	RPD exceeds LOR based limits

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for VOC in soils vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: ✖ = Holding time breach ; ✔ = Within holding time.

Method	Sample Date	Extraction / Preparation			Analysis		
Container / Client Sample ID(s)		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content							
Soil Glass Jar - Unpreserved (EA055-103) TRIPB	22-Jun-2016	----	----	----	24-Jun-2016	06-Jul-2016	✓
EG005T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T) TRIPB	22-Jun-2016	27-Jun-2016	19-Dec-2016	✓	27-Jun-2016	19-Dec-2016	✓
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T) TRIPB	22-Jun-2016	27-Jun-2016	20-Jul-2016	✓	27-Jun-2016	20-Jul-2016	✓
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP071) TRIPB	22-Jun-2016	22-Jun-2016	06-Jul-2016	✓	23-Jun-2016	01-Aug-2016	✓
EP074A: Monocyclic Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP074) TRIPB	22-Jun-2016	23-Jun-2016	29-Jun-2016	✓	23-Jun-2016	29-Jun-2016	✓
EP075A: Phenolic Compounds							
Soil Glass Jar - Unpreserved (EP075) TRIPB	22-Jun-2016	22-Jun-2016	06-Jul-2016	✓	23-Jun-2016	01-Aug-2016	✓
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP080) TRIPB	22-Jun-2016	23-Jun-2016	06-Jul-2016	✓	23-Jun-2016	06-Jul-2016	✓



Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: ✖ = Quality Control frequency not within specification ; ✔ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Moisture Content	EA055-103	2	19	10.53	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Semivolatile Organic Compounds	EP075	1	1	100.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	2	17	11.76	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	1	100.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	2	19	10.53	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	2	14	14.29	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Semivolatile Organic Compounds	EP075	1	1	100.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	17	5.88	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	1	100.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	19	5.26	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	1	14	7.14	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Semivolatile Organic Compounds	EP075	1	1	100.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	17	5.88	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	1	100.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	19	5.26	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	1	14	7.14	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Semivolatile Organic Compounds	EP075	1	1	100.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	17	5.88	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH - Semivolatile Fraction	EP071	1	1	100.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
TRH Volatiles/BTEX	EP080	1	19	5.26	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Volatile Organic Compounds	EP074	1	14	7.14	5.00	✓	NEPM 2013 B3 & ALS QC Standard



Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055-103	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 103-105 degrees C. This method is compliant with NEPM (2013) Schedule B(3) Section 7.1 and Table 1 (14 day holding time).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICP-AES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM (2013) Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl ₂)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl ₂ which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (2013) Schedule B(3)
TRH - Semivolatile Fraction	EP071	SOIL	In house: Referenced to USEPA SW 846 - 8015A Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40.
Volatile Organic Compounds	EP074	SOIL	In house: Referenced to USEPA SW 846 - 8260B Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (2013) Schedule B(3) (Method 501)
Semivolatile Organic Compounds	EP075	SOIL	In house: Referenced to USEPA SW 846 - 8270D Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM (2013) Schedule B(3) (Method 502)
TRH Volatiles/BTEX	EP080	SOIL	In house: Referenced to USEPA SW 846 - 8260B Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve.
Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM (2013) Schedule B(3) (Method 202)
Methanolic Extraction of Soils for Purge and Trap	* ORG16	SOIL	In house: Referenced to USEPA SW 846 - 5030A. 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids	ORG17	SOIL	In house: Mechanical agitation (tumbler). 10g of sample, Na ₂ SO ₄ and surrogate are extracted with 30mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.

QUALITY CONTROL REPORT

Work Order : ES1613484

Page : 1 of 17

Client : GOLDER ASSOCIATES
Contact : MS NATALIE SANDY
Address : LEVEL 1, 124 PACIFIC HIGHWAY
ST LEONARDS NSW, AUSTRALIA 2065
Telephone : +61 02 9478 3900
Project : 1648232
Order number : 1648232
C-O-C number : ----
Sampler : NATALIE SANDY
Site : MINTO
Quote number : ----
No. of samples received : 1
No. of samples analysed : 1

Laboratory : Environmental Division Sydney
Contact :
Address : 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone : +61-2-8784 8555
Date Samples Received : 21-Jun-2016
Date Analysis Commenced : 22-Jun-2016
Issue Date : 29-Jun-2016



NATA Accredited Laboratory 825
 Accredited for compliance with
 ISO/IEC 17025.

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	Position	Accreditation Category
Celine Conceicao	Senior Spectroscopist	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjjar	Organic Coordinator	Sydney Organics, Smithfield, NSW



General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
 CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
 LOR = Limit of reporting
 RPD = Relative Percentage Difference
 # = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EA055: Moisture Content (QC Lot: 498193)									
EM1607206-002	Anonymous	EA055-103: Moisture Content (dried @ 103°C)	----	1	%	16.6	16.3	2.21	0% - 50%
ES1613515-001	Anonymous	EA055-103: Moisture Content (dried @ 103°C)	----	1	%	26.0	25.0	3.90	0% - 20%
EG005T: Total Metals by ICP-AES (QC Lot: 498803)									
ES1613613-001	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	8	7	0.00	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	<2	<2	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	11	12	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	19	25	29.4	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	36	54	40.0	0% - 50%
ES1613850-004	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	<2	<2	0.00	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	<2	<2	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	15	13	16.8	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	87	65	28.6	0% - 50%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 498804)									
ES1613613-001	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
ES1613850-004	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 495480)									
ES1613613-021	Anonymous	EP074: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP074: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit

Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP074A: Monocyclic Aromatic Hydrocarbons (QC Lot: 495480) - continued									
ES1613613-021	Anonymous	EP074: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: Styrene	100-42-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: Isopropylbenzene	98-82-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: n-Propylbenzene	103-65-1	0.5	mg/kg	<0.5	0.7	28.1	No Limit
		EP074: 1.3.5-Trimethylbenzene	108-67-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: sec-Butylbenzene	135-98-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1.2.4-Trimethylbenzene	95-63-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: tert-Butylbenzene	98-06-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: p-Isopropyltoluene	99-87-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: n-Butylbenzene	104-51-8	0.5	mg/kg	<0.5	0.6	0.00	No Limit
		ES1613613-032	Anonymous	EP074: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2
EP074: Toluene	108-88-3			0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP074: Ethylbenzene	100-41-4			0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP074: meta- & para-Xylene	108-38-3 106-42-3			0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP074: Styrene	100-42-5			0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP074: ortho-Xylene	95-47-6			0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP074: Isopropylbenzene	98-82-8			0.5	mg/kg	2.0	1.8	7.36	No Limit
EP074: n-Propylbenzene	103-65-1			0.5	mg/kg	4.8	4.3	11.2	No Limit
EP074: 1.3.5-Trimethylbenzene	108-67-8			0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP074: sec-Butylbenzene	135-98-8			0.5	mg/kg	3.7	3.4	9.59	No Limit
EP074: 1.2.4-Trimethylbenzene	95-63-6			0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP074: tert-Butylbenzene	98-06-6			0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP074: p-Isopropyltoluene	99-87-6			0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP074: n-Butylbenzene	104-51-8			0.5	mg/kg	3.0	2.9	0.00	No Limit
EP074B: Oxygenated Compounds (QC Lot: 495480)									
ES1613613-021	Anonymous	EP074: Vinyl Acetate	108-05-4	5	mg/kg	<5	<5	0.00	No Limit
		EP074: 2-Butanone (MEK)	78-93-3	5	mg/kg	<5	<5	0.00	No Limit
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg	<5	<5	0.00	No Limit
		EP074: 2-Hexanone (MBK)	591-78-6	5	mg/kg	<5	<5	0.00	No Limit
ES1613613-032	Anonymous	EP074: Vinyl Acetate	108-05-4	5	mg/kg	<5	<5	0.00	No Limit
		EP074: 2-Butanone (MEK)	78-93-3	5	mg/kg	<5	<5	0.00	No Limit
		EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg	<5	<5	0.00	No Limit
		EP074: 2-Hexanone (MBK)	591-78-6	5	mg/kg	<5	<5	0.00	No Limit
EP074C: Sulfonated Compounds (QC Lot: 495480)									
ES1613613-021	Anonymous	EP074: Carbon disulfide	75-15-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
ES1613613-032	Anonymous	EP074: Carbon disulfide	75-15-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP074D: Fumigants (QC Lot: 495480)									



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP074D: Fumigants (QC Lot: 495480) - continued									
ES1613613-021	Anonymous	EP074: 2,2-Dichloropropane	594-20-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1,2-Dichloropropane	78-87-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: cis-1,3-Dichloropropylene	10061-01-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: trans-1,3-Dichloropropylene	10061-02-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1,2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
ES1613613-032	Anonymous	EP074: 2,2-Dichloropropane	594-20-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1,2-Dichloropropane	78-87-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: cis-1,3-Dichloropropylene	10061-01-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: trans-1,3-Dichloropropylene	10061-02-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1,2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP074E: Halogenated Aliphatic Compounds (QC Lot: 495480)									
ES1613613-021	Anonymous	EP074: 1,1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: Iodomethane	74-88-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: trans-1,2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1,1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: cis-1,2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1,1,1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1,1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1,2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: Trichloroethene	79-01-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: Dibromomethane	74-95-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1,1,2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1,3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1,1,1,2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: trans-1,4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: cis-1,4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1,1,2,2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1,2,3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1,2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	5	mg/kg	<5	<5	0.00	No Limit
		EP074: Chloromethane	74-87-3	5	mg/kg	<5	<5	0.00	No Limit
		EP074: Vinyl chloride	75-01-4	5	mg/kg	<5	<5	0.00	No Limit
		EP074: Bromomethane	74-83-9	5	mg/kg	<5	<5	0.00	No Limit
		EP074: Chloroethane	75-00-3	5	mg/kg	<5	<5	0.00	No Limit
		EP074: Trichlorofluoromethane	75-69-4	5	mg/kg	<5	<5	0.00	No Limit
ES1613613-032	Anonymous	EP074: 1,1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: Iodomethane	74-88-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP074E: Halogenated Aliphatic Compounds (QC Lot: 495480) - continued									
ES1613613-032	Anonymous	EP074: trans-1,2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1,1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: cis-1,2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1,1,1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1,1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1,2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: Trichloroethene	79-01-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: Dibromomethane	74-95-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1,1,2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1,3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1,1,1,2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: trans-1,4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: cis-1,4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1,1,2,2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1,2,3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1,2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: Dichlorodifluoromethane	75-71-8	5	mg/kg	<5	<5	0.00	No Limit
		EP074: Chloromethane	74-87-3	5	mg/kg	<5	<5	0.00	No Limit
		EP074: Vinyl chloride	75-01-4	5	mg/kg	<5	<5	0.00	No Limit
		EP074: Bromomethane	74-83-9	5	mg/kg	<5	<5	0.00	No Limit
		EP074: Chloroethane	75-00-3	5	mg/kg	<5	<5	0.00	No Limit
		EP074: Trichlorofluoromethane	75-69-4	5	mg/kg	<5	<5	0.00	No Limit
EP074F: Halogenated Aromatic Compounds (QC Lot: 495480)									
ES1613613-021	Anonymous	EP074: Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: Bromobenzene	108-86-1	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1,2,3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
ES1613613-032	Anonymous	EP074: Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: Bromobenzene	108-86-1	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: 1,2,3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP074G: Trihalomethanes (QC Lot: 495480)									
ES1613613-021	Anonymous	EP074: Chloroform	67-66-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP074: Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	<0.5	0.00	No Limit



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report						
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)	
EP074G: Trihalomethanes (QC Lot: 495480) - continued										
ES1613613-021	Anonymous	EP074: Bromoform	75-25-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
ES1613613-032	Anonymous	EP074: Chloroform	67-66-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP074: Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP074: Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP074: Bromoform	75-25-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
EP075A: Phenolic Compounds (QC Lot: 494573)										
ES1613484-001	TRIPB	EP075: Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP075: 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP075: 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP075: 3- & 4-Methylphenol	1319-77-3	0.5	mg/kg	<0.6	<0.6	0.00	No Limit	
		EP075: 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP075: 2,4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP075: 2,4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP075: 2,6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP075: 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP075: 2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP075: 2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP075: Pentachlorophenol	87-86-5	1	mg/kg	<1	<1	0.00	No Limit	
EP075B: Polynuclear Aromatic Hydrocarbons (QC Lot: 494573)										
ES1613484-001	TRIPB	EP075: Naphthalene	91-20-3	0.5	mg/kg	2.3	1.9	19.3	No Limit	
		EP075: 2-Methylnaphthalene	91-57-6	0.5	mg/kg	16.0	# 12.9	21.2	0% - 20%	
		EP075: 2-Chloronaphthalene	91-58-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP075: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP075: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP075: Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP075: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP075: Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP075: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP075: Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP075: N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP075: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP075: Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP075: 7,12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP075: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP075: 3-Methylcholanthrene	56-49-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP075: Indeno(1,2,3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP075: Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP075: Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit	
		EP075: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2	1	mg/kg	<1	<1	0.00	No Limit	
			207-08-9							



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP075C: Phthalate Esters (QC Lot: 494573)									
ES1613484-001	TRIPB	EP075: Dimethyl phthalate	131-11-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Diethyl phthalate	84-66-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Di-n-butyl phthalate	84-74-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Butyl benzyl phthalate	85-68-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Di-n-octylphthalate	117-84-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP075D: Nitrosamines (QC Lot: 494573)									
ES1613484-001	TRIPB	EP075: N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: N-Nitrosodiethylamine	55-18-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: N-Nitrosopyrrolidine	930-55-2	0.5	mg/kg	<1.0	<1.0	0.00	No Limit
		EP075: N-Nitrosomorpholine	59-89-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: N-Nitrosopiperidine	100-75-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: N-Nitrosodibutylamine	924-16-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: N-Nitrosodiphenyl & Diphenylamine	86-30-6	0.5	mg/kg	<1.0	<1.0	0.00	No Limit
			122-39-4						
EP075: Methapyrilene	91-80-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit		
EP075E: Nitroaromatics and Ketones (QC Lot: 494573)									
ES1613484-001	TRIPB	EP075: 2-Picoline	109-06-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Acetophenone	98-86-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Nitrobenzene	98-95-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Isophorone	78-59-1	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: 2,6-Dinitrotoluene	606-20-2	0.5	mg/kg	<1.0	<1.0	0.00	No Limit
		EP075: 2,4-Dinitrotoluene	121-14-2	0.5	mg/kg	<1.0	<1.0	0.00	No Limit
		EP075: 1-Naphthylamine	134-32-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: 4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: 5-Nitro-o-toluidine	99-55-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: 1,3,5-Trinitrobenzene	99-35-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Phenacetin	62-44-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: 4-Aminobiphenyl	92-67-1	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Pentachloronitrobenzene	82-68-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Pronamide	23950-58-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Dimethylaminoazobenzene	60-11-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Chlorobenzilate	510-15-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Azobenzene	103-33-3	1	mg/kg	<1	<1	0.00	No Limit
EP075F: Haloethers (QC Lot: 494573)									
ES1613484-001	TRIPB	EP075: Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: 4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: 4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP075G: Chlorinated Hydrocarbons (QC Lot: 494573)									
ES1613484-001	TRIPB	EP075: 1,3-Dichlorobenzene	541-73-1	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: 1,4-Dichlorobenzene	106-46-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: 1,2-Dichlorobenzene	95-50-1	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Hexachloroethane	67-72-1	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: 1,2,4-Trichlorobenzene	120-82-1	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Hexachloropropylene	1888-71-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Hexachlorobutadiene	87-68-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Hexachlorocyclopentadiene	77-47-4	0.5	mg/kg	<2.5	<2.5	0.00	No Limit
		EP075: Pentachlorobenzene	608-93-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Hexachlorobenzene (HCB)	118-74-1	0.5	mg/kg	<1.0	<1.0	0.00	No Limit
EP075H: Anilines and Benzidines (QC Lot: 494573)									
ES1613484-001	TRIPB	EP075: Aniline	62-53-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: 4-Chloroaniline	106-47-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: 2-Nitroaniline	88-74-4	0.5	mg/kg	<1.0	<1.0	0.00	No Limit
		EP075: 3-Nitroaniline	99-09-2	0.5	mg/kg	<1.0	<1.0	0.00	No Limit
		EP075: Dibenzofuran	132-64-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: 4-Nitroaniline	100-01-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Carbazole	86-74-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: 3,3`-Dichlorobenzidine	91-94-1	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP075I: Organochlorine Pesticides (QC Lot: 494573)									
ES1613484-001	TRIPB	EP075: alpha-BHC	319-84-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: beta-BHC	319-85-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: gamma-BHC	58-89-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: delta-BHC	319-86-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Heptachlor	76-44-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Aldrin	309-00-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Heptachlor epoxide	1024-57-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: alpha-Endosulfan	959-98-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: 4,4`-DDE	72-55-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Dieldrin	60-57-1	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Endrin	72-20-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: beta-Endosulfan	33213-65-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: 4,4`-DDD	72-54-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Endosulfan sulfate	1031-07-8	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: 4,4`-DDT	50-29-3	0.5	mg/kg	<1.0	<1.0	0.00	No Limit
EP075J: Organophosphorus Pesticides (QC Lot: 494573)									
ES1613484-001	TRIPB	EP075: Dichlorvos	62-73-7	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Dimethoate	60-51-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Diazinon	333-41-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg	<0.5	<0.5	0.00	No Limit



Sub-Matrix: SOIL				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EP075J: Organophosphorus Pesticides (QC Lot: 494573) - continued									
ES1613484-001	TRIPB	EP075: Malathion	121-75-5	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Fenthion	55-38-9	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Chlorpyrifos	2921-88-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Pirimphos-ethyl	23505-41-1	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Chlorfenvinphos	470-90-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Prothiofos	34643-46-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP075: Ethion	563-12-2	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 494574)									
ES1613484-001	TRIPB	EP071: C15 - C28 Fraction	----	100	mg/kg	200	150	26.7	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	1450	1390	4.04	0% - 20%
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 495479)									
ES1613613-021	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	86	111	26.3	0% - 50%
ES1613613-032	Anonymous	EP080: C6 - C9 Fraction	----	10	mg/kg	105	125	17.3	0% - 50%
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 494574)									
ES1613484-001	TRIPB	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.00	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	1500	1370	8.88	0% - 20%
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 495479)									
ES1613613-021	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	138	170	21.0	0% - 50%
ES1613613-032	Anonymous	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	151	178	16.1	0% - 50%
EP080: BTEXN (QC Lot: 495479)									
ES1613613-021	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.00	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.00	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	2	3	0.00	No Limit
		ES1613613-032	Anonymous	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2
EP080: Toluene	108-88-3			0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP080: Ethylbenzene	100-41-4			0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP080: meta- & para-Xylene	108-38-3 106-42-3			0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP080: ortho-Xylene	95-47-6			0.5	mg/kg	<0.5	<0.5	0.00	No Limit
EP080: Naphthalene	91-20-3			1	mg/kg	17	15	12.2	0% - 50%



Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

Sub-Matrix: SOIL				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%) LCS	Recovery Limits (%) LowHigh	
Method: Compound	CAS Number	LOR	Unit	Result				
EG005T: Total Metals by ICP-AES (QCLot: 498803)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	21.7 mg/kg	99.0	86	126
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	4.64 mg/kg	94.7	83	113
EG005T: Chromium	7440-47-3	2	mg/kg	<2	43.9 mg/kg	92.6	76	128
EG005T: Copper	7440-50-8	5	mg/kg	<5	32 mg/kg	100	86	120
EG005T: Lead	7439-92-1	5	mg/kg	<5	40 mg/kg	94.3	80	114
EG005T: Nickel	7440-02-0	2	mg/kg	<2	55 mg/kg	98.8	87	123
EG005T: Zinc	7440-66-6	5	mg/kg	<5	60.8 mg/kg	100	80	122
EG035T: Total Recoverable Mercury by FIMS (QCLot: 498804)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	2.57 mg/kg	77.4	70	105
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 495480)								
EP074: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	93.7	71	121
EP074: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	96.1	65	131
EP074: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	90.5	72	114
EP074: meta- & para-Xylene	108-38-3	0.5	mg/kg	<0.5	2 mg/kg	94.5	70	116
	106-42-3							
EP074: Styrene	100-42-5	0.5	mg/kg	<0.5	1 mg/kg	93.0	67	113
EP074: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	97.5	75	115
EP074: Isopropylbenzene	98-82-8	0.5	mg/kg	<0.5	1 mg/kg	90.6	65	117
EP074: n-Propylbenzene	103-65-1	0.5	mg/kg	<0.5	1 mg/kg	93.5	66	122
EP074: 1,3,5-Trimethylbenzene	108-67-8	0.5	mg/kg	<0.5	1 mg/kg	93.3	68	118
EP074: sec-Butylbenzene	135-98-8	0.5	mg/kg	<0.5	1 mg/kg	101	69	119
EP074: 1,2,4-Trimethylbenzene	95-63-6	0.5	mg/kg	<0.5	1 mg/kg	97.6	69	117
EP074: tert-Butylbenzene	98-06-6	0.5	mg/kg	<0.5	1 mg/kg	96.5	69	115
EP074: p-Isopropyltoluene	99-87-6	0.5	mg/kg	<0.5	1 mg/kg	100	66	118
EP074: n-Butylbenzene	104-51-8	0.5	mg/kg	<0.5	1 mg/kg	99.5	59	125
EP074B: Oxygenated Compounds (QCLot: 495480)								
EP074: Vinyl Acetate	108-05-4	5	mg/kg	<5	10 mg/kg	98.1	30	156
EP074: 2-Butanone (MEK)	78-93-3	5	mg/kg	<5	10 mg/kg	70.0	58	136
EP074: 4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg	<5	10 mg/kg	87.4	62	132
EP074: 2-Hexanone (MBK)	591-78-6	5	mg/kg	<5	10 mg/kg	71.9	54	136
EP074C: Sulfonated Compounds (QCLot: 495480)								
EP074: Carbon disulfide	75-15-0	0.5	mg/kg	<0.5	1 mg/kg	86.7	54	126
EP074D: Fumigants (QCLot: 495480)								
EP074: 2,2-Dichloropropane	594-20-7	0.5	mg/kg	<0.5	1 mg/kg	93.1	60	126



Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%) LCS	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result			Low	High
EP074D: Fumigants (QCLot: 495480) - continued								
EP074: 1,2-Dichloropropane	78-87-5	0.5	mg/kg	<0.5	1 mg/kg	94.5	68	124
EP074: cis-1,3-Dichloropropylene	10061-01-5	0.5	mg/kg	<0.5	1 mg/kg	80.7	51	119
EP074: trans-1,3-Dichloropropylene	10061-02-6	0.5	mg/kg	<0.5	1 mg/kg	80.1	52	114
EP074: 1,2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	<0.5	1 mg/kg	86.6	63	115
EP074E: Halogenated Aliphatic Compounds (QCLot: 495480)								
EP074: Dichlorodifluoromethane	75-71-8	5	mg/kg	<5	10 mg/kg	85.4	30	148
EP074: Chloromethane	74-87-3	5	mg/kg	<5	10 mg/kg	87.3	41	141
EP074: Vinyl chloride	75-01-4	5	mg/kg	<5	10 mg/kg	95.8	43	147
EP074: Bromomethane	74-83-9	5	mg/kg	<5	10 mg/kg	89.9	47	141
EP074: Chloroethane	75-00-3	5	mg/kg	<5	10 mg/kg	89.5	49	143
EP074: Trichlorofluoromethane	75-69-4	5	mg/kg	<5	10 mg/kg	94.8	49	135
EP074: 1,1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	1 mg/kg	94.4	54	126
EP074: Iodomethane	74-88-4	0.5	mg/kg	<0.5	1 mg/kg	76.5	43	129
EP074: trans-1,2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	1 mg/kg	97.2	64	120
EP074: 1,1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	1 mg/kg	97.2	67	125
EP074: cis-1,2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	1 mg/kg	97.0	69	121
EP074: 1,1,1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	1 mg/kg	86.2	65	117
EP074: 1,1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	1 mg/kg	94.5	65	123
EP074: Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	1 mg/kg	82.8	59	125
EP074: 1,2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	1 mg/kg	97.2	65	125
EP074: Trichloroethene	79-01-6	0.5	mg/kg	<0.5	1 mg/kg	91.6	70	118
EP074: Dibromomethane	74-95-3	0.5	mg/kg	<0.5	1 mg/kg	88.1	68	118
EP074: 1,1,2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	1 mg/kg	94.1	64	126
EP074: 1,3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	1 mg/kg	93.9	68	122
EP074: Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	1 mg/kg	89.9	67	143
EP074: 1,1,1,2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	1 mg/kg	81.7	62	122
EP074: trans-1,4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	1 mg/kg	75.7	54	128
EP074: cis-1,4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	1 mg/kg	91.6	55	129
EP074: 1,1,2,2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	1 mg/kg	89.6	65	121
EP074: 1,2,3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	1 mg/kg	89.7	61	125
EP074: Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	1 mg/kg	85.7	20	134
EP074: 1,2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	1 mg/kg	76.0	53	129
EP074F: Halogenated Aromatic Compounds (QCLot: 495480)								
EP074: Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	1 mg/kg	95.9	68	116
EP074: Bromobenzene	108-86-1	0.5	mg/kg	<0.5	1 mg/kg	93.9	70	1147
EP074: 2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	1 mg/kg	97.3	68	122
EP074: 4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	1 mg/kg	97.9	67	123
EP074: 1,2,3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	1 mg/kg	98.5	52	122



Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%) LCS	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result			Low	High
EP074G: Trihalomethanes (QCLot: 495480)								
EP074: Chloroform	67-66-3	0.5	mg/kg	<0.5	1 mg/kg	93.7	66	124
EP074: Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	1 mg/kg	83.1	61	121
EP074: Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	1 mg/kg	79.1	63	121
EP074: Bromoform	75-25-2	0.5	mg/kg	<0.5	1 mg/kg	76.7	60	126
EP075A: Phenolic Compounds (QCLot: 494573)								
EP075: Phenol	108-95-2	0.5	mg/kg	<0.5	1.5 mg/kg	78.5	64	114
EP075: 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	1.5 mg/kg	78.8	57	115
EP075: 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	1.5 mg/kg	81.9	55	117
EP075: 3- & 4-Methylphenol	1319-77-3	0.5	mg/kg	<0.6	3 mg/kg	82.5	46	122
EP075: 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	1.5 mg/kg	71.5	47	117
EP075: 2,4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	1.5 mg/kg	89.2	14	108
EP075: 2,4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	1.5 mg/kg	74.8	47	105
EP075: 2,6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	1.5 mg/kg	77.9	48	110
EP075: 4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	1.5 mg/kg	92.1	57	113
EP075: 2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	1.5 mg/kg	80.8	49	109
EP075: 2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	1.5 mg/kg	66.4	49	107
EP075: Pentachlorophenol	87-86-5	1	mg/kg	<1	3 mg/kg	24.8	12	76
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 494573)								
EP075: Naphthalene	91-20-3	0.5	mg/kg	<0.5	1.5 mg/kg	92.6	62	118
EP075: 2-Methylnaphthalene	91-57-6	0.5	mg/kg	<0.5	1.5 mg/kg	90.1	58	116
EP075: 2-Chloronaphthalene	91-58-7	0.5	mg/kg	<0.5	1.5 mg/kg	89.7	54	112
EP075: Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	1.5 mg/kg	91.5	56	114
EP075: Acenaphthene	83-32-9	0.5	mg/kg	<0.5	1.5 mg/kg	87.1	62	112
EP075: Fluorene	86-73-7	0.5	mg/kg	<0.5	1.5 mg/kg	91.0	59	115
EP075: Phenanthrene	85-01-8	0.5	mg/kg	<0.5	1.5 mg/kg	86.2	63	113
EP075: Anthracene	120-12-7	0.5	mg/kg	<0.5	1.5 mg/kg	76.5	57	111
EP075: Fluoranthene	206-44-0	0.5	mg/kg	<0.5	1.5 mg/kg	77.7	58	114
EP075: Pyrene	129-00-0	0.5	mg/kg	<0.5	1.5 mg/kg	86.1	57	117
EP075: N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg	<0.5	1.5 mg/kg	70.6	58	114
EP075: Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	1.5 mg/kg	80.6	59	115
EP075: Chrysene	218-01-9	0.5	mg/kg	<0.5	1.5 mg/kg	86.3	61	117
EP075: Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1	3 mg/kg	85.3	57	119
EP075: 7,12-Dimethylbenz(a)anthracene	57-97-6	0.5	mg/kg	<0.5	1.5 mg/kg	84.1	48	106
EP075: Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	1.5 mg/kg	79.4	56	116
EP075: 3-Methylcholanthrene	56-49-5	0.5	mg/kg	<0.5	1.5 mg/kg	89.1	50	116
EP075: Indeno(1,2,3-cd)pyrene	193-39-5	0.5	mg/kg	<0.5	1.5 mg/kg	84.9	55	117
EP075: Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	1.5 mg/kg	87.0	53	119
EP075: Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	1.5 mg/kg	97.1	56	120



Sub-Matrix: **SOIL**

Method Blank (MB) Report				Laboratory Control Spike (LCS) Report				
				Spike Concentration	Spike Recovery (%)		Recovery Limits (%)	
					LCS	Low	High	
Method: Compound	CAS Number	LOR	Unit	Result				
EP075C: Phthalate Esters (QCLot: 494573)								
EP075: Dimethyl phthalate	131-11-3	0.5	mg/kg	<0.5	1.5 mg/kg	96.9	60	118
EP075: Diethyl phthalate	84-66-2	0.5	mg/kg	<0.5	1.5 mg/kg	87.8	65	115
EP075: Di-n-butyl phthalate	84-74-2	0.5	mg/kg	<0.5	1.5 mg/kg	85.9	65	121
EP075: Butyl benzyl phthalate	85-68-7	0.5	mg/kg	<0.5	1.5 mg/kg	78.8	62	116
EP075: bis(2-ethylhexyl) phthalate	117-81-7	----	mg/kg	----	1.5 mg/kg	85.9	69	133
EP075: Di-n-octylphthalate	117-84-0	0.5	mg/kg	<0.5	1.5 mg/kg	79.6	62	124
EP075D: Nitrosamines (QCLot: 494573)								
EP075: N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg	<0.5	1.5 mg/kg	101	39	124
EP075: N-Nitrosodiethylamine	55-18-5	0.5	mg/kg	<0.5	1.5 mg/kg	79.3	59	117
EP075: N-Nitrosopyrrolidine	930-55-2	0.5	mg/kg	<0.5	1.5 mg/kg	79.9	53	125
EP075: N-Nitrosomorpholine	59-89-2	0.5	mg/kg	<0.5	1.5 mg/kg	99.2	65	121
EP075: N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg	<0.5	1.5 mg/kg	81.7	59	123
EP075: N-Nitrosopiperidine	100-75-4	0.5	mg/kg	<0.5	1.5 mg/kg	80.5	57	115
EP075: N-Nitrosodibutylamine	924-16-3	0.5	mg/kg	<0.5	1.5 mg/kg	82.4	57	119
EP075: N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	0.5	mg/kg	<0.6	3 mg/kg	85.6	42	112
EP075: Methapyrilene	91-80-5	0.5	mg/kg	<0.5	1.5 mg/kg	118	16	123
EP075E: Nitroaromatics and Ketones (QCLot: 494573)								
EP075: 2-Picoline	109-06-8	0.5	mg/kg	<0.5	1.5 mg/kg	72.6	27	129
EP075: Acetophenone	98-86-2	0.5	mg/kg	<0.5	1.5 mg/kg	84.1	60	116
EP075: Nitrobenzene	98-95-3	0.5	mg/kg	<0.5	1.5 mg/kg	87.8	65	119
EP075: Isophorone	78-59-1	0.5	mg/kg	<0.5	1.5 mg/kg	78.8	62	116
EP075: 2,6-Dinitrotoluene	606-20-2	0.5	mg/kg	<0.5	1.5 mg/kg	102	58	118
EP075: 2,4-Dinitrotoluene	121-14-2	0.5	mg/kg	<0.5	1.5 mg/kg	90.5	59	115
EP075: 1-Naphthylamine	134-32-7	0.5	mg/kg	<0.5	1.5 mg/kg	60.6	18	112
EP075: 4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg	<0.5	1.5 mg/kg	84.4	10	87
EP075: 5-Nitro-o-toluidine	99-55-8	0.5	mg/kg	<0.5	1.5 mg/kg	83.0	48	99
EP075: Azobenzene	103-33-3	1	mg/kg	<1	1.5 mg/kg	91.3	62	118
EP075: 1,3,5-Trinitrobenzene	99-35-4	0.5	mg/kg	<0.5	1.5 mg/kg	95.3	36	114
EP075: Phenacetin	62-44-2	0.5	mg/kg	<0.5	1.5 mg/kg	108	62	114
EP075: 4-Aminobiphenyl	92-67-1	0.5	mg/kg	<0.5	1.5 mg/kg	41.7	36	102
EP075: Pentachloronitrobenzene	82-68-8	0.5	mg/kg	<0.5	1.5 mg/kg	84.0	56	110
EP075: Pronamide	23950-58-5	0.5	mg/kg	<0.5	1.5 mg/kg	106	54	110
EP075: Dimethylaminoazobenzene	60-11-7	0.5	mg/kg	<0.5	1.5 mg/kg	80.1	48	108
EP075: Chlorobenzilate	510-15-6	0.5	mg/kg	<0.5	1.5 mg/kg	77.2	57	112
EP075F: Haloethers (QCLot: 494573)								
EP075: Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg	<0.5	1.5 mg/kg	72.0	63	121
EP075: Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg	<0.5	1.5 mg/kg	81.8	59	115



Sub-Matrix: **SOIL**

Sub-Matrix: SOIL				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%) LCS	Recovery Limits (%) Low High	
Method: Compound	CAS Number	LOR	Unit	Result				
EP075F: Haloethers (QCLot: 494573) - continued								
EP075: 4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg	<0.5	1.5 mg/kg	90.6	58	112
EP075: 4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg	<0.5	1.5 mg/kg	89.1	58	110
EP075G: Chlorinated Hydrocarbons (QCLot: 494573)								
EP075: 1,3-Dichlorobenzene	541-73-1	0.5	mg/kg	<0.5	1.5 mg/kg	85.5	58	112
EP075: 1,4-Dichlorobenzene	106-46-7	0.5	mg/kg	<0.5	1.5 mg/kg	84.8	58	116
EP075: 1,2-Dichlorobenzene	95-50-1	0.5	mg/kg	<0.5	1.5 mg/kg	85.6	57	115
EP075: Hexachloroethane	67-72-1	0.5	mg/kg	<0.5	1.5 mg/kg	85.3	54	116
EP075: 1,2,4-Trichlorobenzene	120-82-1	0.5	mg/kg	<0.5	1.5 mg/kg	82.3	63	108
EP075: Hexachloropropylene	1888-71-7	0.5	mg/kg	<0.5	1.5 mg/kg	58.8	39	110
EP075: Hexachlorobutadiene	87-68-3	0.5	mg/kg	<0.5	1.5 mg/kg	83.7	59	117
EP075: Hexachlorocyclopentadiene	77-47-4	0.5	mg/kg	<0.5	1.5 mg/kg	70.3	24	108
EP075: Pentachlorobenzene	608-93-5	0.5	mg/kg	<0.5	1.5 mg/kg	88.8	57	109
EP075: Hexachlorobenzene (HCB)	118-74-1	0.5	mg/kg	<0.5	1.5 mg/kg	101	59	111
EP075H: Anilines and Benzidines (QCLot: 494573)								
EP075: Aniline	62-53-3	0.5	mg/kg	<0.5	1.5 mg/kg	72.0	13	108
EP075: 4-Chloroaniline	106-47-8	0.5	mg/kg	<0.5	1.5 mg/kg	72.2	21	99
EP075: 2-Nitroaniline	88-74-4	0.5	mg/kg	<0.5	1.5 mg/kg	93.6	52	112
EP075: 3-Nitroaniline	99-09-2	0.5	mg/kg	<0.5	1.5 mg/kg	83.2	32	94
EP075: Dibenzofuran	132-64-9	0.5	mg/kg	<0.5	1.5 mg/kg	96.2	60	110
EP075: 4-Nitroaniline	100-01-6	0.5	mg/kg	<0.5	1.5 mg/kg	92.2	42	112
EP075: Carbazole	86-74-8	0.5	mg/kg	<0.5	1.5 mg/kg	81.3	59	111
EP075: 3,3`-Dichlorobenzidine	91-94-1	0.5	mg/kg	<0.5	1.5 mg/kg	88.1	23	113
EP075I: Organochlorine Pesticides (QCLot: 494573)								
EP075: alpha-BHC	319-84-6	0.5	mg/kg	<0.5	1.5 mg/kg	97.6	63	113
EP075: beta-BHC	319-85-7	0.5	mg/kg	<0.5	1.5 mg/kg	87.3	57	113
EP075: gamma-BHC	58-89-9	0.5	mg/kg	<0.5	1.5 mg/kg	88.0	61	117
EP075: delta-BHC	319-86-8	0.5	mg/kg	<0.5	1.5 mg/kg	80.5	64	118
EP075: Heptachlor	76-44-8	0.5	mg/kg	<0.5	1.5 mg/kg	84.6	55	115
EP075: Aldrin	309-00-2	0.5	mg/kg	<0.5	1.5 mg/kg	84.4	61	115
EP075: Heptachlor epoxide	1024-57-3	0.5	mg/kg	<0.5	1.5 mg/kg	82.8	56	118
EP075: alpha-Endosulfan	959-98-8	0.5	mg/kg	<0.5	1.5 mg/kg	85.1	65	125
EP075: 4,4`-DDE	72-55-9	0.5	mg/kg	<0.5	1.5 mg/kg	84.1	60	116
EP075: Dieldrin	60-57-1	0.5	mg/kg	<0.5	1.5 mg/kg	84.7	64	118
EP075: Endrin	72-20-8	0.5	mg/kg	<0.5	1.5 mg/kg	81.3	53	117
EP075: beta-Endosulfan	33213-65-9	0.5	mg/kg	<0.5	1.5 mg/kg	87.9	65	115
EP075: 4,4`-DDD	72-54-8	0.5	mg/kg	<0.5	1.5 mg/kg	84.1	62	118
EP075: Endosulfan sulfate	1031-07-8	0.5	mg/kg	<0.5	1.5 mg/kg	87.2	63	129
EP075: 4,4`-DDT	50-29-3	0.5	mg/kg	<0.5	1.5 mg/kg	82.6	46	122



Sub-Matrix: SOIL				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike Concentration	Spike Recovery (%) LCS	Recovery Limits (%) Low High	
Method: Compound	CAS Number	LOR	Unit	Result				
EP075J: Organophosphorus Pesticides (QCLot: 494573)								
EP075: Dichlorvos	62-73-7	0.5	mg/kg	<0.5	1.5 mg/kg	75.9	46	112
EP075: Dimethoate	60-51-5	0.5	mg/kg	<0.5	1.5 mg/kg	111	63	119
EP075: Diazinon	333-41-5	0.5	mg/kg	<0.5	1.5 mg/kg	80.8	68	134
EP075: Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg	<0.5	1.5 mg/kg	90.5	60	130
EP075: Malathion	121-75-5	0.5	mg/kg	<0.5	1.5 mg/kg	92.8	65	127
EP075: Fenthion	55-38-9	0.5	mg/kg	<0.5	1.5 mg/kg	80.5	60	116
EP075: Chlorpyrifos	2921-88-2	0.5	mg/kg	<0.5	1.5 mg/kg	76.7	63	113
EP075: Pirimphos-ethyl	23505-41-1	0.5	mg/kg	<0.5	1.5 mg/kg	74.7	65	115
EP075: Chlorfenvinphos	470-90-6	0.5	mg/kg	<0.5	1.5 mg/kg	88.2	59	103
EP075: Prothiofos	34643-46-4	0.5	mg/kg	<0.5	1.5 mg/kg	89.6	59	119
EP075: Ethion	563-12-2	0.5	mg/kg	<0.5	1.5 mg/kg	87.5	62	118
EP080/071: Total Petroleum Hydrocarbons (QCLot: 494574)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	200 mg/kg	100	75	129
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	300 mg/kg	109	77	131
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	200 mg/kg	98.5	71	129
EP080/071: Total Petroleum Hydrocarbons (QCLot: 495479)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	89.4	68	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 494574)								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	250 mg/kg	106	77	125
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	350 mg/kg	110	74	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	150 mg/kg	98.3	63	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 495479)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	90.2	68	128
EP080: BTEXN (QCLot: 495479)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	81.5	62	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	89.1	67	121
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	79.2	65	117
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	81.2	66	118
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	86.4	68	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	86.6	63	119

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: SOIL			Matrix Spike (MS) Report		
			Spike	SpikeRecovery(%)	Recovery Limits (%)

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 Work Order : ES1613484
 Client : GOLDER ASSOCIATES
 Project : 1648232



Sub-Matrix: SOIL				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005T: Total Metals by ICP-AES (QCLot: 498803)							
ES1613613-001	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	94.2	70	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	96.1	70	130
		EG005T: Chromium	7440-47-3	50 mg/kg	106	70	130
		EG005T: Copper	7440-50-8	250 mg/kg	96.9	70	130
		EG005T: Lead	7439-92-1	250 mg/kg	86.6	70	130
		EG005T: Nickel	7440-02-0	50 mg/kg	96.9	70	130
		EG005T: Zinc	7440-66-6	250 mg/kg	104	70	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 498804)							
ES1613613-001	Anonymous	EG035T: Mercury	7439-97-6	5 mg/kg	85.1	70	130
EP074A: Monocyclic Aromatic Hydrocarbons (QCLot: 495480)							
ES1613613-021	Anonymous	EP074: Benzene	71-43-2	2.5 mg/kg	86.4	70	130
		EP074: Toluene	108-88-3	2.5 mg/kg	92.0	70	130
EP074E: Halogenated Aliphatic Compounds (QCLot: 495480)							
ES1613613-021	Anonymous	EP074: 1,1-Dichloroethene	75-35-4	2.5 mg/kg	81.8	70	130
		EP074: Trichloroethene	79-01-6	2.5 mg/kg	78.7	70	130
EP074F: Halogenated Aromatic Compounds (QCLot: 495480)							
ES1613613-021	Anonymous	EP074: Chlorobenzene	108-90-7	2.5 mg/kg	86.2	70	130
EP075A: Phenolic Compounds (QCLot: 494573)							
ES1613484-001	TRIPB	EP075: Phenol	108-95-2	10 mg/kg	72.6	60	130
		EP075: 2-Chlorophenol	95-57-8	10 mg/kg	80.7	60	130
		EP075: 2-Nitrophenol	88-75-5	10 mg/kg	75.8	50	130
		EP075: 4-Chloro-3-methylphenol	59-50-7	10 mg/kg	83.4	50	130
		EP075: Pentachlorophenol	87-86-5	20 mg/kg	35.1	10	130
EP075B: Polynuclear Aromatic Hydrocarbons (QCLot: 494573)							
ES1613484-001	TRIPB	EP075: Acenaphthene	83-32-9	10 mg/kg	80.1	50	130
		EP075: Pyrene	129-00-0	10 mg/kg	83.0	50	130
EP075D: Nitrosamines (QCLot: 494573)							
ES1613484-001	TRIPB	EP075: N-Nitrosodi-n-propylamine	621-64-7	10 mg/kg	81.2	50	130
EP075E: Nitroaromatics and Ketones (QCLot: 494573)							
ES1613484-001	TRIPB	EP075: 2,4-Dinitrotoluene	121-14-2	10 mg/kg	87.7	40	130
EP075G: Chlorinated Hydrocarbons (QCLot: 494573)							
ES1613484-001	TRIPB	EP075: 1,4-Dichlorobenzene	106-46-7	10 mg/kg	79.6	60	130
		EP075: 1,2,4-Trichlorobenzene	120-82-1	10 mg/kg	78.1	50	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 494574)							
ES1613484-001	TRIPB	EP071: C10 - C14 Fraction	----	523 mg/kg	96.6	73	137

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 Work Order : ES1613484
 Client : GOLDER ASSOCIATES
 Project : 1648232



Sub-Matrix: **SOIL**

Sub-Matrix: SOIL				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 494574) - continued							
ES1613484-001	TRIPB	EP071: C15 - C28 Fraction	----	2319 mg/kg	93.0	53	131
		EP071: C29 - C36 Fraction	----	1714 mg/kg	119	52	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 495479)							
ES1613613-021	Anonymous	EP080: C6 - C9 Fraction	----	32.5 mg/kg	107	70	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 494574)							
ES1613484-001	TRIPB	EP071: >C10 - C16 Fraction	----	860 mg/kg	96.4	73	137
		EP071: >C16 - C34 Fraction	----	3223 mg/kg	107	53	131
		EP071: >C34 - C40 Fraction	----	1058 mg/kg	110	52	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 495479)							
ES1613613-021	Anonymous	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	106	70	130
EP080: BTEXN (QCLot: 495479)							
ES1613613-021	Anonymous	EP080: Benzene	71-43-2	2.5 mg/kg	79.8	70	130
		EP080: Toluene	108-88-3	2.5 mg/kg	90.0	70	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	93.5	70	130
		EP080: meta- & para-Xylene	108-38-3	2.5 mg/kg	88.9	70	130
			106-42-3				
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	87.4	70	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	73.6	70	130

CERTIFICATE OF ANALYSIS

Work Order : **ES1613484**
Client : **GOLDER ASSOCIATES**
Contact : **MS NATALIE SANDY**
Address : **LEVEL 1, 124 PACIFIC HIGHWAY**
ST LEONARDS NSW, AUSTRALIA 2065
Telephone : **+61 02 9478 3900**
Project : **1648232**
Order number : **1648232**
C-O-C number : **----**
Sampler : **NATALIE SANDY**
Site : **MINTO**
Quote number : **----**
No. of samples received : **1**
No. of samples analysed : **1**

Page : 1 of 11
Laboratory : Environmental Division Sydney
Contact :
Address : 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone : +61-2-8784 8555
Date Samples Received : 21-Jun-2016 14:30
Date Analysis Commenced : 22-Jun-2016
Issue Date : 29-Jun-2016 09:30

NATA Accredited Laboratory 825
 Accredited for compliance with
 ISO/IEC 17025.



This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Accreditation Category</i>
Celine Conceicao	Senior Spectroscopist	Sydney Inorganics, Smithfield, NSW
Edwandy Fadjar	Organic Coordinator	Sydney Organics, Smithfield, NSW



General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.

LOR = Limit of reporting

^ = This result is computed from individual analyte detections at or above the level of reporting

ø = ALS is not NATA accredited for these tests.

~ = Indicates an estimated value.

- EP071: Results of sample TRIPB have been confirmed by re-extraction and re-analysis.
- EP075: Poor duplicate results due to sample heterogeneity. Confirmed by re-extraction and re-analysis.
- EP075: 'Sum of PAH' is the sum of the USEPA 16 priority PAHs
- Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a,h)anthracene (1.0), Benzo(g,h,i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR.
Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.

Sub-Matrix: SOIL (Matrix: SOIL)		Client sample ID		TRIPB	----	----	----	----
Client sampling date / time				[22-Jun-2016]	----	----	----	----
Compound	CAS Number	LOR	Unit	ES1613484-001	-----	-----	-----	-----
				Result	----	----	----	----
EA055: Moisture Content								
Moisture Content (dried @ 103°C)		----	1	%	18.4	----	----	----
EG005T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	----	----	----	----
Cadmium	7440-43-9	1	mg/kg	<1	----	----	----	----
Chromium	7440-47-3	2	mg/kg	12	----	----	----	----
Copper	7440-50-8	5	mg/kg	11	----	----	----	----
Lead	7439-92-1	5	mg/kg	11	----	----	----	----
Nickel	7440-02-0	2	mg/kg	15	----	----	----	----
Zinc	7440-66-6	5	mg/kg	26	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS								
Mercury		7439-97-6	0.1	mg/kg	<0.1	----	----	----
EP074A: Monocyclic Aromatic Hydrocarbons								
Benzene	71-43-2	0.2	mg/kg	<0.2	----	----	----	----
Toluene	108-88-3	0.5	mg/kg	<0.5	----	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	----	----	----	----
Styrene	100-42-5	0.5	mg/kg	<0.5	----	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	----	----	----	----
Isopropylbenzene	98-82-8	0.5	mg/kg	<0.5	----	----	----	----
n-Propylbenzene	103-65-1	0.5	mg/kg	<0.5	----	----	----	----
1,3,5-Trimethylbenzene	108-67-8	0.5	mg/kg	<0.5	----	----	----	----
sec-Butylbenzene	135-98-8	0.5	mg/kg	0.6	----	----	----	----
1,2,4-Trimethylbenzene	95-63-6	0.5	mg/kg	<0.5	----	----	----	----
tert-Butylbenzene	98-06-6	0.5	mg/kg	<0.5	----	----	----	----
p-Isopropyltoluene	99-87-6	0.5	mg/kg	<0.5	----	----	----	----
n-Butylbenzene	104-51-8	0.5	mg/kg	<0.5	----	----	----	----
EP074B: Oxygenated Compounds								
Vinyl Acetate	108-05-4	5	mg/kg	<5	----	----	----	----
2-Butanone (MEK)	78-93-3	5	mg/kg	<5	----	----	----	----
4-Methyl-2-pentanone (MIBK)	108-10-1	5	mg/kg	<5	----	----	----	----
2-Hexanone (MBK)	591-78-6	5	mg/kg	<5	----	----	----	----
EP074C: Sulfonated Compounds								
Carbon disulfide		75-15-0	0.5	mg/kg	<0.5	----	----	----
EP074D: Fumigants								

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TRIPB	----	----	----	----
Client sampling date / time				[22-Jun-2016]	----	----	----	----	----
Compound	CAS Number	LOR	Unit	ES1613484-001	-----	-----	-----	-----	-----
				Result	----	----	----	----	----
EP074D: Fumigants - Continued									
2.2-Dichloropropane	594-20-7	0.5	mg/kg	<0.5	----	----	----	----	----
1.2-Dichloropropane	78-87-5	0.5	mg/kg	<0.5	----	----	----	----	----
cis-1.3-Dichloropropylene	10061-01-5	0.5	mg/kg	<0.5	----	----	----	----	----
trans-1.3-Dichloropropylene	10061-02-6	0.5	mg/kg	<0.5	----	----	----	----	----
1.2-Dibromoethane (EDB)	106-93-4	0.5	mg/kg	<0.5	----	----	----	----	----
EP074E: Halogenated Aliphatic Compounds									
Dichlorodifluoromethane	75-71-8	5	mg/kg	<5	----	----	----	----	----
Chloromethane	74-87-3	5	mg/kg	<5	----	----	----	----	----
Vinyl chloride	75-01-4	5	mg/kg	<5	----	----	----	----	----
Bromomethane	74-83-9	5	mg/kg	<5	----	----	----	----	----
Chloroethane	75-00-3	5	mg/kg	<5	----	----	----	----	----
Trichlorofluoromethane	75-69-4	5	mg/kg	<5	----	----	----	----	----
1.1-Dichloroethene	75-35-4	0.5	mg/kg	<0.5	----	----	----	----	----
Iodomethane	74-88-4	0.5	mg/kg	<0.5	----	----	----	----	----
trans-1.2-Dichloroethene	156-60-5	0.5	mg/kg	<0.5	----	----	----	----	----
1.1-Dichloroethane	75-34-3	0.5	mg/kg	<0.5	----	----	----	----	----
cis-1.2-Dichloroethene	156-59-2	0.5	mg/kg	<0.5	----	----	----	----	----
1.1.1-Trichloroethane	71-55-6	0.5	mg/kg	<0.5	----	----	----	----	----
1.1-Dichloropropylene	563-58-6	0.5	mg/kg	<0.5	----	----	----	----	----
Carbon Tetrachloride	56-23-5	0.5	mg/kg	<0.5	----	----	----	----	----
1.2-Dichloroethane	107-06-2	0.5	mg/kg	<0.5	----	----	----	----	----
Trichloroethene	79-01-6	0.5	mg/kg	<0.5	----	----	----	----	----
Dibromomethane	74-95-3	0.5	mg/kg	<0.5	----	----	----	----	----
1.1.2-Trichloroethane	79-00-5	0.5	mg/kg	<0.5	----	----	----	----	----
1.3-Dichloropropane	142-28-9	0.5	mg/kg	<0.5	----	----	----	----	----
Tetrachloroethene	127-18-4	0.5	mg/kg	<0.5	----	----	----	----	----
1.1.1.2-Tetrachloroethane	630-20-6	0.5	mg/kg	<0.5	----	----	----	----	----
trans-1.4-Dichloro-2-butene	110-57-6	0.5	mg/kg	<0.5	----	----	----	----	----
cis-1.4-Dichloro-2-butene	1476-11-5	0.5	mg/kg	<0.5	----	----	----	----	----
1.1.2.2-Tetrachloroethane	79-34-5	0.5	mg/kg	<0.5	----	----	----	----	----
1.2.3-Trichloropropane	96-18-4	0.5	mg/kg	<0.5	----	----	----	----	----
Pentachloroethane	76-01-7	0.5	mg/kg	<0.5	----	----	----	----	----
1.2-Dibromo-3-chloropropane	96-12-8	0.5	mg/kg	<0.5	----	----	----	----	----
EP074F: Halogenated Aromatic Compounds									



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TRIPB	----	----	----	----
Client sampling date / time				[22-Jun-2016]	----	----	----	----	----
Compound	CAS Number	LOR	Unit	ES1613484-001	-----	-----	-----	-----	-----
Result				----	----	----	----	----	----
EP074F: Halogenated Aromatic Compounds - Continued									
Chlorobenzene	108-90-7	0.5	mg/kg	<0.5	----	----	----	----	----
Bromobenzene	108-86-1	0.5	mg/kg	<0.5	----	----	----	----	----
2-Chlorotoluene	95-49-8	0.5	mg/kg	<0.5	----	----	----	----	----
4-Chlorotoluene	106-43-4	0.5	mg/kg	<0.5	----	----	----	----	----
1,2,3-Trichlorobenzene	87-61-6	0.5	mg/kg	<0.5	----	----	----	----	----
EP074G: Trihalomethanes									
Chloroform	67-66-3	0.5	mg/kg	<0.5	----	----	----	----	----
Bromodichloromethane	75-27-4	0.5	mg/kg	<0.5	----	----	----	----	----
Dibromochloromethane	124-48-1	0.5	mg/kg	<0.5	----	----	----	----	----
Bromoform	75-25-2	0.5	mg/kg	<0.5	----	----	----	----	----
EP075A: Phenolic Compounds									
Phenol	108-95-2	0.5	mg/kg	<0.5	----	----	----	----	----
2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	----	----	----	----	----
2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	----	----	----	----	----
3- & 4-Methylphenol	1319-77-3	0.5	mg/kg	<0.6	----	----	----	----	----
2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	----	----	----	----	----
2,4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	----	----	----	----	----
2,4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	----	----	----	----	----
2,6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	----	----	----	----	----
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg	<0.5	----	----	----	----	----
2,4,6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	----	----	----	----	----
2,4,5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	----	----	----	----	----
Pentachlorophenol	87-86-5	1	mg/kg	<1	----	----	----	----	----
EP075B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg	2.3	----	----	----	----	----
2-Methylnaphthalene	91-57-6	0.5	mg/kg	16.0	----	----	----	----	----
2-Chloronaphthalene	91-58-7	0.5	mg/kg	<0.5	----	----	----	----	----
Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	----	----	----	----	----
Acenaphthene	83-32-9	0.5	mg/kg	<0.5	----	----	----	----	----
Fluorene	86-73-7	0.5	mg/kg	<0.5	----	----	----	----	----
Phenanthrene	85-01-8	0.5	mg/kg	<0.5	----	----	----	----	----
Anthracene	120-12-7	0.5	mg/kg	<0.5	----	----	----	----	----
Fluoranthene	206-44-0	0.5	mg/kg	<0.5	----	----	----	----	----
Pyrene	129-00-0	0.5	mg/kg	<0.5	----	----	----	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TRIPB	----	----	----	----
Client sampling date / time				[22-Jun-2016]	----	----	----	----	----
Compound	CAS Number	LOR	Unit	ES1613484-001	-----	-----	-----	-----	-----
Result				----	----	----	----	----	----
EP075B: Polynuclear Aromatic Hydrocarbons - Continued									
N-2-Fluorenyl Acetamide	53-96-3	0.5	mg/kg	<0.5	----	----	----	----	----
Benzo(a)anthracene	56-55-3	0.5	mg/kg	<0.5	----	----	----	----	----
Chrysene	218-01-9	0.5	mg/kg	<0.5	----	----	----	----	----
Benzo(b+j) & Benzo(k)fluoranthene	205-99-2 207-08-9	1	mg/kg	<1	----	----	----	----	----
7,12-Dimethylbenzo(a)anthracene	57-97-6	0.5	mg/kg	<0.5	----	----	----	----	----
Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	----	----	----	----	----
3-Methylcholanthrene	56-49-5	0.5	mg/kg	<0.5	----	----	----	----	----
Indeno(1,2,3-cd)pyrene	193-39-5	0.5	mg/kg	<0.5	----	----	----	----	----
Dibenz(a,h)anthracene	53-70-3	0.5	mg/kg	<0.5	----	----	----	----	----
Benzo(g,h,i)perylene	191-24-2	0.5	mg/kg	<0.5	----	----	----	----	----
^ Sum of PAHs	----	0.5	mg/kg	2.3	----	----	----	----	----
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	----	----	----	----	----
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg	0.6	----	----	----	----	----
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg	1.2	----	----	----	----	----
EP075C: Phthalate Esters									
Dimethyl phthalate	131-11-3	0.5	mg/kg	<0.5	----	----	----	----	----
Diethyl phthalate	84-66-2	0.5	mg/kg	<0.5	----	----	----	----	----
Di-n-butyl phthalate	84-74-2	0.5	mg/kg	<0.5	----	----	----	----	----
Butyl benzyl phthalate	85-68-7	0.5	mg/kg	<0.5	----	----	----	----	----
bis(2-ethylhexyl) phthalate	117-81-7	5	mg/kg	<5.0	----	----	----	----	----
Di-n-octylphthalate	117-84-0	0.5	mg/kg	<0.5	----	----	----	----	----
EP075D: Nitrosamines									
N-Nitrosomethylethylamine	10595-95-6	0.5	mg/kg	<0.5	----	----	----	----	----
N-Nitrosodiethylamine	55-18-5	0.5	mg/kg	<0.5	----	----	----	----	----
N-Nitrosopyrrolidine	930-55-2	1	mg/kg	<1.0	----	----	----	----	----
N-Nitrosomorpholine	59-89-2	0.5	mg/kg	<0.5	----	----	----	----	----
N-Nitrosodi-n-propylamine	621-64-7	0.5	mg/kg	<0.5	----	----	----	----	----
N-Nitrosopiperidine	100-75-4	0.5	mg/kg	<0.5	----	----	----	----	----
N-Nitrosodibutylamine	924-16-3	0.5	mg/kg	<0.5	----	----	----	----	----
N-Nitrosodiphenyl & Diphenylamine	86-30-6 122-39-4	1	mg/kg	<1.0	----	----	----	----	----
Methapyrilene	91-80-5	0.5	mg/kg	<0.5	----	----	----	----	----
EP075E: Nitroaromatics and Ketones									
2-Picoline	109-06-8	0.5	mg/kg	<0.5	----	----	----	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TRIPB	----	----	----	----
Client sampling date / time				[22-Jun-2016]	----	----	----	----	----
Compound	CAS Number	LOR	Unit	ES1613484-001	-----	-----	-----	-----	-----
Result				----	----	----	----	----	----
EP075E: Nitroaromatics and Ketones - Continued									
Acetophenone	98-86-2	0.5	mg/kg	<0.5	----	----	----	----	----
Nitrobenzene	98-95-3	0.5	mg/kg	<0.5	----	----	----	----	----
Isophorone	78-59-1	0.5	mg/kg	<0.5	----	----	----	----	----
2,6-Dinitrotoluene	606-20-2	1	mg/kg	<1.0	----	----	----	----	----
2,4-Dinitrotoluene	121-14-2	1	mg/kg	<1.0	----	----	----	----	----
1-Naphthylamine	134-32-7	0.5	mg/kg	<0.5	----	----	----	----	----
4-Nitroquinoline-N-oxide	56-57-5	0.5	mg/kg	<0.5	----	----	----	----	----
5-Nitro-o-toluidine	99-55-8	0.5	mg/kg	<0.5	----	----	----	----	----
Azobenzene	103-33-3	1	mg/kg	<1	----	----	----	----	----
1,3,5-Trinitrobenzene	99-35-4	0.5	mg/kg	<0.5	----	----	----	----	----
Phenacetin	62-44-2	0.5	mg/kg	<0.5	----	----	----	----	----
4-Aminobiphenyl	92-67-1	0.5	mg/kg	<0.5	----	----	----	----	----
Pentachloronitrobenzene	82-68-8	0.5	mg/kg	<0.5	----	----	----	----	----
Pronamide	23950-58-5	0.5	mg/kg	<0.5	----	----	----	----	----
Dimethylaminoazobenzene	60-11-7	0.5	mg/kg	<0.5	----	----	----	----	----
Chlorobenzilate	510-15-6	0.5	mg/kg	<0.5	----	----	----	----	----
EP075F: Haloethers									
Bis(2-chloroethyl) ether	111-44-4	0.5	mg/kg	<0.5	----	----	----	----	----
Bis(2-chloroethoxy) methane	111-91-1	0.5	mg/kg	<0.5	----	----	----	----	----
4-Chlorophenyl phenyl ether	7005-72-3	0.5	mg/kg	<0.5	----	----	----	----	----
4-Bromophenyl phenyl ether	101-55-3	0.5	mg/kg	<0.5	----	----	----	----	----
EP075G: Chlorinated Hydrocarbons									
1,3-Dichlorobenzene	541-73-1	0.5	mg/kg	<0.5	----	----	----	----	----
1,4-Dichlorobenzene	106-46-7	0.5	mg/kg	<0.5	----	----	----	----	----
1,2-Dichlorobenzene	95-50-1	0.5	mg/kg	<0.5	----	----	----	----	----
Hexachloroethane	67-72-1	0.5	mg/kg	<0.5	----	----	----	----	----
1,2,4-Trichlorobenzene	120-82-1	0.5	mg/kg	<0.5	----	----	----	----	----
Hexachloropropylene	1888-71-7	0.5	mg/kg	<0.5	----	----	----	----	----
Hexachlorobutadiene	87-68-3	0.5	mg/kg	<0.5	----	----	----	----	----
Hexachlorocyclopentadiene	77-47-4	2.5	mg/kg	<2.5	----	----	----	----	----
Pentachlorobenzene	608-93-5	0.5	mg/kg	<0.5	----	----	----	----	----
Hexachlorobenzene (HCB)	118-74-1	1	mg/kg	<1.0	----	----	----	----	----
EP075H: Anilines and Benzidines									
Aniline	62-53-3	0.5	mg/kg	<0.5	----	----	----	----	----



Analytical Results

Sub-Matrix: SOIL
 (Matrix: SOIL)

Client sample ID

				TRIPB	----	----	----	----
Client sampling date / time				[22-Jun-2016]	----	----	----	----
Compound	CAS Number	LOR	Unit	ES1613484-001	-----	-----	-----	-----
				Result	----	----	----	----

EP075H: Anilines and Benzidines - Continued

4-Chloroaniline	106-47-8	0.5	mg/kg	<0.5	----	----	----	----
2-Nitroaniline	88-74-4	1	mg/kg	<1.0	----	----	----	----
3-Nitroaniline	99-09-2	1	mg/kg	<1.0	----	----	----	----
Dibenzofuran	132-64-9	0.5	mg/kg	<0.5	----	----	----	----
4-Nitroaniline	100-01-6	0.5	mg/kg	<0.5	----	----	----	----
Carbazole	86-74-8	0.5	mg/kg	<0.5	----	----	----	----
3,3'-Dichlorobenzidine	91-94-1	0.5	mg/kg	<0.5	----	----	----	----

EP075I: Organochlorine Pesticides

alpha-BHC	319-84-6	0.5	mg/kg	<0.5	----	----	----	----
beta-BHC	319-85-7	0.5	mg/kg	<0.5	----	----	----	----
gamma-BHC	58-89-9	0.5	mg/kg	<0.5	----	----	----	----
delta-BHC	319-86-8	0.5	mg/kg	<0.5	----	----	----	----
Heptachlor	76-44-8	0.5	mg/kg	<0.5	----	----	----	----
Aldrin	309-00-2	0.5	mg/kg	<0.5	----	----	----	----
Heptachlor epoxide	1024-57-3	0.5	mg/kg	<0.5	----	----	----	----
alpha-Endosulfan	959-98-8	0.5	mg/kg	<0.5	----	----	----	----
4,4'-DDE	72-55-9	0.5	mg/kg	<0.5	----	----	----	----
Dieldrin	60-57-1	0.5	mg/kg	<0.5	----	----	----	----
Endrin	72-20-8	0.5	mg/kg	<0.5	----	----	----	----
beta-Endosulfan	33213-65-9	0.5	mg/kg	<0.5	----	----	----	----
4,4'-DDD	72-54-8	0.5	mg/kg	<0.5	----	----	----	----
Endosulfan sulfate	1031-07-8	0.5	mg/kg	<0.5	----	----	----	----
4,4'-DDT	50-29-3	1	mg/kg	<1.0	----	----	----	----

EP075J: Organophosphorus Pesticides

Dichlorvos	62-73-7	0.5	mg/kg	<0.5	----	----	----	----
Dimethoate	60-51-5	0.5	mg/kg	<0.5	----	----	----	----
Diazinon	333-41-5	0.5	mg/kg	<0.5	----	----	----	----
Chlorpyrifos-methyl	5598-13-0	0.5	mg/kg	<0.5	----	----	----	----
Malathion	121-75-5	0.5	mg/kg	<0.5	----	----	----	----
Fenthion	55-38-9	0.5	mg/kg	<0.5	----	----	----	----
Chlorpyrifos	2921-88-2	0.5	mg/kg	<0.5	----	----	----	----
Pirimphos-ethyl	23505-41-1	0.5	mg/kg	<0.5	----	----	----	----
Chlorfenvinphos	470-90-6	0.5	mg/kg	<0.5	----	----	----	----
Prothiofos	34643-46-4	0.5	mg/kg	<0.5	----	----	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TRIPB	----	----	----	----
Client sampling date / time				[22-Jun-2016]	----	----	----	----	----
Compound	CAS Number	LOR	Unit	ES1613484-001	-----	-----	-----	-----	-----
Result				----	----	----	----	----	----
EP075J: Organophosphorus Pesticides - Continued									
Ethion	563-12-2	0.5	mg/kg	<0.5	----	----	----	----	----
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg	168	----	----	----	----	----
C10 - C14 Fraction	----	50	mg/kg	1450	----	----	----	----	----
C15 - C28 Fraction	----	100	mg/kg	200	----	----	----	----	----
C29 - C36 Fraction	----	100	mg/kg	<100	----	----	----	----	----
^ C10 - C36 Fraction (sum)	----	50	mg/kg	1650	----	----	----	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg	358	----	----	----	----	----
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg	358	----	----	----	----	----
>C10 - C16 Fraction	----	50	mg/kg	1500	----	----	----	----	----
>C16 - C34 Fraction	----	100	mg/kg	<100	----	----	----	----	----
>C34 - C40 Fraction	----	100	mg/kg	<100	----	----	----	----	----
^ >C10 - C40 Fraction (sum)	----	50	mg/kg	1500	----	----	----	----	----
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg	1500	----	----	----	----	----
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg	<0.2	----	----	----	----	----
Toluene	108-88-3	0.5	mg/kg	<0.5	----	----	----	----	----
Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	----	----	----	----	----
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	----	----	----	----	----
ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	----	----	----	----	----
^ Sum of BTEX	----	0.2	mg/kg	<0.2	----	----	----	----	----
^ Total Xylenes	1330-20-7	0.5	mg/kg	<0.5	----	----	----	----	----
Naphthalene	91-20-3	1	mg/kg	3	----	----	----	----	----
EP074S: VOC Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.5	%	85.2	----	----	----	----	----
Toluene-D8	2037-26-5	0.5	%	104	----	----	----	----	----
4-Bromofluorobenzene	460-00-4	0.5	%	93.3	----	----	----	----	----
EP075S: Acid Extractable Surrogates									
2-Fluorophenol	367-12-4	0.5	%	88.4	----	----	----	----	----
Phenol-d6	13127-88-3	0.5	%	83.1	----	----	----	----	----
2-Chlorophenol-D4	93951-73-6	0.5	%	71.1	----	----	----	----	----



Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	TRIPB	----	----	----	----
Client sampling date / time				[22-Jun-2016]	----	----	----	----	----
Compound	CAS Number	LOR	Unit	ES1613484-001	-----	-----	-----	-----	-----
Result				----	----	----	----	----	----
EP075S: Acid Extractable Surrogates - Continued									
2,4,6-Tribromophenol	118-79-6	0.5	%	64.1	----	----	----	----	----
EP075T: Base/Neutral Extractable Surrogates									
Nitrobenzene-D5	4165-60-0	0.5	%	83.2	----	----	----	----	----
1,2-Dichlorobenzene-D4	2199-69-1	0.5	%	72.1	----	----	----	----	----
2-Fluorobiphenyl	321-60-8	0.5	%	91.6	----	----	----	----	----
Anthracene-d10	1719-06-8	0.5	%	87.9	----	----	----	----	----
4-Terphenyl-d14	1718-51-0	0.5	%	64.0	----	----	----	----	----
EP080S: TPH(V)/BTEX Surrogates									
1,2-Dichloroethane-D4	17060-07-0	0.2	%	77.6	----	----	----	----	----
Toluene-D8	2037-26-5	0.2	%	114	----	----	----	----	----
4-Bromofluorobenzene	460-00-4	0.2	%	108	----	----	----	----	----



Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP074S: VOC Surrogates			
1,2-Dichloroethane-D4	17060-07-0	64	130
Toluene-D8	2037-26-5	66	136
4-Bromofluorobenzene	460-00-4	60	122
EP075S: Acid Extractable Surrogates			
2-Fluorophenol	367-12-4	29	149
Phenol-d6	13127-88-3	32	128
2-Chlorophenol-D4	93951-73-6	32	128
2,4,6-Tribromophenol	118-79-6	13	121
EP075T: Base/Neutral Extractable Surrogates			
Nitrobenzene-D5	4165-60-0	33	125
1,2-Dichlorobenzene-D4	2199-69-1	34	108
2-Fluorobiphenyl	321-60-8	35	121
Anthracene-d10	1719-06-8	35	123
4-Terphenyl-d14	1718-51-0	33	125
EP080S: TPH(V)/BTEX Surrogates			
1,2-Dichloroethane-D4	17060-07-0	73	133
Toluene-D8	2037-26-5	74	132
4-Bromofluorobenzene	460-00-4	72	130



APPENDIX H

Report Limitations



IMPORTANT INFORMATION RELATING TO THIS REPORT

The document ("Report") to which this page is attached and which this page forms a part of, has been issued by Golder Associates Pty Ltd ("Golder") subject to the important limitations and other qualifications set out below.

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Having regard to the matters referred to in the previous paragraphs on this page in particular, carrying out the Services has allowed Golder to form no more than an opinion as to the actual conditions at any relevant location. That opinion is necessarily constrained by the extent of the information collected by Golder or otherwise made available to Golder. Further, the passage of time may affect the accuracy, applicability or usefulness of the opinions, assessments or other information in this Report. This Report is based upon the information and other circumstances that existed and were known to Golder when the Services were performed and this Report was prepared. Golder has not considered the effect of any possible future developments including physical changes to any relevant location or changes to any laws or regulations relevant to such location.

Where permitted by the Contract, Golder may have retained subconsultants affiliated with Golder to provide some or all of the Services. However, it is Golder which remains solely responsible for the Services and there is no legal recourse against any of Golder's affiliated companies or the employees, officers or directors of any of them.

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