Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / 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 x SDL / Mean + 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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE243061.038	LB271490.024		TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	96	<90	143	6
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE243061.048	LB271491.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	52	139	15
			TRH C29-C36	mg/kg	45	<45	55	144	21
			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 (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	91	200	1
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE243061.058	LB271491.025		TRH C10-C14	mg/kg	20	52	26	82	68
			TRH C15-C28	mg/kg	45	1000	790	35	24
			TRH C29-C36	mg/kg	45	1200	1000	34	17
			TRH C37-C40	mg/kg	100	590	530	48	12
			TRH C10-C36 Total	mg/kg	110	2300	1800	35	21
			TRH >C10-C40 Total (F bands)	mg/kg	210	2900	2400	38	19
		TRH F Bands	TRH >C10-C16	mg/kg	25	71	37	76	63
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	71	37	76	63
			TRH >C16-C34 (F3)	mg/kg	90	1800	1500	36	21
			TRH >C34-C40 (F4)	mg/kg	120	980	860	43	13
SE243061.061	LB271508.014		TRH C10-C14	mg/kg	20	<20	<20	185	0
			TRH C15-C28	mg/kg	45	150	260	52	54 ②
			TRH C29-C36	mg/kg	45	87	110	75	27
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	240	380	66	45
			TRH >C10-C40 Total (F bands)	mg/kg	210	210	340	106	48
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	166	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	210	340	63	48
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE243061.072	LB271508.023		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	73	100	81	35
			TRH C29-C36	mg/kg	45	150	190	56	26
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	220	300	72	29
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	250	127	16
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	190	250	72	29
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	153	0

TRH (Total Recoverable Hydrocarbons) in Water

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE243015.013	LB271575.029		TRH C10-C14	µg/L	50	<50	<50	200	0
			TRH C15-C28	µg/L	200	<200	<200	200	0
			TRH C29-C36	µg/L	200	<200	<200	200	0
			TRH C37-C40	µg/L	200	<200	<200	200	0
			TRH C10-C40	µg/L	320	<320	<320	200	0
		TRH F Bands	TRH >C10-C16	µg/L	60	<60	<60	200	0
			TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60	<60	200	0
			TRH >C16-C34 (F3)	µg/L	500	<500	<500	200	0
			TRH >C34-C40 (F4)	µg/L	500	<500	<500	200	0
SE243174.001	LB271575.028		TRH C10-C14	µg/L	50	<50	<50	200	0
			TRH C15-C28	µg/L	200	<200	<200	200	0
			TRH C29-C36	µg/L	200	<200	<200	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / 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 x SDL / Mean + 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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

TRH (Total Recoverable Hydrocarbons) in Water (continued)

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE243174.001	LB271575.028		TRH C37-C40	µg/L	200	<200	<200	200	0
			TRH C10-C40	µg/L	320	<320	<320	200	0
		TRH F Bands	TRH >C10-C16	µg/L	60	<60	<60	200	0
			TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60	<60	200	0
			TRH >C16-C34 (F3)	µg/L	500	<500	<500	200	0
			TRH >C34-C40 (F4)	µg/L	500	<500	<500	200	0

VOC's in Soil

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE243061.010	LB271509.014	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
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.6	9.9	50	7
			d8-toluene (Surrogate)	mg/kg	-	9.5	8.5	50	11
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.6	8.6	50	11
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
			Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0
SE243061.019	LB271509.024	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
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.1	10.2	50	9
			d8-toluene (Surrogate)	mg/kg	-	9.9	9.4	50	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.6	8.8	50	9
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
			Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0
SE243061.029	LB271511.014	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
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.8	10.5	50	3
			d8-toluene (Surrogate)	mg/kg	-	9.8	9.8	50	0
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.9	9.0	50	0
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
			Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0
SE243061.038	LB271511.024	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
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.7	10.5	50	2
			d8-toluene (Surrogate)	mg/kg	-	9.9	9.3	50	6
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.2	8.9	50	3
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
			Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0
SE243061.048	LB271512.014	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
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.7	8.7	50	0
			d8-toluene (Surrogate)	mg/kg	-	8.7	8.8	50	1

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / 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 x SDL / Mean + 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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

VOC's in Soil (continued)

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE243061.048	LB271512.014	Surrogates	Bromofluorobenzene (Surrogate)	mg/kg	-	8.0	7.9	50	2
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
			Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0
SE243061.058	LB271512.025	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
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.4	8.5	50	1
			d8-toluene (Surrogate)	mg/kg	-	8.5	8.7	50	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.8	8.0	50	4
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
			Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0
SE243061.059	LB271533.015	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
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.7	9.1	50	4
			d8-toluene (Surrogate)	mg/kg	-	9.1	10.9	50	18
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.8	8.2	50	5
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
			Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0
SE243061.072	LB271533.032	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
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.2	7.5	50	4
			d8-toluene (Surrogate)	mg/kg	-	7.9	7.9	50	0
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.1	7.3	50	3
		Totals	Total BTEX*	mg/kg	0.6	<0.6	<0.6	200	0
			Total Xylenes*	mg/kg	0.3	<0.3	<0.3	200	0

VOCs in Water

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE243061.068	LB271699.021	Monocyclic	Benzene	µg/L	0.5	<0.5	<0.5	200	0
		Aromatic	Toluene	µg/L	0.5	<0.5	<0.5	200	0
			Ethylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			m/p-xylene	µg/L	1	<1	<1	200	0
			o-xylene	µg/L	0.5	<0.5	<0.5	200	0
		Polycyclic	Naphthalene (VOC)*	µg/L	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.1	9.3	30	3
			d8-toluene (Surrogate)	µg/L	-	9.6	9.6	30	0
			Bromofluorobenzene (Surrogate)	µg/L	-	9.0	9.4	30	4
		Totals	Total BTEX	µg/L	3	<3	<3	200	0

Volatile Petroleum Hydrocarbons in Soil

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE243061.010	LB271509.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.6	9.9	30	7
			d8-toluene (Surrogate)	mg/kg	-	9.5	8.5	30	11
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.6	8.6	30	11
		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
SE243061.019	LB271509.024		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.1	10.2	30	9

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / 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 x SDL / Mean + 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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

Volatile Petroleum Hydrocarbons in Soil (continued)

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE243061.019	LB271509.024	Surrogates	d8-toluene (Surrogate)	mg/kg	-	9.9	9.4	30	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.6	8.8	30	9
		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
SE243061.029	LB271511.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.8	10.5	30	3
			d8-toluene (Surrogate)	mg/kg	-	9.8	9.8	30	0
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.9	9.0	30	0
		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
SE243061.038	LB271511.024		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.7	10.5	30	2
			d8-toluene (Surrogate)	mg/kg	-	9.9	9.3	30	6
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.2	8.9	30	3
		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
SE243061.048	LB271512.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.7	8.7	30	0
			d8-toluene (Surrogate)	mg/kg	-	8.7	8.8	30	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.0	7.9	30	2
		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
SE243061.058	LB271512.025		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.4	8.5	30	1
			d8-toluene (Surrogate)	mg/kg	-	8.5	8.7	30	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.8	8.0	30	4
		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
SE243061.059	LB271533.015		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.7	9.1	30	4
			d8-toluene (Surrogate)	mg/kg	-	9.1	10.9	30	18
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.8	8.2	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
SE243061.072	LB271533.032		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.2	7.5	30	4
			d8-toluene (Surrogate)	mg/kg	-	7.9	7.9	30	0
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.1	7.3	30	3
		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

Volatile Petroleum Hydrocarbons in Water

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

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE243061.068	LB271699.021		TRH C6-C10	µg/L	50	<50	<50	200	0
			TRH C6-C9	µg/L	40	<40	<40	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.1	9.3	30	3
			d8-toluene (Surrogate)	µg/L	-	9.6	9.6	30	0
			Bromofluorobenzene (Surrogate)	µg/L	-	9.0	9.4	30	4
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	<0.5	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	200	0
SE243086.001	LB271699.022		TRH C6-C10	µg/L	50	<50	<50	200	0
			TRH C6-C9	µg/L	40	<50	<40	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.3	9.5	30	2
			d8-toluene (Surrogate)	µg/L	-	9.7	9.8	30	2
			Bromofluorobenzene (Surrogate)	µg/L	-	9.4	9.3	30	1

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / 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 x SDL / Mean + 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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

Volatile Petroleum Hydrocarbons in Water (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE243086.001	LB271699.022	VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	<0.5	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	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.

Mercury in Soil

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

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB271525.002	Mercury	mg/kg	0.05	0.20	0.2	70 - 130	100
LB271526.002	Mercury	mg/kg	0.05	0.20	0.2	70 - 130	102
LB271528.002	Mercury	mg/kg	0.05	0.20	0.2	70 - 130	100
LB271551.002	Mercury	mg/kg	0.05	0.19	0.2	70 - 130	97

OC Pesticides in Soil

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

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB271471.002		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	96
		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	95
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	101
		Dieldrin	mg/kg	0.2	0.2	0.2	60 - 140	103
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	101
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	89
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.15	40 - 130	93
LB271490.002		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	81
		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	85
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	81
		Dieldrin	mg/kg	0.2	0.2	0.2	60 - 140	80
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	88
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	76
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.15	40 - 130	91
LB271491.002		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	95
		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	104
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	99
		Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	98
		Endrin	mg/kg	0.2	<0.2	0.2	60 - 140	98
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	93
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	40 - 130	103
LB271508.002		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	85
		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	90
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	86
		Dieldrin	mg/kg	0.2	0.2	0.2	60 - 140	90
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	88
		p,p'-DDT	mg/kg	0.1	0.1	0.2	60 - 140	71
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.13	0.15	40 - 130	85

OP Pesticides in Soil

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

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB271471.002		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.8	2	60 - 140	91
		Diazinon (Dimpylate)	mg/kg	0.5	1.9	2	60 - 140	95
		Dichlorvos	mg/kg	0.5	1.5	2	60 - 140	77
		Ethion	mg/kg	0.2	1.7	2	60 - 140	83
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	87
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	92
LB271490.002		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.6	2	60 - 140	81
		Diazinon (Dimpylate)	mg/kg	0.5	1.7	2	60 - 140	85
		Dichlorvos	mg/kg	0.5	1.5	2	60 - 140	76
		Ethion	mg/kg	0.2	1.7	2	60 - 140	84
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	92
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	88
LB271491.002		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.7	2	60 - 140	84
		Diazinon (Dimpylate)	mg/kg	0.5	1.8	2	60 - 140	88
		Dichlorvos	mg/kg	0.5	1.6	2	60 - 140	80
		Ethion	mg/kg	0.2	1.3	2	60 - 140	65
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	90
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84
LB271508.002		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.6	2	60 - 140	81
		Diazinon (Dimpylate)	mg/kg	0.5	1.7	2	60 - 140	87
		Dichlorvos	mg/kg	0.5	1.3	2	60 - 140	63
		Ethion	mg/kg	0.2	1.5	2	60 - 140	73
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	82
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	85

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.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

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

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB271471.002		Naphthalene	mg/kg	0.1	4.3	4	60 - 140	107
		Acenaphthylene	mg/kg	0.1	4.4	4	60 - 140	111
		Acenaphthene	mg/kg	0.1	4.3	4	60 - 140	107
		Phenanthrene	mg/kg	0.1	4.2	4	60 - 140	106
		Anthracene	mg/kg	0.1	4.2	4	60 - 140	106
		Fluoranthene	mg/kg	0.1	4.5	4	60 - 140	112
		Pyrene	mg/kg	0.1	4.5	4	60 - 140	113
		Benzo(a)pyrene	mg/kg	0.1	4.4	4	60 - 140	111
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	101
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	87
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	92
LB271490.002		Naphthalene	mg/kg	0.1	4.2	4	60 - 140	106
		Acenaphthylene	mg/kg	0.1	4.3	4	60 - 140	109
		Acenaphthene	mg/kg	0.1	4.3	4	60 - 140	106
		Phenanthrene	mg/kg	0.1	4.1	4	60 - 140	102
		Anthracene	mg/kg	0.1	4.1	4	60 - 140	103
		Fluoranthene	mg/kg	0.1	4.3	4	60 - 140	106
		Pyrene	mg/kg	0.1	4.4	4	60 - 140	111
		Benzo(a)pyrene	mg/kg	0.1	4.3	4	60 - 140	108
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	98
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	92
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	88
LB271491.002		Naphthalene	mg/kg	0.1	4.3	4	60 - 140	107
		Acenaphthylene	mg/kg	0.1	4.5	4	60 - 140	113
		Acenaphthene	mg/kg	0.1	4.3	4	60 - 140	107
		Phenanthrene	mg/kg	0.1	4.1	4	60 - 140	103
		Anthracene	mg/kg	0.1	4.2	4	60 - 140	105
		Fluoranthene	mg/kg	0.1	4.4	4	60 - 140	109
		Pyrene	mg/kg	0.1	4.4	4	60 - 140	109
		Benzo(a)pyrene	mg/kg	0.1	4.4	4	60 - 140	110
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	98
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	90
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84
LB271508.002		Naphthalene	mg/kg	0.1	4.0	4	60 - 140	101
		Acenaphthylene	mg/kg	0.1	4.1	4	60 - 140	103
		Acenaphthene	mg/kg	0.1	4.0	4	60 - 140	99
		Phenanthrene	mg/kg	0.1	3.9	4	60 - 140	99
		Anthracene	mg/kg	0.1	3.9	4	60 - 140	99
		Fluoranthene	mg/kg	0.1	4.2	4	60 - 140	104
		Pyrene	mg/kg	0.1	4.2	4	60 - 140	104
		Benzo(a)pyrene	mg/kg	0.1	4.3	4	60 - 140	108
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	94
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	82
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	85

PCBs in Soil

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

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB271471.002	Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	126
LB271490.002	Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	93
LB271491.002	Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	125
LB271508.002	Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	95

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

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

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB271520.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	105
	Cadmium, Cd	mg/kg	0.3	4.3	4.81	70 - 130	89
	Chromium, Cr	mg/kg	0.5	37	38.31	80 - 120	96
	Copper, Cu	mg/kg	0.5	310	290	80 - 120	107
	Nickel, Ni	mg/kg	0.5	180	187	80 - 120	97
	Lead, Pb	mg/kg	1	90	89.9	80 - 120	100
	Zinc, Zn	mg/kg	2	260	273	80 - 120	97
LB271521.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	106

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 Elements in Soil/Waste Solids/Materials by ICPOES (continued)

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

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB271521.002	Cadmium, Cd	mg/kg	0.3	4.3	4.81	70 - 130	90
	Chromium, Cr	mg/kg	0.5	40	38.31	80 - 120	103
	Copper, Cu	mg/kg	0.5	310	290	80 - 120	107
	Nickel, Ni	mg/kg	0.5	180	187	80 - 120	98
	Lead, Pb	mg/kg	1	89	89.9	80 - 120	99
	Zinc, Zn	mg/kg	2	270	273	80 - 120	98
LB271522.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	107
	Cadmium, Cd	mg/kg	0.3	4.5	4.81	70 - 130	93
	Chromium, Cr	mg/kg	0.5	39	38.31	80 - 120	103
	Copper, Cu	mg/kg	0.5	320	290	80 - 120	109
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	100
	Lead, Pb	mg/kg	1	91	89.9	80 - 120	101
	Zinc, Zn	mg/kg	2	270	273	80 - 120	99
LB271545.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	108
	Cadmium, Cd	mg/kg	0.3	4.5	4.81	70 - 130	94
	Chromium, Cr	mg/kg	0.5	40	38.31	80 - 120	105
	Copper, Cu	mg/kg	0.5	310	290	80 - 120	107
	Nickel, Ni	mg/kg	0.5	180	187	80 - 120	98
	Lead, Pb	mg/kg	1	91	89.9	80 - 120	101
	Zinc, Zn	mg/kg	2	270	273	80 - 120	100

Trace Metals (Dissolved) in Water by ICPMS

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

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB271420.002	Arsenic	µg/L	1	20	20	80 - 120	100
	Cadmium	µg/L	0.1	20	20	80 - 120	102
	Chromium	µg/L	1	20	20	80 - 120	100
	Copper	µg/L	1	21	20	80 - 120	106
	Lead	µg/L	1	20	20	80 - 120	101
	Nickel	µg/L	1	21	20	80 - 120	104
	Zinc	µg/L	5	21	20	80 - 120	103

TRH (Total Recoverable Hydrocarbons) in Soil

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

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB271471.002		TRH C10-C14	mg/kg	20	52	40	60 - 140	130
		TRH C15-C28	mg/kg	45	52	40	60 - 140	131
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	99
	TRH F Bands	TRH >C10-C16	mg/kg	25	52	40	60 - 140	131
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	120
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	93
LB271490.002		TRH C10-C14	mg/kg	20	48	40	60 - 140	120
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	104
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	95
	TRH F Bands	TRH >C10-C16	mg/kg	25	49	40	60 - 140	122
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	106
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	84
LB271491.002		TRH C10-C14	mg/kg	20	50	40	60 - 140	124
		TRH C15-C28	mg/kg	45	49	40	60 - 140	122
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	102
	TRH F Bands	TRH >C10-C16	mg/kg	25	50	40	60 - 140	124
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	116
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	96
LB271508.002		TRH C10-C14	mg/kg	20	48	40	60 - 140	120
		TRH C15-C28	mg/kg	45	48	40	60 - 140	119
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	94
	TRH F Bands	TRH >C10-C16	mg/kg	25	48	40	60 - 140	119
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	112
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	87

TRH (Total Recoverable Hydrocarbons) in Water

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

Sample Number	Parameter	Units	LOR

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.

TRH (Total Recoverable Hydrocarbons) in Water (continued)

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

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB271575.002		TRH C10-C14	µg/L	50	1400	1200	60 - 140	113
		TRH C15-C28	µg/L	200	1500	1200	60 - 140	124
		TRH C29-C36	µg/L	200	1500	1200	60 - 140	126
	TRH F Bands	TRH >C10-C16	µg/L	60	1400	1200	60 - 140	120
		TRH >C16-C34 (F3)	µg/L	500	1600	1200	60 - 140	130
		TRH >C34-C40 (F4)	µg/L	500	720	600	60 - 140	120

VOC's in Soil

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

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB271509.002	Monocyclic	Benzene	mg/kg	0.1	4.4	5	60 - 140	88
	Aromatic	Toluene	mg/kg	0.1	4.7	5	60 - 140	95
		Ethylbenzene	mg/kg	0.1	4.5	5	60 - 140	89
		m/p-xylene	mg/kg	0.2	8.7	10	60 - 140	87
		o-xylene	mg/kg	0.1	4.6	5	60 - 140	93
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.0	10	70 - 130	100
		d8-toluene (Surrogate)	mg/kg	-	10.2	10	70 - 130	102
		Bromofluorobenzene (Surrogate)	mg/kg	-	10.5	10	70 - 130	105
LB271511.002	Monocyclic	Benzene	mg/kg	0.1	4.3	5	60 - 140	86
	Aromatic	Toluene	mg/kg	0.1	4.6	5	60 - 140	92
		Ethylbenzene	mg/kg	0.1	4.4	5	60 - 140	88
		m/p-xylene	mg/kg	0.2	8.7	10	60 - 140	87
		o-xylene	mg/kg	0.1	4.6	5	60 - 140	92
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.0	10	70 - 130	90
		d8-toluene (Surrogate)	mg/kg	-	9.4	10	70 - 130	94
		Bromofluorobenzene (Surrogate)	mg/kg	-	10.0	10	70 - 130	100
LB271512.002	Monocyclic	Benzene	mg/kg	0.1	4.8	5	60 - 140	95
	Aromatic	Toluene	mg/kg	0.1	4.9	5	60 - 140	97
		Ethylbenzene	mg/kg	0.1	5.0	5	60 - 140	100
		m/p-xylene	mg/kg	0.2	9.6	10	60 - 140	96
		o-xylene	mg/kg	0.1	5.2	5	60 - 140	104
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.6	10	70 - 130	96
		d8-toluene (Surrogate)	mg/kg	-	10.0	10	70 - 130	100
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.1	10	70 - 130	91
LB271533.002	Monocyclic	Benzene	mg/kg	0.1	4.8	5	60 - 140	96
	Aromatic	Toluene	mg/kg	0.1	4.9	5	60 - 140	97
		Ethylbenzene	mg/kg	0.1	4.6	5	60 - 140	92
		m/p-xylene	mg/kg	0.2	8.9	10	60 - 140	89
		o-xylene	mg/kg	0.1	4.7	5	60 - 140	93
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.1	10	70 - 130	101
		d8-toluene (Surrogate)	mg/kg	-	10.5	10	70 - 130	105
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.1	10	70 - 130	91

VOCs in Water

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

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB271699.002	Monocyclic	Benzene	µg/L	0.5	48	45.45	60 - 140	105
	Aromatic	Toluene	µg/L	0.5	47	45.45	60 - 140	104
		Ethylbenzene	µg/L	0.5	54	45.45	60 - 140	118
		m/p-xylene	µg/L	1	110	90.9	60 - 140	118
		o-xylene	µg/L	0.5	54	45.45	60 - 140	118
	Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.3	10	60 - 140	103
		d8-toluene (Surrogate)	µg/L	-	9.8	10	70 - 130	98
		Bromofluorobenzene (Surrogate)	µg/L	-	10.3	10	70 - 130	103

Volatile Petroleum Hydrocarbons in Soil

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

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB271509.002		TRH C6-C10	mg/kg	25	71	92.5	60 - 140	77
		TRH C6-C9	mg/kg	20	54	80	60 - 140	68
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.0	10	70 - 130	100
		Bromofluorobenzene (Surrogate)	mg/kg	-	10.5	10	70 - 130	105
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	45	62.5	60 - 140	71
LB271511.002		TRH C6-C10	mg/kg	25	70	92.5	60 - 140	76
		TRH C6-C9	mg/kg	20	53	80	60 - 140	66

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.

Volatile Petroleum Hydrocarbons in Soil (continued)

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

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB271511.002	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.0	10	70 - 130	90
		Bromofluorobenzene (Surrogate)	mg/kg	-	10.0	10	70 - 130	100
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	44	62.5	60 - 140	70
LB271512.002		TRH C6-C10	mg/kg	25	97	92.5	60 - 140	105
		TRH C6-C9	mg/kg	20	87	80	60 - 140	109
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.6	10	70 - 130	96
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.1	10	70 - 130	91
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	68	62.5	60 - 140	109
LB271533.002		TRH C6-C10	mg/kg	25	84	92.5	60 - 140	91
		TRH C6-C9	mg/kg	20	77	80	60 - 140	96
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.1	10	70 - 130	101
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.1	10	70 - 130	91
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	57	62.5	60 - 140	91

Volatile Petroleum Hydrocarbons in Water

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

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB271699.002		TRH C6-C10	µg/L	50	920	946.63	60 - 140	97
		TRH C6-C9	µg/L	40	790	818.71	60 - 140	97
	Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.3	10	60 - 140	103
		d8-toluene (Surrogate)	µg/L	-	9.8	10	70 - 130	98
		Bromofluorobenzene (Surrogate)	µg/L	-	10.3	10	70 - 130	103
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	610	639.67	60 - 140	95

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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury (dissolved) in Water

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

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE242526A.002	LB271447.004	Mercury	mg/L	0.0001	0.0018	<0.0001	0.008	91

Mercury in Soil

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

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE243061.001	LB271525.004	Mercury	mg/kg	0.05	0.41	0.25	0.2	83
SE243061.039	LB271528.004	Mercury	mg/kg	0.05	0.20	0.10	0.2	50 ④
SE243187.001	LB271551.004	Mercury	mg/kg	0.05	0.25	<0.05	0.2	114

OC Pesticides in Soil

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE243061.001	LB271471.004		Alpha BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-	-
			Beta BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	0.2	<0.1	0.2	113
			Heptachlor	mg/kg	0.1	0.3	<0.1	0.2	119
			Aldrin	mg/kg	0.1	0.2	<0.1	0.2	114
			Isodrin	mg/kg	0.1	<0.1	<0.1	-	-
			Heptachlor epoxide	mg/kg	0.1	0.4	0.3	-	-
			Gamma Chlordane	mg/kg	0.1	0.2	0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.1	<0.2	-	-
			o,p'-DDE*	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	0.2	<0.2	0.2	120
			Endrin	mg/kg	0.2	0.3	<0.2	0.2	126
			Beta Endosulfan	mg/kg	0.2	<0.1	<0.2	-	-
			o,p'-DDD*	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	-	-
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDT*	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	0.2	<0.1	0.2	76
			Endrin ketone	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	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	2	<1	-	-
			Total OC VIC EPA	mg/kg	1	2	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	-	98
SE243061.020	LB271490.004		Alpha BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-	-
			Beta BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	0.2	<0.1	0.2	87
			Heptachlor	mg/kg	0.1	0.2	<0.1	0.2	90
			Aldrin	mg/kg	0.1	0.2	<0.1	0.2	87
			Isodrin	mg/kg	0.1	<0.1	<0.1	-	-
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.1	<0.2	-	-
			o,p'-DDE*	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	0.2	<0.2	0.2	86
			Endrin	mg/kg	0.2	0.2	<0.2	0.2	94
			Beta Endosulfan	mg/kg	0.2	<0.1	<0.2	-	-
			o,p'-DDD*	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDD	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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE243061.020	LB271490.004		Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	-	-
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDT*	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	0.2	<0.1	0.2	81
			Endrin ketone	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	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	1	<1	-	-
			Total OC VIC EPA	mg/kg	1	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.13	-	93
SE243061.039	LB271491.004		Alpha BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-	-
			Beta BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	0.2	<0.1	0.2	88
			Heptachlor	mg/kg	0.1	0.2	<0.1	0.2	96
			Aldrin	mg/kg	0.1	0.2	<0.1	0.2	90
			Isodrin	mg/kg	0.1	<0.1	<0.1	-	-
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			o,p'-DDE*	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	<0.2	<0.2	0.2	89
			Endrin	mg/kg	0.2	<0.2	<0.2	0.2	84
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			o,p'-DDD*	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin aldehyde	mg/kg	0.1	<0.1	<0.1	-	-
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDT*	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	0.2	<0.1	0.2	82
			Endrin ketone	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	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	1	<1	-	-
			Total OC VIC EPA	mg/kg	1	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.18	-	92
SE243092.001	LB271508.025		Alpha BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-	-
			Beta BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Lindane (gamma BHC)	mg/kg	0.1	<0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	0.2	<0.1	0.2	109
			Heptachlor	mg/kg	0.1	0.2	<0.1	0.2	111
			Aldrin	mg/kg	0.1	0.2	<0.1	0.2	108
			Isodrin	mg/kg	0.1	<0.1	<0.1	-	-
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.1	<0.2	-	-
			o,p'-DDE*	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	0.2	<0.2	0.2	111
			Endrin	mg/kg	0.2	0.2	<0.2	0.2	108
			Beta Endosulfan	mg/kg	0.2	<0.1	<0.2	-	-
			o,p'-DDD*	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin aldehyde	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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE243092.001	LB271508.025		Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDT*	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	0.2	<0.1	0.2	81
			Endrin ketone	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	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	1	<1	-	-
			Total OC VIC EPA	mg/kg	1	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.16	-	108

OP Pesticides in Soil

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE243061.001	LB271471.004		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.9	<0.2	2	94
			Diazinon (Dimpylate)	mg/kg	0.5	1.9	<0.5	2	97
			Dichlorvos	mg/kg	0.5	1.6	<0.5	2	79
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
			Ethion	mg/kg	0.2	1.9	<0.2	2	96
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	<0.5	-	-
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	7.4	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	90
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	93
SE243061.020	LB271490.004		Azinphos-methyl (Guthion)	mg/kg	0.2	2.1	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.6	<0.2	2	78
			Diazinon (Dimpylate)	mg/kg	0.5	1.6	<0.5	2	80
			Dichlorvos	mg/kg	0.5	1.5	<0.5	2	73
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
			Ethion	mg/kg	0.2	1.7	<0.2	2	86
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	<0.5	-	-
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	8.5	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	89
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	83
SE243061.039	LB271491.004		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.4	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.4	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.9	<0.4	2	95
			Diazinon (Dimpylate)	mg/kg	0.5	2.0	<1.0	2	99
			Dichlorvos	mg/kg	0.5	1.9	<1.0	2	96
			Dimethoate	mg/kg	0.5	<0.5	<1.0	-	-
			Ethion	mg/kg	0.2	1.9	<0.4	2	92
			Fenitrothion	mg/kg	0.2	<0.2	<0.4	-	-
			Malathion	mg/kg	0.2	<0.2	<0.4	-	-
			Methidathion	mg/kg	0.5	<0.5	<1.0	-	-
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.4	-	-
			Total OP Pesticides*	mg/kg	1.7	7.7	<3.4	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4	-	95
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	86
SE243092.001	LB271508.025		Azinphos-methyl (Guthion)	mg/kg	0.2		<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2		<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2		<0.2	2	92
			Diazinon (Dimpylate)	mg/kg	0.5		<0.5	2	94
			Dichlorvos	mg/kg	0.5		<0.5	2	78
			Dimethoate	mg/kg	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.

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

OP Pesticides in Soil (continued)

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE243092.001	LB271508.025		Ethion	mg/kg	0.2		<0.2	2	89
			Fenitrothion	mg/kg	0.2		<0.2	-	-
			Malathion	mg/kg	0.2		<0.2	-	-
			Methidathion	mg/kg	0.5		<0.5	-	-
			Parathion-ethyl (Parathion)	mg/kg	0.2		<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7		<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-		0.4	-	84
			d14-p-terphenyl (Surrogate)	mg/kg	-		0.4	-	86

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE243061.001	LB271471.004		Naphthalene	mg/kg	0.1	4.3	<0.1	4	106
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	4.5	<0.1	4	111
			Acenaphthene	mg/kg	0.1	4.3	<0.1	4	106
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	4.6	0.5	4	103
			Anthracene	mg/kg	0.1	4.4	0.2	4	106
			Fluoranthene	mg/kg	0.1	5.3	1.1	4	106
			Pyrene	mg/kg	0.1	5.2	1.1	4	102
			Benzo(a)anthracene	mg/kg	0.1	0.5	0.6	-	-
			Chrysene	mg/kg	0.1	0.4	0.5	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.6	0.7	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	0.2	0.3	-	-
			Benzo(a)pyrene	mg/kg	0.1	4.8	0.6	4	104
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.3	0.4	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	0.3	0.4	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	5.0	0.8	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	5.0	0.9	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	5.1	0.9	-	-
			Total PAH (18)	mg/kg	0.8	40	6.4	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	-	104
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	90
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	93
SE243061.020	LB271490.004		Naphthalene	mg/kg	0.1	4.2	<0.1	4	105
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	4.3	<0.1	4	107
			Acenaphthene	mg/kg	0.1	4.2	<0.1	4	104
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	4.2	0.6	4	90
			Anthracene	mg/kg	0.1	4.0	0.1	4	98
			Fluoranthene	mg/kg	0.1	4.6	0.8	4	93
			Pyrene	mg/kg	0.1	4.5	0.7	4	95
			Benzo(a)anthracene	mg/kg	0.1	0.2	0.4	-	-
			Chrysene	mg/kg	0.1	0.2	0.4	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.2	0.4	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	0.1	0.2	-	-
			Benzo(a)pyrene	mg/kg	0.1	4.4	0.3	4	102
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	0.1	0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	4.5	0.4	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	4.5	0.5	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	4.6	0.5	-	-
			Total PAH (18)	mg/kg	0.8	35	4.2	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	-	95
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	89
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	83

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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE243061.039	LB271491.004		Naphthalene	mg/kg	0.1	4.2	<0.2	4	105
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.2	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.2	-	-
			Acenaphthylene	mg/kg	0.1	4.3	<0.2	4	108
			Acenaphthene	mg/kg	0.1	4.2	<0.2	4	105
			Fluorene	mg/kg	0.1	<0.1	<0.2	-	-
			Phenanthrene	mg/kg	0.1	3.8	<0.2	4	94
			Anthracene	mg/kg	0.1	3.8	<0.2	4	94
			Fluoranthene	mg/kg	0.1	3.9	<0.2	4	97
			Pyrene	mg/kg	0.1	3.7	<0.2	4	91
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.2	-	-
			Chrysene	mg/kg	0.1	<0.1	<0.2	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.2	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.2	-	-
			Benzo(a)pyrene	mg/kg	0.1	2.9	<0.2	4	71
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.2	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.2	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	2.9	<0.4	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	2.9	<0.4	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	3.0	<0.6	-	-
			Total PAH (18)	mg/kg	0.8	31	<1.6	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	-	106
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4	-	95
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	86
SE243092.001	LB271508.025		Naphthalene	mg/kg	0.1	4.1	<0.1	4	102
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	4.2	<0.1	4	106
			Acenaphthene	mg/kg	0.1	4.0	<0.1	4	101
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	4.0	<0.1	4	100
			Anthracene	mg/kg	0.1	4.0	<0.1	4	100
			Fluoranthene	mg/kg	0.1	4.3	<0.1	4	105
			Pyrene	mg/kg	0.1	4.2	<0.1	4	104
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	4.2	<0.1	4	104
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0*	TEQ (mg/kg)	0.2	4.2	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2*	TEQ (mg/kg)	0.2	4.3	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR*	TEQ (mg/kg)	0.3	4.3	<0.3	-	-
			Total PAH (18)	mg/kg	0.8	33	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	-	100
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	84
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	86

PCBs in Soil

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

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE243061.001	LB271471.004	Arochlor 1016	mg/kg	0.2	<0.2	<0.2	-	-
		Arochlor 1221	mg/kg	0.2	<0.2	<0.2	-	-
		Arochlor 1232	mg/kg	0.2	<0.2	<0.2	-	-
		Arochlor 1242	mg/kg	0.2	<0.2	<0.2	-	-
		Arochlor 1248	mg/kg	0.2	<0.2	<0.2	-	-
		Arochlor 1254	mg/kg	0.2	<0.2	<0.2	-	-
		Arochlor 1260	mg/kg	0.2	0.4	<0.2	0.4	105
		Arochlor 1262	mg/kg	0.2	<0.2	<0.2	-	-

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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil (continued)

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE243061.001	LB271471.004		Arochlor 1268	mg/kg	0.2	<0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	-	-
		Surrogates	TCMX (Surrogate)	mg/kg	-	0	0	-	105
SE243061.020	LB271490.004		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	0.4	<0.2	0.4	97
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	-	-
		Surrogates	TCMX (Surrogate)	mg/kg	-	0	0	-	92
SE243061.039	LB271491.004		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	0.4	<0.2	0.4	107
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	-	-
		Surrogates	TCMX (Surrogate)	mg/kg	-	0	0	-	94
SE243092.001	LB271508.025		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	0.4	<0.2	0.4	112
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	-	-
		Surrogates	TCMX (Surrogate)	mg/kg	-	0	0	-	110

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

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

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE243061.001	LB271520.004	Arsenic, As	mg/kg	1	52	4	50	96
		Cadmium, Cd	mg/kg	0.3	45	0.5	50	90
		Chromium, Cr	mg/kg	0.5	52	5.4	50	93
		Copper, Cu	mg/kg	0.5	70	23	50	94
		Nickel, Ni	mg/kg	0.5	49	2.9	50	92
		Lead, Pb	mg/kg	1	220	210	50	34 ⑨
		Zinc, Zn	mg/kg	2	210	170	50	80
SE243061.020	LB271521.004	Arsenic, As	mg/kg	1	53	5	50	97
		Cadmium, Cd	mg/kg	0.3	46	<0.3	50	91
		Chromium, Cr	mg/kg	0.5	56	11	50	90
		Copper, Cu	mg/kg	0.5	67	27	50	80
		Nickel, Ni	mg/kg	0.5	54	9.7	50	88
		Zinc, Zn	mg/kg	2	140	130	50	22 ⑨
SE243061.039	LB271522.004	Arsenic, As	mg/kg	1	53	5	50	97
		Cadmium, Cd	mg/kg	0.3	47	<0.3	50	93
		Chromium, Cr	mg/kg	0.5	51	6.0	50	90
		Copper, Cu	mg/kg	0.5	55	12	50	85
		Nickel, Ni	mg/kg	0.5	50	5.9	50	89
		Lead, Pb	mg/kg	1	50	8	50	84
		Zinc, Zn	mg/kg	2	100	95	50	10 ④
SE243187.001	LB271545.004	Arsenic, As	mg/kg	1	54	5	50	97
		Cadmium, Cd	mg/kg	0.3	46	<0.3	50	92

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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements 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%
SE243187.001	LB271545.004	Chromium, Cr	mg/kg	0.5	54	5.9	50	97
		Copper, Cu	mg/kg	0.5	55	6.4	50	98
		Nickel, Ni	mg/kg	0.5	49	3.2	50	91
		Lead, Pb	mg/kg	1	63	16	50	93
		Zinc, Zn	mg/kg	2	65	18	50	95

TRH (Total Recoverable Hydrocarbons) in Soil

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE243061.001	LB271471.004		TRH C10-C14	mg/kg	20	64	<20	40	121
			TRH C15-C28	mg/kg	45	120	110	40	25 ⑤
			TRH C29-C36	mg/kg	45	100	88	40	31 ⑤
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	290	200	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	230	<210	-	-
		TRH F	TRH >C10-C16	mg/kg	25	67	<25	40	115
		Bands	TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	67	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	170	170	40	-15 ⑤
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-
SE243061.020	LB271490.004		TRH C10-C14	mg/kg	20	48	<20	40	108
			TRH C15-C28	mg/kg	45	63	<45	40	98
			TRH C29-C36	mg/kg	45	<45	<45	40	66
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F	TRH >C10-C16	mg/kg	25	49	<25	40	111
		Bands	TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	49	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	79
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-
SE243061.039	LB271491.004		TRH C10-C14	mg/kg	20	71	55	40	38 ⑤
			TRH C15-C28	mg/kg	45	340	500	40	-416 ⑤
			TRH C29-C36	mg/kg	45	620	1000	40	-1028 ⑤
			TRH C37-C40	mg/kg	100	160	280	-	-
			TRH C10-C36 Total	mg/kg	110	1000	1600	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	1200	1900	-	-
		TRH F	TRH >C10-C16	mg/kg	25	79	67	40	29 ⑤
		Bands	TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	79	67	-	-
			TRH >C16-C34 (F3)	mg/kg	90	780	1300	40	-1205 ⑤
			TRH >C34-C40 (F4)	mg/kg	120	310	540	-	-
SE243092.001	LB271508.025		TRH C10-C14	mg/kg	20	63	<20	40	138
			TRH C15-C28	mg/kg	45	140	77	40	166 ⑤
			TRH C29-C36	mg/kg	45	130	110	40	49 ⑤
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	340	190	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	280	<210	-	-
		TRH F	TRH >C10-C16	mg/kg	25	61	<25	40	134
		Bands	TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	61	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	220	170	40	117
			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%
SE243061.001	LB271509.004	Monocyclic	Benzene	mg/kg	0.1	4.2	<0.1	5	84
		Aromatic	Toluene	mg/kg	0.1	4.7	<0.1	5	94
			Ethylbenzene	mg/kg	0.1	4.5	<0.1	5	90
			m/p-xylene	mg/kg	0.2	8.8	<0.2	10	88
			o-xylene	mg/kg	0.1	4.7	<0.1	5	94
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.6	10.8	10	96
			d8-toluene (Surrogate)	mg/kg	-	9.9	9.5	10	99
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.5	9.7	10	105
		Totals	Total BTEX*	mg/kg	0.6	27	<0.6	-	-
			Total Xylenes*	mg/kg	0.3	13	<0.3	-	-

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 identifer 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%
SE243061.020	LB271511.004	Monocyclic Aromatic	Benzene	mg/kg	0.1	4.1	<0.1	5	82
			Toluene	mg/kg	0.1	4.5	<0.1	5	91
			Ethylbenzene	mg/kg	0.1	4.5	<0.1	5	89
			m/p-xylene	mg/kg	0.2	8.7	<0.2	10	87
			o-xylene	mg/kg	0.1	4.7	<0.1	5	93
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.4	9.1	10	94
			d8-toluene (Surrogate)	mg/kg	-	9.0	7.9	10	90
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.7	7.7	10	97
		Totals	Total BTEX*	mg/kg	0.6	27	<0.6	-	-
			Total Xylenes*	mg/kg	0.3	13	<0.3	-	-
SE243061.039	LB271512.004	Monocyclic Aromatic	Benzene	mg/kg	0.1	3.4	<0.1	5	68
			Toluene	mg/kg	0.1	3.5	<0.1	5	70
			Ethylbenzene	mg/kg	0.1	3.6	<0.1	5	72
			m/p-xylene	mg/kg	0.2	6.8	<0.2	10	68
			o-xylene	mg/kg	0.1	3.6	<0.1	5	72
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.6	11.1	10	76
			d8-toluene (Surrogate)	mg/kg	-	7.2	10.2	10	72
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.5	10.0	10	65 ①
		Totals	Total BTEX*	mg/kg	0.6	21	<0.6	-	-
			Total Xylenes*	mg/kg	0.3	10	<0.3	-	-
SE243187.001	LB271533.004	Monocyclic Aromatic	Benzene	mg/kg	0.1	4.7	<0.1	5	94
			Toluene	mg/kg	0.1	6.0	<0.1	5	120
			Ethylbenzene	mg/kg	0.1	4.9	<0.1	5	98
			m/p-xylene	mg/kg	0.2	9.5	<0.2	10	94
			o-xylene	mg/kg	0.1	5.0	<0.1	5	100
		Polycyclic	Naphthalene (VOC)*	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.0	8.5	10	110
			d8-toluene (Surrogate)	mg/kg	-	12.3	9.5	10	123
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.0	9.2	10	90
		Totals	Total BTEX*	mg/kg	0.6	30	<0.6	-	-
			Total Xylenes*	mg/kg	0.3	14	<0.3	-	-

Volatile Petroleum Hydrocarbons in Soil

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

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE243061.001	LB271509.004		TRH C6-C10	mg/kg	25	72	<25	92.5	77
			TRH C6-C9	mg/kg	20	54	<20	80	67
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.6	10.8	10	96
			d8-toluene (Surrogate)	mg/kg	-	9.9	9.5	10	99
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.5	9.7	-	105
		VPH F Bands	Benzene (F0)	mg/kg	0.1	4.2	<0.1	-	-
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	45	<25	62.5	71
SE243061.020	LB271511.004		TRH C6-C10	mg/kg	25	71	<25	92.5	76
			TRH C6-C9	mg/kg	20	53	<20	80	66
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.4	9.1	10	94
			d8-toluene (Surrogate)	mg/kg	-	9.0	7.9	10	90
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.7	7.7	-	97
		VPH F Bands	Benzene (F0)	mg/kg	0.1	4.1	<0.1	-	-
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	44	<25	62.5	71
SE243061.039	LB271512.004		TRH C6-C10	mg/kg	25	68	<25	92.5	73
			TRH C6-C9	mg/kg	20	62	<20	80	77
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.6	11.1	10	76
			d8-toluene (Surrogate)	mg/kg	-	7.2	10.2	10	72
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.5	10.0	-	65
		VPH F Bands	Benzene (F0)	mg/kg	0.1	3.4	<0.1	-	-
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	47	<25	62.5	74

Volatile Petroleum Hydrocarbons in Water

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

QC Sample	Sample Number	Parameter	Units	LOR

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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Water (continued) — **Method: ME-(AU)-[ENV]AN433**

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE243083.001	LB271699.023		TRH C6-C10	µg/L	50	1000	0	946.63	108
			TRH C6-C9	µg/L	40	880	0	818.71	108
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.2	9.37853931259	-	102
			d8-toluene (Surrogate)	µg/L	-	10.9	9.73167388815	-	109
			Bromofluorobenzene (Surrogate)	µg/L	-	11.6	9.59777696557	-	116
		VPH F	Benzene (F0)	µg/L	0.5		0.011551845	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	760	0	639.67	119

MATRIX SPIKE DUPLICATES

SE243061 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / 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 x SDL / Mean + 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 identifer when outside suggested criteria. Refer to the footnotes section at the

Volatile Petroleum Hydrocarbons in Soil — **Method: ME-(AU)-[ENV]AN433**

QC Sample	Sample Number		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE243187.001	LB271533.004		TRH C6-C10	mg/kg	25	-	85	-	206
			TRH C6-C9	mg/kg	20	-	78	-	205
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	-	11.0	-	200
			d8-toluene (Surrogate)	mg/kg	-	-	12.3	-	200
			Bromofluorobenzene (Surrogate)	mg/kg	-	-	9.0	-	200
		VPH F Bands	Benzene (F0)	mg/kg	0.1	-	4.7	-	-
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	-	55	-	209

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: https://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.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	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 relevant report comments for further information.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client only. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

This test report shall not be reproduced, except in full.

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	Geisiane Torres
Client	EI AUSTRALIA
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009
Telephone	61 2 95160722
Facsimile	(Not specified)
Email	Geisiane.Torres @eiaustralia.com.au
Project	**E25947 600-660 Elizabeth St Redfern**
Order Number	**E25947**
Samples	65

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	**SE243061 R0**
Date Received	09 Feb 2023
Date Reported	21 Feb 2023

COMMENTS

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

TRH/OC/PCB/PAH/OP - The Limit of Reporting (LOR) has been raised due to high moisture factor content of the sample.
No respirable fibres detected in all soil samples using trace analysis technique.
Sample #40: Chrysotile asbestos found in approx 4x3x2mm cement sheet fragment.
Sample #63: Chrysotile asbestos found in approx 10x3x2mm bituminous material.
Sample #72: Chrysotile asbestos found in approx 10x6x3mm bituminous material.
Sample #34-36,60,62,63,71,72: A portion of the sample supplied has been sub-sampled for asbestos analysis in soil according to SGS In-house procedures due to large volume. We therefore cannot guarantee that the sub-sample is representative of the entire sample supplied. SGS Industries and Environment recommends supplying approximately 50-100g of sample in a separate container.
Asbestos analysed by Approved Identifier Ravee Sivasubramaniam and Yusuf Kuthpudin

SIGNATORIES

Yusuf KUTHPUDIN
Asbestos Analyst

RESULTS

Fibre Identification in soil — Method AS4964/AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE243061.001	TP401_0.1-0.2	Soil	135g Sand, Soil, Rocks	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE243061.002	TP401_0.5-0.6	Soil	133g Sand, Soil, Rocks	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.003	TP401_1.0-1.1	Soil	163g Clay, Sand, Soil	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.004	TP402_0.1-0.2	Soil	136g Sand, Soil, Rocks	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.005	TP402_0.5-0.6	Soil	129g Sand, Soil, Rocks	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.006	TP402_1.0-1.1	Soil	100g Sand, Soil, Rocks	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE243061.007	TP403_0.1-0.2	Soil	135g Sand, Soil, Rocks	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.008	TP403_0.5-0.6	Soil	183g Sand, Soil, Rocks	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE243061.009	TP403_1.0-1.1	Soil	31g Sand, Soil, Rocks, Plant Matter	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE243061.010	TP404_0.1-0.2	Soil	154g Sand, Soil, Rocks	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.011	TP404_0.5-0.6	Soil	167g Sand, Soil, Rocks	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.012	TP404_1.0-1.1	Soil	154g Sand, Soil, Rocks	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.013	TP405_0.1-0.2	Soil	161g Sand, Soil, Rocks	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE243061.014	TP405_0.5-0.6	Soil	121g Sand, Soil, Rocks	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE243061.015	TP405_1.0-1.1	Soil	20g Sand, Soil, Rocks, Plant Matter	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE243061.016	TP406_0.1-0.2	Soil	147g Sand, Soil, Rocks	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.017	TP406_0.5-0.6	Soil	159g Sand, Soil, Rocks	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.018	TP406_1.0-1.1	Soil	132g Sand, Soil, Rocks	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.019	TP407_0.1-0.2	Soil	152g Sand, Rocks	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.020	TP407_0.5-0.6	Soil	128g Sand, Rocks	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.021	TP407_1.0-1.1	Soil	19g Sand, Soil, Plant Matter	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE243061.022	TP408_0.1-0.2	Soil	121g Sand, Soil, Rocks	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.023	TP408_0.5-0.6	Soil	173g Sand	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.024	TP408_1.0-1.1	Soil	28g Sand, Soil, Plant Matter	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE243061.025	TP409_0.1-0.2	Soil	147g Sand, Soil, Rocks	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE243061.026	TP409_0.5-0.6	Soil	139g Sand, Rocks	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.027	TP409_1.0-1.1	Soil	195g Sand, Soil, Rocks	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01

RESULTS

Fibre Identification in soil — Method AS4964/AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE243061.028	TP410_0.1-0.2	Soil	117g Sand, Soil, Plant Matter	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE243061.029	TP410_0.5-0.6	Soil	201g Clay, Soil	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.030	TP410_1.0-1.1	Soil	113g Sand, Soil, Rocks	06 Feb 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE243061.031	TP411_0.1-0.2	Soil	139g Sand	07 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.032	TP411_0.5-0.6	Soil	145g Sand	07 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.033	TP411_1.0-1.1	Soil	143g Clay, Sand, Rocks	07 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.034	TP412_0.1-0.2	Soil	182g Sand, Rocks	07 Feb 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE243061.035	TP412_0.5-0.6	Soil	210g Sand, Rocks	07 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.036	TP412_1.0-1.1	Soil	280g Sand, Rocks	07 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.037	TP413_0.1-0.2	Soil	121g Sand, Soil, Rocks	07 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.038	TP413_0.5-0.6	Soil	164g Sand, Soil, Rocks	07 Feb 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE243061.039	TP413_1.0-1.1	Soil	45g Sand, Soil, Rocks, Plant Matter	07 Feb 2023	No Asbestos Found at RL of 0.1g/kg Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE243061.040	TP414_0.1-0.2	Soil	190g Sand, Soil, Rocks	07 Feb 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE243061.041	TP414_0.5-0.6	Soil	182g Sand, Soil, Rocks	07 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.042	TP414_1.0-1.1	Soil	277g Sand, Soil, Rocks	07 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.043	TP415_0.1-0.2	Soil	126g Sand, Soil, Rocks	07 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.044	TP415_0.5-0.6	Soil	151g Sand, Soil, Rocks	07 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.045	TP415_1.0-1.1	Soil	163g Sand, Soil, Rocks	07 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.046	TP416_0.1-0.2	Soil	163g Sand, Soil, Rocks	07 Feb 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE243061.047	TP416_0.5-0.6	Soil	157g Sand, Soil, Rocks	07 Feb 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE243061.048	TP416_1.0-1.1	Soil	173g Sand, Soil, Rocks	07 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.049	TP417_0.1-0.2	Soil	169g Sand, Soil, Rocks	07 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.050	TP417_0.5-0.6	Soil	214g Sand, Soil, Rocks, Concrete	07 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.051	TP417_1.0-1.1	Soil	232g Sand, Soil, Rocks	07 Feb 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE243061.052	TP418_0.1-0.2	Soil	128g Sand, Soil, Rocks	07 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.053	TP418_0.5-0.6	Soil	209g Sand, Soil, Rocks	07 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.054	TP418_1.0-1.1	Soil	90g Sand, Soil, Plant Matter	07 Feb 2023	No Asbestos Found at RL of 0.1g/kg Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01

RESULTS

Fibre Identification in soil — Method AS4964/AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE243061.055	TP419_0.1-0.2	Soil	135g Sand, Soil, Rocks	07 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.056	TP419_0.5-0.6	Soil	179g Sand, Rocks	07 Feb 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE243061.057	TP419_1.0-1.1	Soil	191g Sand, Soil, Rocks	07 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.058	BH501M_0.3-0.45	Soil	447g Sand, Soil, Rocks	08 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.059	BH501M_1.0-1.1	Soil	322g Sand, Soil, Rocks	08 Feb 2023	No Asbestos Found at RL of 0.1g/kg Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE243061.060	BH502M_0.4-0.6	Soil	192g Sand, Soil, Rocks	08 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.061	BH502M_1.0-1.1	Soil	301g Sand, Soil, Rocks, Bitumen	08 Feb 2023	No Asbestos Found at RL of 0.1g/kg	<0.01
SE243061.062	BH503_0.4-0.5	Soil	136g Clay, Sand, Soil, Rocks	08 Feb 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE243061.063	BH503_0.9-1.0	Soil	120g Clay, Sand, Rocks	08 Feb 2023	Chrysotile Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	>0.01
SE243061.071	BH501M_1.5-1.6	Soil	100g Clay, Sand, Soil, Rocks	08 Feb 2023	No Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	<0.01
SE243061.072	BH503M_1.5-1.6	Soil	119g Clay, Sand, Soil, Bitumen	08 Feb 2023	Chrysotile Asbestos Found at RL of 0.1g/kg Organic Fibres Detected	>0.01

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN602/AS4964	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602/AS4964	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602/AS4964	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection/reporting limit (RL) of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602/AS4964	The sample can be reported “no asbestos found at the reporting limit (RL) of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service .
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.
			***	-	Indicates that both * and ** apply.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy , including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos -containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company 's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client only. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .

This test report shall not be reproduced, except in full.

source: Sydney_20230214105037d2.pdf page: 1 SGS Ref: SE243061_COC

E-MAILED
13/2/23 @ 5:24 pm

Sheet 1 of 3

Site: 600-660 ELIZABETH ST, REDFERN

Project No: E25947

Laboratory:

SGS Australia
Unit 16, 33 Maddox Street,
ALEXANDRIA NSW 2015
P: 02 8594 0400 F: 02 8594 0499

Sample ID	Laboratory ID	Container Type	Sampling Date	Sampling Time	Sample Matrix: SOIL	WATER	0.45 µm field filtered	OTHER	Analysis: HM[A] /TRH/BTEX/PAHs OCP/OP/PCB/Asbestos	HM[A] /TRH/BTEX/PAHs	HM[A] /TRH/BTEX	BTEX	VOCs	Asbestos	Asbestos Quantification	Excavated Natural Material (ENM) Suite	ENM Suite - Stockpile discrete (TRH/BTEX/PAHs)	ENM Suite - Stockpile composite (HM[A] /pH / EC / Foreign Materials)	Dewatering Suite	pH / pH peroxide	sPOCAS	Chromium Reducible Sulfur (CrS)	PFAS	pH / CEC (cation exchange)	pH / EC (electrical conductivity)	Sulphate / Chloride	Lead	TCLP HM[B] / PAH
TP																												
TP01_0.1-0.2	1	TP/ZLB	6/2/23	AM/PM	X				X																			
TP01_0.5-0.6	2								X																			
TP01_1.0-1.1	3								X																			
TP02_0.1-0.2	4								X																			
TP02_0.5-0.6	5								X																			
TP02_1.0-1.1	6								X																			
TP03_0.1-0.2	7								X																			
TP03_0.5-0.6	8								X																			
TP03_1.0-1.1	9								X																			
TP04_0.1-0.2	10								X																			
TP04_0.5-0.6	11								X																			
TP04_1.0-1.1	12								X																			

SGS EHS Sydney COC
SE243061

Comments

HM[A]
Arsenic
Cadmium
Chromium
Copper
Lead
Mercury
Nickel
Zinc

HM[B]
Arsenic
Cadmium
Chromium
Lead
Mercury
Nickel

Dewatering Suite
pH & EC
TDS / TDU
Hardness
Total Cyanide
Metals (Al, As, Cd, Cr, Cu, Pb, Hg, Ni, Zn)
TRH (F1, F2, F3, F4)
BTEX
PAH
Total Phenol

LABORATORY TURNAROUND
- [x] Standard
- [ ] 24 Hours
- [ ] 48 Hours
- [ ] 72 Hours
- [ ] Other____

Container Type:
V = solvent washed, acid rinsed, Tefton sealed glass jar
A = solvent washed, acid rinsed glass bottle
P = natural HDPE plastic bottle
G = glass vial, Tefton Septum
ZLB = Zip-Lock Bag BB = Bulk Bag

eiaustralia
Contamination | Remediation | Geotechnical

Suite 6.01, 55 Miller Street,
PYRMONT NSW 2009
Ph: 9516 0722
lab@eiaustralia.com.au

COC June 2021 FORM v.5 - SGS

Investigator: I attest that these samples were collected in accordance with standard EI field sampling procedures.

Report with EI Waste Classification Table [x]

Sampler's Name (EI): GT	Received by (SGS):	Sampler's Comments:
Print: GEISIANE TORRES	Print:	cc. SHARON LI
Signature:	Signature:	SERGIO RABOSKIRA
Date: 13/02/23	Date: 09/02/23 @ 2:05	

IMPORTANT:
Please e-mail laboratory results to: lab@eiaustralia.com.au

heet 2 of 8

e: 600-660 ELIZABETH ST, REDFERN

Project No: E05947

Laboratory:

SGS Australia
Unit 16, 33 Maddox Street,
ALEXANDRIA NSW 2015
P: 02 8594 0400 F: 02 8594 0499

Sample ID	Laboratory ID	Container Type	Sampling Date	Sampling Time	Sample Matrix: SOIL	WATER	0.45 µm field filtered	OTHER	Analysis: HM [A] /TRH/BTEX/PAHs OCP/OP/PCB/Asbestos	HM [A] /TRH/BTEX/PAHs	HM [A] /TRH/BTEX	BTEX	VOCs	Asbestos	Asbestos Quantification	Excavated Natural Material (ENM) Suite	ENM Suite - Stockpile discrete (TRH/BTEX/PAHs)	ENM Suite - Stockpile composite (HM [A] /pH / EC / Foreign Materials)	Dewatering Suite	pH / pH peroxide	sPOCAS	Chromium Reducible Sulfur (CrS)	PFAS	pH / CEC (cation exchange)	pH / EC (electrical conductivity)	Sulphate / Chloride	Lead	TCLP HM [B] / PAH
TP																												
BH05_0.1-0.2	13	P/ZLB		AM/PM	X				X																			
BH05_0.5-0.6	14								X																			
BH05_1.0-1.1	15								X																			
BH06_0.1-0.2	16								X																			
BH06_0.5-0.6	17								X																			
BH06_1.0-1.1	18								X																			
BH07_0.1-0.2	19								X																			
BH07_0.5-0.6	20								X																			
BH07_1.0-1.1	21								X																			
BH08_0.1-0.2	22								X																			
BH08_0.5-0.6	23								X																			
BH08_1.0-1.1	24								X																			

Comments

HM [A]
Arsenic
Cadmium
Chromium
Copper
Lead
Mercury
Nickel
Zinc

HM [B]
Arsenic
Cadmium
Chromium
Lead
Mercury
Nickel

Dewatering Suite
pH & EC
TDS / TDU
Hardness
Total Cyanide
Metals (Al, As, Cd, Cr, Cu, Pb, Hg, Ni, Zn)
TRH (F1, F2, F3, F4)
BTEX
PAH
Total Phenol

LABORATORY TURNAROUND

- [x] Standard
- [ ] 24 Hours
- [ ] 48 Hours
- [ ] 72 Hours
- [ ] Other____

ontainer Type:
= solvent washed, acid rinsed, Tefton sealed glass jar
= solvent washed, acid rinsed glass bottle
= natural HDPE plastic bottle
C = glass vial, Tefton Septum
.B = Zip-Lock Bag BB = Bulk Bag

eiaustralia
Contamination | Remediation | Geotechnical

Suite 6.01, 55 Miller Street,
PYRMONT NSW 2009
Ph: 9516 0722
lab@eiaustralia.com.au

COC June 2021 FORM v.5 - SGS

Investigator: I attest that these samples were collected in accordance with standard EI field sampling procedures.

Report with EI Waste Classification Table ☒

Sampler's Name (EI): GT	Received by (SGS):	Sampler's Comments:
Print: GEISLANE TORRES	Print:	cc. SHARON Li
Signature:	Signature: B. Rubarca	SERGIO RAPOSEIRA
Date: 13/2/23	Date: 09/02/23 @ 2:05	

IMPORTANT:
Please e-mail laboratory results to: lab@eiaustralia.com.au

heet 3 o. 8

te: 600-660 Elizabeth ST, Redfern

Project No: ES947

Laboratory: SGS Australia
Unit 16, 33 Maddox Street,
ALEXANDRIA NSW 2015
P: 02 8594 0400 F: 02 8594 0499

Sample ID	Laboratory ID	Container Type	Sampling Date	Sampling Time	SOIL	WATER	0.45 µm field filtered	OTHER	HM [A] /TRH/BTEX/PAHs OCP/OP/PCB/Asbestos	HM [A] /TRH/BTEX/PAHs	HM [A] /TRH/BTEX	BTEX	VOCs	Asbestos	Asbestos Quantification	Excavated Natural Material (ENM) Suite	ENM Suite - Stockpile discrete (TRH/BTEX/PAHs)	ENM Suite - Stockpile composite (HM [A] /pH / EC / Foreign Materials)	Dewatering Suite	pH / pH peroxide	sPOCAS	Chromium Reducible Sulfur (CrS)	PFAS	pH / CEC (cation exchange)	pH / EC (electrical conductivity)	Sulphate / Chloride	Lead	TCLP HM [B] / PAH
19																												
PH09_0.1-0.2	25	P/ZLB		AM/PM	X				X																			
PH09_0.5-0.6	26								X																			
PH09_1.0-1.1	27								X																			
PH10_0.1-0.2	28								X																			
PH10_0.5-0.6	29								X																			
PH10_1.0-1.1	30								X																			
PH11_0.1-0.2	31								X																			
PH11_0.5-0.6	32								X																			
PH11_1.0-1.1	33								X																			
PH12_0.1-0.2	34								X																			
PH12_0.5-0.6	35								X																			
PH12_1.0-1.1	36								X																			

Comments

HM [A]
Arsenic
Cadmium
Chromium
Copper
Lead
Mercury
Nickel
Zinc

HM [B]
Arsenic
Cadmium
Chromium
Lead
Mercury
Nickel

Dewatering Suite
pH & EC
TDS / TDU
Hardness
Total Cyanide
Metals (Al, As, Cd, Cr, Cu, Pb, Hg, Ni, Zn)
TRH (F1, F2, F3, F4)
BTEX
PAH
Total Phenol

LABORATORY TURNAROUND

- [x] Standard
- [ ] 24 Hours
- [ ] 48 Hours
- [ ] 72 Hours
- [ ] Other____

ntainer Type:
= solvent washed, acid rinsed, Tefton sealed glass jar
= solvent washed, acid rinsed glass bottle
= natural HDPE plastic bottle
= glass vial, Tefton Septum
.B = Zip-Lock Bag BB = Bulk Bag

Investigator: I attest that these samples were collected in accordance with standard EI field sampling procedures.

Report with EI Waste Classification Table [x]

Sampler's Name (EI): GT	Received by (SGS):	Sampler's Comments:
Print GEISLANE TORRES	Print	CC: Sharon Li
Signature	Signature	Sergio Barbosa
Date 9/2/23	Date 09/02/23 @2:05	

IMPORTANT:
Please e-mail laboratory results to: lab@eiaustralia.com.au

eiaustralia
Contamination | Remediation | Geotechnical
Suite 6.01, 55 Miller Street,
PYRMONT NSW 2009
Ph: 9516 0722
lab@eiaustralia.com.au

heet 4 of 8

ite: 6000-6600 ELIZABETH ST, REDFERN

Project No: E25947

aboratory: SGS Australia
Unit 16, 33 Maddox Street,
ALEXANDRIA NSW 2015
P: 02 8594 0400 F: 02 8594 0499

Sample ID	Laboratory ID	Container Type	Sampling Date	Sampling Time	SOIL	WATER	0.45 µm field filtered	OTHER	HM [A] /TRH/BTEX/PAHs OCP/OP/PCB/Asbestos	HM [A] /TRH/BTEX/PAHs	HM [A] /TRH/BTEX	BTEX	VOCs	Asbestos	Asbestos Quantification	Excavated Natural Material (ENM) Suite	ENM Suite - Stockpile discrete (TRH/BTEX/PAHs)	ENM Suite - Stockpile composite (HM [A] /pH / EC / Foreign Materials)	Dewatering Suite	pH / pH peroxide	sPOCAS	Chromium Reducible Sulfur (CrS)	PFAS	pH / CEC (cation exchange)	pH / EC (electrical conductivity)	Sulphate / Chloride	Lead	TCLP HM [B] / PAH
1P																												
TP13_0.1-0.2	37	Z/LB		AM/PM	X				X																			
P13_0.5-0.6	38								X																			
P13_1.0-1.1	39								X																			
P14_0.1-0.2	40								X																			
P14_0.5-0.6	41								X																			
P14_1.0-1.1	42								X																			
P15_0.1-0.2	43								X																			
P15_0.5-0.6	44								X																			
P15_1.0-1.1	45								X																			
TP16_0.1-0.2	46								X																			
TP16_0.5-0.6	47								X																			
TP16_1.0-1.1	48								X																			

Comments

HM [A]
Arsenic
Cadmium
Chromium
Copper
Lead
Mercury
Nickel
Zinc

HM [B]
Arsenic
Cadmium
Chromium
Lead
Mercury
Nickel

Dewatering Suite
pH & EC
TDS / TDU
Hardness
Total Cyanide
Metals (Al, As, Cd, Cr, Cu, Pb, Hg, Ni, Zn)
TRH (F1, F2, F3, F4)
BTEX
PAH
Total Phenol

LABORATORY TURNAROUND

- [X] Standard
- [ ] 24 Hours
- [ ] 48 Hours
- [ ] 72 Hours
- [ ] Other_____

ontainer Type:
= solvent washed, acid rinsed, Tefton sealed glass jar
= solvent washed, acid rinsed glass bottle
= natural HDPE plastic bottle
C = glass vial, Tefton Septum
LB = Zip-Lock Bag BB = Bulk Bag

Investigator: I attest that these samples were collected in accordance with standard EI field sampling procedures.

Report with EI Waste Classification Table [X]

Sampler's Name (EI): GT	Received by (SGS):	Sampler's Comments:
Print GEISIANE TORRES	Print	CC: Shaow Li, SERGIO RAPOSEIRA
Signature	Signature S. Subaraj	
Date 13/2/23	Date 09/02/23 @ 2:05	

IMPORTANT:
Please e-mail laboratory results to: lab@eiaustralia.com.au

eiaustralia
Contamination | Remediation | Geotechnical
Suite 6.01, 55 Miller Street,
PYRMONT NSW 2009
Ph: 9516 0722
lab@eiaustralia.com.au

Sheet 5 of 8

e: 600-660 Elizabeth St, Redfern

Project No: E35947

Laboratory: SGS Australia
Unit 16, 33 Maddox Street,
ALEXANDRIA NSW 2015
P: 02 8594 0400 F: 02 8594 0499

Sample ID	Laboratory ID	Container Type	Sampling Date	Sampling Time	Sample Matrix: SOIL	WATER	0.45 µm field filtered	OTHER	Analysis: HM [A] /TRH/BTEX/PAHs OCP/OP/PCB/Asbestos	HM [A] /TRH/BTEX/PAHs	HM [A] /TRH/BTEX	BTEX	VOCs	Asbestos	Asbestos Quantification	Excavated Natural Material (ENM) Suite	ENM Suite - Stockpile discrete (TRH/BTEX/PAHs)	ENM Suite - Stockpile composite (HM [A] /pH / EC / Foreign Materials)	Dewatering Suite	pH / pH peroxide	sPOCAS	Chromium Reducible Sulfur (CrS)	PFAS	pH / CEC (cation exchange)	pH / EC (electrical conductivity)	Sulphate / Chloride	Lead	TCLP HM [B] / PAH
TP																												
P4/17_0.1-0.2	49	P/ZLB		AM/PM	X				X																			
P4/17_0.5-0.6	50								X																			
P4/17_1.0-1.1	51								X																			
P4/18_0.1-0.2	52								X																			
P4/18_0.5-0.6	53								X																			
P4/18_1.0-1.1	54								X																			
P4/19_0.1-0.2	55								X																			
P4/19_0.5-0.6	56								X																			
P4/19_1.0-1.1	57								X																			
HSDM_0.3-0.5	58								X																			
HSDM_1.0-1.1	59								X																			
HSDM_0.4-0.6	60								X																			

Comments

HM [A]
Arsenic
Cadmium
Chromium
Copper
Lead
Mercury
Nickel
Zinc

HM [B]
Arsenic
Cadmium
Chromium
Lead
Mercury
Nickel

Dewatering Suite
pH & EC
TDS / TDU
Hardness
Total Cyanide
Metals (Al, As, Cd, Cr, Cu, Pb, Hg, Ni, Zn)
TRH (F1, F2, F3, F4)
BTEX
PAH
Total Phenol

LABORATORY TURNAROUND

- [X] Standard
- [ ] 24 Hours
- [ ] 48 Hours
- [ ] 72 Hours
- [ ] Other____

ntainer Type:
: solvent washed, acid rinsed, Tefton sealed glass jar
= solvent washed, acid rinsed glass bottle
= natural HDPE plastic bottle
; = glass vial, Tefton Septum
B = Zip-Lock Bag BB = Bulk Bag

Investigator: I attest that these samples were collected in accordance with standard EI field sampling procedures.

Report with EI Waste Classification Table [X]

Sampler's Name (EI): GT	Received by (SGS):
Print GEISIANE TORRES	Print
Signature	Signature S. Subaraj
Date 13/2/23	Date 09/02/23 @ 2:05

Sampler's Comments:

cc: Sharon Li
Sergio Ribeiro

IMPORTANT:
Please e-mail laboratory results to: lab@eiaustralia.com.au

eiaustralia
Contamination | Remediation | Geotechnical

Suite 6.01, 55 Miller Street,
PYRMONT NSW 2009
Ph: 9516 0722
lab@eiaustralia.com.au

COC June 2021 FORM v.5 - SGS

Sheet 6 of 8

Site: 600-660 ELIZABETH ST, REDFERN

Project No: E25947

Laboratory: SGS Australia
Unit 16, 33 Maddox Street,
ALEXANDRIA NSW 2015
P: 02 8594 0400 F: 02 8594 0499

Sample ID	Laboratory ID	Container Type	Sampling Date	Sampling Time	SOIL	WATER	0.45 μm field filtered	OTHER	HM ᴬ /TRH/BTEX/PAHs OCP/OP/PCB/Asbestos	HM ᴬ /TRH/BTEX/PAHs	HM ᴬ /TRH/BTEX	BTEX	VOCs	Asbestos	Asbestos Quantification	Excavated Natural Material (ENM) Suite	ENM Suite - Stockpile discrete (TRH/BTEX/PAHs)	ENM Suite - Stockpile composite (HM ᴬ /pH / EC / Foreign Materials)	Dewatering Suite	pH / pH peroxide	sPOCAS	Chromium Reducible Sulfur (CrS)	PFAS	pH / CEC (cation exchange)	pH / EC (electrical conductivity)	Sulphate / Chloride	HOLD	TCLP HM ᴮ / PAH
HS04_1.0-1.1	61	J/ZLB		AM/PM	X				X																		X	
JHS03_0.4-0.5	62								X																		X	
HS03_0.9-1.0	63								X																		X	
QD1	64										X																	
QD2																												
QD3	65										X																	
QD4	66										X																	
QD5																												
QD6	67										X																	
QR	68	S,P,ZNC				X					X																	
QRB		S,P,ZNC				X																					X	
TB	69	LAB PREPARED										X																
TS	70	LAB PREPARED										X																

Comments

HM ᴬ: Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Zinc

HM ᴮ: Arsenic, Cadmium, Chromium, Lead, Mercury, Nickel

Dewatering Suite: pH & EC, TDS / TDU, Hardness, Total Cyanide, Metals (Al, As, Cd, Cr, Cu, Pb, Hg, Ni, Zn), TRH (F1, F2, F3, F4), BTEX, PAH, Total Phenol

LABORATORY TURNAROUND

- [X] Standard
- [ ] 24 Hours
- [ ] 48 Hours
- [ ] 72 Hours
- [ ] Other_____

Container Type:
J = solvent washed, acid rinsed, Teflon sealed glass jar
= solvent washed, acid rinsed glass bottle
= natural HDPE plastic bottle
C = glass vial, Teflon Septum
ZLB = Zip-Lock Bag BB = Bulk Bag

Investigator: I attest that these samples were collected in accordance with standard EI field sampling procedures.

Report with EI Waste Classification Table [X]

Sampler's Name (EI): GT	Received by (SGS):
Print: GEISIANE TORRES	Print
Signature: [signature]	Signature: [signature]
Date: 13/2/23	Date: 09/02/23 @ 2:05

Sampler's Comments: cc: Sharon Li, SERGIO RAPOSEIRA

IMPORTANT:
Please e-mail laboratory results to: lab@eiaustralia.com.au

eiaustralia
Contamination | Remediation | Geotechnical
Suite 6.01, 55 Miller Street,
PYRMONT NSW 2009
Ph: 9516 0722
lab@eiaustralia.com.au

Sheet 2 of 2

Site: 605 606 ELIZABETH ST REDFERN

Project No: E25948

Laboratory:

Sample ID	Laboratory ID	Container Type	Sampling Date	Sampling Time	SOIL	WATER	0.45 µm field filtered	OTHER	HM [A] /TRH/BTEX/PAHs OCP/OP/PCB/Asbestos	HM [A] /TRH/BTEX/PAHs	HM [A] /TRH/BTEX	BTEX	VOCs	Asbestos	Asbestos Quantification	Excavated Natural Material (ENM) Suite	Dewatering Suite	pH / pH peroxide	sPOCAS	Chromium Reducible Sulfur (CrS)	PFAS	pH / CEC (cation exchange)	pH / EC (electrical conductivity)	Sulphate / Chloride	Heavy Metal	Hold	TCLP HM [B] / PAH
TP101_1.5-1.6		ZLB	8/2/2023	AM	X																				X	
TP102_1.5-1.6																									X	
TP103_1.5-1.6																									X	
TP104_1.5-1.6																									X	
TP105_1.5-1.6																									X	
TP106_1.5-1.6																									X	
TP107_1.5-1.6																									X	
TP108_1.5-1.6																									X	
TP109_1.5-1.6																									X	
TP110_1.5-1.6																									X	
TP111_1.5-1.6																									X	
TP112_1.5-1.6																									X	

Comments

HM [A]
Arsenic
Cadmium
Chromium
Copper
Lead
Mercury
Nickel
Zinc

HM [B]
Arsenic
Cadmium
Chromium
Lead
Mercury
Nickel

Dewatering Suite
pH & EC
TDS / TDU
Hardness
Total Cyanide
Metals (Al, As, Cd, Cr, Cu, Pb, Hg, Ni, Zn)
TRH (F1, F2, F3, F4)
BTEX
PAH

LABORATORY TURNAROUND

- [X] Standard
- [ ] 24 Hours
- [ ] 48 Hours
- [ ] 72 Hours
- [ ] Other____

Container Type:
J = solvent washed, acid rinsed, Tefton sealed glass jar
S = solvent washed, acid rinsed glass bottle
P = natural HDPE plastic bottle
VC = glass vial, Tefton Septum
ZLB = Zip-Lock Bag

eiaustralia
Suite 6.01, 55 Miller Street,
PYRMONT NSW 2009
Ph: 9516 0722
lab@eiaustralia.com.au

COC June 2021 FORM v.5 - Envirolab

Investigator: I attest that these samples were collected in accordance with standard EI field sampling procedures.

Sampler's Name (EI): GT	Received by (Envirolab):
Print Gerisiane Torres	Print
Signature	Signature
Date 13/2/23	Date 09/02/23 @ 2:05

IMPORTANT:
Please e-mail laboratory results to: lab@eiaustralia.com.au

Report with EI Waste Classification Table [X]

Sampler's Comments:
cc: SHARON LI
SERGIO CABRERA

Sheet 2 of 2

Site: 600-606 Elizabeth St - Redfern

Project No: E05447

Laboratory:

Sample ID	Laboratory ID	Container Type	Sampling Date	Sampling Time	SOIL	WATER	0.45 µm field filtered	OTHER	HM [A] /TRH/BTEX/PAHs OCP/OP/PCB/Asbestos	HM [A] /TRH/BTEX/PAHs	HM [A] /TRH/BTEX	BTEX	VOCs	Asbestos	Asbestos Quantification	Excavated Natural Material (ENM) Suite	Dewatering Suite	pH / pH peroxide	sPOCAS	Chromium Reducible Sulfur (CrS)	PFAS	pH / CEC (cation exchange)	pH / EC (electrical conductivity)	Sulphate / Chloride	Heavy Metal	Hold	TCLP HM [B] / PAH
TP413_1.5-1.6			07/02/2023	AM/PM	✓																					X	
TP414_1.5-1.6																										X	
TP415_1.5-1.6																										X	
TP416_1.5-1.6																										X	
TP417_1.5-1.6																										X	
TP418_1.5-1.6																										X	
TP419_1.5-1.6																										X	
BH501_1.5-1.6	71								X																		
BH503_1.5-1.6	72	✓		✓	✓				X																		

Comments

HM [A]
Arsenic
Cadmium
Chromium
Copper
Lead
Mercury
Nickel
Zinc

HM [B]
Arsenic
Cadmium
Chromium
Lead
Mercury
Nickel

Dewatering Suite
pH & EC
TDS / TDU
Hardness
Total Cyanide
Metals (Al, As, Cd, Cr, Cu, Pb, Hg, Ni, Zn)
TRH (F1, F2, F3, F4)
BTEX
PAH

LABORATORY TURNAROUND

- [X] Standard
- [ ] 24 Hours
- [ ] 48 Hours
- [ ] 72 Hours
- [ ] Other_____

Container Type:
J = solvent washed, acid rinsed, Tefton sealed glass jar
S = solvent washed, acid rinsed glass bottle
P = natural HDPE plastic bottle
VC = glass vial, Tefton Septum
ZLB = Zip-Lock Bag

eiaustralia
Suite 6.01, 55 Miller Street,
PYRMONT NSW 2009
Ph: 9516 0722
lab@eiaustralia.com.au

Investigator: I attest that these samples were collected in accordance with standard EI field sampling procedures.

Sampler's Name (EI): GT	Received by (Envirolab):
Print Geisiane Torres	*Print*
Signature	*Signature*
Date 13/02/23	*Date* 09/02/23 @ 2:05

IMPORTANT:
Please e-mail laboratory results to: lab@eiaustralia.com.au

Report with EI Waste Classification Table [X]

Sampler's Comments:
cc: SHARON LI
SERGIO RAPOSEIRA

SAMPLE RECEIPT ADVICE

SE243061

CLIENT DETAILS

Contact	Geisiane Torres
Client	EI AUSTRALIA
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009
Telephone	61 2 95160722
Facsimile	(Not specified)
Email	Geisiane.Torres @eiaustralia.com.au
Project	**E25947 600-660 Elizabeth St Redfern**
Order Number	**E25947**
Samples	72

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	Thu 9/2/2023
Report Due	Tue 21/2/2023
SGS Reference	**SE243061**

SUBMISSION DETAILS

This is to confirm that 72 samples were received on Thursday 9/2/2023. Results are expected to be ready by COB Tuesday 21/2/2023. Please quote SGS reference SE243061 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Sample counts by matrix	71 Soil, 1 Water	Type of documentation received	COC
Date documentation received	13/2/2023@5:24pm	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	10.3°C
Sample container provider	SGS	Turnaround time requested	Standard
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes
Complete documentation received	Yes		

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

COMMENTS

21 Soil and 1 Water have been placed on hold as no tests have been assigned for it . These samples will not be processed.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE243061

CLIENT DETAILS

Client EI AUSTRALIA

Project E25947 600-660 Elizabeth St Redfern

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Total Recoverable Elements in Soil/Waste	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	TP401_0.1-0.2	30	14	26	11	7	10	11	7
002	TP401_0.5-0.6	30	14	26	11	7	10	11	7
003	TP401_1.0-1.1	30	14	26	11	7	10	11	7
004	TP402_0.1-0.2	30	14	26	11	7	10	11	7
005	TP402_0.5-0.6	30	14	26	11	7	10	11	7
006	TP402_1.0-1.1	30	14	26	11	7	10	11	7
007	TP403_0.1-0.2	30	14	26	11	7	10	11	7
008	TP403_0.5-0.6	30	14	26	11	7	10	11	7
009	TP403_1.0-1.1	30	14	26	11	7	10	11	7
010	TP404_0.1-0.2	30	14	26	11	7	10	11	7
011	TP404_0.5-0.6	30	14	26	11	7	10	11	7
012	TP404_1.0-1.1	30	14	26	11	7	10	11	7
013	TP405_0.1-0.2	30	14	26	11	7	10	11	7
014	TP405_0.5-0.6	30	14	26	11	7	10	11	7
015	TP405_1.0-1.1	30	14	26	11	7	10	11	7
016	TP406_0.1-0.2	30	14	26	11	7	10	11	7
017	TP406_0.5-0.6	30	14	26	11	7	10	11	7
018	TP406_1.0-1.1	30	14	26	11	7	10	11	7
019	TP407_0.1-0.2	30	14	26	11	7	10	11	7
020	TP407_0.5-0.6	30	14	26	11	7	10	11	7
021	TP407_1.0-1.1	30	14	26	11	7	10	11	7
022	TP408_0.1-0.2	30	14	26	11	7	10	11	7
023	TP408_0.5-0.6	30	14	26	11	7	10	11	7
024	TP408_1.0-1.1	30	14	26	11	7	10	11	7

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 .

SAMPLE RECEIPT ADVICE

SE243061

CLIENT DETAILS

Client EI AUSTRALIA

Project E25947 600-660 Elizabeth St Redfern

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Total Recoverable Elements in Soil/Waste	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
025	TP409_0.1-0.2	30	14	26	11	7	10	11	7
026	TP409_0.5-0.6	30	14	26	11	7	10	11	7
027	TP409_1.0-1.1	30	14	26	11	7	10	11	7
028	TP410_0.1-0.2	30	14	26	11	7	10	11	7
029	TP410_0.5-0.6	30	14	26	11	7	10	11	7
030	TP410_1.0-1.1	30	14	26	11	7	10	11	7
031	TP411_0.1-0.2	30	14	26	11	7	10	11	7
032	TP411_0.5-0.6	30	14	26	11	7	10	11	7
033	TP411_1.0-1.1	30	14	26	11	7	10	11	7
034	TP412_0.1-0.2	30	14	26	11	7	10	11	7
035	TP412_0.5-0.6	30	14	26	11	7	10	11	7
036	TP412_1.0-1.1	30	14	26	11	7	10	11	7
037	TP413_0.1-0.2	30	14	26	11	7	10	11	7
038	TP413_0.5-0.6	30	14	26	11	7	10	11	7
039	TP413_1.0-1.1	30	14	26	11	7	10	11	7
040	TP414_0.1-0.2	30	14	26	11	7	10	11	7
041	TP414_0.5-0.6	30	14	26	11	7	10	11	7
042	TP414_1.0-1.1	30	14	26	11	7	10	11	7
043	TP415_0.1-0.2	30	14	26	11	7	10	11	7
044	TP415_0.5-0.6	30	14	26	11	7	10	11	7
045	TP415_1.0-1.1	30	14	26	11	7	10	11	7
046	TP416_0.1-0.2	30	14	26	11	7	10	11	7
047	TP416_0.5-0.6	30	14	26	11	7	10	11	7
048	TP416_1.0-1.1	30	14	26	11	7	10	11	7

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 .

SAMPLE RECEIPT ADVICE

SE243061

CLIENT DETAILS

Client EI AUSTRALIA

Project E25947 600-660 Elizabeth St Redfern

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Total Recoverable Elements in Soil/Waste	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
049	TP417_0.1-0.2	30	14	26	11	7	10	11	7
050	TP417_0.5-0.6	30	14	26	11	7	10	11	7
051	TP417_1.0-1.1	30	14	26	11	7	10	11	7
052	TP418_0.1-0.2	30	14	26	11	7	10	11	7
053	TP418_0.5-0.6	30	14	26	11	7	10	11	7
054	TP418_1.0-1.1	30	14	26	11	7	10	11	7
055	TP419_0.1-0.2	30	14	26	11	7	10	11	7
056	TP419_0.5-0.6	30	14	26	11	7	10	11	7
057	TP419_1.0-1.1	30	14	26	11	7	10	11	7
058	BH501M_0.3-0.45	30	14	26	11	7	10	11	7
059	BH501M_1.0-1.1	30	14	26	11	7	10	11	7
060	BH502M_0.4-0.6	30	14	26	11	7	10	11	7
061	BH502M_1.0-1.1	30	14	26	11	7	10	11	7
062	BH503_0.4-0.5	30	14	26	11	7	10	11	7
063	BH503_0.9-1.0	30	14	26	11	7	10	11	7
064	QD1	-	-	-	-	7	10	11	7
065	QD3	-	-	-	-	7	10	11	7
066	QD4	-	-	-	-	7	10	11	7
067	QD6	-	-	-	-	7	10	11	7
069	TB	-	-	-	-	-	-	11	-
070	TS	-	-	-	-	-	-	11	-
071	BH501M_1.5-1.6	30	14	26	11	7	10	11	7
072	BH503M_1.5-1.6	30	14	26	11	7	10	11	7

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 .

SAMPLE RECEIPT ADVICE

SE243061

CLIENT DETAILS

Client EI AUSTRALIA

Project E25947 600-660 Elizabeth St Redfern

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Mercury in Soil	Moisture Content
001	TP401_0.1-0.2	2	1	1
002	TP401_0.5-0.6	2	1	1
003	TP401_1.0-1.1	2	1	1
004	TP402_0.1-0.2	2	1	1
005	TP402_0.5-0.6	2	1	1
006	TP402_1.0-1.1	2	1	1
007	TP403_0.1-0.2	2	1	1
008	TP403_0.5-0.6	2	1	1
009	TP403_1.0-1.1	2	1	1
010	TP404_0.1-0.2	2	1	1
011	TP404_0.5-0.6	2	1	1
012	TP404_1.0-1.1	2	1	1
013	TP405_0.1-0.2	2	1	1
014	TP405_0.5-0.6	2	1	1
015	TP405_1.0-1.1	2	1	1
016	TP406_0.1-0.2	2	1	1
017	TP406_0.5-0.6	2	1	1
018	TP406_1.0-1.1	2	1	1
019	TP407_0.1-0.2	2	1	1
020	TP407_0.5-0.6	2	1	1
021	TP407_1.0-1.1	2	1	1
022	TP408_0.1-0.2	2	1	1
023	TP408_0.5-0.6	2	1	1
024	TP408_1.0-1.1	2	1	1

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 .

SAMPLE RECEIPT ADVICE

SE243061

CLIENT DETAILS

Client EI AUSTRALIA

Project E25947 600-660 Elizabeth St Redfern

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Mercury in Soil	Moisture Content
025	TP409_0.1-0.2	2	1	1
026	TP409_0.5-0.6	2	1	1
027	TP409_1.0-1.1	2	1	1
028	TP410_0.1-0.2	2	1	1
029	TP410_0.5-0.6	2	1	1
030	TP410_1.0-1.1	2	1	1
031	TP411_0.1-0.2	2	1	1
032	TP411_0.5-0.6	2	1	1
033	TP411_1.0-1.1	2	1	1
034	TP412_0.1-0.2	2	1	1
035	TP412_0.5-0.6	2	1	1
036	TP412_1.0-1.1	2	1	1
037	TP413_0.1-0.2	2	1	1
038	TP413_0.5-0.6	2	1	1
039	TP413_1.0-1.1	2	1	1
040	TP414_0.1-0.2	2	1	1
041	TP414_0.5-0.6	2	1	1
042	TP414_1.0-1.1	2	1	1
043	TP415_0.1-0.2	2	1	1
044	TP415_0.5-0.6	2	1	1
045	TP415_1.0-1.1	2	1	1
046	TP416_0.1-0.2	2	1	1
047	TP416_0.5-0.6	2	1	1
048	TP416_1.0-1.1	2	1	1

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 .

SAMPLE RECEIPT ADVICE

SE243061

CLIENT DETAILS

Client EI AUSTRALIA

Project E25947 600-660 Elizabeth St Redfern

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Mercury in Soil	Moisture Content	VOCs in Water	Volatile Petroleum Hydrocarbons in Water
049	TP417_0.1-0.2	2	1	1	-	-
050	TP417_0.5-0.6	2	1	1	-	-
051	TP417_1.0-1.1	2	1	1	-	-
052	TP418_0.1-0.2	2	1	1	-	-
053	TP418_0.5-0.6	2	1	1	-	-
054	TP418_1.0-1.1	2	1	1	-	-
055	TP419_0.1-0.2	2	1	1	-	-
056	TP419_0.5-0.6	2	1	1	-	-
057	TP419_1.0-1.1	2	1	1	-	-
058	BH501M_0.3-0.45	2	1	1	-	-
059	BH501M_1.0-1.1	2	1	1	-	-
060	BH502M_0.4-0.6	2	1	1	-	-
061	BH502M_1.0-1.1	2	1	1	-	-
062	BH503_0.4-0.5	2	1	1	-	-
063	BH503_0.9-1.0	2	1	1	-	-
064	QD1	-	1	1	-	-
065	QD3	-	1	1	-	-
066	QD4	-	1	1	-	-
067	QD6	-	1	1	-	-
068	QR	-	-	-	11	7
069	TB	-	-	1	-	-
071	BH501M_1.5-1.6	2	1	1	-	-
072	BH503M_1.5-1.6	2	1	1	-	-

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 .

SAMPLE RECEIPT ADVICE

SE243061

CLIENT DETAILS

Client EI AUSTRALIA

Project E25947 600-660 Elizabeth St Redfern

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury (dissolved) in Water	Trace Metals (Dissolved) in Water by ICPMS	TRH (Total Recoverable Hydrocarbons) in Water
068	QR	1	7	9

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 .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	Geisiane Torres
Client	EI AUSTRALIA
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009
Telephone	61 2 95160722
Facsimile	(Not specified)
Email	Geisiane.Torres @eiaustralia.com.au
Project	**E25947 600-660 Elizabeth St Redfern**
Order Number	**E25947**
Samples	72

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	**SE243061A R0**
Date Received	22/2/2023
Date Reported	1/3/2023

COMMENTS

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

SIGNATORIES

Dong LIANG
Metals/Inorganics Team Leader

Ly Kim HA
Organic Section Head

TCLP (Toxicity Characteristic Leaching Procedure) for Organics/SVOC [AN006] Tested: 23/2/2023

PARAMETER	UOM	LOR	TP405_0.1-0.2 SOIL - 6/2/2023 SE243061A.013	TP407_0.1-0.2 SOIL - 6/2/2023 SE243061A.019	TP409_0.5-0.6 SOIL - 6/2/2023 SE243061A.026	TP414_0.5-0.6 SOIL - 7/2/2023 SE243061A.041	BH501M_0.3-0.45 SOIL - 8/2/2023 SE243061A.058
pH 1:20	pH Units	-	7.2	7.5	8.4	7.1	8.6
pH 1:20 plus HCL	pH Units	-	2.4	2.2	2.3	2.2	2.3
Extraction Solution Used	No unit	-	1	1	1	1	1
Mass of Sample Used*	g	-	25	25	25	25	25
Volume of ExtractionSolution Used*	mL	-	500	500	500	500	500
pH TCLP after 18 hours	pH Units	-	5.6	5.0	5.1	4.9	5.3

PARAMETER	UOM	LOR	BH502M_0.4-0.6 SOIL - 8/2/2023 SE243061A.060
pH 1:20	pH Units	-	8.3
pH 1:20 plus HCL	pH Units	-	2.3
Extraction Solution Used	No unit	-	1
Mass of Sample Used*	g	-	25
Volume of ExtractionSolution Used*	mL	-	500
pH TCLP after 18 hours	pH Units	-	5.0

PAH (Polynuclear Aromatic Hydrocarbons) in TCLP Extract [AN420] Tested: 24/2/2023

PARAMETER	UOM	LOR	TP405_0.1-0.2 SOIL - 6/2/2023 SE243061A.013	TP407_0.1-0.2 SOIL - 6/2/2023 SE243061A.019	TP409_0.5-0.6 SOIL - 6/2/2023 SE243061A.026	TP414_0.5-0.6 SOIL - 7/2/2023 SE243061A.041	BH501M_0.3-0.45 SOIL - 8/2/2023 SE243061A.058
Benzo(a)pyrene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

PARAMETER	UOM	LOR	BH502M_0.4-0.6 SOIL - 8/2/2023 SE243061A.060
Benzo(a)pyrene	µg/L	0.1	<0.1

TCLP (Toxicity Characteristic Leaching Procedure) for Metals [AN006] Tested: 23/2/2023

PARAMETER	UOM	LOR	TP401_0.5-0.6 SOIL - 6/2/2023 SE243061A.002	TP403_0.1-0.2 SOIL - 6/2/2023 SE243061A.007	TP408_0.1-0.2 SOIL - 6/2/2023 SE243061A.022	TP417_0.5-0.6 SOIL - 7/2/2023 SE243061A.050	BH503_0.4-0.5 SOIL - 8/2/2023 SE243061A.062
pH 1:20	pH Units	-	8.3	8.2	7.6	8.3	7.8
pH 1:20 plus HCL	pH Units	-	3.2	2.2	2.2	2.4	2.3
Extraction Solution Used	No unit	-	1	1	1	1	1
Mass of Sample Used*	g	-	13	13	13	13	13
Volume of ExtractionSolution Used*	mL	-	250	250	250	250	250
pH TCLP after 18 hours	pH Units	-	6.1	5.6	5.0	5.8	5.6

PARAMETER	UOM	LOR	BH503_0.9-1.0 SOIL - 8/2/2023 SE243061A.063
pH 1:20	pH Units	-	7.8
pH 1:20 plus HCL	pH Units	-	2.2
Extraction Solution Used	No unit	-	1
Mass of Sample Used*	g	-	13
Volume of ExtractionSolution Used*	mL	-	250
pH TCLP after 18 hours	pH Units	-	5.1

Metals in TCLP Extract by ICPOES [AN320] Tested: 27/2/2023

PARAMETER	UOM	LOR	TP401_0.5-0.6 SOIL - 6/2/2023 SE243061A.002	TP403_0.1-0.2 SOIL - 6/2/2023 SE243061A.007	TP407_0.1-0.2 SOIL - 6/2/2023 SE243061A.019	TP408_0.1-0.2 SOIL - 6/2/2023 SE243061A.022	TP417_0.5-0.6 SOIL - 7/2/2023 SE243061A.050
Lead, Pb	mg/L	0.02	**0.54**	**0.17**	**1.0**	**0.07**	**6.5**

PARAMETER	UOM	LOR	BH502M_0.4-0.6 SOIL - 8/2/2023 SE243061A.060	BH503_0.4-0.5 SOIL - 8/2/2023 SE243061A.062	BH503_0.9-1.0 SOIL - 8/2/2023 SE243061A.063
Lead, Pb	mg/L	0.02	**0.07**	**0.68**	**0.47**

Mercury in TCLP Extract [AN311(Perth) /AN312] Tested: 27/2/2023

PARAMETER	UOM	LOR	BH502M_0.4-0.6 SOIL - 8/2/2023 SE243061A.060
Mercury	mg/L	0.0001	**0.0001**

METHOD	METHODOLOGY SUMMARY
AN006	Contaminants of interest in a waste material are leached out of the waste with a selected leaching solution under controlled conditions. The ratio of sample to extraction fluid is 100g to 2L (1 to 20 by mass). The concentration of each contaminant of interest is determined in the leachate by appropriate methods after separation from the sample by filtering. Base on USEPA 1311.
AN006	Extraction Fluid #1: This fluid is made by combining 128.6mL of dilute sodium hydroxide solution and 11.5mL glacial acetic acid with water and diluting to a volume of 2 litres. The pH of this fluid should be 4.93 ± 0.05.
AN006	Extraction Fluid #2: This fluid is made by diluting 5.7mL glacial acetic acid with water to a volume of 1 litre. The pH of this fluid should be 2.88 ± 0.05.
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN311(Perth) /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.
AN320	Metals by ICP-OES: Samples are preserved with 10% nitric acid for a wide range of metals and some non-metals. This solution is measured by Inductively Coupled Plasma. Solutions are aspirated into an argon plasma at 8000-10000K and emit characteristic energy or light as a result of electron transitions through unique energy levels. The emitted light is focused onto a diffraction grating where it is separated into components .
AN320	Photomultipliers or CCDs are used to measure the light intensity at specific wavelengths. This intensity is directly proportional to concentration. Corrections are required to compensate for spectral overlap between elements . Reference APHA 3120 B.
AN420	(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). Total PAH calculated from individual analyte detections at or above the limit of reporting .

FOOTNOTES

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

Unless it is reported that sampling has been performed by SGS, the samples have been 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:

a. 1 Bq is equivalent to 27 pCi
b. 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 and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client only. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .

This report must not be reproduced, except in full.

STATEMENT OF QA/QC PERFORMANCE

SE243061A R0

CLIENT DETAILS

Contact	Geisiane Torres
Client	EI AUSTRALIA
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009
Telephone	61 2 95160722
Facsimile	(Not specified)
Email	Geisiane.Torres @eiaustralia.com.au
Project	**E25947 600-660 Elizabeth St Redfern**
Order Number	**E25947**
Samples	72

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	**SE243061A R0**
Date Received	22 Feb 2023
Date Reported	01 Mar 2023

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.
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	TCLP (Toxicity Characteristic Leaching Procedure) for Organics/SVOC	6 items

SAMPLE SUMMARY

Sample counts by matrix	12 Soil	Type of documentation received	Email
Date documentation received	22/2/2023@4:39pm	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	10.3°C
Sample container provider	SGS	Turnaround time requested	Standard
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes
Complete documentation received	Yes		

HOLDING TIME SUMMARY

SE243061A R0

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

Mercury in TCLP Extract

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
BH502M_0.4-0.6	SE243061A.060	LB272442	08 Feb 2023	22 Feb 2023	08 Mar 2023	27 Feb 2023	08 Mar 2023	27 Feb 2023

Metals in TCLP Extract by ICPOES

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP401_0.5-0.6	SE243061A.002	LB272445	06 Feb 2023	22 Feb 2023	05 Aug 2023	27 Feb 2023	05 Aug 2023	27 Feb 2023
TP403_0.1-0.2	SE243061A.007	LB272445	06 Feb 2023	22 Feb 2023	05 Aug 2023	27 Feb 2023	05 Aug 2023	27 Feb 2023
TP407_0.1-0.2	SE243061A.019	LB272445	06 Feb 2023	22 Feb 2023	05 Aug 2023	27 Feb 2023	05 Aug 2023	27 Feb 2023
TP408_0.1-0.2	SE243061A.022	LB272445	06 Feb 2023	22 Feb 2023	05 Aug 2023	27 Feb 2023	05 Aug 2023	27 Feb 2023
TP417_0.5-0.6	SE243061A.050	LB272445	07 Feb 2023	22 Feb 2023	06 Aug 2023	27 Feb 2023	06 Aug 2023	27 Feb 2023
BH502M_0.4-0.6	SE243061A.060	LB272445	08 Feb 2023	22 Feb 2023	07 Aug 2023	27 Feb 2023	07 Aug 2023	27 Feb 2023
BH503_0.4-0.5	SE243061A.062	LB272445	08 Feb 2023	22 Feb 2023	07 Aug 2023	27 Feb 2023	07 Aug 2023	27 Feb 2023
BH503_0.9-1.0	SE243061A.063	LB272445	08 Feb 2023	22 Feb 2023	07 Aug 2023	27 Feb 2023	07 Aug 2023	27 Feb 2023

PAH (Polynuclear Aromatic Hydrocarbons) in TCLP Extract

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

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP405_0.1-0.2	SE243061A.013	LB272320	06 Feb 2023	22 Feb 2023	27 Feb 2023	24 Feb 2023	05 Apr 2023	01 Mar 2023
TP407_0.1-0.2	SE243061A.019	LB272320	06 Feb 2023	22 Feb 2023	27 Feb 2023	24 Feb 2023	05 Apr 2023	01 Mar 2023
TP409_0.5-0.6	SE243061A.026	LB272320	06 Feb 2023	22 Feb 2023	27 Feb 2023	24 Feb 2023	05 Apr 2023	01 Mar 2023
TP414_0.5-0.6	SE243061A.041	LB272320	07 Feb 2023	22 Feb 2023	28 Feb 2023	24 Feb 2023	05 Apr 2023	01 Mar 2023
BH501M_0.3-0.45	SE243061A.058	LB272320	08 Feb 2023	22 Feb 2023	01 Mar 2023	24 Feb 2023	05 Apr 2023	01 Mar 2023
BH502M_0.4-0.6	SE243061A.060	LB272320	08 Feb 2023	22 Feb 2023	01 Mar 2023	24 Feb 2023	05 Apr 2023	01 Mar 2023

TCLP (Toxicity Characteristic Leaching Procedure) for Metals

Method: ME-(AU)-[ENV]AN006

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP401_0.5-0.6	SE243061A.002	LB272273	06 Feb 2023	22 Feb 2023	05 Aug 2023	23 Feb 2023	27 Feb 2023	27 Feb 2023
TP403_0.1-0.2	SE243061A.007	LB272273	06 Feb 2023	22 Feb 2023	05 Aug 2023	23 Feb 2023	27 Feb 2023	27 Feb 2023
TP408_0.1-0.2	SE243061A.022	LB272273	06 Feb 2023	22 Feb 2023	05 Aug 2023	23 Feb 2023	27 Feb 2023	27 Feb 2023
TP417_0.5-0.6	SE243061A.050	LB272273	07 Feb 2023	22 Feb 2023	06 Aug 2023	23 Feb 2023	27 Feb 2023	27 Feb 2023
BH503_0.4-0.5	SE243061A.062	LB272273	08 Feb 2023	22 Feb 2023	07 Aug 2023	23 Feb 2023	27 Feb 2023	27 Feb 2023
BH503_0.9-1.0	SE243061A.063	LB272273	08 Feb 2023	22 Feb 2023	07 Aug 2023	23 Feb 2023	27 Feb 2023	27 Feb 2023

TCLP (Toxicity Characteristic Leaching Procedure) for Organics/SVOC

Method: ME-(AU)-[ENV]AN006

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP405_0.1-0.2	SE243061A.013	LB272274	06 Feb 2023	22 Feb 2023	20 Feb 2023	23 Feb 2023†	27 Feb 2023	27 Feb 2023
TP407_0.1-0.2	SE243061A.019	LB272274	06 Feb 2023	22 Feb 2023	20 Feb 2023	23 Feb 2023†	27 Feb 2023	27 Feb 2023
TP409_0.5-0.6	SE243061A.026	LB272274	06 Feb 2023	22 Feb 2023	20 Feb 2023	23 Feb 2023†	27 Feb 2023	27 Feb 2023
TP414_0.5-0.6	SE243061A.041	LB272274	07 Feb 2023	22 Feb 2023	21 Feb 2023	23 Feb 2023†	27 Feb 2023	27 Feb 2023
BH501M_0.3-0.45	SE243061A.058	LB272274	08 Feb 2023	22 Feb 2023	22 Feb 2023	23 Feb 2023†	27 Feb 2023	27 Feb 2023
BH502M_0.4-0.6	SE243061A.060	LB272274	08 Feb 2023	22 Feb 2023	22 Feb 2023	23 Feb 2023†	27 Feb 2023	27 Feb 2023

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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in TCLP Extract — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	TP405_0.1-0.2	SE243061A.013	%	40 - 130%	71
	TP407_0.1-0.2	SE243061A.019	%	40 - 130%	73
	TP409_0.5-0.6	SE243061A.026	%	40 - 130%	54
	TP414_0.5-0.6	SE243061A.041	%	40 - 130%	77
	BH501M_0.3-0.45	SE243061A.058	%	40 - 130%	63
	BH502M_0.4-0.6	SE243061A.060	%	40 - 130%	66
d14-p-terphenyl (Surrogate)	TP405_0.1-0.2	SE243061A.013	%	40 - 130%	74
	TP407_0.1-0.2	SE243061A.019	%	40 - 130%	76
	TP409_0.5-0.6	SE243061A.026	%	40 - 130%	65
	TP414_0.5-0.6	SE243061A.041	%	40 - 130%	88
	BH501M_0.3-0.45	SE243061A.058	%	40 - 130%	68
	BH502M_0.4-0.6	SE243061A.060	%	40 - 130%	75
d5-nitrobenzene (Surrogate)	TP405_0.1-0.2	SE243061A.013	%	40 - 130%	71
	TP407_0.1-0.2	SE243061A.019	%	40 - 130%	76
	TP409_0.5-0.6	SE243061A.026	%	40 - 130%	54
	TP414_0.5-0.6	SE243061A.041	%	40 - 130%	77
	BH501M_0.3-0.45	SE243061A.058	%	40 - 130%	58
	BH502M_0.4-0.6	SE243061A.060	%	40 - 130%	65

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.

Mercury in TCLP Extract

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

Sample Number	Parameter	Units	LOR	Result
LB272442.001	Mercury	mg/L	0.0001	<0.0001

Metals in TCLP Extract by ICPOES

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

Sample Number	Parameter	Units	LOR	Result
LB272445.001	Lead, Pb	mg/L	0.02	<0.02

PAH (Polynuclear Aromatic Hydrocarbons) in TCLP Extract

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

Sample Number		Parameter	Units	LOR	Result
LB272320.001		Benzo(a)pyrene	µg/L	0.1	<0.1
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	84
		d14-p-terphenyl (Surrogate)	%	-	82
		d5-nitrobenzene (Surrogate)	%	-	90

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / 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 x SDL / Mean + 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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

PAH (Polynuclear Aromatic Hydrocarbons) in TCLP Extract — **Method: ME-(AU)-[ENV]AN420**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE243061A.060	LB272320.026		Benzo(a)pyrene	µg/L	0.1	<0.1	0.1	142	13
		Surrogates	2-fluorobiphenyl (Surrogate)	µg/L	-	0.3	0.4	30	10
			d14-p-terphenyl (Surrogate)	µg/L	-	0.4	0.4	30	15
			d5-nitrobenzene (Surrogate)	µg/L	-	0.3	0.4	30	8

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.

Metals in TCLP Extract by ICPOES

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

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB272445.002	Lead, Pb	mg/L	0.02	0.49	0.5	80 - 120	98

PAH (Polynuclear Aromatic Hydrocarbons) in TCLP Extract

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

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB272320.002		Benzo(a)pyrene	µg/L	0.1	31	40	60 - 140	78
	Surrogates	2-fluorobiphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	88
		d14-p-terphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	86
		d5-nitrobenzene (Surrogate)	µg/L	-	0.5	0.5	40 - 130	94

MATRIX SPIKES

SE243061A R0

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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

QC Sample	Sample Number	Parameter	Units	LOR

MATRIX SPIKE DUPLICATES

SE243061A R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / 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 x SDL / Mean + 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 identifer when outside suggested criteria. Refer to the footnotes section at the

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: https://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.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	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 relevant report comments for further information.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client only. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

This test report shall not be reproduced, except in full.

source: SE_Autoscan.pdf page: 1 SGS Ref: SE243061A_COC

Yin, Emily (Sydney)

From: Geisiane Torres - EIAustralia <geisiane.torres@eiaustralia.com.au>
Sent: Wednesday, 22 February 2023 4:51 PM
To: AU.Environmental.Sydney, AU (Sydney)
Cc: Sergio Raposeira - EIAustralia; Sharon Li - EIAustralia; AU.SampleReceipt.Sydney, AU (Sydney)
Subject: RE: [EXTERNAL] RE: SPLIT Report Job SE243061, your reference E25947 600-660 Elizabeth St Redfern, order number E25947

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Thank you Matthew.

Can you please add on the list TP401_0.5-0.6 for Lead. TAT: standard
Thank you.

SGS EHS Alexandria Laboratory
SE243061A COC
Received: 22 – Feb – 2023

Kind regards,

Geisiane Torres
Environmental Engineer

T (02) 9516 0722 M 0478 965 237
E geisiane.torres@eiaustralia.com.au

Suite 6.01, 55 Miller Street
Pyrmont, NSW 2009

www.eiaustralia.com.au

eiaustralia
Practical Solutions for Built Environments

FINANCIAL REVIEW CLIENT CHOICE AWARDS 2019 WINNER beaton

Environmental | Geotechnical | Structural | Civil | Hazardous Materials

EI Australia is a proud member of the Australian Contaminated Land Consultants Association and the Australian Geomechanics Society.

CONFIDENTIALITY - This email contains confidential and privileged information.
If you are not the intended recipient, our apologies - please destroy it and notify us so that we can appropriately re-address it.
Disclosure, copying, distribution or use of the contents of this email is strictly prohibited.

Please consider the environment before printing this email.

From: AU.Environmental.Sydney, AU (Sydney) [mailto:AU.Environmental.Sydney@sgs.com]
Sent: Wednesday, 22 February 2023 4:43 PM
To: Geisiane Torres - EIAustralia
Cc: Sergio Raposeira - EIAustralia; Sharon Li - EIAustralia; AU.Environmental.Sydney, AU (Sydney); AU.SampleReceipt.Sydney, AU (Sydney)
Subject: RE: [EXTERNAL] RE: SPLIT Report Job SE243061, your reference E25947 600-660 Elizabeth St Redfern, order number E25947

Caution: This email originated from outside your organization and might have suspicious subject or content. PLEASE DO NOT CLICK ANY LINKS AND\OR OPEN ANY ATTACHEMENTS UNLESS YOU CAN CONFIRM THE SENDER. When in doubt, please report suspicious emails to: quarantine@eiaustralia.com.au

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Yin, Emily (Sydney)

From: AU.Environmental.Sydney, AU (Sydney)
Sent: Wednesday, 22 February 2023 4:53 PM
To: AU.SampleReceipt.GBS, AU (Alexandria)
Cc: AU.Environmental.Sydney, AU (Sydney); AU.SampleReceipt.Sydney, AU (Sydney)
Subject: FW: [EXTERNAL] RE: SPLIT Report Job SE243061, your reference E25947 600-660 Elizabeth St Redfern, order number E25947
Attachments: Fig 1 redfern.png; fig 2 redfern.png

Hi GBS team.

Please book these TCLPs in as an A job, standard TAT.

Pb - 7, 19, 22, 50, 60, 62, 63
B(a)P - 13, 19, 26, 41, 58, 60
Hg – 60

Thanks.

Matthew Tyler
Environment, Health & Safety
Client Services

SGS Australia Pty Ltd
Unit 16, 33 Maddox Street
Alexandria NSW 2015

From: Geisiane Torres - ElAustralia <geisiane.torres@eiaustralia.com.au>
Sent: Wednesday, 22 February 2023 4:39 PM
To: AU.Environmental.Sydney, AU (Sydney) <AU.Environmental.Sydney@SGS.com>; AU.SampleReceipt.Sydney, AU (Sydney) <AU.SampleReceipt.Sydney@sgs.com>
Cc: Sergio Raposeira - ElAustralia <sergio.raposeira@eiaustralia.com.au>; Sharon Li - ElAustralia <sharon.li@eiaustralia.com.au>
Subject: [EXTERNAL] RE: SPLIT Report Job SE243061, your reference E25947 600-660 Elizabeth St Redfern, order number E25947

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi SGS team,

Can you please book TCLP for samples highlighted in blue. Please refer to fig 1 and fig 2 attached.
TAT: standard
Thank you.

Best regards,

Sample ID		Sampling date	Heavy Metals						PAHs		BTEX				TRHs		OCPs	OPPs	Total PCBs	Asbestos
			As	Cd	Cr[3]	Pb	Ni	Hg	Benzo(a)pyrene	Total PAHs	Benzene	Toluene	Ethylbenzene	Total Xylenes	C6 - C9	C10 - C36				
Waste Classification Assessment Criteria	NSW EPA 2014 General Solid Waste	CT1 (mg/kg) [1]	100	20	100[5]	100	40	4	0.8	200	10	288	600	1,000	650	10,000	<50	250	<50	NR
		TCLP1 (mg/L)	5	1	5	5	2	0.2	0.04	NR	0.5	14.4	30	50	NR	NR	NR	NR	NR	NR
		SCC1 (mg/kg) [2]	500	100	1,900	1,500	1,050	50	10	200	18	518	1,080	1,800	650	10,000	<50	250	<50	NR
	NSW EPA 2014 Restricted Solid Waste	CT2 (mg/kg) [3]	400	80	400[5]	400	160	16	3.2	800	40	1,152	2,400	4,000	2,600	40,000	<50	1000	<50	NR
		TCLP2 (mg/L)	20	4	20	20	8	0.8	0.16	NR	2	58	120	200	NR	NR	NR	NR	NR	NR
		SCC2 (mg/kg) [4]	2,000	400	7,600	6,000	4,200	200	23	800	72	2,073	4,320	7,200	2,600	40,000	<50	1000	<50	NR
	Special Waste / Scheduled Waste																>2 mg/kg - Scheduled Waste[5]		>2 mg/kg - PCB Waste[6]	Where detected classification is Special Waste (Asbestos Waste)
TP403_0.1-0.2		6/02/2023	3	0.4	4	210	2.5	1.7	0.4	3.4	<0.1	<0.1	<0.1	<0.3	<20	<110	<1	<1.7	<1	No
TP403_0.1-0.2-TCLP			NA	NA	NA	TCLP Req.	NA	NA	NA	NR	NA	NA	NA	NA	NR	NR	NR	NR	NR	NR
TP405_0.1-0.2			3	0.5	5.4	210	3.4	0.48	0.3	31	<0.1	<0.1	<0.1	<0.3	<20	260	<1	<1.7	<1	No
TP405_0.1-0.2-TCLP			NA	NA	NA	TCLP Req.	NA	NA	TCLP Req.	NR	NA	NA	NA	NA	NR	NR	NR	NR	NR	NR
TP407_0.1-0.2			2	0.5	6.6	150	2.7	0.53	0.6	7.3	<0.1	<0.1	<0.1	<0.3	<20	130	<1	<1.7	<1	No
TP407_0.1-0.2-TCLP			NA	NA	NA	TCLP Req.	NA	NA	NA	NR	NA	NA	NA	NA	NR	NR	NR	NR	NR	NR
TP408_0.1-0.2			4	0.4	12	210	4	0.34	2.5	33	<0.1	<0.1	<0.1	<0.3	<20	230	<1	<1.7	<1	No
TP408_0.1-0.2-TCLP			NA	NA	NA	TCLP Req.	NA	NA	TCLP Req.	NR	NA	NA	NA	NA	NR	NR	NR	NR	NR	NR
TP409_0.5-0.6			2	<0.3	3.2	100	1.2	0.41	2.4	37	<0.1	<0.1	<0.1	<0.3	<20	190	6	<1.7	<1	No
TP409_0.5-0.6-TCLP			NA	NA	NA	NA	NA	NA	TCLP Req.	NR	NA	NA	NA	NA	NR	NR	NR	NR	NR	NR
95% UCL [7]			NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Waste Classification																				

Note:

NA Not Analysed

	Sample ID	Sampling date	Heavy Metals						PAHs		BTEX				TRHs		OCPs	OPPs	Total PCBs	Asbestos
			As	Cd	Cr [3]	Pb	Ni	Hg	Benzo(a)pyrene	Total PAHs	Benzene	Toluene	Ethylbenzene	Total Xylenes	C6 - C9	C10 - C36				
Waste Classification Assessment Criteria	NSW EPA 2014 General Solid Waste	CT1 (mg/kg) [1]	100	20	100 [5]	100	40	4	0.8	200	10	288	600	1,000	650	10,000	<50	250	<50	NR
		TCLP1 (mg/L)	5	1	5	5	2	0.2	0.04	NR	0.5	14.4	30	50	NR	NR	NR	NR	NR	NR
		SCC1 (mg/kg) [2]	500	100	1,900	1,500	1,050	50	10	200	18	518	1,080	1,800	650	10,000	<50	250	<50	NR
	NSW EPA 2014 Restricted Solid Waste	CT2 (mg/kg) [1]	400	80	400 [5]	400	160	16	3.2	800	40	1,152	2,400	4,000	2,600	40,000	<50	1000	<50	NR
		TCLP2 (mg/L)	20	4	20	20	8	0.8	0.16	NR	2	58	120	200	NR	NR	NR	NR	NR	NR
		SCC2 (mg/kg) [2]	2,000	400	7,600	6,000	4,200	200	23	800	72	2,073	4,320	7,200	2,600	40,000	<50	1000	<50	NR
	Special Waste / Scheduled Waste																>2 mg/kg - Scheduled Waste [5]		>2 mg/kg - PCB Waste [6]	Where detected classification is Special Waste (Asbestos Waste)
TP414_0.5-0.6			2	<0.3	2.8	81	1.1	0.09	1.4	66	<0.1	<0.1	<0.1	<0.3	<20	390	<1	<1.7	<1	No
TP414_0.5-0.6-TCLP			NA	NA	NA	NA	NA	NA	TCLP Req.	NR	NA	NA	NA	NA	NR	NR	NR	NR	NR	NR
TP416_1.0-1.1			1	<0.3	0.9	9	0.6	<0.05	0.2	1.4	<0.1	<0.1	<0.1	<0.3	<20	<110	<1	<1.7	<1	No
TP417_0.5-0.6			4	0.4	5.2	240	1.8	0.31	1	10	<0.1	<0.1	<0.1	<0.3	<20	<110	<1	<1.7	<1	No
TP417_0.5-0.6-TCLP			NA	NA	NA	TCLP Req.	NA	NA	TCLP Req.	NR	NA	NA	NA	NA	NR	NR	NR	NR	NR	NR
TP417_1.0-1.1			<1	<0.3	1.5	40	0.6	0.11	0.2	1.5	<0.1	<0.1	<0.1	<0.3	<20	<110	<1	<1.7	<1	No
BH501M_0.3-0.45			4	0.3	6.9	79	19	0.16	4.5	49	<0.1	<0.1	<0.1	<0.3	<20	2300	<1	<1.7	<1	No
BH501M_0.3-0.45-TCLP			NA	NA	NA	NA	NA	NA	TCLP Req.	NR	NA	NA	NA	NA	NR	NR	NR	NR	NR	NR
BH501M_1.0-1.1		7/02/2023	3	<0.3	3.7	78	7.3	0.09	2.6	26	<0.1	<0.1	<0.1	<0.3	<20	1200	<1	<1.7	<1	No
BH501M_1.0-1.1-TCLP			NA	NA	NA	NA	NA	NA	TCLP Req.	NR	NA	NA	NA	NA	NR	NR	NR	NR	NR	NR
BH502M_0.4-0.6			4	0.4	10	430	5.9	0.1	1	110	<0.1	<0.1	<0.1	<0.3	<20	870	<1	<1.7	<1	No
BH502M_0.4-0.6-TCLP			NA	NA	NA	TCLP Req.	NA	TCLP Req.	TCLP Req.	NR	NA	NA	NA	NA	NR	NR	NR	NR	NR	NR
BH502M_1.0-1.1			2	<0.3	6.9	74	4	1.2	2.4	28	<0.1	<0.1	<0.1	<0.3	<20	240	<1	<1.7	<1	No
BH502M_1.0-1.1-TCLP			NA	NA	NA	NA	NA	NA	TCLP Req.	NR	NA	NA	NA	NA	NR	NR	NR	NR	NR	NR
BH503_0.4-0.5			6	2.4	14	470	14	0.72	0.7	9.3	<0.1	<0.1	<0.1	<0.3	<20	320	<1	<1.7	<1	No
BH503_0.4-0.5-TCLP			NA	NA	NA	TCLP Req.	NA	NA	NA	NR	NA	NA	NA	NA	NR	NR	NR	NR	NR	NR
BH503_0.9-1.0			4	2.5	12	870	13	0.3	0.2	2.4	<0.1	<0.1	<0.1	<0.3	<20	560	<1	<1.7	<1	Yes
BH503_0.9-1.0-TCLP			NA	NA	NA	TCLP Req.	NA	NA	NA	NR	NA	NA	NA	NA	NR	NR	NR	NR	NR	NR
BH503M_1.5-1.6-TCLP			NA	NA	NA	NA	NA	NA	NA	NR	NA	NA	NA	NA	NR	NR	NR	NR	NR	NR
95% UCL [7]			NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Waste Classification																				

SAMPLE RECEIPT ADVICE

SE243061A

CLIENT DETAILS

Contact	Geisiane Torres
Client	EI AUSTRALIA
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009
Telephone	61 2 95160722
Facsimile	(Not specified)
Email	Geisiane.Torres @eiaustralia.com.au
Project	**E25947 600-660 Elizabeth St Redfern**
Order Number	**E25947**
Samples	72

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	Wed 22/2/2023
Report Due	Wed 1/3/2023
SGS Reference	**SE243061A**

SUBMISSION DETAILS

This is to confirm that 72 samples were received on Wednesday 22/2/2023. Results are expected to be ready by COB Wednesday 1/3/2023. Please quote SGS reference SE243061A when making enquiries. Refer below for details relating to sample integrity upon receipt.

Sample counts by matrix	12 Soil	Type of documentation received	Email
Date documentation received	22/2/2023@4:39pm	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	10.3°C
Sample container provider	SGS	Turnaround time requested	Standard
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes
Complete documentation received	Yes		

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

COMMENTS

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE243061A

CLIENT DETAILS

Client EI AUSTRALIA

Project E25947 600-660 Elizabeth St Redfern

SUMMARY OF ANALYSIS

No.	Sample ID	Metals in TCLP Extract by ICPOES	PAH (Polynuclear Aromatic Hydrocarbons) in TCLP	TCLP (Toxicity Characteristic Leaching	TCLP (Toxicity Characteristic Leaching
002	TP401 0.5-0.6	1	-	6	-
007	TP403 0.1-0.2	1	-	6	-
013	TP405_0.1-0.2	-	4	-	6
019	TP407_0.1-0.2	1	4	-	6
022	TP408 0.1-0.2	1	-	6	-

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 .

SAMPLE RECEIPT ADVICE

SE243061A

CLIENT DETAILS

Client EI AUSTRALIA

Project E25947 600-660 Elizabeth St Redfern

SUMMARY OF ANALYSIS

No.	Sample ID	PAH (Polynuclear Aromatic Hydrocarbons) in TCLP	TCLP (Toxicity Characteristic Leaching
026	TP409 0.5-0.6	4	6
041	TP414 0.5-0.6	4	6

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 .

SAMPLE RECEIPT ADVICE

SE243061A

CLIENT DETAILS

Client EI AUSTRALIA

Project E25947 600-660 Elizabeth St Redfern

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury in TCLP Extract	Metals in TCLP Extract by ICPOES	PAH (Polynuclear Aromatic Hydrocarbons) in TCLP	TCLP (Toxicity Characteristic Leaching	TCLP (Toxicity Characteristic Leaching
050	TP417 0.5-0.6	-	1	-	6	-
058	BH501M 0.3-0.45	-	-	4	-	6
060	BH502M_0.4-0.6	1	1	4	-	6
062	BH503_0.4-0.5	-	1	-	6	-
063	BH503 0.9-1.0	-	1	-	6	-

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 .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	Geisiane Torres
Client	EI AUSTRALIA
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009
Telephone	61 2 95160722
Facsimile	(Not specified)
Email	Geisiane.Torres @eiaustralia.com.au
Project	**E25947 600-660 Elizabeth St Redfern-Add**
Order Number	**E25947**
Samples	72

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	**SE243061B R0**
Date Received	13/3/2023
Date Reported	14/3/2023

COMMENTS

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

SIGNATORIES

Dong LIANG
Metals/Inorganics Team Leader

Shane MCDERMOTT
Inorganic/Metals Chemist

TCLP (Toxicity Characteristic Leaching Procedure) for Metals [AN006] Tested: 13/3/2023

PARAMETER	UOM	LOR	TP406_0.1-0.2 SOIL - 6/2/2023 SE243061B.016	TP416_0.1-0.2 SOIL - 7/2/2023 SE243061B.046
pH 1:20	pH Units	-	**8.2**	**6.6**
pH 1:20 plus HCL	pH Units	-	**2.2**	**2.2**
Extraction Solution Used	No unit	-	**1**	**1**
Mass of Sample Used*	g	-	**13**	**13**
Volume of ExtractionSolution Used*	mL	-	**250**	**250**
pH TCLP after 18 hours	pH Units	-	**5.1**	**4.9**

Metals in TCLP Extract by ICPOES [AN320] Tested: 14/3/2023

PARAMETER	UOM	LOR	TP406_0.1-0.2 SOIL - 6/2/2023 SE243061B.016	TP416_0.1-0.2 SOIL - 7/2/2023 SE243061B.046
Lead, Pb	mg/L	0.02	**0.19**	**0.14**

METHOD	METHODOLOGY SUMMARY
AN006	Contaminants of interest in a waste material are leached out of the waste with a selected leaching solution under controlled conditions. The ratio of sample to extraction fluid is 100g to 2L (1 to 20 by mass). The concentration of each contaminant of interest is determined in the leachate by appropriate methods after separation from the sample by filtering. Base on USEPA 1311.
AN006	Extraction Fluid #1: This fluid is made by combining 128.6mL of dilute sodium hydroxide solution and 11.5mL glacial acetic acid with water and diluting to a volume of 2 litres. The pH of this fluid should be 4.93 ± 0.05.
AN006	Extraction Fluid #2: This fluid is made by diluting 5.7mL glacial acetic acid with water to a volume of 1 litre. The pH of this fluid should be 2.88 ± 0.05.
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN320	Metals by ICP-OES: Samples are preserved with 10% nitric acid for a wide range of metals and some non-metals. This solution is measured by Inductively Coupled Plasma. Solutions are aspirated into an argon plasma at 8000-10000K and emit characteristic energy or light as a result of electron transitions through unique energy levels. The emitted light is focused onto a diffraction grating where it is separated into components .
AN320	Photomultipliers or CCDs are used to measure the light intensity at specific wavelengths. This intensity is directly proportional to concentration. Corrections are required to compensate for spectral overlap between elements . Reference APHA 3120 B.

FOOTNOTES

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

Unless it is reported that sampling has been performed by SGS, the samples have been 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:

a. 1 Bq is equivalent to 27 pCi
b. 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 and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client only. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .

This report must not be reproduced, except in full.

STATEMENT OF QA/QC PERFORMANCE

SE243061B R0

CLIENT DETAILS

Contact	Geisiane Torres
Client	EI AUSTRALIA
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009
Telephone	61 2 95160722
Facsimile	(Not specified)
Email	Geisiane.Torres @eiaustralia.com.au
Project	**E25947 600-660 Elizabeth St Redfern-Add**
Order Number	**E25947**
Samples	72

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	**SE243061B R0**
Date Received	13 Mar 2023
Date Reported	14 Mar 2023

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.
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 (within the SGS Alexandria Environmental laboratory).

SAMPLE SUMMARY

Sample counts by matrix	2 Soil	Type of documentation received	Email
Date documentation received	13/3/2023@5:41pm	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	10.3°C
Sample container provider	SGS	Turnaround time requested	Next Day
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes
Complete documentation received	Yes		

HOLDING TIME SUMMARY

SE243061B R0

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

Metals in TCLP Extract by ICPOES — **Method: ME-(AU)-[ENV]AN320**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP406_0.1-0.2	SE243061B.016	LB273842	06 Feb 2023	13 Mar 2023	05 Aug 2023	14 Mar 2023	05 Aug 2023	14 Mar 2023
TP416_0.1-0.2	SE243061B.046	LB273842	07 Feb 2023	13 Mar 2023	06 Aug 2023	14 Mar 2023	06 Aug 2023	14 Mar 2023

TCLP (Toxicity Characteristic Leaching Procedure) for Metals — **Method: ME-(AU)-[ENV]AN006**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP406_0.1-0.2	SE243061B.016	LB273778	06 Feb 2023	13 Mar 2023	05 Aug 2023	13 Mar 2023	17 Mar 2023	14 Mar 2023
TP416_0.1-0.2	SE243061B.046	LB273778	07 Feb 2023	13 Mar 2023	06 Aug 2023	13 Mar 2023	17 Mar 2023	14 Mar 2023

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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

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.

Metals in TCLP Extract by ICPOES — **Method: ME-(AU)-[ENV]AN320**

Sample Number	Parameter	Units	LOR	Result
LB273842.001	Lead, Pb	mg/L	0.02	<0.02

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / 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 x SDL / Mean + 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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

No duplicates were required for this job.

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.

Metals in TCLP Extract by ICPOES — **Method: ME-(AU)-[ENV]AN320**

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB273842.002	Lead, Pb	mg/L	0.02	0.50	0.5	80 - 120	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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spikes were required for this job.

MATRIX SPIKE DUPLICATES

SE243061B R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / 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 x SDL / Mean + 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 identifer when outside suggested criteria. Refer to the footnotes section at the

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: https://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.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	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 relevant report comments for further information.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client only. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

This test report shall not be reproduced, except in full.

source: SE_Autoscan.pdf page: 1 SGS Ref: SE243061B_COC

Yin, Emily (Sydney)

From: Sharon Li - EIAustralia <sharon.li@eiaustralia.com.au>
Sent: Monday, 13 March 2023 5:41 PM
To: AU.Environmental.Sydney, AU (Sydney); Geisiane Torres - EIAustralia; Sergio Raposeira - EIAustralia; AU.SampleReceipt.Sydney, AU (Sydney)
Subject: [EXTERNAL] RE: Report Job SE243061, your reference E25947 600-660 Elizabeth St Redfern, order number E25947

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

SGS EHS Alexandria Laboratory
SE243061B COC
Received: 13 – Mar – 2023

Hi SGS

Please run TCLP for lead for the following samples on 24 hrs TAT:

- TP406_0.1-0.2
- TP416_0.1-0.2

Thanks
Sharon
From: AU.Environmental.Sydney@SGS.com [mailto:AU.Environmental.Sydney@SGS.com]
Sent: Tuesday, 21 February 2023 5:37 PM
To: Geisiane Torres - EIAustralia; Laboratory Results - EIAustralia; Sergio Raposeira - EIAustralia; Sharon Li - EIAustralia
Subject: Report Job SE243061, your reference E25947 600-660 Elizabeth St Redfern, order number E25947

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Dear Valued Customer,

Please find attached the report for SGS job SE243061, your reference E25947 600-660 Elizabeth St Redfern, order number E25947.

If you have any questions or concerns, please don't hesitate to contact your SGS Client Services representative.

Please provide any feedback you have on our service via this link http://bit.ly/3XpzDFe

Best Regards,
SGS Alexandria Customer Service Team
SGS Australia Pty Ltd
Phone: +61 (0)2 8594 0400

Information in this email and any attachments is confidential and intended solely for the use of the individual(s) to whom it is addressed or otherwise directed. Please note that any views or opinions presented in this email are solely those of the author and do not necessarily represent those of the Company. Finally, the recipient should check this email and any attachments for the presence of viruses. The Company accepts no liability for any damage caused by any virus transmitted by this email. All SGS services are rendered in accordance with the applicable SGS conditions of service available on request and accessible at https://www.sgs.com/en/terms-and-conditions

SAMPLE RECEIPT ADVICE

SE243061B

CLIENT DETAILS

Contact	Geisiane Torres
Client	EI AUSTRALIA
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009
Telephone	61 2 95160722
Facsimile	(Not specified)
Email	Geisiane.Torres @eiaustralia.com.au
Project	**E25947 600-660 Elizabeth St Redfern-Add**
Order Number	**E25947**
Samples	72

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	Mon 13/3/2023
Report Due	Wed 15/3/2023
SGS Reference	**SE243061B**

SUBMISSION DETAILS

This is to confirm that 72 samples were received on Monday 13/3/2023. Results are expected to be ready by COB Wednesday 15/3/2023.
Please quote SGS reference SE243061B when making enquiries. Refer below for details relating to sample integrity upon receipt.

Sample counts by matrix	2 Soil	Type of documentation received	Email
Date documentation received	13/3/2023@5:41pm	Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	10.3°C
Sample container provider	SGS	Turnaround time requested	Next Day
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes
Complete documentation received	Yes		

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

COMMENTS

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx.
Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE243061B

CLIENT DETAILS

Client EI AUSTRALIA

Project E25947 600-660 Elizabeth St Redfern-Add

SUMMARY OF ANALYSIS

No.	Sample ID	Metals in TCLP Extract by ICPOES	TCLP (Toxicity Characteristic Leaching
016	TP406_0.1-0.2	1	6

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 .

SAMPLE RECEIPT ADVICE

SE243061B

CLIENT DETAILS

Client EI AUSTRALIA

Project E25947 600-660 Elizabeth St Redfern-Add

SUMMARY OF ANALYSIS

No.	Sample ID	Metals in TCLP Extract by ICPOES	TCLP (Toxicity Characteristic Leaching
046	TP416_0.1-0.2	1	6

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 .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	Geisiane Torres
Client	EI AUSTRALIA
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009
Telephone	61 2 95160722
Facsimile	(Not specified)
Email	Geisiane.Torres @eiaustralia.com.au
Project	**E25947 600-660 Elizabeth St Redfern**
Order Number	**E25947**
Samples	8

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	**SE243073 R0**
Date Received	9/2/2023
Date Reported	21/2/2023

COMMENTS

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

SPOCAS and CrS subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146. Report No. CE164709.

SIGNATORIES

Huong CRAWFORD
Production Manager

Shane MCDERMOTT
Inorganic/Metals Chemist

Field pH for Acid Sulphate Soil [AN104] Tested: 14/2/2023

PARAMETER	UOM	LOR	TP402_1.9-2.0 ASSA SOIL - 6/2/2023 SE243073.001	TP406_1.9-2.0 ASSA SOIL - 6/2/2023 SE243073.002	TP410_1.9-2.0 ASSA SOIL - 6/2/2023 SE243073.003	TP412_1.9-2.0 ASSA SOIL - 7/2/2023 SE243073.004	TP413_1.9-2.0 ASSA SOIL - 7/2/2023 SE243073.005
pHf	pH Units	-	6.2	5.6	5.6	5.5	5.8
pHfox	pH Units	-	2.3	2.3	2.6	2.6	3.1
Reaction Rate (pHfox)*	No unit	-	2	3	3	2	2
pH Difference*	pH Units	-10	3.9	3.3	3.0	2.9	2.6

PARAMETER	UOM	LOR	TP414_1.9-2.0 ASSA SOIL - 7/2/2023 SE243073.006	TP417_1.9-2.0 ASSA SOIL - 8/2/2023 SE243073.007	TP419_1.9-2.0 ASSA SOIL - 8/2/2023 SE243073.008
pHf	pH Units	-	5.9	5.5	5.7
pHfox	pH Units	-	3.5	2.8	3.4
Reaction Rate (pHfox)*	No unit	-	2	2	1
pH Difference*	pH Units	-10	2.3	2.7	2.2

Moisture Content [AN002] Tested: 21/2/2023

PARAMETER	UOM	LOR	TP402_1.9-2.0 ASSA SOIL - 6/2/2023 SE243073.001	TP406_1.9-2.0 ASSA SOIL - 6/2/2023 SE243073.002	TP410_1.9-2.0 ASSA SOIL - 6/2/2023 SE243073.003	TP412_1.9-2.0 ASSA SOIL - 7/2/2023 SE243073.004	TP413_1.9-2.0 ASSA SOIL - 7/2/2023 SE243073.005
% Moisture	%w/w	0.5	81	83	40	83	33

PARAMETER	UOM	LOR	TP414_1.9-2.0 ASSA SOIL - 7/2/2023 SE243073.006	TP417_1.9-2.0 ASSA SOIL - 8/2/2023 SE243073.007	TP419_1.9-2.0 ASSA SOIL - 8/2/2023 SE243073.008
% Moisture	%w/w	0.5	83	70	85

TAA (Titratable Actual Acidity) [AN219] Tested: 21/2/2023

PARAMETER	UOM	LOR	TP402_1.9-2.0 ASSA SOIL - 6/2/2023 SE243073.001	TP406_1.9-2.0 ASSA SOIL - 6/2/2023 SE243073.002	TP410_1.9-2.0 ASSA SOIL - 6/2/2023 SE243073.003	TP412_1.9-2.0 ASSA SOIL - 7/2/2023 SE243073.004	TP413_1.9-2.0 ASSA SOIL - 7/2/2023 SE243073.005
pH KCl*	pH Units	-	5.3	4.1	4.3	4.2	4.5
Titratable Actual Acidity	kg H2SO4/T	0.25	3.9	11	4.7	13	2.6
Titratable Actual Acidity (TAA) moles H+/tonne	moles H+/T	5	79	225	95	259	52
Titratable Actual Acidity (TAA) S%w/w	%w/w S	0.01	0.13	0.36	0.15	0.42	0.08
Sulphur (SKCl)	%w/w	0.005	0.017	0.017	<0.005	0.019	<0.005
Calcium (CaKCl)	%w/w	0.005	0.72	0.080	0.048	0.20	0.048
Magnesium (MgKCl)	%w/w	0.005	0.10	0.10	0.079	0.27	0.085

PARAMETER	UOM	LOR	TP414_1.9-2.0 ASSA SOIL - 7/2/2023 SE243073.006	TP417_1.9-2.0 ASSA SOIL - 8/2/2023 SE243073.007	TP419_1.9-2.0 ASSA SOIL - 8/2/2023 SE243073.008
pH KCl*	pH Units	-	5.3	4.2	4.8
Titratable Actual Acidity	kg H2SO4/T	0.25	3.3	9.2	6.4
Titratable Actual Acidity (TAA) moles H+/tonne	moles H+/T	5	67	187	130
Titratable Actual Acidity (TAA) S%w/w	%w/w S	0.01	0.11	0.30	0.21
Sulphur (SKCl)	%w/w	0.005	0.027	0.006	0.012
Calcium (CaKCl)	%w/w	0.005	0.68	0.068	0.57
Magnesium (MgKCl)	%w/w	0.005	0.27	0.095	0.17

TPA (Titratable Peroxide Acidity) [AN218] Tested: 21/2/2023

PARAMETER	UOM	LOR	TP402_1.9-2.0 ASSA SOIL - 6/2/2023 SE243073.001	TP406_1.9-2.0 ASSA SOIL - 6/2/2023 SE243073.002	TP410_1.9-2.0 ASSA SOIL - 6/2/2023 SE243073.003	TP412_1.9-2.0 ASSA SOIL - 7/2/2023 SE243073.004	TP413_1.9-2.0 ASSA SOIL - 7/2/2023 SE243073.005
Peroxide pH (pH Ox)	pH Units	-	1.9	1.8	2.6	1.8	2.9
TPA as kg H_2SO_4/tonne	kg H2SO4/T	0.25	230	280	15	210	6.1
TPA as moles H+/tonne	moles H+/T	5	4678	5638	299	4353	125
TPA as S % W/W	%w/w S	0.01	7.50	9.04	0.48	6.98	0.20
Titratable Sulfidic Acidity as moles H+/tonne	moles H+/T	5	4599	5414	205	4094	72
Titratable Sulfidic Acidity as kg H_2SO_4/tonne	kg H2SO4/T	0.25	230	270	10	200	3.6
Titratable Sulfidic Acidity as S % W/W	%w/w S	0.01	7.37	8.68	0.33	6.56	0.12
ANCE as % $CaCO_3$	% CaCO3	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
ANCE as moles H+/tonne	moles H+/T	5	<5	<5	<5	<5	<5
ANCE as S % W/W	%w/w S	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Peroxide Oxidisable Sulphur (Spos)*	%w/w	0.005	1.4	1.5	0.20	1.9	0.15
Peroxide Oxidisable Sulphur as moles H+/tonne*	moles H+/T	5	900	965	128	1167	95
Sulphur (Sp)	%w/w	0.005	1.5	1.6	0.21	1.9	0.15
Calcium (Cap)	%w/w	0.005	0.22	0.084	0.046	0.20	0.050
Reacted Calcium (CaA)*	%w/w	0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Reacted Calcium (CaA)*	moles H+/T	5	<5	<5	<5	<5	<5
Magnesium (Mgp)	%w/w	0.005	0.13	0.094	0.079	0.25	0.090
Reacted Magnesium (MgA)*	%w/w	0.005	0.033	<0.005	<0.005	<0.005	<0.005
Reacted Magnesium (MgA)*	moles H+/T	5	27	<5	<5	<5	<5
Net Acid Soluble Sulphur as % w/w*	%w/w	0.005	-	0.071	0.019	0.082	0.014
Net Acid Soluble Sulphur as moles H+/tonne*	moles H+/T	5	-	45	12	51	9

PARAMETER	UOM	LOR	TP414_1.9-2.0 ASSA SOIL - 7/2/2023 SE243073.006	TP417_1.9-2.0 ASSA SOIL - 8/2/2023 SE243073.007	TP419_1.9-2.0 ASSA SOIL - 8/2/2023 SE243073.008
Peroxide pH (pH Ox)	pH Units	-	2.0	2.1	1.9
TPA as kg H_2SO_4/tonne	kg H2SO4/T	0.25	230	58	180
TPA as moles H+/tonne	moles H+/T	5	4678	1188	3692
TPA as S % W/W	%w/w S	0.01	7.50	1.90	5.92
Titratable Sulfidic Acidity as moles H+/tonne	moles H+/T	5	4610	1000	3563
Titratable Sulfidic Acidity as kg H_2SO_4/tonne	kg H2SO4/T	0.25	230	49	170
Titratable Sulfidic Acidity as S % W/W	%w/w S	0.01	7.39	1.60	5.71
ANCE as % $CaCO_3$	% CaCO3	0.01	<0.01	<0.01	<0.01
ANCE as moles H+/tonne	moles H+/T	5	<5	<5	<5
ANCE as S % W/W	%w/w S	0.01	<0.01	<0.01	<0.01
Peroxide Oxidisable Sulphur (Spos)*	%w/w	0.005	1.6	0.53	1.6
Peroxide Oxidisable Sulphur as moles H+/tonne*	moles H+/T	5	967	328	968
Sulphur (Sp)	%w/w	0.005	1.6	0.53	1.6
Calcium (Cap)	%w/w	0.005	0.46	0.060	0.13
Reacted Calcium (CaA)*	%w/w	0.005	<0.005	<0.005	<0.005
Reacted Calcium (CaA)*	moles H+/T	5	<5	<5	<5
Magnesium (Mgp)	%w/w	0.005	0.28	0.10	0.16
Reacted Magnesium (MgA)*	%w/w	0.005	<0.005	<0.005	<0.005
Reacted Magnesium (MgA)*	moles H+/T	5	<5	<5	<5
Net Acid Soluble Sulphur as % w/w*	%w/w	0.005	-	0.027	0.086
Net Acid Soluble Sulphur as moles H+/tonne*	moles H+/T	5	-	17	54

SPOCAS Net Acidity Calculations [AN220] Tested: 21/2/2023

PARAMETER	UOM	LOR	TP402_1.9-2.0 ASSA SOIL - 6/2/2023 SE243073.001	TP406_1.9-2.0 ASSA SOIL - 6/2/2023 SE243073.002	TP410_1.9-2.0 ASSA SOIL - 6/2/2023 SE243073.003	TP412_1.9-2.0 ASSA SOIL - 7/2/2023 SE243073.004	TP413_1.9-2.0 ASSA SOIL - 7/2/2023 SE243073.005
s-Net Acidity	%w/w S	0.005	1.6	2.0	0.37	2.3	0.25
a-Net Acidity	moles H+/T	5	980	1200	230	1500	150
Liming Rate*	kg CaCO3/T	0.1	73	92	17	110	12
Verification s-Net Acidity*	%w/w S	-20	0.48	0.52	0.07	0.62	0.05
a-Net Acidity without ANCE*	moles H+/T	5	980	1200	230	1500	150
Liming Rate without ANCE*	kg CaCO3/T	0.1	73	92	17	110	12

PARAMETER	UOM	LOR	TP414_1.9-2.0 ASSA SOIL - 7/2/2023 SE243073.006	TP417_1.9-2.0 ASSA SOIL - 8/2/2023 SE243073.007	TP419_1.9-2.0 ASSA SOIL - 8/2/2023 SE243073.008
s-Net Acidity	%w/w S	0.005	1.7	0.85	1.8
a-Net Acidity	moles H+/T	5	1000	530	1100
Liming Rate*	kg CaCO3/T	0.1	78	40	85
Verification s-Net Acidity*	%w/w S	-20	0.52	0.18	0.52
a-Net Acidity without ANCE*	moles H+/T	5	1000	530	1100
Liming Rate without ANCE*	kg CaCO3/T	0.1	78	40	85

Chromium Reducible Sulfur (CRS) [AN217] Tested: 21/2/2023

PARAMETER	UOM	LOR	TP402_1.9-2.0 ASSA SOIL - 6/2/2023 SE243073.001	TP406_1.9-2.0 ASSA SOIL - 6/2/2023 SE243073.002	TP410_1.9-2.0 ASSA SOIL - 6/2/2023 SE243073.003	TP412_1.9-2.0 ASSA SOIL - 7/2/2023 SE243073.004	TP413_1.9-2.0 ASSA SOIL - 7/2/2023 SE243073.005
Chromium Reducible Sulfur (Scr)	%	0.005	**0.28**	**0.13**	**0.021**	**0.15**	**0.008**
Chromium Reducible Sulfur (Scr)	moles H+/T	5	**173**	**82**	**13**	**94**	<5

PARAMETER	UOM	LOR	TP414_1.9-2.0 ASSA SOIL - 7/2/2023 SE243073.006	TP417_1.9-2.0 ASSA SOIL - 8/2/2023 SE243073.007	TP419_1.9-2.0 ASSA SOIL - 8/2/2023 SE243073.008
Chromium Reducible Sulfur (Scr)	%	0.005	**0.14**	**0.038**	**0.11**
Chromium Reducible Sulfur (Scr)	moles H+/T	5	**87**	**24**	**72**

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.
AN104	pHF is determined on an extract of approximately 2g of as received sample in approximately 10 mL of deionised water with pH determined after standing 30 minutes.
AN104	pHFox is determined on an extract of approximately 2g of as received sample with a few mLs of 30% hydrogen peroxide (adjusted to pH 4.5 to 5.5) with the extract reaction being rated from slight to extreme, with pH determined after reaction is complete and extract has cooled. Referenced to ASS Laboratory Methods Guidelines , method 23Af-Bf, 2004. 0 No Reaction 1 Slight Reaction 2 Moderate Reaction 3 Strong/High Reaction 4 Extreme/Vigorous Reaction (gas evolution and heat generation)
AN217	Dried pulped sample is mixed with acid and chromium metal in a rapid distillation unit to produce hydrogen sulfide (H2S) which is collected and titrated with iodine (I2(aq)) to measure SCR.
AN218	Soil samples are subjected to extreme oxidising conditions using hydrogen peroxide. Continuous application of heat and peroxide ensure all sulfide is converted to sulfuric acid. Excess peroxide is broken down by a copper catalyst prior to titration for acidity. Calcium, magnesium, and sulfur are determined by ICP-OES. Also included is a carbonate modification step which, depending on pH after the initial oxidation, gives a measure of ANC.
AN219	Dried pulped sample is extracted for 4 hours in a 1 M KCl solution. The ratio of sample to solution is 1:40. The extract is titrated for acidity. Calcium, magnesium, and sulfur are determined by ICP-AES.
AN220	SPOCAS Suite: Scheme for the calculation of net acidities and liming rates using a Fineness Factor of 1.5.

FOOTNOTES

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

Unless it is reported that sampling has been performed by SGS, the samples have been 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:

a. 1 Bq is equivalent to 27 pCi
b. 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 and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client only. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .

This report must not be reproduced, except in full.

STATEMENT OF QA/QC PERFORMANCE

SE243073 R0

CLIENT DETAILS

Contact	Geisiane Torres
Client	EI AUSTRALIA
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009
Telephone	61 2 95160722
Facsimile	(Not specified)
Email	Geisiane.Torres @eiaustralia.com.au
Project	**E25947 600-660 Elizabeth St Redfern**
Order Number	**E25947**
Samples	8

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	**SE243073 R0**
Date Received	09 Feb 2023
Date Reported	21 Feb 2023

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.
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 (within the SGS Alexandria Environmental laboratory).

SAMPLE SUMMARY

Sample counts by matrix	8 Soil	Type of documentation received	COC
Date documentation received	13/2/2023@5:24pm	Samples received in good order	Yes
Samples received without headspace	N/A	Sample temperature upon receipt	10.3°C
Sample container provider	Client	Turnaround time requested	Standard
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes
Complete documentation received	Yes		

HOLDING TIME SUMMARY

SE243073 R0

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

Field pH for Acid Sulphate Soil — **Method: ME-(AU)-[ENV]AN104**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP402_1.9-2.0 ASSA	SE243073.001	LB271413	06 Feb 2023	09 Feb 2023	06 Mar 2023	14 Feb 2023	06 Mar 2023	16 Feb 2023
TP406_1.9-2.0 ASSA	SE243073.002	LB271413	06 Feb 2023	09 Feb 2023	06 Mar 2023	14 Feb 2023	06 Mar 2023	16 Feb 2023
TP410_1.9-2.0 ASSA	SE243073.003	LB271413	06 Feb 2023	09 Feb 2023	06 Mar 2023	14 Feb 2023	06 Mar 2023	16 Feb 2023
TP412_1.9-2.0 ASSA	SE243073.004	LB271413	07 Feb 2023	09 Feb 2023	07 Mar 2023	14 Feb 2023	07 Mar 2023	16 Feb 2023
TP413_1.9-2.0 ASSA	SE243073.005	LB271413	07 Feb 2023	09 Feb 2023	07 Mar 2023	14 Feb 2023	07 Mar 2023	16 Feb 2023
TP414_1.9-2.0 ASSA	SE243073.006	LB271413	07 Feb 2023	09 Feb 2023	07 Mar 2023	14 Feb 2023	07 Mar 2023	16 Feb 2023
TP417_1.9-2.0 ASSA	SE243073.007	LB271413	08 Feb 2023	09 Feb 2023	08 Mar 2023	14 Feb 2023	08 Mar 2023	16 Feb 2023
TP419_1.9-2.0 ASSA	SE243073.008	LB271413	08 Feb 2023	09 Feb 2023	08 Mar 2023	14 Feb 2023	08 Mar 2023	16 Feb 2023

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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

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.

No method blanks were required for this job.

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / 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 x SDL / Mean + 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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

NOTE: The RPD reported is calculated from the unrounded data for the original and replicate result. Manual calculation of the RPD from the rounded data reported may

Field pH for Acid Sulphate Soil — **Method: ME-(AU)-[ENV]AN104**

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE242987.018	LB271413.012	pHf	pH Units	-	6.3	6.2	30	1
		pHfox	pH Units	-	2.2	2.1	30	3
SE243073.008	LB271413.023	pHf	pH Units	-	5.7	5.8	30	3
		pHfox	pH Units	-	3.4	3.5	30	2

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.

Sample Number	Parameter	Units	LOR

MATRIX SPIKES

SE243073 R0

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 identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spikes were required for this job.

MATRIX SPIKE DUPLICATES

SE243073 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / 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 x SDL / Mean + 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 identifer when outside suggested criteria. Refer to the footnotes section at the

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: https://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.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	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 relevant report comments for further information.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client only. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

This test report shall not be reproduced, except in full.

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS		LABORATORY DETAILS	
Contact	Admin	Manager	Anthony Nilsson
Client	SGS I&E SYDNEY	Laboratory	SGS Cairns Environmental
Address	5058 201 I&E HSE SYDNEY (EX 5258) UNIT 16 33 MADDOX STREET ALEXANDRIA NSW 2015	Address	Unit 2, 58 Comport St Portsmith QLD 4870
Telephone	0285940400	Telephone	+61 07 4035 5111
Facsimile	0285940499	Facsimile	+61 07 4035 5122
Email	au.environmental.sydney@sgs.com	Email	AU.Environmental.Cairns@sgs.com
Project	**E25947 600-660 Elizabeth St Redfern**	SGS Reference	**CE164709 R1**
Order Number	**SE243073**	Date Received	14 Feb 2023
Samples	8	Date Reported	28 Feb 2023

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(3146/19038)

This report cancels and supersedes the report No.CE164709 R0. dated 21/02/2023 issued by SGS Environment, Health and Safety due to addition of extra results on Chromium suite.

SIGNATORIES

Anthony NILSSON
Operations Manager

Jon DICKER
Manager Northern QLD

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE164709.001 Soil 02 Jun 2023 SE243073.001	CE164709.002 Soil 02 Jun 2023 SE243073.002	CE164709.003 Soil 02 Jun 2023 SE243073.003	CE164709.004 Soil 02 Jul 2023 SE243073.004
Moisture Content Method: AN002 Tested: 15/2/2023						
% Moisture	%w/w	0.5	**81**	**83**	**40**	**83**
TAA (Titratable Actual Acidity) Method: AN219 Tested: 16/2/2023						
pH KCl	pH Units	-	**5.3**	**4.1**	**4.3**	**4.2**
Titratable Actual Acidity	kg H2SO4/T	0.25	**3.9**	**11**	**4.7**	**13**
Titratable Actual Acidity (TAA) moles H+/tonne	moles H+/T	5	**79**	**225**	**95**	**259**
Titratable Actual Acidity (TAA) S%w/w	%w/w S	0.01	**0.13**	**0.36**	**0.15**	**0.42**
Sulphur (SKCl)	%w/w	0.005	**0.017**	**0.017**	<0.005	**0.019**
Calcium (CaKCl)	%w/w	0.005	**0.72**	**0.080**	**0.048**	**0.20**
Magnesium (MgKCl)	%w/w	0.005	**0.10**	**0.10**	**0.079**	**0.27**
TPA (Titratable Peroxide Acidity) Method: AN218 Tested: 16/2/2023						
Peroxide pH (pH Ox)	pH Units	-	**1.9**	**1.8**	**2.6**	**1.8**
TPA as kg H_2SO_4/tonne	kg H2SO4/T	0.25	**230**	**280**	**15**	**210**
TPA as moles H+/tonne	moles H+/T	5	**4678**	**5638**	**299**	**4353**
TPA as S % W/W	%w/w S	0.01	**7.50**	**9.04**	**0.48**	**6.98**
Titratable Sulfidic Acidity as moles H+/tonne	moles H+/T	5	**4599**	**5414**	**205**	**4094**
Titratable Sulfidic Acidity as kg H_2SO_4/tonne	kg H2SO4/T	0.25	**230**	**270**	**10**	**200**
Titratable Sulfidic Acidity as S % W/W	%w/w S	0.01	**7.37**	**8.68**	**0.33**	**6.56**
ANCE as % $CaCO_3$	% CaCO3	0.01	<0.01	<0.01	<0.01	<0.01
ANCE as moles H+/tonne	moles H+/T	5	<5	<5	<5	<5
ANCE as S % W/W	%w/w S	0.01	<0.01	<0.01	<0.01	<0.01
Peroxide Oxidisable Sulphur (Spos)	%w/w	0.005	**1.4**	**1.5**	**0.20**	**1.9**
Peroxide Oxidisable Sulphur as moles H+/tonne	moles H+/T	5	**900**	**965**	**128**	**1167**
Sulphur (Sp)	%w/w	0.005	**1.5**	**1.6**	**0.21**	**1.9**
Calcium (Cap)	%w/w	0.005	**0.22**	**0.084**	**0.046**	**0.20**
Reacted Calcium (CaA)	%w/w	0.005	<0.005	<0.005	<0.005	<0.005
Reacted Calcium (CaA)	moles H+/T	5	<5	<5	<5	<5
Magnesium (Mgp)	%w/w	0.005	**0.13**	**0.094**	**0.079**	**0.25**
Reacted Magnesium (MgA)	%w/w	0.005	**0.033**	<0.005	<0.005	<0.005
Reacted Magnesium (MgA)	moles H+/T	5	**27**	<5	<5	<5
Net Acid Soluble Sulphur as % w/w	%w/w	0.005	-	**0.071**	**0.019**	**0.082**
Net Acid Soluble Sulphur as moles H+/tonne	moles H+/T	5	-	**45**	**12**	**51**
HCl Extractable S, Ca and Mg in Soil/Solids ICP OES Method: AN014 Tested: 21/2/2023						
Acid Soluble Sulfate, SO4 as S	%w/w	0.005	-	**0.089**	**0.021**	**0.10**
Acid Soluble Sulfur (SHCl)	%w/w	0.005	-	**0.089**	**0.021**	**0.10**
SPOCAS Net Acidity Calculations Method: AN220 Tested: 21/2/2023						
s-Net Acidity	%w/w S	0.005	**1.6**	**2.0**	**0.37**	**2.3**
a-Net Acidity	moles H+/T	5	**980**	**1200**	**230**	**1500**
Liming Rate	kg CaCO3/T	0.1	**73**	**92**	**17**	**110**
Verification s-Net Acidity	%w/w S	-20	**0.48**	**0.52**	**0.07**	**0.62**
a-Net Acidity without ANCE	moles H+/T	5	**980**	**1200**	**230**	**1500**
Liming Rate without ANCE	kg CaCO3/T	0.1	**73**	**92**	**17**	**110**
Chromium Reducible Sulfur (CRS) Method: AN217 Tested: 16/2/2023						
Chromium Reducible Sulfur (Scr)	%	0.005	**0.28**	**0.13**	**0.021**	**0.15**
Chromium Reducible Sulfur (Scr)	moles H+/T	5	**173**	**82**	**13**	**94**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE164709.001 Soil 02 Jun 2023 SE243073.001	CE164709.002 Soil 02 Jun 2023 SE243073.002	CE164709.003 Soil 02 Jun 2023 SE243073.003	CE164709.004 Soil 02 Jul 2023 SE243073.004
Chromium Suite Net Acidity Calculations	**Method: AN220**	**Tested: 28/2/2023**					
s-Net Acidity	%w/w S	0.01		**0.40**	**0.55**	**0.19**	**0.63**
s-Net Acidity without ANC	%w/w S	0.01		**0.40**	**0.55**	**0.19**	**0.63**
a-Net Acidity	moles H+/T	3		**250**	**340**	**120**	**390**
Liming Rate	kg CaCO3/T	0.1		**19**	**26**	**8.8**	**29**
Verification s-Net Acidity	%w/w S	-20		**0.28**	**0.13**	**0.02**	**0.15**
a-Net Acidity without ANCBT	moles H+/T	3		**250**	**340**	**120**	**390**
Liming Rate without ANCBT	kg CaCO3/T	0.1		**19**	**26**	**8.8**	**29**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE164709.005 Soil 02 Jul 2023 SE243073.005	CE164709.006 Soil 02 Jul 2023 SE243073.006	CE164709.007 Soil 02 Aug 2023 SE243073.007	CE164709.008 Soil 02 Aug 2023 SE243073.008
Moisture Content Method: AN002 Tested: 15/2/2023							
% Moisture	%w/w	0.5		**33**	**83**	**70**	**85**
TAA (Titratable Actual Acidity) Method: AN219 Tested: 16/2/2023							
pH KCl	pH Units	-		**4.5**	**5.3**	**4.2**	**4.8**
Titratable Actual Acidity	kg H2SO4/T	0.25		**2.6**	**3.3**	**9.2**	**6.4**
Titratable Actual Acidity (TAA) moles H+/tonne	moles H+/T	5		**52**	**67**	**187**	**130**
Titratable Actual Acidity (TAA) S%w/w	%w/w S	0.01		**0.08**	**0.11**	**0.30**	**0.21**
Sulphur (SKCl)	%w/w	0.005		<0.005	**0.027**	**0.006**	**0.012**
Calcium (CaKCl)	%w/w	0.005		**0.048**	**0.68**	**0.068**	**0.57**
Magnesium (MgKCl)	%w/w	0.005		**0.085**	**0.27**	**0.095**	**0.17**
TPA (Titratable Peroxide Acidity) Method: AN218 Tested: 16/2/2023							
Peroxide pH (pH Ox)	pH Units	-		**2.9**	**2.0**	**2.1**	**1.9**
TPA as kg H_2SO_4/tonne	kg H2SO4/T	0.25		**6.1**	**230**	**58**	**180**
TPA as moles H+/tonne	moles H+/T	5		**125**	**4678**	**1188**	**3692**
TPA as S % W/W	%w/w S	0.01		**0.20**	**7.50**	**1.90**	**5.92**
Titratable Sulfidic Acidity as moles H+/tonne	moles H+/T	5		**72**	**4610**	**1000**	**3563**
Titratable Sulfidic Acidity as kg H_2SO_4/tonne	kg H2SO4/T	0.25		**3.6**	**230**	**49**	**170**
Titratable Sulfidic Acidity as S % W/W	%w/w S	0.01		**0.12**	**7.39**	**1.60**	**5.71**
ANCE as % $CaCO_3$	% CaCO3	0.01		<0.01	<0.01	<0.01	<0.01
ANCE as moles H+/tonne	moles H+/T	5		<5	<5	<5	<5
ANCE as S % W/W	%w/w S	0.01		<0.01	<0.01	<0.01	<0.01
Peroxide Oxidisable Sulphur (Spos)	%w/w	0.005		**0.15**	**1.6**	**0.53**	**1.6**
Peroxide Oxidisable Sulphur as moles H+/tonne	moles H+/T	5		**95**	**967**	**328**	**968**
Sulphur (Sp)	%w/w	0.005		**0.15**	**1.6**	**0.53**	**1.6**
Calcium (Cap)	%w/w	0.005		**0.050**	**0.46**	**0.060**	**0.13**
Reacted Calcium (CaA)	%w/w	0.005		<0.005	<0.005	<0.005	<0.005
Reacted Calcium (CaA)	moles H+/T	5		<5	<5	<5	<5
Magnesium (Mgp)	%w/w	0.005		**0.090**	**0.28**	**0.10**	**0.16**
Reacted Magnesium (MgA)	%w/w	0.005		<0.005	<0.005	<0.005	<0.005
Reacted Magnesium (MgA)	moles H+/T	5		<5	<5	<5	<5
Net Acid Soluble Sulphur as % w/w	%w/w	0.005		**0.014**	-	**0.027**	**0.086**
Net Acid Soluble Sulphur as moles H+/tonne	moles H+/T	5		**9**	-	**17**	**54**
HCl Extractable S, Ca and Mg in Soil/Solids ICP OES Method: AN014 Tested: 21/2/2023							
Acid Soluble Sulfate, SO4 as S	%w/w	0.005		**0.015**	-	**0.033**	**0.098**
Acid Soluble Sulfur (SHCl)	%w/w	0.005		**0.015**	-	**0.033**	**0.098**
SPOCAS Net Acidity Calculations Method: AN220 Tested: 21/2/2023							
s-Net Acidity	%w/w S	0.005		**0.25**	**1.7**	**0.85**	**1.8**
a-Net Acidity	moles H+/T	5		**150**	**1000**	**530**	**1100**
Liming Rate	kg CaCO3/T	0.1		**12**	**78**	**40**	**85**
Verification s-Net Acidity	%w/w S	-20		**0.05**	**0.52**	**0.18**	**0.52**
a-Net Acidity without ANCE	moles H+/T	5		**150**	**1000**	**530**	**1100**
Liming Rate without ANCE	kg CaCO3/T	0.1		**12**	**78**	**40**	**85**
Chromium Reducible Sulfur (CRS) Method: AN217 Tested: 16/2/2023							
Chromium Reducible Sulfur (Scr)	%	0.005		**0.008**	**0.14**	**0.038**	**0.11**
Chromium Reducible Sulfur (Scr)	moles H+/T	5		<5	**87**	**24**	**72**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE164709.005 Soil 02 Jul 2023 SE243073.005	CE164709.006 Soil 02 Jul 2023 SE243073.006	CE164709.007 Soil 02 Aug 2023 SE243073.007	CE164709.008 Soil 02 Aug 2023 SE243073.008
Chromium Suite Net Acidity Calculations **Method: AN220** **Tested: 28/2/2023**							
s-Net Acidity	%w/w S	0.01		**0.10**	**0.25**	**0.36**	**0.39**
s-Net Acidity without ANC	%w/w S	0.01		**0.10**	**0.25**	**0.36**	**0.39**
a-Net Acidity	moles H+/T	3		**64**	**150**	**220**	**240**
Liming Rate	kg CaCO3/T	0.1		**4.8**	**12**	**17**	**18**
Verification s-Net Acidity	%w/w S	-20		**0.01**	**0.14**	**0.04**	**0.11**
a-Net Acidity without ANCBT	moles H+/T	3		**64**	**150**	**220**	**240**
Liming Rate without ANCBT	kg CaCO3/T	0.1		**4.8**	**12**	**17**	**18**

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Chromium Reducible Sulfur (CRS) **Method: ME-(AU)-[ENV]AN217**

Parameter	QC Reference	Units	LOR	MB	DUP %RPD
Chromium Reducible Sulfur (Scr)	LB112813	%	0.005	<0.005	0%
Chromium Reducible Sulfur (Scr)	LB112813	moles H+/T	5	<5	

TAA (Titratable Actual Acidity) **Method: ME-(AU)-[ENV]AN219**

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
pH KCl	LB112822	pH Units	-	6.4	0%	103%
Titratable Actual Acidity	LB112822	kg H2SO4/T	0.25	<0.25	0%	NA
Titratable Actual Acidity (TAA) moles H+/tonne	LB112822	moles H+/T	5	<5	0%	96%
Titratable Actual Acidity (TAA) S%w/w	LB112822	%w/w S	0.01	<0.01	0%	97%
Sulphur (SKCl)	LB112822	%w/w	0.005	<0.005	13%	90%
Calcium (CaKCl)	LB112822	%w/w	0.005	<0.005	7%	116%
Magnesium (MgKCl)	LB112822	%w/w	0.005	<0.005	7%	102%

TPA (Titratable Peroxide Acidity) **Method: ME-(AU)-[ENV]AN218**

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Peroxide pH (pH Ox)	LB112812	pH Units	-	6.2	9%	100%
TPA as kg H_2SO_4/tonne	LB112812	kg H2SO4/T	0.25	0.37	10%	104%
TPA as moles H+/tonne	LB112812	moles H+/T	5	7	10%	104%
TPA as S % W/W	LB112812	%w/w S	0.01	0.01	10%	104%
ANCE as % $CaCO_3$	LB112812	% CaCO3	0.01	<0.01	0%	
ANCE as moles H+/tonne	LB112812	moles H+/T	5	<5	0%	
ANCE as S % W/W	LB112812	%w/w S	0.01	<0.01	0%	
Sulphur (Sp)	LB112812	%w/w	0.005	<0.005	3%	97%
Calcium (Cap)	LB112812	%w/w	0.005	<0.005	3%	114%
Magnesium (Mgp)	LB112812	%w/w	0.005	<0.005	2%	108%

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.
AN014	This method is for the determination of soluble sulfate (SO4-S) by extraction with hydrochloric acid. Sulphides should not react and would normally be expelled. Sulfate as Sulfur is determined by ICP.
AN217	Dried pulped sample is mixed with acid and chromium metal in a rapid distillation unit to produce hydrogen sulfide (H2S) which is collected and titrated with iodine (I2(aq)) to measure SCR.
AN218	Soil samples are subjected to extreme oxidising conditions using hydrogen peroxide. Continuous application of heat and peroxide ensure all sulfide is converted to sulfuric acid. Excess peroxide is broken down by a copper catalyst prior to titration for acidity. Calcium, magnesium, and sulfur are determined by ICP-OES. Also included is a carbonate modification step which, depending on pH after the initial oxidation, gives a measure of ANC.
AN219	Dried pulped sample is extracted for 4 hours in a 1 M KCl solution. The ratio of sample to solution is 1:40. The extract is titrated for acidity. Calcium, magnesium, and sulfur are determined by ICP-AES.
AN220	Chromium Suite: Scheme for the calculation of net acidities and liming rates using a Fineness Factor of 1.5.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
***	Indicates that both * and ** apply.	NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been 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 calcuated 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:

a. 1 Bq is equivalent to 27 pCi
b. 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 and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client only. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .

This report must not be reproduced, except in full.

E-MAILED
13/2/23 @ 5.24pm

heet 1 of 2

te: 600-660 ELIZABETH ST, REDFERN

Project No: ES9147

aboratory: SGS Australia
Unit 16, 33 Maddox Street,
ALEXANDRIA NSW 2015
P: 02 8594 0400 F: 02 8594 0499

Sample ID	Laboratory ID	Container Type	Sampling Date	Sampling Time	SOIL	WATER	0.45 µm field filtered	OTHER	HM [A] /TRH/BTEX/PAHs OCP/OP/PCB/Asbestos	HM [A] /TRH/BTEX/PAHs	HM [A] /TRH/BTEX	BTEX	VOCs	Asbestos	Asbestos Quantification	Excavated Natural Material (ENM) Suite	ENM Suite - Stockpile discrete (TRH/BTEX/PAHs)	ENM Suite - Stockpile composite (HM [A] /pH / EC / Foreign Materials)	Dewatering Suite	pH / pH peroxide	sPOCAS	Chromium Reducible Sulfur (CrS)	PFAS	pH / CEC (cation exchange)	pH / EC (electrical conductivity)	Sulphate / Chloride	[illegible]	TCLP HM [B] / PAH
PH01_1.9-2.0ASS	1	ZLB	6/2/23	AM/PM	X															X	X	X					
PH05_1.9-2.0ASS																											
PH06_1.9-2.0ASS	2																			X	X	X					
PH07_1.9-2.0ASS																											
PH08_1.9-2.0ASS																											
PH10_1.9-2.0ASS	3																			X	X	X					
PH12_1.9-2.0ASS	4																			X	X	X					
PH13_1.9-2.0ASS	5																			X	X	X					
PH14_1.9-2.0ASS	6																			X	X	X					
PH15_1.9-2.0ASS																											
PH16_1.9-2.0ASS																											
PH17_1.9-2.0ASS	7																			X	X	X					

SGS EHS Sydney COC
SE243073

Sample Matrix | **Analysis** | **Comments**

Comments

HM [A]
Arsenic
Cadmium
Chromium
Copper
Lead
Mercury
Nickel
Zinc

HM [B]
Arsenic
Cadmium
Chromium
Lead
Mercury
Nickel

Dewatering Suite
pH & EC
TDS / TDU
Hardness
Total Cyanide
Metals (Al, As, Cd, Cr, Cu, Pb, Hg, Ni, Zn)
TRH (F1, F2, F3, F4)
BTEX
PAH
Total Phenol

LABORATORY TURNAROUND
- [X] Standard
- [ ] 24 Hours
- [ ] 48 Hours
- [ ] 72 Hours
- [ ] Other____

ontainer Type:
= solvent washed, acid rinsed, Tefton sealed glass jar
= solvent washed, acid rinsed glass bottle
= natural HDPE plastic bottle
C = glass vial, Tefton Septum
LB = Zip-Lock Bag BB = Bulk Bag

Investigator: I attest that these samples were collected in accordance with standard EI field sampling procedures.

Report with EI Waste Classification Table [X]

Sampler's Name (EI): GT	Received by (SGS):
Print GEISIANE TORRES	Print
Signature	Signature
Date 13/2/23	Date 09/02/23 @ 2.05

Sampler's Comments:
CC. SHARON LI
SERGIO RAPISARDA

IMPORTANT:
Please e-mail laboratory results to: lab@eiaustralia.com.au

eiaustralia
Contamination | Remediation | Geotechnical
Suite 6.01, 55 Miller Street,
PYRMONT NSW 2009
Ph: 9516 0722
lab@eiaustralia.com.au

source:SE_Autoscan.pdf page:1 SGS Ref: SE243073_COC

Sheet 2 of 2

Site: 600-660 ELIZABETH ST, REDFERN

Project No: E25947

Laboratory: **SGS Australia**
Unit 16, 33 Maddox Street,
ALEXANDRIA NSW 2015
P: 02 8594 0400 F: 02 8594 0499

Sample ID	Laboratory ID	Container Type	Sampling Date	Sampling Time	SOIL	WATER	0.45 µm field filtered	OTHER	HM^A /TRH/BTEX/PAHs OCP/OP/PCB/Asbestos	HM^A /TRH/BTEX/PAHs	HM^A /TRH/BTEX	BTEX	VOCs	Asbestos	Asbestos Quantification	Excavated Natural Material (ENM) Suite	ENM Suite - Stockpile discrete (TRH/BTEX/PAHs)	ENM Suite - Stockpile composite (HM^A /pH / EC / Foreign Materials)	Dewatering Suite	pH / pH peroxide	sPOCAS	Chromium Reducible Sulfur (CrS)	PFAS	pH / CEC (cation exchange)	pH / EC (electrical conductivity)	Sulphate / Chloride	Lead	TCLP HM^B / PAH
19:419 PMA_1.9-2.0ASA	8	ZLB	↓	AM/AM	X															X	X	X						

Comments

HM^A: Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Zinc

HM^B: Arsenic, Cadmium, Chromium, Lead, Mercury, Nickel

Dewatering Suite: pH & EC, TDS / TDU, Hardness, Total Cyanide, Metals (Al, As, Cd, Cr, Cu, Pb, Hg, Ni, Zn), TRH (F1, F2, F3, F4), BTEX, PAH, Total Phenol

LABORATORY TURNAROUND

- [x] Standard
- [ ] 24 Hours
- [ ] 48 Hours
- [ ] 72 Hours
- [ ] Other______

Container Type:
J = solvent washed, acid rinsed, Teflon sealed glass jar
B = solvent washed, acid rinsed glass bottle
P = natural HDPE plastic bottle
VC = glass vial, Teflon Septum
ZLB = Zip-Lock Bag BB = Bulk Bag

Investigator: I attest that these samples were collected in accordance with standard EI field sampling procedures.

Report with EI Waste Classification Table [x]

Sampler's Name (EI): GT	Received by (SGS):
Print: GEISIANE TORRES	Print:
Signature: [signature]	Signature: [signature]
Date: 13/2/23	Date: 09/02/23 @ 2:05

Sampler's Comments:
CC: SHARON LI
SERGIO RAPISARDA

eiaustralia
Contamination | Remediation | Geotechnical
Suite 6.01, 55 Miller Street,
PYRMONT NSW 2009
Ph: 9516 0722
lab@eiaustralia.com.au

COC June 2021 FORM v.5 - SGS

IMPORTANT:
Please e-mail laboratory results to: lab@eiaustralia.com.au

SAMPLE RECEIPT ADVICE

SE243073

CLIENT DETAILS

Contact	Geisiane Torres
Client	EI AUSTRALIA
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009
Telephone	61 2 95160722
Facsimile	(Not specified)
Email	Geisiane.Torres @eiaustralia.com.au
Project	**E25947 600-660 Elizabeth St Redfern**
Order Number	**E25947**
Samples	8

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	Thu 9/2/2023
Report Due	Tue 21/2/2023
SGS Reference	**SE243073**

SUBMISSION DETAILS

This is to confirm that 8 samples were received on Thursday 9/2/2023. Results are expected to be ready by COB Tuesday 21/2/2023. Please quote SGS reference SE243073 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Sample counts by matrix	8 Soil	Type of documentation received	COC
Date documentation received	13/2/2023@5:24pm	Samples received in good order	Yes
Samples received without headspace	N/A	Sample temperature upon receipt	10.3°C
Sample container provider	Client	Turnaround time requested	Standard
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes
Complete documentation received	Yes		

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

COMMENTS

SPOCAS and CrS subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146.
5 samples have been placed on hold as no tests have been assigned for it. These samples will not be processed.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE243073

CLIENT DETAILS

Client EI AUSTRALIA

Project E25947 600-660 Elizabeth St Redfern

SUMMARY OF ANALYSIS

No.	Sample ID	Chromium Reducible Sulfur (CRS)	Field pH for Acid Sulphate Soil	Moisture Content	SPOCAS Net Acidity Calculations	TAA (Titratable Actual Acidity)	TPA (Titratable Peroxide Acidity)
001	TP402_1.9-2.0 ASSA	2	4	1	6	7	21
002	TP406_1.9-2.0 ASSA	2	4	1	6	7	21
003	TP410_1.9-2.0 ASSA	2	4	1	6	7	21
004	TP412_1.9-2.0 ASSA	2	4	1	6	7	21
005	TP413_1.9-2.0 ASSA	2	4	1	6	7	21
006	TP414_1.9-2.0 ASSA	2	4	1	6	7	21
007	TP417_1.9-2.0 ASSA	2	4	1	6	7	21
008	TP419_1.9-2.0 ASSA	2	4	1	6	7	21

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 .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	Admin
Client	SGS I&E SYDNEY
Address	5058 201 I&E HSE SYDNEY (EX 5258) UNIT 16 33 MADDOX STREET ALEXANDRIA NSW 2015
Telephone	0285940400
Facsimile	0285940499
Email	au.environmental.sydney@sgs.com
Project	**E25947 600-660 Elizabeth St Redfern**
Order Number	**SE243073**
Samples	8

LABORATORY DETAILS

Manager	Anthony Nilsson
Laboratory	SGS Cairns Environmental
Address	Unit 2, 58 Comport St Portsmith QLD 4870
Telephone	+61 07 4035 5111
Facsimile	+61 07 4035 5122
Email	AU.Environmental.Cairns@sgs.com
SGS Reference	**CE164709 R0**
Date Received	14 Feb 2023
Date Reported	21 Feb 2023

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(3146/19038)

SIGNATORIES

Anthony NILSSON
Operations Manager

Jon DICKER
Manager Northern QLD

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE164709.001 Soil 02 Jun 2023 SE243073.001	CE164709.002 Soil 02 Jun 2023 SE243073.002	CE164709.003 Soil 02 Jun 2023 SE243073.003	CE164709.004 Soil 02 Jul 2023 SE243073.004
Moisture Content Method: AN002 Tested: 15/2/2023							
% Moisture	%w/w	0.5		81	83	40	83
TAA (Titratable Actual Acidity) Method: AN219 Tested: 16/2/2023							
pH KCl	pH Units	-		5.3	4.1	4.3	4.2
Titratable Actual Acidity	kg H2SO4/T	0.25		3.9	11	4.7	13
Titratable Actual Acidity (TAA) moles H+/tonne	moles H+/T	5		79	225	95	259
Titratable Actual Acidity (TAA) S%w/w	%w/w S	0.01		0.13	0.36	0.15	0.42
Sulphur (SKCl)	%w/w	0.005		0.017	0.017	<0.005	0.019
Calcium (CaKCl)	%w/w	0.005		0.72	0.080	0.048	0.20
Magnesium (MgKCl)	%w/w	0.005		0.10	0.10	0.079	0.27
TPA (Titratable Peroxide Acidity) Method: AN218 Tested: 16/2/2023							
Peroxide pH (pH Ox)	pH Units	-		1.9	1.8	2.6	1.8
TPA as kg H_2SO_4/tonne	kg H2SO4/T	0.25		230	280	15	210
TPA as moles H+/tonne	moles H+/T	5		4678	5638	299	4353
TPA as S % W/W	%w/w S	0.01		7.50	9.04	0.48	6.98
Titratable Sulfidic Acidity as moles H+/tonne	moles H+/T	5		4599	5414	205	4094
Titratable Sulfidic Acidity as kg H_2SO_4/tonne	kg H2SO4/T	0.25		230	270	10	200
Titratable Sulfidic Acidity as S % W/W	%w/w S	0.01		7.37	8.68	0.33	6.56
ANCE as % $CaCO_3$	% CaCO3	0.01		<0.01	<0.01	<0.01	<0.01
ANCE as moles H+/tonne	moles H+/T	5		<5	<5	<5	<5
ANCE as S % W/W	%w/w S	0.01		<0.01	<0.01	<0.01	<0.01
Peroxide Oxidisable Sulphur (Spos)	%w/w	0.005		1.4	1.5	0.20	1.9
Peroxide Oxidisable Sulphur as moles H+/tonne	moles H+/T	5		900	965	128	1167
Sulphur (Sp)	%w/w	0.005		1.5	1.6	0.21	1.9
Calcium (Cap)	%w/w	0.005		0.22	0.084	0.046	0.20
Reacted Calcium (CaA)	%w/w	0.005		<0.005	<0.005	<0.005	<0.005
Reacted Calcium (CaA)	moles H+/T	5		<5	<5	<5	<5
Magnesium (Mgp)	%w/w	0.005		0.13	0.094	0.079	0.25
Reacted Magnesium (MgA)	%w/w	0.005		0.033	<0.005	<0.005	<0.005
Reacted Magnesium (MgA)	moles H+/T	5		27	<5	<5	<5
Net Acid Soluble Sulphur as % w/w	%w/w	0.005		-	0.071	0.019	0.082
Net Acid Soluble Sulphur as moles H+/tonne	moles H+/T	5		-	45	12	51
HCl Extractable S, Ca and Mg in Soil/Solids ICP OES Method: AN014 Tested: 21/2/2023							
Acid Soluble Sulfate, SO4 as S	%w/w	0.005		-	0.089	0.021	0.10
Acid Soluble Sulfur (SHCl)	%w/w	0.005		-	0.089	0.021	0.10
SPOCAS Net Acidity Calculations Method: AN220 Tested: 21/2/2023							
s-Net Acidity	%w/w S	0.005		1.6	2.0	0.37	2.3
a-Net Acidity	moles H+/T	5		980	1200	230	1500
Liming Rate	kg CaCO3/T	0.1		73	92	17	110
Verification s-Net Acidity	%w/w S	-20		0.48	0.52	0.07	0.62
a-Net Acidity without ANCE	moles H+/T	5		980	1200	230	1500
Liming Rate without ANCE	kg CaCO3/T	0.1		73	92	17	110
Chromium Reducible Sulfur (CRS) Method: AN217 Tested: 16/2/2023							
Chromium Reducible Sulfur (Scr)	%	0.005		0.28	0.13	0.021	0.15
Chromium Reducible Sulfur (Scr)	moles H+/T	5		173	82	13	94

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE164709.005 Soil 02 Jul 2023 SE243073.005	CE164709.006 Soil 02 Jul 2023 SE243073.006	CE164709.007 Soil 02 Aug 2023 SE243073.007	CE164709.008 Soil 02 Aug 2023 SE243073.008
Moisture Content Method: AN002 Tested: 15/2/2023							
% Moisture	%w/w	0.5		**33**	**83**	**70**	**85**
TAA (Titratable Actual Acidity) Method: AN219 Tested: 16/2/2023							
pH KCl	pH Units	-		**4.5**	**5.3**	**4.2**	**4.8**
Titratable Actual Acidity	kg H2SO4/T	0.25		**2.6**	**3.3**	**9.2**	**6.4**
Titratable Actual Acidity (TAA) moles H+/tonne	moles H+/T	5		**52**	**67**	**187**	**130**
Titratable Actual Acidity (TAA) S%w/w	%w/w S	0.01		**0.08**	**0.11**	**0.30**	**0.21**
Sulphur (SKCl)	%w/w	0.005		<0.005	**0.027**	**0.006**	**0.012**
Calcium (CaKCl)	%w/w	0.005		**0.048**	**0.68**	**0.068**	**0.57**
Magnesium (MgKCl)	%w/w	0.005		**0.085**	**0.27**	**0.095**	**0.17**
TPA (Titratable Peroxide Acidity) Method: AN218 Tested: 16/2/2023							
Peroxide pH (pH Ox)	pH Units	-		**2.9**	**2.0**	**2.1**	**1.9**
TPA as kg H_2SO_4/tonne	kg H2SO4/T	0.25		**6.1**	**230**	**58**	**180**
TPA as moles H+/tonne	moles H+/T	5		**125**	**4678**	**1188**	**3692**
TPA as S % W/W	%w/w S	0.01		**0.20**	**7.50**	**1.90**	**5.92**
Titratable Sulfidic Acidity as moles H+/tonne	moles H+/T	5		**72**	**4610**	**1000**	**3563**
Titratable Sulfidic Acidity as kg H_2SO_4/tonne	kg H2SO4/T	0.25		**3.6**	**230**	**49**	**170**
Titratable Sulfidic Acidity as S % W/W	%w/w S	0.01		**0.12**	**7.39**	**1.60**	**5.71**
ANCE as % $CaCO_3$	% CaCO3	0.01		<0.01	<0.01	<0.01	<0.01
ANCE as moles H+/tonne	moles H+/T	5		<5	<5	<5	<5
ANCE as S % W/W	%w/w S	0.01		<0.01	<0.01	<0.01	<0.01
Peroxide Oxidisable Sulphur (Spos)	%w/w	0.005		**0.15**	**1.6**	**0.53**	**1.6**
Peroxide Oxidisable Sulphur as moles H+/tonne	moles H+/T	5		**95**	**967**	**328**	**968**
Sulphur (Sp)	%w/w	0.005		**0.15**	**1.6**	**0.53**	**1.6**
Calcium (Cap)	%w/w	0.005		**0.050**	**0.46**	**0.060**	**0.13**
Reacted Calcium (CaA)	%w/w	0.005		<0.005	<0.005	<0.005	<0.005
Reacted Calcium (CaA)	moles H+/T	5		<5	<5	<5	<5
Magnesium (Mgp)	%w/w	0.005		**0.090**	**0.28**	**0.10**	**0.16**
Reacted Magnesium (MgA)	%w/w	0.005		<0.005	<0.005	<0.005	<0.005
Reacted Magnesium (MgA)	moles H+/T	5		<5	<5	<5	<5
Net Acid Soluble Sulphur as % w/w	%w/w	0.005		**0.014**	-	**0.027**	**0.086**
Net Acid Soluble Sulphur as moles H+/tonne	moles H+/T	5		**9**	-	**17**	**54**
HCl Extractable S, Ca and Mg in Soil/Solids ICP OES Method: AN014 Tested: 21/2/2023							
Acid Soluble Sulfate, SO4 as S	%w/w	0.005		**0.015**	-	**0.033**	**0.098**
Acid Soluble Sulfur (SHCl)	%w/w	0.005		**0.015**	-	**0.033**	**0.098**
SPOCAS Net Acidity Calculations Method: AN220 Tested: 21/2/2023							
s-Net Acidity	%w/w S	0.005		**0.25**	**1.7**	**0.85**	**1.8**
a-Net Acidity	moles H+/T	5		**150**	**1000**	**530**	**1100**
Liming Rate	kg CaCO3/T	0.1		**12**	**78**	**40**	**85**
Verification s-Net Acidity	%w/w S	-20		**0.05**	**0.52**	**0.18**	**0.52**
a-Net Acidity without ANCE	moles H+/T	5		**150**	**1000**	**530**	**1100**
Liming Rate without ANCE	kg CaCO3/T	0.1		**12**	**78**	**40**	**85**
Chromium Reducible Sulfur (CRS) Method: AN217 Tested: 16/2/2023							
Chromium Reducible Sulfur (Scr)	%	0.005		**0.008**	**0.14**	**0.038**	**0.11**
Chromium Reducible Sulfur (Scr)	moles H+/T	5		<5	**87**	**24**	**72**

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Chromium Reducible Sulfur (CRS) **Method: ME-(AU)-[ENV]AN217**

Parameter	QC Reference	Units	LOR	MB	DUP %RPD
Chromium Reducible Sulfur (Scr)	LB112813	%	0.005	<0.005	0%
Chromium Reducible Sulfur (Scr)	LB112813	moles H+/T	5	<5	

TAA (Titratable Actual Acidity) **Method: ME-(AU)-[ENV]AN219**

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
pH KCl	LB112822	pH Units	-	6.4	0%	103%
Titratable Actual Acidity	LB112822	kg H2SO4/T	0.25	<0.25	0%	NA
Titratable Actual Acidity (TAA) moles H+/tonne	LB112822	moles H+/T	5	<5	0%	96%
Titratable Actual Acidity (TAA) S%w/w	LB112822	%w/w S	0.01	<0.01	0%	97%
Sulphur (SKCl)	LB112822	%w/w	0.005	<0.005	13%	90%
Calcium (CaKCl)	LB112822	%w/w	0.005	<0.005	7%	116%
Magnesium (MgKCl)	LB112822	%w/w	0.005	<0.005	7%	102%

TPA (Titratable Peroxide Acidity) **Method: ME-(AU)-[ENV]AN218**

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Peroxide pH (pH Ox)	LB112812	pH Units	-	6.2	9%	100%
TPA as kg H_2SO_4/tonne	LB112812	kg H2SO4/T	0.25	0.37	10%	104%
TPA as moles H+/tonne	LB112812	moles H+/T	5	7	10%	104%
TPA as S % W/W	LB112812	%w/w S	0.01	0.01	10%	104%
ANCE as % $CaCO_3$	LB112812	% CaCO3	0.01	<0.01	0%	
ANCE as moles H+/tonne	LB112812	moles H+/T	5	<5	0%	
ANCE as S % W/W	LB112812	%w/w S	0.01	<0.01	0%	
Sulphur (Sp)	LB112812	%w/w	0.005	<0.005	3%	97%
Calcium (Cap)	LB112812	%w/w	0.005	<0.005	3%	114%
Magnesium (Mgp)	LB112812	%w/w	0.005	<0.005	2%	108%

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.
AN014	This method is for the determination of soluble sulfate (SO4-S) by extraction with hydrochloric acid. Sulphides should not react and would normally be expelled. Sulfate as Sulfur is determined by ICP.
AN217	Dried pulped sample is mixed with acid and chromium metal in a rapid distillation unit to produce hydrogen sulfide (H2S) which is collected and titrated with iodine (I2(aq)) to measure SCR.
AN218	Soil samples are subjected to extreme oxidising conditions using hydrogen peroxide. Continuous application of heat and peroxide ensure all sulfide is converted to sulfuric acid. Excess peroxide is broken down by a copper catalyst prior to titration for acidity. Calcium, magnesium, and sulfur are determined by ICP-OES. Also included is a carbonate modification step which, depending on pH after the initial oxidation, gives a measure of ANC.
AN219	Dried pulped sample is extracted for 4 hours in a 1 M KCl solution. The ratio of sample to solution is 1:40. The extract is titrated for acidity. Calcium, magnesium, and sulfur are determined by ICP-AES.
AN220	SPOCAS Suite: Scheme for the calculation of net acidities and liming rates using a Fineness Factor of 1.5.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
***	Indicates that both * and ** apply.	NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been 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 calcuated 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:

a. 1 Bq is equivalent to 27 pCi
b. 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 and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client only. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law .

This report must not be reproduced, except in full.

source: SE_Autoscan.pdf page: 1 SGS Ref: SE243073A_COC

Yin, Emily (Sydney)

From: Geisiane Torres - ElAustralia <geisiane.torres@eiaustralia.com.au>
Sent: Friday, 24 February 2023 6:10 PM
To: AU.Environmental.Sydney, AU (Sydney); AU.SampleReceipt.Sydney, AU (Sydney)
Cc: Sharon Li - ElAustralia
Subject: [EXTERNAL] E25947_Redfern

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi SGS team,

Can you please book Chromium suite for samples below:

	Sample ID	TPA (moles H^+/tonne)	TSA (moles H^+/tonne)	S_{POS} (as %S)
1	TP402_1.9-2.0 ASSA	4678	4599	1.4
2	TP406_1.9-2.0 ASSA	5638	5414	1.5
3	TP410_1.9-2.0 ASSA			0.2
4	TP412_1.9-2.0 ASSA	4353	4094	1.9
5	TP413_1.9-2.0 ASSA			0.15
6	TP414_1.9-2.0 ASSA	4678	4610	1.6
7	TP417_1.9-2.0 ASSA	1188		0.53
8	TP419_1.9-2.0 ASSA	3692	3563	1.6

SGS EHS Alexandria Laboratory
SE243073A COC
Received: 24 – Feb – 2023

TAT: Standard. Thank you.

Best regards,

Geisiane Torres
Environmental Engineer

T (02) 9516 0722 M 0478 965 237
E geisiane.torres@eiaustralia.com.au

Suite 6.01, 55 Miller Street
Pyrmont, NSW 2009

www.eiaustralia.com.au

eiaustralia
Practical Solutions for Built Environments

Environmental | Geotechnical | Structural | Civil | Hazardous Materials

FINANCIAL REVIEW CLIENT CHOICE AWARDS 2019 WINNER beaton

Yin, Emily (Sydney)

From: Sharon Li - EIAustralia <sharon.li@eiaustralia.com.au>
Sent: Monday, 27 February 2023 3:22 PM
To: AU.SampleReceipt.Sydney, AU (Sydney); Geisiane Torres - EIAustralia
Subject: RE: [EXTERNAL] E25947_Redfern

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Yes please

Thanks for confirming

From: AU.SampleReceipt.Sydney, AU (Sydney) [mailto:AU.SampleReceipt.Sydney@sgs.com]
Sent: Monday, 27 February 2023 11:43 AM
To: Geisiane Torres - EIAustralia
Cc: Sharon Li - EIAustralia
Subject: RE: [EXTERNAL] E25947_Redfern

Caution: This email originated from outside your organization and might have suspicious subject or content. PLEASE DO NOT CLICK ANY LINKS AND\OR OPEN ANY ATTACHEMENTS UNLESS YOU CAN CONFIRM THE SENDER.

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Dear All,

Do you want them all analysed for Chromium Suite?
Please advise as soon as possible.
Thank You.

Regards,

Emily Yin
Environment, Health & Safety
Sample Receipt

SGS Australia Pty Ltd
Unit 16, 33 Maddox Street
Alexandria NSW 2015

Phone: +61 (0)2 8594 0400
Fax: +61 (0)2 8594 0499
E-mail: au.samplereceipt.sydney@sgs.com

From: Geisiane Torres - EIAustralia <geisiane.torres@eiaustralia.com.au>
Sent: Friday, 24 February 2023 6:10 PM
To: AU.Environmental.Sydney, AU (Sydney) <AU.Environmental.Sydney@sgs.com>; AU.SampleReceipt.Sydney, AU (Sydney) <AU.SampleReceipt.Sydney@sgs.com>

SAMPLE RECEIPT ADVICE

SE243073A

CLIENT DETAILS

Contact	Geisiane Torres
Client	EI AUSTRALIA
Address	SUITE 6.01 55 MILLER STREET PYRMONT NSW 2009
Telephone	61 2 95160722
Facsimile	(Not specified)
Email	Geisiane.Torres @eiaustralia.com.au
Project	**E25947 600-660 Elizabeth St Redfern-Add**
Order Number	**E25947**
Samples	8

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 24/2/2023
Report Due	Mon 6/3/2023
SGS Reference	**SE243073A**

SUBMISSION DETAILS

This is to confirm that 8 samples were received on Friday 24/2/2023. Results are expected to be ready by COB Monday 6/3/2023. Please quote SGS reference SE243073A when making enquiries. Refer below for details relating to sample integrity upon receipt.

Sample counts by matrix	8 Soil	Type of documentation received	Email
Date documentation received	24/2/2023@6:29pm	Samples received in good order	Yes
Samples received without headspace	N/A	Sample temperature upon receipt	10.3°C
Sample container provider	Client	Turnaround time requested	Standard
Samples received in correct containers	Yes	Sufficient sample for analysis	Yes
Sample cooling method	Ice Bricks	Samples clearly labelled	Yes
Complete documentation received	Yes		

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

COMMENTS

Chromium Suite subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146. Report No. CE164709A.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE243073A

CLIENT DETAILS

Client EI AUSTRALIA

Project E25947 600-660 Elizabeth St Redfern-Add

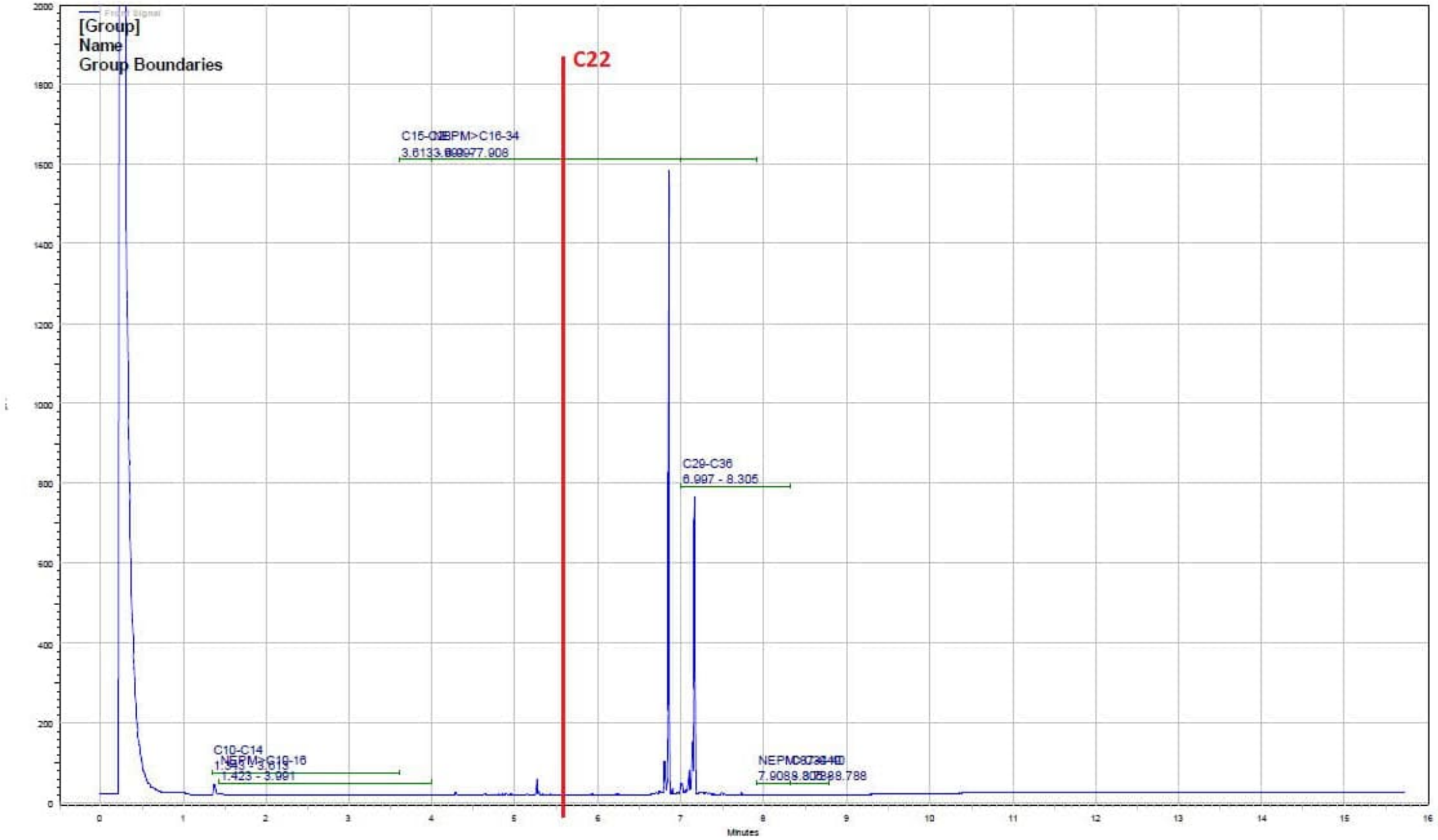
SUMMARY OF ANALYSIS

No.	Sample ID	Acid Neutralising Capacity (ANC)	Chromium Reducible Sulfur (CRS)	Chromium Suite Net Acidity Calculations	HCl Extractable S, Ca and Mg in Soil/Solids ICP OES	Moisture Content	TAA (Titratable Actual Acidity)
001	TP402 1.9-2.0 ASSA	6	2	7	1	1	5
002	TP406 1.9-2.0 ASSA	6	2	7	1	1	5
003	TP410_1.9-2.0 ASSA	6	2	7	1	1	5
004	TP412_1.9-2.0 ASSA	6	2	7	1	1	5
005	TP413 1.9-2.0 ASSA	6	2	7	1	1	5
006	TP414 1.9-2.0 ASSA	6	2	7	1	1	5
007	TP417 1.9-2.0 ASSA	6	2	7	1	1	5
008	TP419 1.9-2.0 ASSA	6	2	7	1	1	5

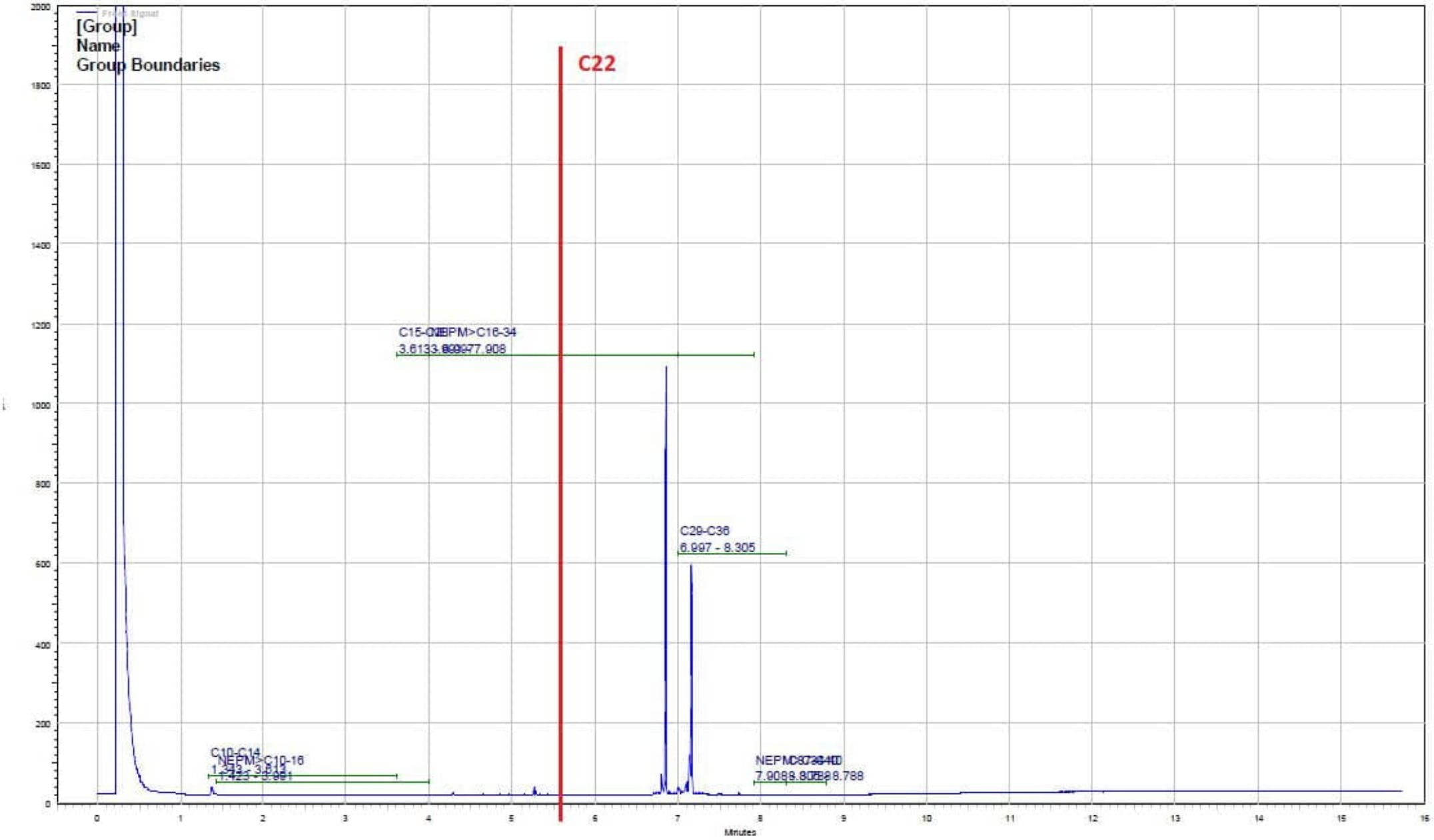
The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

Appendix D - Chromatograms

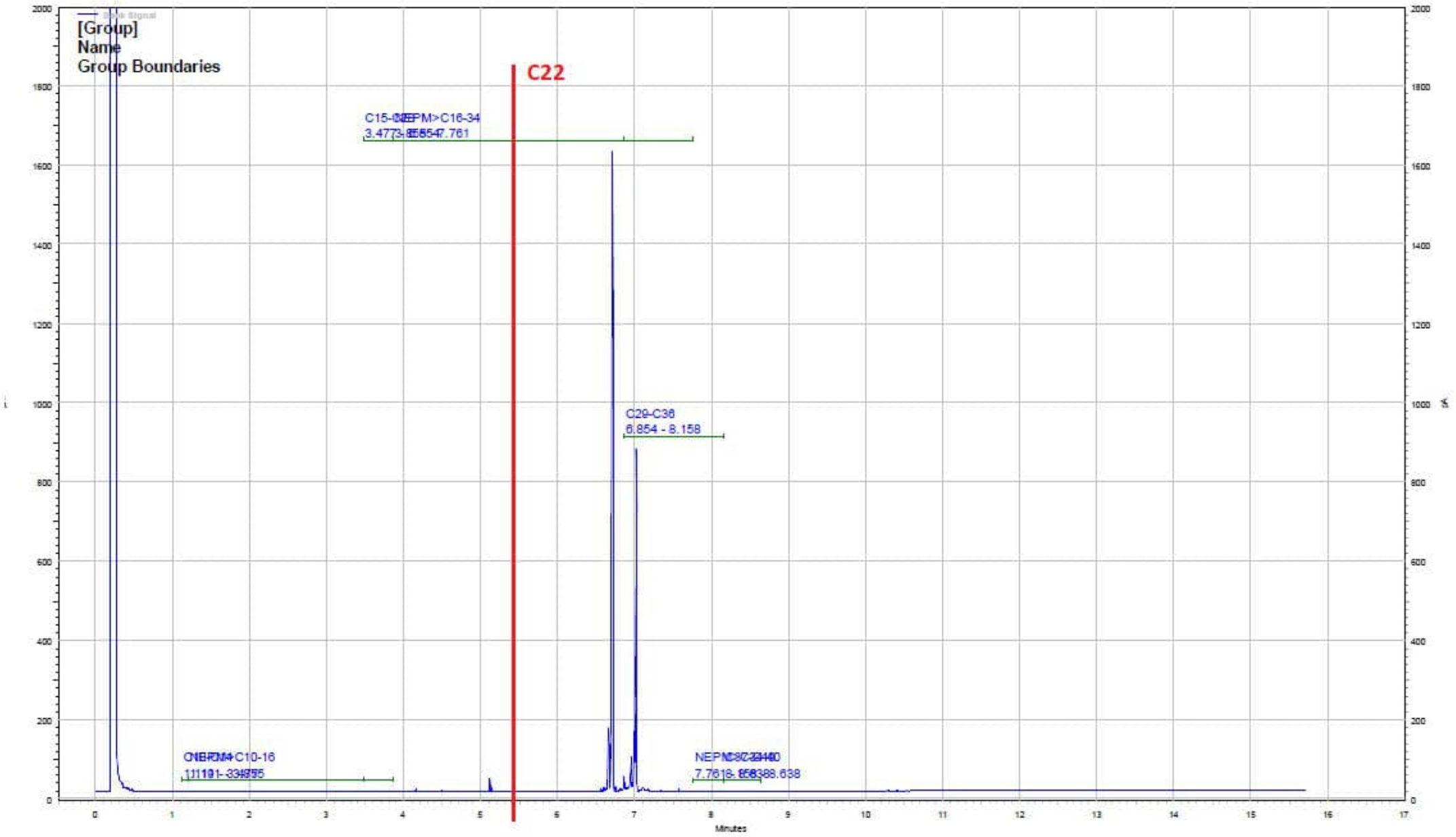
243060A-4 |SIL



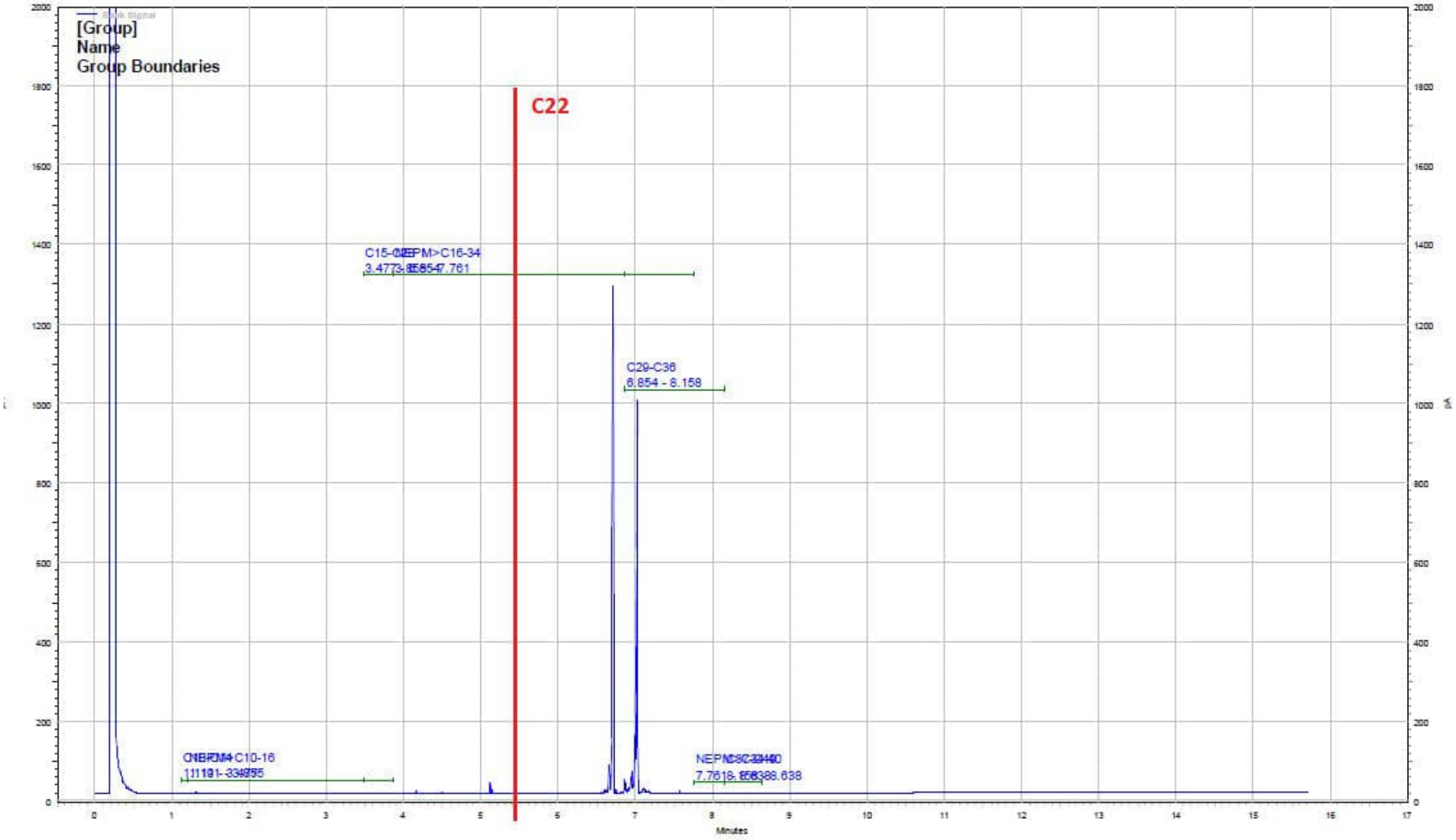
243060A-5 |SIL



243060A-6 |SIL



243060A-9 |SIL



243060A-15 |SIL