
APPENDIX C

QA/QC

QUALITY ASSURANCE/QUALITY CONTROL FOR CONTAMINATION ASSESSMENT MINMI

Quality Assurance (QA) was maintained by:

- compliance with a Project Quality Plan written for the objectives of the study;
- using qualified engineers to undertake the field supervision and sampling;
- following the Douglas Partners Pty Ltd (DP) operating procedures for sampling, field testing and decontamination as presented in Table 1;
- using NATA registered laboratories for sample testing that generally utilise standard laboratory methods of the US EPA, the APHA and NSW EPA.

Table 1 - Field Procedures

Abbreviation	Procedure Name
FPM LOG	Logging
FPM DECONT	Decontamination of Personnel and Equipment
FPM ENVID	Sample Identification, Handling, Transport and Storage of Contaminated Samples
FPM PIDETC	Operation of Field Analysers
FPM ENVSAMP	Sampling of Contaminated Soils

(from DP Field Procedures Manual)

Quality Control (QC) of the laboratory programme was achieved by the following means:

- check replicate - a specific sample was split in the field, placed in separate containers and labelled with different sample numbers, and sent to the laboratory for analysis;
- method blanks - the laboratory ran reagent blanks to confirm the equipment and standards used were uncontaminated;
- laboratory duplicates - the laboratory split samples internally and conducted tests on separate extracts;
- laboratory spikes - samples were spiked by the laboratory with a known concentration of contaminants and subsequently tested for percent recovery.

DISCUSSION

A. Check Replicate

The Relative Percent Difference (RPD) between replicate results is used as a measure of laboratory reproducibility and is given by the following:

$$RPD = \frac{ABS(\text{Replicate result 1} - \text{Replicate result 2})}{(\text{Replicate result 1} + \text{Replicate result 2})/2} \times 100$$

The RPD can have a value between 0% and 200%. An RPD data quality objective of up to 50% is generally considered to be acceptable for organic analysis, and 35% for inorganics (i.e. Metals).

A summary of the results of the soil replicate QA/QC testing is provided in Table 2.

Table 2 - Results of Quality Control Analysis

Analyte		Pit 1/0.1	R4	RPD (%)	Pit 6/0.25	R5	RPD (%)	Pit 7/0.1	R1	RPD (%)	Pit 11/0.1	R2	RPD (%)	Pit 19/0.1	R8	RPD (%)
Metals	As	<PQL	14	N/A	13	10	26	21	20	5	4	5	22	15	16	6
	Cd	<PQL	0.7	N/A	0.5	0.4	22	1.9	1.8	5	0.3	0.4	29	0.8	0.9	12
	Cr	<PQL	7.7	N/A	14	13	7	12	14	15	3.3	4.8	37	9.9	9.1	8
	Cu	0.8	27	188	29	26	11	880	4400	133	130	260	67	31	33	6
	Pb	5	160	188	290	460	45	410	540	27	53	81	42	140	160	13
	Hg	0.18	0.18	0	0.09	0.07	25	0.14	0.11	24	<PQL	0.05	N/A	0.22	0.25	13
	Ni	<PQL	8.5	N/A	15	15	0	20	22	10	7.5	8.3	10	10	9.4	6
	Zn	6.9	210	187	120	120	0	860	880	2	110	130	17	170	200	16
TRH	C ₆ - C ₉	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
	C ₁₀ - C ₁₄	<PQL	<PQL	N/A	<PQL	34	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	35	41	16
	C ₁₅ - C ₂₈	<PQL	<PQL	N/A	<PQL	330	N/A	77	92	18	53	<PQL	N/A	300	310	3
	C ₂₉ - C ₃₆	<PQL	<PQL	N/A	<PQL	420	N/A	330	250	28	240	<PQL	N/A	99	93	6
BTEX	Benzene	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
	Toluene	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
	Ethyl Benzene	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
	Xylene	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
PAH	Total PAHs	<PQL	<PQL	N/A	1.81	0.78	80	1.98	0.18	167	0.1	0.3	100	9.17	15.5	51
	Benzo(a)pyrene	<PQL	<PQL	N/A	0.21	0.08	90	1.31	0.11	169	<PQL	<PQL	N/A	0.77	1.2	44
OCPs	Total OCPs	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
	Aldrin + Dieldrin	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
	Chlordane	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
	DDT	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
	Heptachlor	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
OPPs		<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
PCBs		<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A

Results expressed in mg/kg on dry weight basis
 PQL - Practical Quantitation Limit
 N/A - Not Applicable

Table 2 (cont) - Results of Quality Control Analysis

Analyte		Pit 35/0.7	R3	RPD (%)	Pit 58/0.1-0.3	D111	RPD (%)	Pit 59/0-0.15	D109	RPD (%)	Pit 60/0.3-0.5	D106	RPD (%)	Pit 63/0.3-0.5	D112	RPD (%)
Metals	As	10	15	40	4	4	0	10	8	22	18	85	130	11	8	32
	Cd	0.4	0.7	55	0.3	0.3	0	3.9	0.3	171	0.4	0.3	29	0.1	0.1	0
	Cr	10	16	46	12	12	0	9.4	6.6	35	2.9	2.7	7	6.4	9.4	38
	Cu	5.7	6.4	12	4.7	5.9	23	27	14	63	18	14	25	19	26	31
	Pb	11	17	43	18	15	18	410	56	152	25	20	22	11	13	17
	Hg	<PQL	<PQL	N/A	<PQL	<PQL	N/A	0.08	0.11	32	0.27	0.57	71	0.07	0.05	33
	Ni	2	1.5	29	7.1	6.2	14	9.4	4	81	9.6	7	31	7.1	9	24
	Zn	28	24	15	30	33	10	1900	210	160	88	36	84	23	31	30
TRH	C ₆ - C ₉	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
	C ₁₀ - C ₁₄	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	42	54	25	<PQL	<PQL	N/A
	C ₁₅ - C ₂₈	<PQL	<PQL	N/A	<PQL	<PQL	N/A	170	180	6	320	380	17	<PQL	<PQL	N/A
	C ₂₉ - C ₃₆	<PQL	<PQL	N/A	<PQL	77	N/A	57	97	52	120	150	22	<PQL	<PQL	N/A
BTEX	Benzene	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
	Toluene	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
	Ethyl Benzene	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
	Xylene	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
PAH	Total PAHs	<PQL	<PQL	N/A	<PQL	<PQL	N/A	3.05	17.7	141	3.93	2.66	39	<PQL	<PQL	N/A
	Benzo(a)pyrene	<PQL	<PQL	N/A	<PQL	<PQL	N/A	0.15	1.7	168	0.13	0.06	74	<PQL	<PQL	N/A
OCPs	Total OCPs	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
	Aldrin + Dieldrin	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
	Chlordane	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
	DDT	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
	Heptachlor	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
OPPs		<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
PCBs		<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A

Results expressed in mg/kg on dry weight basis
 PQL - Practical Quantitation Limit
 N/A - Not Applicable

Table 2 (cont) - Results of Quality Control Analysis

Analyte		Pit 88/0-0.05	D129	RPD (%)	Pit 92/0.3-0.5	D123	RPD (%)	Pit 104/0.3	R7	RPD (%)	Pit 115/0.2	R6	RPD (%)	Bore 97/2.0	BD4	RPD (%)
Metals	As	20	7	96	<PQL	4	N/A	6	5	18	5	3	50	4	4	0
	Cd	0.4	0.3	29	0.2	0.2	0	0.4	<PQL	N/A	<PQL	<PQL	N/A	0.3	0.4	29
	Cr	8	4.5	56	8.9	8	11	5.5	10	58	6.2	6	3	10	10	0
	Cu	15	8.2	59	27	26	4	9.3	14	40	3.3	2.7	20	29	31	7
	Pb	26	17	42	15	18	18	91	15	143	4	4	0	12	13	8
	Hg	<PQL	<PQL	N/A	0.06	0.05	18	0.09	<PQL	N/A	<PQL	<PQL	N/A	0.05	0.06	18
	Ni	5.2	4.4	17	16	20	22	3.6	14	118	2.4	2.3	4	31	40	25
	Zn	60	41	38	75	77	3	58	21	94	17	16	6	150	180	18
TRH	C ₆ - C ₉	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
	C ₁₀ - C ₁₄	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
	C ₁₅ - C ₂₈	<PQL	<PQL	N/A	<PQL	<PQL	N/A	89	130	37	<PQL	<PQL	N/A	<PQL	<PQL	N/A
	C ₂₉ - C ₃₆	<PQL	<PQL	N/A	<PQL	<PQL	N/A	120	160	29	<PQL	<PQL	N/A	<PQL	<PQL	N/A
BTEX	Benzene	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
	Toluene	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
	Ethyl Benzene	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
	Xylene	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
PAH	Total PAHs	<PQL	<PQL	N/A	<PQL	<PQL	N/A	0.68	2.49	114	<PQL	<PQL	N/A	<PQL	<PQL	N/A
	Benzo(a)pyrene	<PQL	<PQL	N/A	<PQL	<PQL	N/A	0.08	0.19	81	<PQL	<PQL	N/A	<PQL	<PQL	N/A
OCPs	Total OCPs	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
	Aldrin + Dieldrin	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
	Chlordane	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
	DDT	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
	Heptachlor	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
OPPs		<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A
PCBs		<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A	<PQL	<PQL	N/A

Results expressed in mg/kg on dry weight basis
 PQL - Practical Quantitation Limit
 N/A - Not Applicable

RPDs ranged from 0% to 188%, and generally within 0% to 50%. The high RPDs are considered to be due to the heterogeneity of the fill material (detailed sample descriptions contained in the test report sheets in Appendix A), and the results are considered to be within the acceptable limits.

B. Method Blanks

All method blanks returned results lower than the laboratory detection limit, therefore are acceptable.

C. Laboratory Replicates

The average RPD for individual contaminants generally ranged from 0% to 50%, with the exception of two RPD's of 67% and one PAH result (concentration difference of 0.1 mg/kg), and one RPD of 167% (heterogeneous fill material), which is considered to be within acceptable limits.

D. Laboratory Spikes

Recoveries in the order of 70% to 130% are generally considered to be acceptable. The average percent recovery for individual organic contaminants ranged from 62% to 138%, and was generally within the quality control objectives.

CONCLUSIONS

The accuracy and precision of the soil testing procedures, as inferred by the QA/QC data is generally considered to be of sufficient standard to allow the data reported to be used to interpret site contamination conditions.

5301-03

CHAIN OF CUSTODY DESPATCH SHEET

Project Name: MINMI
Project No: 39663D DP Order No: 71303
DP Contact Person: WILL WRIGHT / LEON COLLINS
Prior Storage: esky (fridge) shelved (circle).....

To: SGS Australia PTY LTD
Unit 16/33 Maddox Street.....
ALEXANDRIA NSW 2015
Ph: (02) 8594 0400.....
Attn: Angela.....

Sample ID	Date Sampled	Sample Type S-soil W-water	Lab ID	Analytes											TCLP	Notes
				TRH	BTEX	#Metals	PCB's	PAH's	OCP's	OPP's	Asbestos					
37/0.1	24.10.07	S	1	/	/	/	/	/	/	/						
32/0.6	26.10.07		2	/	/	/	/	/	/	/						
35/0.7	" "		3	/	/	/	/	/	/	/						
46/1.6	24.10.07		4	/	/	/	/	/	/	/						
45/0.2	" "		5	/	/	/	/	/	/	/						
42/1.2	" "		6	/	/	/	/	/	/	/	✓					
44/0.5	" "		7	/	/	/	✓	✓	/	/						
43/1.1	" "		8	/	/	/	/	/	/	/						
40/0.2	" "		9	/	/	/	/	/	/	/						
49/0.1	" "		10	/	/	/	/	/	/	/						
48/0-0.05	" "		11	/	/	/	✓	/	/	/						
41/2.0	25.10.07	↓	12	/	/	/	/	/	/	/						
PQL (S)		mg/kg														
PQL (W)		mg/L														

SGS
Received: 21/11/07
By: [Signature]
Time: 8:30 am
Samples intact: [Initials]
Ice/ Cooler Pack: [Initials]
56277

PQL = practical quantitation limit *As per Laboratory Method (Detection Limit)
- Metals to Analyse (Please circle): As Cd Cr Cu Pb Zn Hg Ni Other
Date relinquished: 1/11/07
Total number of samples in container: 48
Results required by:
TAT (Circle): Standard 72 hr 48hr 24hr

SAMPLES RECEIVED
Please sign and date to acknowledge receipt of samples and return by fax

Signature: [Signature]
Date: 21/11/07 Lab Ref: 55238

Send results to:
Douglas Partners Pty Ltd
Address:
BOX 324 Hunter Region Mail Centre
NSW 2310
Fax: (02) 4960 9601

CHAIN OF CUSTODY DESPATCH SHEET

Project Name: MINMI
Project No: 39663D DP Order No: 71303
DP Contact Person: WILL WRIGHT / LEON COLLINS
Prior Storage: esky (fridge) shelved (circle).....

To: SGS Australia PTY LTD
Unit 16/33 Maddox Street
ALEXANDRIA NSW 2015
Ph: (02) 8594 0400
Attn: Angela

Sample ID	Date Sampled	Sample Type S-soil W-water	Lab ID	Analytes											TCLP	Notes
				TRH	BTEX	#Metals	PCB's	PAH's	OCP's	OPP's	Asbestos					
15/0.2	25.10.07	S	13	/	/	/	/	/	/	/						
7/0.1	" "		14	/	/	/	/	/	/	/						
11/0.1	" "		15	/	/	/	/	/	/	/						
11/0.7	" "		16	/	/	/	/	/	/	/						
9/0.1	" "		17	/	/	/	/	/	/	/						
8/0.1	" "		18	/	/	/	/	/	/	/						
→ 35/0.1	26.10.07		19	/	/	/	/	/	/	/						
R1	25.10.07		20	/	/	/	/	/	/	/						
R2	" "		21	/	/	/	/	/	/	/						
R3	26.10.07		22	/	/	/	/	/	/	/						
R4	29.10.07		23	/	/	/	/	/	/	/						
R5	30.10.07	↓	24	/	/	/	/	/	/	/						
PQL (S)		mg/kg														
PQL (W)		mg/L														

PQL = practical quantitation limit *As per Laboratory Method (Detection Limit)

- Metals to Analyse (Please circle): As Cd Cr Cu Pb Zn Hg Ni Other

Date relinquished: 1/11/07

Total number of samples in container: 48

Results required by:

TAT (Circle): Standard 72 hr 48hr 24hr

SAMPLES RECEIVED

Please sign and date to acknowledge receipt of samples and return by fax

Signature: [Signature]

Date: 2/11/07 Lab Ref: 26238

Send results to:

Douglas Partners Pty Ltd

Address:

BOX 324 Hunter Region Mail Centre

NSW 2310

Fax: (02) 4960 9601

CHAIN OF CUSTODY DESPATCH SHEET

Project Name: MINMI
Project No: 39663D DP Order No: 71303
DP Contact Person: WILL WRIGHT / LEON COLLINS
Prior Storage: esky (fridge) shelved (circle).....

To: SGS Australia PTY LTD
Unit 16/33 Maddox Street
ALEXANDRIA NSW 2015
Ph: (02) 8594 0400
Attn: Angela

Sample ID	Date Sampled	Sample Type S-soil W-water	Lab ID	Analytes											TCLP	Notes
				TRH	BTEX	#Metals	PCB's	PAH's	OCP's	OPP's	Asbestos					
39/1.6	26.10.07	S	20	/	/	/	/	/	/	/						
47/0.4	25.10.07		26	/	/	/	/	/	/	/						
47/2.3	" "		27	/	/	/	/	/	/	/						
38/1.9	26.10.07		28	/	/	/	/	/	/	/						
29/0.1	26.10.07		29	/	/	/	/	/	/	/						
31/0.2	30.10.07		30	/	/	/	/	/	/	/						
30/0.9	" "		31	/	/	/	/	/	/	/						
28/1.6	" "		32	/	/	/	/	/	/	/						
25/0.3	" "		33	/	/	/	/	/	/	/						
33/0.2	" "		34	/	/	/	/	/	/	/	✓					
27/0.5	31.10.07		35	/	/	/	/	/	/	/						
23/0.1	31.10.07	↓	36	/	/	/	/	/	/	/	✓					
PQL (S)		mg/kg														
PQL (W)		mg/L														

PQL = practical quantitation limit *As per Laboratory Method (Detection Limit)

- Metals to Analyse (Please circle): As Cd Cr Cu Pb Zn Hg Ni Other

Date relinquished: 1/11/07

Total number of samples in container: 48

Results required by:

TAT (Circle): Standard 72 hr 48hr 24hr

SAMPLES RECEIVED

Please sign and date to acknowledge receipt of samples and return by fax

Signature: [Signature]

Date: 2/11/07 Lab Ref: 51238

Send results to:

Douglas Partners Pty Ltd

Address:

BOX 324 Hunter Region Mail Centre

NSW 2310

Fax: (02) 4960 9601

CHAIN OF CUSTODY DESPATCH SHEET

Project Name: MINMI
Project No: 39663D DP Order No: 71303
DP Contact Person: WILL WRIGHT / LEON COLLINS
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To: SGS Australia PTY LTD
Unit 16/33 Maddox Street
ALEXANDRIA NSW 2015
Ph: (02) 8594 0400
Attn: Angela

Sample ID	Date Sampled	Sample Type S-soil W-water	Lab ID	Analytes											TCLP	Notes
				TRH	BTEX	#Metals	PCB's	PAH's	OCP's	OPP's	Asbestos					
23A/1.5	31.10.07	S	37	✓	✓	✓	✓	✓	✓	✓						
20/0.2	" "		38	✓	✓	✓	✓	✓	✓	✓						
21/0.3	" "		39	✓	✓	✓	✓	✓	✓	✓	✓					
1/0.1	29.10.07		40	✓	✓	✓	✓	✓	✓	✓	✓					
4/0.5	" "		41	✓	✓	✓	✓	✓	✓	✓						
2/1.6	" "		42	✓	✓	✓	✓	✓	✓	✓						
4A/1.1	" "		43	✓	✓	✓	✓	✓	✓	✓						
13/0.1	" "		44	✓	✓	✓	✓	✓	✓	✓	✓					
3/0.2	30.10.07		45	✓	✓	✓	✓	✓	✓	✓						
6/0.25	" "		46	✓	✓	✓	✓	✓	✓	✓						
6/0.8	" "		47	✓	✓	✓	✓	✓	✓	✓						
5/0.8	" "		48	✓	✓	✓	✓	✓	✓	✓						
PQL (S)		mg/kg														
PQL (W)		mg/L														

PQL = practical quantitation limit *As per Laboratory Method (Detection Limit)

- Metals to Analyse (Please circle): As Cd Cr Cu Pb Zn Hg Ni Other

Date relinquished: 1/11/07

Total number of samples in container: 48

Results required by:

TAT (Circle): Standard 72 hr 48hr 24hr

SAMPLES RECEIVED

Please sign and date to acknowledge receipt of samples and return by fax

Signature: [Signature]

Date: 2/11/07 Lab Ref: 26238

Send results to:

Douglas Partners Pty Ltd

Address:

BOX 324 Hunter Region Mail Centre

NSW 2310

Fax: (02) 4960 9601

Project Name: MINMI
Project No: 39663C DP Order No: 71365
DP Contact Person: Will Wright / Leon Collins
Prior Storage: esky / fridge / shelved (circle)

To: SGS Australia PTY LTD
Unit 16/33 Maddox Street
ALEXANDRIA NSW 2015
Ph: (02) 8594 0400
Attn: Angela

Sample ID	Date Sampled	Sample Type S-soil W-water	Lab ID	TCLP										TCLP	Notes		
				As	Cd	Cr	Pb	Hg	Ni	PAHs							
R1	25/10/07	S	20	✓		✓	✓		✓	✓							SGS Report #56238
R5	30/10/07		24	✓		✓	✓		✓								
714 9/0.1	25/10/07		17	✓	✓	✓	✓		✓	✓							
15/0.2	25/10/07		13				✓		✓	✓							
23A/1.5	31/10/07		37				✓		✓								
67/0.3-0.5	21/10/07		11			✓	✓		✓								SGS #56402
59/0-0.5	21/10/07		8		✓		✓		✓								SGS Report #56338
75/1.1-1.3	21/10/07		21	✓			✓	✓	✓								
D109	31/10/07	↓	23							✓							
23B/2.5	1/11/07	↓	9				✓			✓							SGS #56402
PQL (S)		mg/kg															
PQL (W)		mg/L															

PQL = practical quantitation limit *As per Laboratory Method (Detection Limit)
- Metals to Analyse (Please circle): As Cd Cr Cu Pb Zn Hg Ni Other
Date relinquished: _____
Total number of samples in container: _____
Results required by: _____
TAT (Circle): Standard 72 hr 48hr 24hr

SAMPLES RECEIVED
Please sign and date to acknowledge receipt of samples and return by fax
Signature: Emily...
Date: 24/11/07 Lab Ref: 56238A

Send results to:
Douglas Partners Pty Ltd
Address:
BOX 324 Hunter Region Mail Centre
NSW 2310
Fax: (02) 4960 9601

Date Due 29/11/07
TAT: Normal

Project Name: Minni
Project No: 39663C DP Order No: 71303
DP Contact Person: Will Wright / Leon Collins
Prior Storage: esky / (ridge) / shelved (circle)

To: SGS Australia P/L
Unit 16/33 Maddox St
Alexandria NSW 2015
Ph: 02 85940400
Attn: Angela

Sample ID	Date Sampled	Sample Type S-soil W-water	Lab ID	Analytes												TCLP	Notes
				pH	Cl ⁻	SO ₄											
32/0.6	26.10.07	S	56238-02	✓	✓	✓											Lab has
35/0.7	"		56238-3	✓	✓	✓											all samples
41/2.0	25.10.07		"-12	✓	✓	✓											from previous
47/2.3	"		"-27	✓	✓	✓											Minni work
28/1.6	30.10.07		"-32	✓	✓	✓											
29/0.1	26.10.07		"-29	✓	✓	✓											
11/0.7	25.10.07		"-16	✓	✓	✓											
38/1.9	26.10.07		"-28	✓	✓	✓											
21/1.6	29.10.07		"-42	✓	✓	✓											
4A/1.1	"		"-43	✓	✓	✓											
64/1.5	2.11.07		?	✓	✓	✓											
72/1.5	2.11.07	✓	?	✓	✓	✓											
PQL (S)		mg/kg															
PQL (W)		mg/L															

PQL = practical quantification limit *As per Laboratory Method (Detection Limit)
- Metals to Analyse (Please circle): As Cd Cr Cu Pb Zn Hg Ni Other
Date relinquished: ALL SAMPLES AT SGS
Total number of samples in container: 20
Results required by:
TAT (Circle): Standard 72 hr 48hr 24hr

SAMPLES RECEIVED
Please sign and date to acknowledge receipt of samples and return by fax

Signature: [Signature]
Date: 20/11 Lab Ref: 56238B

Send results to:
Douglas Partners Pty Ltd
Address:
BOX 324 Hunter Region Mail Centre
NSW 2310
Fax: (02) 4960 9601

CHAIN OF CUSTODY DESPATCH SHEET

Project Name: MINMI
Project No: 39663C DP Order No: 71365
DP Contact Person: Will Wright / Leon Collins
Prior Storage: esky / fridge / shelved (circle)

To: SGS Australia PTY LTD
Unit 16/33 Maddox Street
ALEXANDRIA NSW 2015
Ph: (02) 8594 0400
Attn: Angela

Sample ID	Date Sampled	Sample Type S-soil W-water	Lab ID	TCLP										TCLP	Notes	
				As	Cd	Cr	Pb	Hg	Ni	PAHs						
R1	25/10/07	S	20	✓		✓	✓		✓							SGS Report #56238
RS	30/10/07		24	✓		✓	✓		✓							
71+9/0.1	25/10/07		17	✓	✓	✓	✓		✓							
15/0.2	25/10/07		13								✓					
23A/1.5	31/10/07		37				✓		✓							SGS #56402
67/03-05	21/11/07		11			✓	✓		✓							SGS Report #56338
59/0-0.15	21/11/07		8		✓		✓		✓							
75/1.1-1.3	21/11/07		21	✓			✓	✓	✓							
D109	31/10/07	↓	23								✓					SGS #56402
23B/2.5	1/11/07	↓	9				✓				✓					
PQL (S)		mg/kg														
PQL (W)		mg/L														

PQL = practical quantitation limit *As per Laboratory Method (Detection Limit)
- Metals to Analyse (Please circle): As Cd Cr Cu Pb Zn Hg Ni Other
Date relinquished: _____
Total number of samples in container: _____
Results required by: _____
TAT (Circle): Standard 72 hr 48hr 24hr

SAMPLES RECEIVED
Please sign and date to acknowledge receipt of samples and return by fax

Signature: [Signature]
Date: 29/11/07 Lab Ref: 56338A

Send results to:
Douglas Partners Pty Ltd
Address:
BOX 324 Hunter Region Mail Centre
NSW 2310
Fax: (02) 4960 9601

Date due: 29/11/07
TAT: Normal

Project Name: Minmi
Project No: 39663C DP Order No: 71303
DP Contact Person: Will Wright / Leon Collins
Prior Storage: esky / (fridge) / shelved (circle)

To: SGS Australia P/L
Unit 16/33 Maddox St
Alexandria NSW 2015
Ph: 02 85940400
Attn: Angela

Sample ID	Date Sampled	Sample Type S-soil W-water	Lab ID	Analytes										TCLP	Notes	
				pH	Cl ⁻	SO ₄										
32/0.6	26.10.07	S	56238-02	✓	✓	✓										Lab has
35/0.7	"		56238-3	✓	✓	✓										all samples
41/2.0	25.10.07		"-12	✓	✓	✓										from previous
47/2.3	"		"-27	✓	✓	✓										Minmi work
28/1.6	30.10.07		"-32	✓	✓	✓										
29/0.1	26.10.07		"-29	✓	✓	✓										
11/0.7	25.10.07		"-16	✓	✓	✓										
38/1.9	26.10.07		"-28	✓	✓	✓										
2/1.6	29.10.07		"-42	✓	✓	✓										
4A/1.1	"		"-43	✓	✓	✓										
64/1.5	2.11.07		?	✓	✓	✓										
72/1.5	2.11.07	✓	?	✓	✓	✓										
PQL (S)		mg/kg														
PQL (W)		mg/L														

PQL = practical quantitation limit *As per Laboratory Method (Detection Limit)
- Metals to Analyse (Please circle): As Cd Cr Cu Pb Zn Hg Ni Other
Date relinquished: ALL SAMPLES AT SGS
Total number of samples in container: 20
Results required by:
TAT (Circle): Standard 72 hr 48 hr 24 hr

SAMPLES RECEIVED
Please sign and date to acknowledge receipt of samples and return by fax

Signature: [Signature]
Date: 30/11 Lab Ref: 56338B

Send results to:
Douglas Partners Pty Ltd
Address:
BOX 324 Hunter Region Mail Centre
NSW 2310
Fax: (02) 4960 9601

To: SGS Australia
Unit 16/33 Maddox St
Alexandria NSW 2015
Ph: 02 85740400
Attn: Angela

30/11 2007 13:43 FAX 61 2 49609601

5352-54

Page 1 of 3



CHAIN OF CUSTODY DESPATCH SHEET

Project Name: Minmi
 Project No: 296636 DP Order No: 71312
 DP Contact Person: Will Wright / Cath Kampiel
 Prior Storage: esky / fridge / shelved (circle)

To: SGS Australia PTY LTD
 Unit 16/33 Maddox Street
 ALEXANDRIA NSW 2015
 Ph: (02) 8594 0400
 Attn: Angela

Sample ID	Date Sampled	Sample Type S-soil W-water	Lab ID	Analytes										TCLP	Notes
				TRH	BTEX	#Metals	PCB's	PAH's	OCP's	OPP's	Phenols				
93/1-3-15	7.11.07	S		✓	✓	✓	✓	✓	✓	✓	✓				
57/0-5	30.10.07														
57/5-5															
97/2-0															
97/5-5															
98/1-0															
91/3-5	31.10.07														
94/2-0	1.11.07														
23B/2-5	1.11.07														
61A/1-9-2-1	2.11.07														
67/0-3-0-5															
69/0-0-15															
PQL (S)		mg/kg													
PQL (W)		mg/L													

SGS

Received 2.11.07

By [Signature]

Time am

Samples intact yes

Ice/Cooler Pack yes

Comments: 56402

PQL = practical quantitation limit *As per Laboratory Method (Detection Limit)

- Metals to Analyse (Please circle): As Cd Cr Cu Pb Zn Hg Ni Other

Date relinquished: 8.11.07

Total number of samples in container: 27

Results required by:

TAT (Circle): Standard 72 hr 48hr 24hr

SAMPLES RECEIVED

Please sign and date to acknowledge receipt of samples and return by fax

Signature: [Signature]

Date: 9.11.07 Lab Ref: 56402

Send results to:

Douglas Partners Pty Ltd

Address:

BOX 324 Hunter Region Mail Centre

NSW 2310

Fax: (02) 4960 9601

CHAIN OF CUSTODY DESPATCH SHEET

Project Name: Mimmi
Project No: 296636 DP Order No: 71312
DP Contact Person: Will Wright / Cath Karpel
Prior Storage: esky / fridge / shelved (circle)

To: SGS Australia PTY LTD
Unit 16/33 Maddox Street
ALEXANDRIA NSW 2015
Ph: (02) 8594 0400
Attn: Angela

Sample ID	Date Sampled	Sample Type S-soil W-water	Lab ID	Analytes										TCLP	Notes
				TRH	BTEX	#Metals	PCB's	PAH's	OCP's	OPP's	Phenols	Asbestos			
89/2-1-23	6.11.07	S		✓	✓	✓	✓	✓	✓	✓					
92/0-3-05	↓	↓		↓	↓	↓	↓	↓	↓	↓					
95/25-2-7	↓	↓		↓	↓	↓	↓	↓	↓	↓		✓			sub-sampled
96/0-8-1-0	↓	↓		↓	↓	↓	↓	↓	↓	↓					
131/0-0-05	↓	↓		↓	↓	↓	↓	↓	↓	↓					
133/0-2-03	↓	↓		↓	↓	↓	↓	↓	↓	↓					
135/0-0-05	↓	↓		↓	↓	↓	↓	↓	↓	↓					
137/6-2-03	↓	↓		↓	↓	↓	↓	↓	↓	↓					
87/0-8-1-0	7.11.07			↓	↓	↓	↓	↓	↓	↓					
88/0-0-05	↓	↓		↓	↓	↓	↓	↓	↓	↓					
90/0-8-1-0	↓	↓		↓	↓	↓	↓	↓	↓	↓					
90/2-8-3-0	↓	↓		↓	↓	↓	↓	↓	↓	↓					
PQL (S)		mg/kg													
PQL (W)		mg/L													

PQL = practical quantitation limit *As per Laboratory Method (Detection Limit)
- Metals to Analyse (Please circle): As Cd Cr Cu Pb Zn Hg Ni Other
Date relinquished: 8.11.07
Total number of samples in container: 27
Results required by: Standard 72 hr 48hr 24hr
TAT (Circle):

SAMPLES RECEIVED
Please sign and date to acknowledge receipt of samples and return by fax
Signature: [Signature]
Date: 9/11/07 Lab Ref: [Signature]

Send results to:
Douglas Partners Pty Ltd
Address:
BOX 324 Hunter Region Mail Centre
NSW 2310
Fax: (02) 4960 9601

CHAIN OF CUSTODY DESPATCH SHEET

Project Name: Minmi
Project No: 39663C DP Order No: 71312
DP Contact Person: Will Wright / Cath Kampriel
Prior Storage: (esky / fridge) shelved (circle)

To: SGS Australia PTY LTD
Unit 16/33 Maddox Street
ALEXANDRIA NSW 2015
Ph: (02) 8594 0400
Attn: Angela

Attn: Angela																
Sample ID	Date Sampled	Sample Type S-soil W-water	Lab ID	Analytes											TCLP	Notes
				TRH	BTEX	#Metals	PCB's	PAH's	OCP's	OPP's	Phenols					
B104	30.10.07	S		✓	✓	✓	✓	✓	✓	✓						
D123	6.11.07	↓		↓	↓	↓	↓	↓	↓	↓						
D129	7.11.07	↓		↓	↓	↓	↓	↓	↓	↓						
PQL (S)		mg/kg														
PQL (W)		mg/L														

PQL = practical quantitation limit *As per Laboratory Method (Detection Limit)

- Metals to Analyse (Please circle): As Cd Cr Cu Pb Zn Hg Ni Other

Date relinquished: 8.11.07

Total number of samples in container: 27

Results required by:

TAT (Circle): Standard 72 hr 48hr 24hr

SAMPLES RECEIVED

Please sign and date to acknowledge receipt of samples and return by fax

Signature: 8-lyz

Date: 9/11/07 Lab Ref: 56402

Send results to:

Douglas Partners Pty Ltd

Address:

BOX 324 Hunter Region Mail Centre

NSW 2310

Fax: (02) 4960 9601

CHAIN OF CUSTODY DESPATCH SHEET

Project Name: MINMI
 Project No: 39663C DP Order No: 71365
 DP Contact Person: Will Wright / Leon Collins
 Prior Storage: esky / fridge / shelved (circle)

To: SGS Australia PTY LTD
 Unit 16/33 Maddox Street
 ALEXANDRIA NSW 2015
 Ph: (02) 8594 0400
 Attn: Angela

Sample ID	Date Sampled	Sample Type S-soil W-water	Lab ID	TCLP								Analytes								TCLP	Notes
				As	Cd	Cr	Pb	Hg	Ni	PAHs											
R1	25/10/07	S	20	✓		✓	✓		✓										SGS Report #56238		
RS	30/10/07		24	✓		✓	✓		✓												
71/9/0.1	25/10/07		17	✓	✓	✓	✓		✓												
15/0.2	25/10/07		13									✓									
23A/1.5	31/10/07		37				✓		✓										SGS #56402		
67/03-05	21/11/07		11			✓	✓		✓										SGS Report #56338		
59/0-0.5	21/11/07		8		✓		✓		✓												
75/1.1-1.3	21/11/07		21	✓			✓	✓	✓												
D109	31/11/07	↓	23								✓										
23B/2.5	4/11/07	↓	9				✓				✓								SGS #56402		
PQL (S)		mg/kg																			
PQL (W)		mg/L																			

PQL = practical quantitation limit *As per Laboratory Method (Detection Limit)
 # - Metals to Analyse (Please circle): As Cd Cr Cu Pb Zn Hg Ni Other
 Date relinquished: _____
 Total number of samples in container: _____
 Results required by: _____
 TAT (Circle): Standard 72 hr 48hr 24hr

SAMPLES RECEIVED
 Please sign and date to acknowledge receipt of samples and return by fax

 Signature: [Signature]
 Date: 21/11/07 Lab Ref: 56402A

Send results to:
 Douglas Partners Pty Ltd
 Address:
 BOX 324 Hunter Region Mail Centre
 NSW 2310
 Fax: (02) 4960 9601

Date Due: 29/11/07
 TAT: NORMAL



4/2
SHEET

To: SCS Australia
Unit 16/33 Maddox St
Alexandria NSW 2115
Ph: 02 85740400
Attn: Angela

Sample ID	Date Sampled	Sample Type S-soil W-water	Lab ID	Analytes												TCLP	Notes
				pH	Al	SO ₄ ²⁻											
74/0.8-1.0	2.11.07	S	?	✓	✓	✓											
97/2.0	30.10.07		SG 402-4	✓	✓	✓											
61A/1.9-2.1	2.11.07		"-10	✓	✓	✓											
67/0.3-0.5	"		"-11	✓	✓	✓											
133/0.2-0.3	6.11.07		"-18	✓	✓	✓											
137/0.2-0.3	"		"-20	✓	✓	✓											
587/0.8-1.5	7.11.07		"-21	✓	✓	✓											
93/1.3-1.5	"	✓	"-01	✓	✓	✓											
PQL (S)		mg/kg															
PQL (W)		mg/L															

PQL = practical quantitation limit *As per Laboratory Method (Detection Limit)

- Metals to Analyse (Please circle): As Cd Cr Cu Pb Zn Hg Ni Other

Date relinquished: ALL SAMPLES AT 505

Total number of samples in container: 20

Results required by: _____

TAT (Circle): Standard 72 hr 48hr 24hr

SAMPLES RECEIVED

Please sign and date to acknowledge receipt of samples and return by fax

Signature: [Signature]

Date: 30.11 Lab Ref: 56402B

Send results to:

Douglas Partners Pty Ltd

Address:

BOX 324 Hunter Region Mail Centre

NSW 2310

Fax: (02) 4960 9601

5419-21

CHAIN OF CUSTODY DESPATCH SHEET

Project Name: Minmi
Project No: 39663C DP Order No: 71343
DP Contact Person: Leon Collins / Will Wright
Prior Storage: esky (fridge) shelved (circle)

To: SGS Australia PTY LTD
Unit 16/33 Maddox Street
ALEXANDRIA NSW 2015
Ph: (02) 8594 0400
Attn: Angela

Sample ID	Date Sampled	Sample Type S-soil W-water	Lab ID	Analytes										TCLP	Notes
				TRH	BTEX	#Metals	PCB's	PAH's	OCP's	OPP's	Asbestos				
127/0.1	7/11/07	S	1	/	/	/	/	/	/	/	/				
125/0.1			2	/	/	/	/	/	/	/	/				
115/0.2			3	/	/	/	/	/	/	/	/				
124/0.6			4	/	/	/	/	/	/	/	/				
128/0.1			5	/	/	/	/	/	/	/	/				
138/0.1			6	/	/	/	/	/	/	/	/				
R6			7	/	/	/	/	/	/	/	/				
104/0.3	8/11/07		8	/	/	/	/	/	/	/	/				
101/0.1			9	/	/	/	/	/	/	/	/				
103/0.1			10	/	/	/	/	/	/	/	/				
108/0.7			11	/	/	/	/	/	/	/	/				
99/0.2			12	/	/	/	/	/	/	/	/				
PQL (S)		mg/kg													
PQL (W)		mg/L													

SGS

Received: 9/11/07

By: [Signature]

Time: 9:00 am

Samples intact: Yes

Ice/Cooler Pack: Yes

Cons/no: 56072

PQL = practical quantitation limit *As per Laboratory Method (Detection Limit)

- Metals to Analyse (Please circle): As Cd Cr Cu Pb Zn Hg Ni Other

Date relinquished: 19/11/07

Total number of samples in container: 34

Results required by: Standard 72 hr 48hr 24hr

SAMPLES RECEIVED

Please sign and date to acknowledge receipt of samples and return by fax

Signature: [Signature]

Date: 20/11/07 Lab Ref: 56072

Send results to:

Douglas Partners Pty Ltd

Address:

BOX 324 Hunter Region Mail Centre

NSW 2310

Fax: (02) 4960 9601

Project Name: Minmi
Project No: 39663C DP Order No: 71343
DP Contact Person: Leon Collins / Will Wright
Prior Storage: esky (fridge) shelved (circle)

To: SGS Australia PTY LTD
Unit 16/33 Maddox Street
ALEXANDRIA NSW 2015
Ph: (02) 8594 0400
Attn: Angela

Sample ID	Date Sampled	Sample Type S-soil W-water	Lab ID	Analytes											TCLP	Notes
				TRH	BTEX	#Metals	PCB's	PAH's	OCP's	OPP's	Asbestos					
107/0.2	8/11/07	S	13	/	/	/	/	/	/	/						
100/0.1	↓	↓	14	/	/	/	/	/	/	/						
100/0.4	↓	↓	15	/	/	/	/	/	/	/						
134/0.2	↓	↓	16	/	/	/	/	/	/	/						
106/0.1	↓	↓	17	/	/	/	/	/	/	/						
R7	↓	↓	18	/	/	/	/	/	/	/						
113/0.7	9/11/07	↓	19	/	/	/	/	/	/	/						
105/0.6	↓	↓	20	/	/	/	/	/	/	/						
19/0.1	13/11/07	↓	21	/	/	/	/	/	/	/						
19/0.3	↓	↓	22	/	/	/	/	/	/	/						
17/0.1	↓	↓	23	/	/	/	/	/	/	/						
22/0.15	↓	↓	24	/	/	/	/	/	/	/						
PQL (S)		mg/kg														
PQL (W)		mg/L														

PQL = practical quantitation limit *As per Laboratory Method (Detection Limit)
- Metals to Analyse (Please circle): As Cd Cr Cu Pb Zn Hg Ni Other
Date relinquished: 19/11/07
Total number of samples in container: 34
Results required by:
TAT (Circle): Standard 72 hr 48hr 24hr

SAMPLES RECEIVED
Please sign and date to acknowledge receipt of samples and return by fax

Signature: [Signature]
Date: 20/11/07 Lab Ref: 8672

Send results to:
Douglas Partners Pty Ltd
Address:
BOX 324 Hunter Region Mail Centre
NSW 2310
Fax: (02) 4960 9601

Project Name: Minmi
Project No: 39663C DP Order No: 71343
DP Contact Person: Leon Collins / Will Wright
Prior Storage: esky (fridge) shelved (circle)

To: SGS Australia PTY LTD
Unit 16/33 Maddox Street
ALEXANDRIA NSW 2015
Ph: (02) 8594 0400
Attn: Angela

Sample ID	Date Sampled	Sample Type S-soil W-water	Lab ID	Analytes											Notes	
				TRH	BTEX	#Metals	PCB's	PAH's	OCP's	OPP's	Asbestos					TCLP
22/0.5	13/11/07	S	28	/	/	/	/	/	/	/	/					
R8	↓		26	/	/	/	/	/	/	/	/					
140/0.1	14/11/07		27	/	/	/	/	/	/	/	/					
141/0.1			28	/	/	/	/	/	/	/	/					
142/0.1			29	/	/	/	/	/	/	/	/					
143/0.1			30	/	/	/	/	/	/	/	/					
143/0.8			31	/	/	/	/	/	/	/	/					
144/0.05			32	/	/	/	/	/	/	/	/	/				
144/FIBRO		FIBRO	33									/				
146/0.1	↓	S	34	/	/	/	/	/	/	/	/					
PQL (S)		mg/kg														
PQL (W)		mg/L														

PQL = practical quantitation limit *As per Laboratory Method (Detection Limit)
- Metals to Analyse (Please circle): As Cd Cr Cu Pb Zn Hg Ni Other
Date relinquished: 19/11/07
Total number of samples in container: 34
Results required by:
TAT (Circle): Standard 72 hr 48hr 24hr

SAMPLES RECEIVED
Please sign and date to acknowledge receipt of samples and return by fax

Signature: [Signature]
Date: 20/11/07 Lab Ref: 16672

Send results to:
Douglas Partners Pty Ltd
Address:
BOX 324 Hunter Region Mail Centre
NSW 2310
Fax: (02) 4960 9601

Project Name: MINMI
Project No: 39663C DP Order No: 71343
DP Contact Person: WILL WRIGHT / LEON COLLINS
Prior Storage: esky / fridge / shelved (circle).....

To: SGS Australia PTY LTD
Unit 16/33 Maddox Street
ALEXANDRIA NSW 2015
Ph: (02) 8594 0400
Attn: Angela

Sample ID	Date Sampled	Sample Type S-soil W-water	Lab ID	TCLP					Analytes								TCLP	Notes	
				As	Cr	Pb	Ni	PAHs											
19/0.3	13/4	S	22		✓	✓	✓												Refer SGS
R8	13/4	I	26	✓		/	/	✓											reg # 56672
100/0.1	8/11	I	14			/		/											
101/0.1	8/4	I	9			/		/											
143/0.8	14/4	✓	31	/		/	/	/											
PQL (S)		mg/kg																	
PQL (W)		mg/L																	

PQL = practical quantitation limit *As per Laboratory Method (Detection Limit)
- Metals to Analyse (Please circle): As Cd Cr Cu Pb Zn Hg Ni Other
Date relinquished:
Total number of samples in container:
Results required by:
TAT (Circle): Standard 72 hr 48hr 24hr

SAMPLES RECEIVED
Please sign and date to acknowledge receipt of samples and return by fax
Signature: [Signature]
Date: 4/12/07 Lab Ref: 56672A

Send results to:
Douglas Partners Pty Ltd
Address:
BOX 324 Hunter Region Mail Centre
NSW 2310
Fax: (02) 4960 9601

5007

CHAIN OF CUSTODY DESPATCH SHEET

Project Name: Minmi
Project No: 396636 DP Order No: 713164
DP Contact Person: Will Wright / Cath Kerpel
Prior Storage: (esky) (fridge) (shelved (circle))

To: SGS Australia PTY LTD
Unit 16/33 Maddox Street
ALEXANDRIA NSW 2015
Ph: (02) 8594 0400
Attn: Angela

Sample ID	Date Sampled	Sample Type S-soil W-water	Lab ID	Analytes										TCLP	Notes
				TRH	BTEX	#Metals	PCB's	PAH's	OCP's	OPP's	Phenols	Asbestos			
76/03-05	30.10.07	S.		✓	✓	✓	✓	✓	✓	✓					
77/03-05	↓	↓		↓	↓	↓	↓	↓	↓	↓					
77B/02-03	↓	↓		↓	↓	↓	↓	↓	↓	↓					
79/0-015	↓	↓		↓	↓	↓	↓	↓	↓	↓					
80/0-015	31.10.07	↓		↓	↓	↓	↓	↓	↓	↓		✓			
82/0-015	↓	↓		↓	↓	↓	↓	↓	↓	↓		✓			
85/03-05	↓	↓		↓	↓	↓	↓	↓	↓	↓					
77/0-0.0	30.10.07	Fibre Cement										✓			
80/0-0.01	30.10.07	Fibre cement										✓			
PQL (S)		mg/kg													
PQL (W)		mg/L													

SGS
Received 23/11/07
By [Signature]
Time 9:30 am
Samples intact yes
Ice/Cooler Pack yes/no
Comments 56751

PQL = practical quantitation limit *As per Laboratory Method (Detection Limit)
- Metals to Analyse (Please circle): As Cd Cr Cu Pb Zn Hg Ni Other
Date relinquished:

Total number of samples in container:

Results required by:

TAT (Circle): Standard 72 hr 48hr 24hr

SAMPLES RECEIVED
Please sign and date to acknowledge receipt of samples and return by fax

Signature: [Signature]
Date: 23/11/07 Lab Ref: 56751

Send results to:
Douglas Partners Pty Ltd
Address:
BOX 324 Hunter Region Mail Centre
NSW 2310
Fax: (02) 4960 9601



Project Name: MINMI
Project No: 39663C DP Order No: 71394
DP Contact Person: WILL WRIGHT / LEON COLLINS
Prior Storage: esky //fridge/ shelved (circle).....

To: SGS Australia PTY LTD
Unit 16/33 Maddox Street
ALEXANDRIA NSW 2015
Ph: (02) 8594 0400.....
Attn: Angela.....

M:/Environmental/QA-QC/AmendedC-O-C.doc

5202

CHAIN OF CUSTODY DESPATCH SHEET

Project Name: MINMI
Project No: 39663C DP Order No: 71452
DP Contact Person: Will Wright/Leon Collins
Prior Storage: esky / fridge / shelved (circle)

To: SGS Australia PTY LTD
Unit 16/33 Maddox Street
ALEXANDRIA NSW 2015
Ph: (02) 8594 0400
Attn: Angela

Sample ID	Date Sampled	Sample Type S-soil W-water	Lab ID	Analytes														TCLP	Notes
				TRH	BTEX	Metals (8)	PCB	OCP	OPP	PAH	Asbestos								
130/0.1	19/12/07	S	1	/	/	/	/	/	/	/	/								
147A/0.05			2	/	/	/	/	/	/	/	/								
149/0.05			3	/	/	/	/	/	/	/	/								
149/Fibro		Fibro	4									/							
152/0.1		S	5	/	/	/	/	/	/	/	/	/							
152/Fibro		Fibro	6									/							
153/0.1		S	7	/	/	/	/	/	/	/	/	/							
153/Fibro		Fibro	8									/							
157/0.1	20/12/07	S	9	/	/	/	/	/	/	/	/	/							
PQL (S)		mg/kg																	
PQL (W)		mg/L																	

PQL = practical quantitation limit *As per Laboratory Method (Detection Limit)
- Metals to Analyse (Please circle): As Cd Cr Cu Pb Zn Hg Ni Other
Date relinquished: 20/12/07
Total number of samples in container: 9
Results required by:
TAT (Circle): Standard 72 hr 48hr 24hr

SAMPLES RECEIVED
Please sign and date to acknowledge receipt of samples and return by fax
Signature: [Signature]
Date: 21/12/07 Lab Ref: 57521

Send results to:
Douglas Partners Pty Ltd
Address:
BOX 324 Hunter Region Mail Centre
NSW 2310
Fax: (02) 4960 9601

Project Name: Mini
Project No: 39663C DP Order No: 71497
DP Contact Person: Will Wright
Prior Storage: esky / fridge / shelved (circle) Freezer

To: ALS PTY LTD.....
5 Rosegum Close
Warabrook NSW 2304
Ph: (02) 4968 9433.....
Attn: Ken Reid

Sample ID	Date Sampled	Sample Type S-soil W-water	Lab ID	Analytes												TCLP	Notes
				Full Chromium suite													
119/1.0		S	1	/													
119/1.5		↓	2	/													
124/1.7		↓	3	/													
150/0.1		↓	4	/													
PQL (S)		mg/kg															
PQL (W)		mg/L															

Environmental Division
Brisbane
Work Order
EB0800972



Telephone : +61-7-3243 7222

PQL = practical quantitation limit *As per Laboratory Method (Detection Limit)
- Metals to Analyse (Please circle): As Cd Cr Cu Pb Zn Hg Ni Other
Date relinquished: 21/1/08
Total number of samples in container: 4
Results required by:
TAT (Circle): Standard 72 hr 48hr 24hr

SAMPLES RECEIVED
Please sign and date to acknowledge receipt of samples and return by fax
Signature: [Signature]
Date: 21/1/08 Lab Ref:
1625

Send results to:
Douglas Partners Pty Ltd
Address:
BOX 324 Hunter Region Mail Centre
NSW 2310
Fax: (02) 4960 9601

Relinquished by: 2 Bordenough
AS Newcast 23/1/08 4PM