Appendix A

Photo Log

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Camp Lonely 2006 Site Characterization: Tar-Like Material (CLSS12 Area)

(for site locations, see Figure 3)

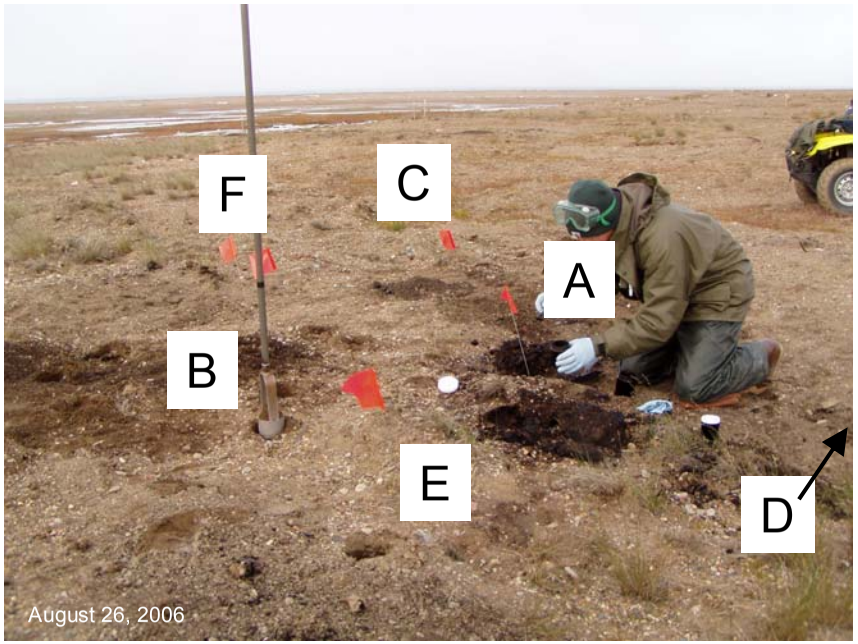

Photo 1. Determining extent and sampling of black, tar-like material. Letters correspond to sample ID numbers (facing northwest).

Photo 2. Tar-like material at sample location CLSS12A-0.5.

Camp Lonely 2006 Site Characterization:
Pore Water and Surface Water Sampling (CLSW01 Area)

(for site locations, see Figure 3)

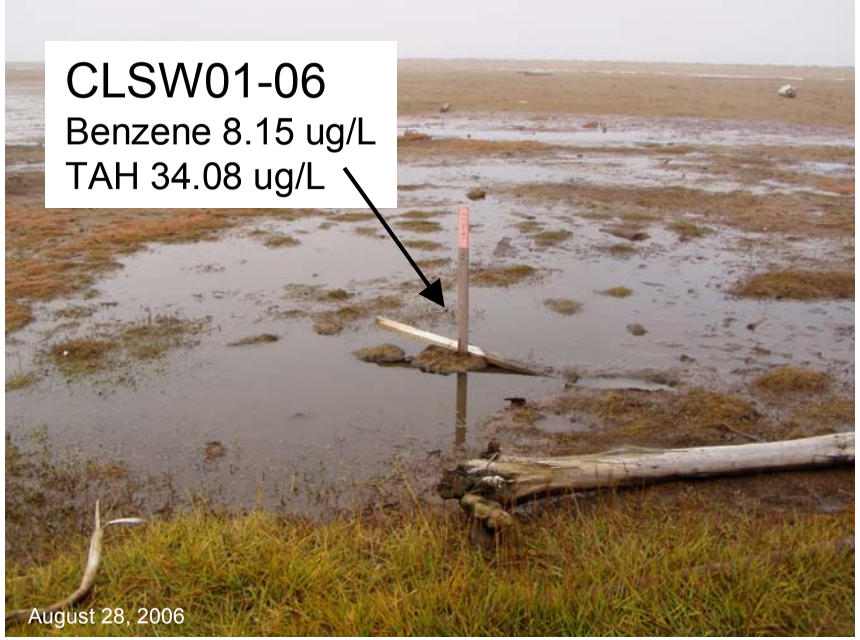

Photo 3. Facing west.

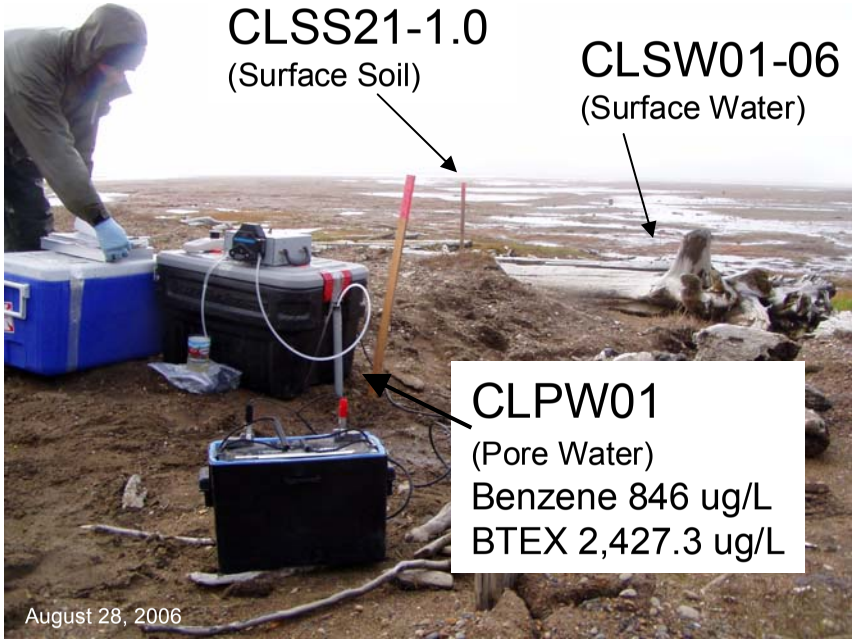

Photo 4. Sampling pore water (looking west).

Camp Lonely 2006 Site Characterization:
Pore Water and Surface Water Sampling (CLSW02 Area)

(for site locations, see Figure 3)

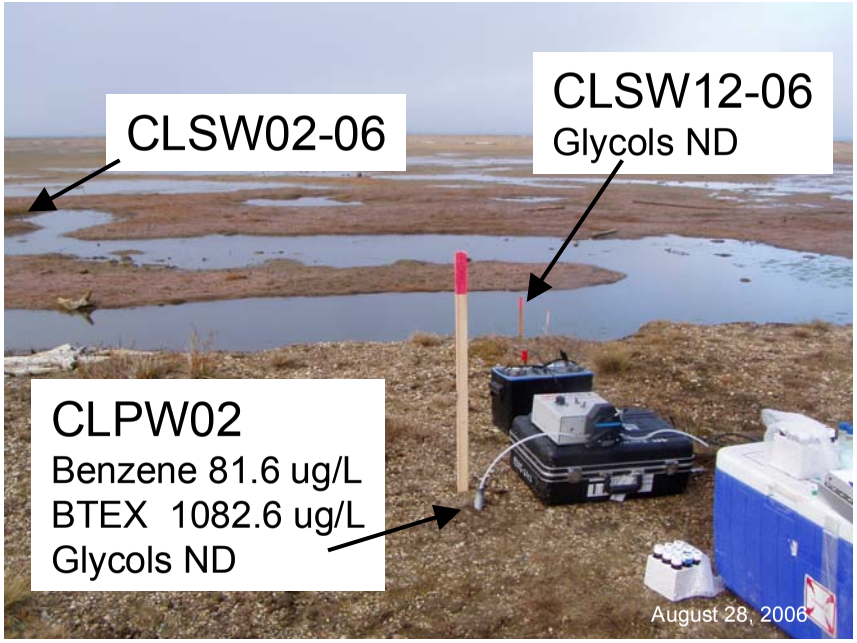

Photo 5. Facing west.

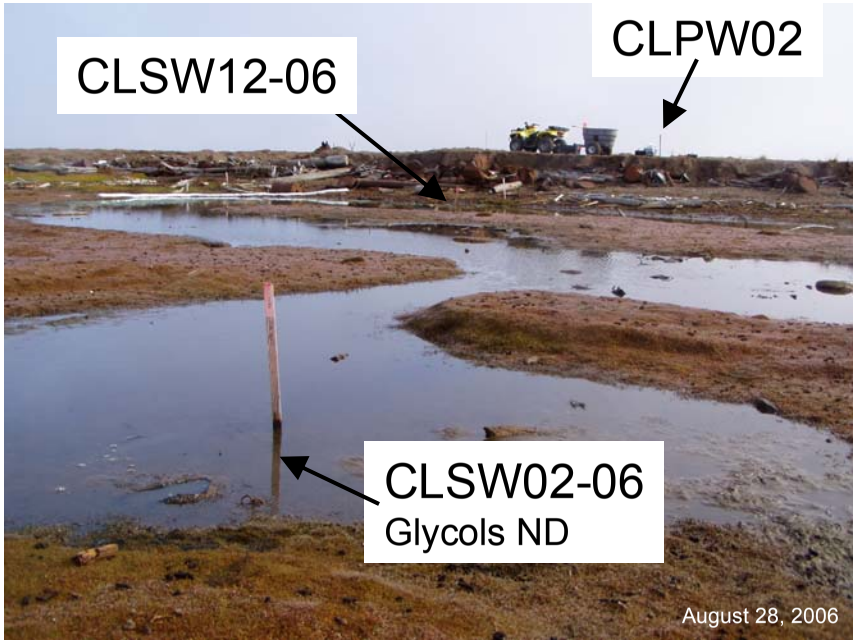

Photo 6. Facing east.

Camp Lonely 2006 Site Characterization: Sheen Testing

(for site locations, see Figure 3)

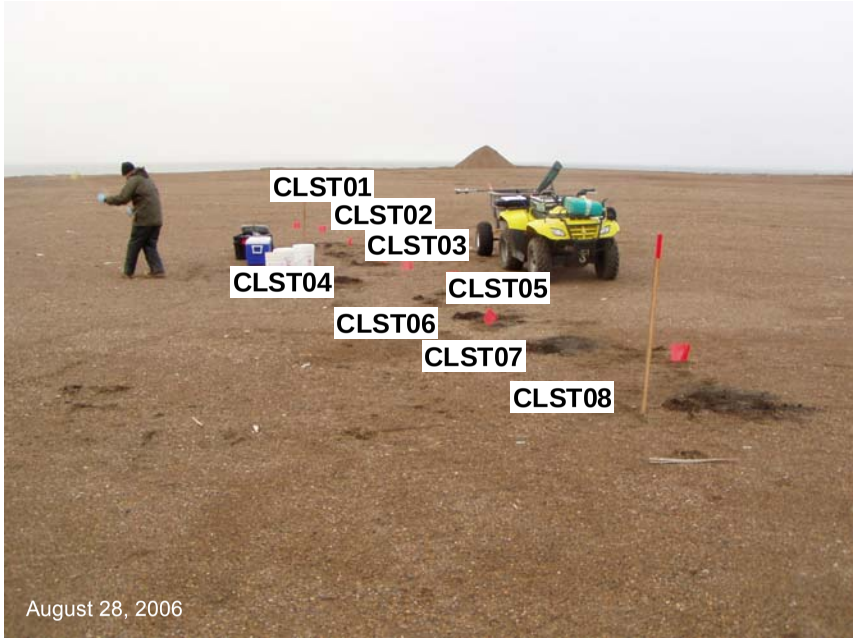

Photo 7. Sheen test transect (facing north).

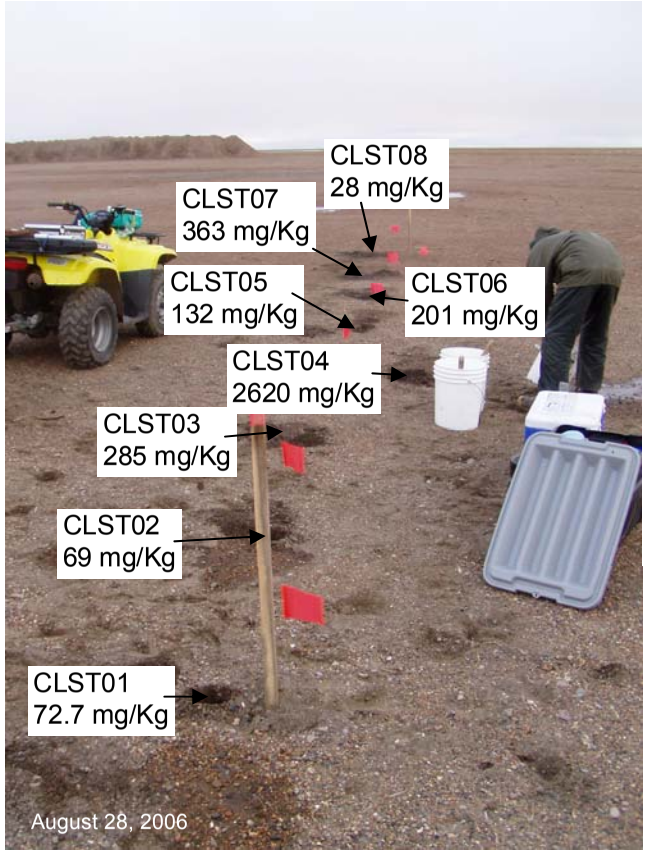

Photo 8. Sheen test transect with DRO results (facing south).

Camp Lonely 2006
Boom Maintenance
(for site locations, see Figure 3)

Photo 9 (2005). Sorbent boom adjacent to lagoon, downgradient of Drainage Course Drum (looking southwest).

Photo 10 (2006). Boom material installed down gradient of former drainage ditch drum (looking north).

Appendix B

Laboratory Data

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SGS Environmental Services
Alaska Division
Level II Laboratory Data Report

Project:	Camp Lonely 2006
Client:	Hoefler Consulting Group
SGS Work Order:	1065083

Released by:

Contents:

Cover Page
Case Narrative
Final Report Pages
Quality Control Summary Forms
Chain of Custody/Sample Receipt Forms

Note:
Unless otherwise noted, all quality assurance/quality control criteria is in compliance with the standards set forth by the proper regulatory authority, the SGS Quality Assurance Program Plan, and the National Environmental Accreditation Conference.

Client Name: Hoefler Consulting Group
Project Name: Camp Lonely 2006
Workorder No.: 1065083

Sample Comments

Refer to the sample receipt form for information on sample condition.

Lab Sample ID	Sample Type	Client Sample ID
1065042002	BMS	06LF03CMW104GW MS
	BTEX - CCV is biased high for toluene possibly due to carry-over. BTEX - BMS recovery is biased low for benzene.	
1065042003	BMSD	06LF03CMW104GW MSD
	BTEX - CCV is biased high for toluene possibly due to carry-over. DRO- MSD recoveries are outside of controls possibly due to a nonhomogeneous sample. See the LCS for accuracy.	
1065083001	PS	CLPW01
	Glycols were analyzed by Bio-Chem in Grand Rapids, MI.	
1065083002	PS	CLPW02
	Glycols were analyzed by Bio-Chem in Grand Rapids, MI.	
1065083003	PS	CLSW 12-06
	Glycols were analyzed by Bio-Chem in Grand Rapids, MI.	
1065083004	PS	CLSW 02-06
	Glycols were analyzed by Bio-Chem in Grand Rapids, MI.	
1065083005	PS	CLSW 01-06
	Glycols were analyzed by Bio-Chem in Grand Rapids, MI. 6020 - Ag QC recovered 111%. Concentration of Ag in the sample is below the PQL.	
1065083006	PS	CLSW 91-06
	6020 - Ag QC recovered 111%. Concentration of Ag in the sample is below the PQL.	
724472	MS	06ST09SW105SW(1065042020MS
	PAHSIM - The MS recovery for benzo(a)anthracene is outside QC goals(biased low). The associated LCS met recovery goals for this analyte.	
724473	MSD	06ST09SW105SW(1065042020MS
	PAHSIM - The MS/MSD RPD for benzo(a)anthracene and benzo(b)fluoranthene are outside QC goals(biased high).	
724666	MS	CLSW 01-06(1065083005MS)
	6020 - MS/MSD recovery for Ag was outside of acceptance criteria. Post digestion spike was successful.	
724667	MSD	CLSW 01-06(1065083005MSD)
	6020 - MS/MSD recovery for Ag was outside of acceptance criteria. Post digestion spike was successful.	
725392	CCV2	CCV2 for HBN 176980 [VFC/8017]
	BTEX - CCV is biased high for toluene possibly due to carry-over. Samples are non-detect or will be re-run.	
725811	IB	IB for HBN 177075 [XMS/3766]
	PAHSIM - IB recovery for the surrogate terphenyl-d14 is outside QC goals(biased high). Analytes were found in the instrument blank.	

726472	CCV	CCV for HBN 177198 [VFC/8026]

GRO - BFB surrogate recovery is biased low for CCV. Results should not be affected.

726475	CCV2	CCV2 for HBN 177198 [VFC/8026]

BTEX - CCV is biased high for ethylbenzene and p&m xylene. Associated samples not re-run due to hold time.

728322	QCS	QCS for HBN 177547 [MMS/4404]

6020 - QCS Mg recovered 111%. Concentration of Mg in the sample is below the PQL.

Laboratory Analytical Report

Client: **Hoefler Consulting Group**
3401 Minnesota Drive, Ste 300
Anchorage, AK 99503

Attn: **Nathan Webb**
T: (907)563-2196 F:(907)563-2164

Project: **Camp Lonely 2006**

Workorder No.: **1065083**

Certification:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, other than the conditions noted on the sample data sheet(s) and/or the case narrative. This certification applies only to the tested parameters and the specific sample(s) received at the laboratory.

Released by:

Report Date

If you have any questions regarding this report, or if we can be of further assistance, please contact your SGS Project Manager.

Shane Poston

Shane_Poston@sgs.com

Project Manager / Assistant Technical Director

Print Date: 9/27/2006

Enclosed are the analytical results associated with this workorder.

As required by the state of Alaska and the USEPA, a formal Quality Assurance/Quality Control Program is maintained by SGS. A copy of our Quality Assurance Plan (QAP), which outlines this program is available at your request.

The laboratory certification numbers are AK971-05 (DW), UST-005 (CS) and AK00971 (Micro) for ADEC and 001327 for NELAP.

Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP, the National Environmental Laboratory Accreditation Program and, when applicable, other regulatory authorities.

If you have any questions regarding this report or if we can be of any assistance, please contact your SGS Project Manager at 907-562-2343.

The following descriptors may be found on your report which will serve to further qualify the data.

MDL	Method Detection Limit
PQL	Practical Quantitation Limit (reporting limit).
CL	Control Limit
U	Indicates the analyte was analyzed for but not detected.
F	Indicates value that is greater than or equal to the MDL.
J	The quantitation is an estimation.
ND	Indicates the analyte is not detected
B	Indicates the analyte is found in a blank associated with the sample.
*	The analyte has exceeded allowable regulatory or control limits.
GT	Greater Than
LT	Less Than
Q	QC parameter out of acceptance range.
M	A matrix effect was present.
E	The analyte result is above the calibrated range.
DF	Analytical Dilution Factor
JL	The analyte was positively identified, but the quantitation is a low estimation.
<Surr>	Surrogate QC spiked standard

Note: Soil samples are reported on a dry weight basis unless otherwise specified

SGS

SAMPLE SUMMARY

Print Date: 9/27/2006

Client Name: Hoefler Consulting Group
Project Name: Camp Lonely 2006
Workorder No.: 1065083

Analytical Methods

Method Description	Analytical Method
8270 PAH SIM Semi-Volatiles GC/MS	8270C SIMS
BTEX 8021	SW8021B
Mercury 7470	SW7470A/E245.1
RCRA Metals by ICP-MS	SW6020

Sample ID Cross Reference

Lab Sample ID	Client Sample ID
1065083001	CLPW01
1065083002	CLPW02
1065083003	CLSW 12-06
1065083004	CLSW 02-06
1065083005	CLSW 01-06
1065083006	CLSW 91-06
1065083007	CLSW 91
1065083008	Trip Blank

Hoefler Consulting Group

Print Date: 9/27/2006

Client Sample ID: **CLPW01**
SGS Ref. #: 1065083001
Project ID: Camp Lonely 2006
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/28/06 13:55
Receipt Date/Time: 08/30/06 12:10

Volatile Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Benzene	846	5.00	1.50	ug/L	10	VFC8018	VXX15901	
Toluene	1090	20.0	6.20	ug/L	10	VFC8018	VXX15901	
Ethylbenzene	83.3	2.00	0.620	ug/L	1	VFC8017	VXX15901	
P & M -Xylene	238	2.00	0.620	ug/L	1	VFC8017	VXX15901	
o-Xylene	170	2.00	0.620	ug/L	1	VFC8017	VXX15901	
1,4-Difluorobenzene <surr>	110	74-120		%	1	VFC8017	VXX15901	

Batch Information

Analytical Batch: VFC8017
Analytical Method: SW8021B
Analysis Date/Time: 09/05/06 16:42
Dilution Factor: 1

Prep Batch: VXX15901
Prep Method: SW5030B
Prep Date/Time: 09/05/06 08:00

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1065083001-A
Analyst: DNA

Analytical Batch: VFC8018
Analytical Method: SW8021B
Analysis Date/Time: 09/07/06 04:55
Dilution Factor: 10

Prep Batch: VXX15901
Prep Method: SW5030B
Prep Date/Time: 09/05/06 08:00

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1065083001-B
Analyst: DNA

Hoefler Consulting Group

Print Date: 9/27/2006

Client Sample ID: **CLPW02**
SGS Ref. #: 1065083002
Project ID: Camp Lonely 2006
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/28/06 11:30
Receipt Date/Time: 08/30/06 12:10

Volatile Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Benzene	81.6	0.500	0.150	ug/L	1	VFC8017	VXX15901	
Toluene	274	20.0	6.20	ug/L	10	VFC8018	VXX15901	
Ethylbenzene	109	2.00	0.620	ug/L	1	VFC8017	VXX15901	
P & M -Xylene	406	2.00	0.620	ug/L	1	VFC8017	VXX15901	
o-Xylene	212	2.00	0.620	ug/L	1	VFC8017	VXX15901	
1,4-Difluorobenzene <surr>	102	74-120		%	1	VFC8017	VXX15901	

Batch Information

Analytical Batch: VFC8017
Analytical Method: SW8021B
Analysis Date/Time: 09/05/06 17:07
Dilution Factor: 1

Prep Batch: VXX15901
Prep Method: SW5030B
Prep Date/Time: 09/05/06 08:00

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1065083002-A
Analyst: DNA

Analytical Batch: VFC8018
Analytical Method: SW8021B
Analysis Date/Time: 09/07/06 05:20
Dilution Factor: 10

Prep Batch: VXX15901
Prep Method: SW5030B
Prep Date/Time: 09/05/06 08:00

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1065083002-B
Analyst: DNA

Hoefler Consulting Group

Print Date: 9/27/2006

Client Sample ID: **CLSW 01-06**
SGS Ref. #: 1065083005
Project ID: Camp Lonely 2006
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/28/06 12:30
Receipt Date/Time: 08/30/06 12:10

Metals Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Mercury	ND	0.200	0.0620	ug/L	1	MCV3485	MXX18063	

Batch Information

Analytical Batch: MCV3485
Analytical Method: SW7470A/E245.1
Analysis Date/Time: 09/01/06 13:39
Dilution Factor: 1

Prep Batch: MXX18063
Prep Method: METHOD
Prep Date/Time: 09/01/06 09:15

Initial Prep Wt./Vol.: 25 mL
Prep Extract Vol.: 50 mL
Container ID:1065083005-I
Analyst: HKG

Hoefler Consulting Group

Print Date: 9/27/2006

Client Sample ID: **CLSW 01-06**
SGS Ref. #: 1065083005
Project ID: Camp Lonely 2006
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/28/06 12:30
Receipt Date/Time: 08/30/06 12:10

RCRA Metals

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Arsenic	ND	10.0	5.00	ug/L	5	MMS4411	MXX18117	
Barium	274	3.00	0.940	ug/L	5	MMS4411	MXX18117	
Cadmium	ND	2.00	1.00	ug/L	5	MMS4411	MXX18117	
Chromium	10.2	4.00	1.20	ug/L	5	MMS4411	MXX18117	
Lead	0.879 J	1.00	0.310	ug/L	5	MMS4411	MXX18117	
Selenium	7.99 J	10.0	3.10	ug/L	5	MMS4411	MXX18117	
Silver	ND	2.00	0.620	ug/L	5	MMS4411	MXX18117	

Batch Information

Analytical Batch: MMS4411
Analytical Method: SW6020
Analysis Date/Time: 09/19/06 16:51
Dilution Factor: 5

Prep Batch: MXX18117
Prep Method: SW3010A
Prep Date/Time: 09/12/06 16:00

Initial Prep Wt./Vol.: 50 mL
Prep Extract Vol.: 50 mL
Container ID:1065083005-I
Analyst: SCL

Hoefler Consulting Group

Print Date: 9/27/2006

Client Sample ID: **CLSW 01-06**
SGS Ref. #: 1065083005
Project ID: Camp Lonely 2006
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/28/06 12:30
Receipt Date/Time: 08/30/06 12:10

Volatile Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Benzene	8.15	0.500	0.150	ug/L	1	VFC8017	VXX15901	
Toluene	5.96	2.00	0.620	ug/L	1	VFC8026	VXX15901	
Ethylbenzene	2.86	2.00	0.620	ug/L	1	VFC8017	VXX15901	
P & M -Xylene	9.52	2.00	0.620	ug/L	1	VFC8017	VXX15901	
o-Xylene	7.59	2.00	0.620	ug/L	1	VFC8017	VXX15901	
1,4-Difluorobenzene <surr>	91.2	74-120		%	1	VFC8017	VXX15901	

Batch Information

Analytical Batch: VFC8017
Analytical Method: SW8021B
Analysis Date/Time: 09/05/06 17:32
Dilution Factor: 1

Prep Batch: VXX15901
Prep Method: SW5030B
Prep Date/Time: 09/05/06 08:00

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1065083005-A
Analyst: DNA

Analytical Batch: VFC8026
Analytical Method: SW8021B
Analysis Date/Time: 09/09/06 15:56
Dilution Factor: 1

Prep Batch: VXX15901
Prep Method: SW5030B
Prep Date/Time: 09/05/06 08:00

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:
Analyst: DNA

Hoefler Consulting Group

Print Date: 9/27/2006

Client Sample ID: **CLSW 01-06**
SGS Ref. #: 1065083005
Project ID: Camp Lonely 2006
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/28/06 12:30
Receipt Date/Time: 08/30/06 12:10

Polynuclear Aromatics GC/MS

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Acenaphthylene	ND	0.0500	0.0150	ug/L	1	XMS3766	XXX17220	
2-Methylnaphthalene	0.0437 J	0.0500	0.0150	ug/L	1	XMS3766	XXX17220	
Acenaphthene	ND	0.0500	0.0150	ug/L	1	XMS3766	XXX17220	
Fluorene	ND	0.0500	0.0150	ug/L	1	XMS3766	XXX17220	
Phenanthrene	ND	0.100	0.0310	ug/L	1	XMS3766	XXX17220	
Anthracene	ND	0.0500	0.0150	ug/L	1	XMS3766	XXX17220	
Fluoranthene	ND	0.0500	0.0150	ug/L	1	XMS3766	XXX17220	
Pyrene	ND	0.0500	0.0150	ug/L	1	XMS3766	XXX17220	
Benzo(a)Anthracene	ND	0.0500	0.0150	ug/L	1	XMS3766	XXX17220	
Chrysene	ND	0.0500	0.0150	ug/L	1	XMS3766	XXX17220	
Benzo[b]Fluoranthene	ND	0.0500	0.0150	ug/L	1	XMS3766	XXX17220	
Benzo[a]pyrene	ND	0.0500	0.0150	ug/L	1	XMS3766	XXX17220	
Indeno[1,2,3-c,d] pyrene	ND	0.0500	0.0150	ug/L	1	XMS3766	XXX17220	
Dibenzo[a,h]anthracene	ND	0.0500	0.0150	ug/L	1	XMS3766	XXX17220	
Benzo[g,h,i]perylene	ND	0.0500	0.0150	ug/L	1	XMS3766	XXX17220	
Naphthalene	0.133	0.100	0.0310	ug/L	1	XMS3766	XXX17220	
1-Methylnaphthalene	0.203	0.100	0.0310	ug/L	1	XMS3766	XXX17220	
Benzo[k]fluoranthene	ND	0.0500	0.0150	ug/L	1	XMS3766	XXX17220	
Terphenyl-d14 <surr>	75.4	50-120		%	1	XMS3766	XXX17220	

Batch Information

Analytical Batch: XMS3766
Analytical Method: 8270C SIMS
Analysis Date/Time: 09/06/06 18:30
Dilution Factor: 1

Prep Batch: XXX17220
Prep Method: SW3510C
Prep Date/Time: 09/01/06 10:06

Initial Prep Wt./Vol.: 1000 mL
Prep Extract Vol.: 1 mL
Container ID:1065083005-G
Analyst: KWM

Hoefler Consulting Group

Print Date: 9/27/2006

Client Sample ID: **CLSW 91-06**
SGS Ref. #: 1065083006
Project ID: Camp Lonely 2006
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/28/06 12:30
Receipt Date/Time: 08/30/06 12:10

Metals Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Mercury	ND	0.200	0.0620	ug/L	1	MCV3485	MXX18063	

Batch Information

Analytical Batch: MCV3485
Analytical Method: SW7470A/E245.1
Analysis Date/Time: 09/01/06 13:42
Dilution Factor: 1

Prep Batch: MXX18063
Prep Method: METHOD
Prep Date/Time: 09/01/06 09:15

Initial Prep Wt./Vol.: 25 mL
Prep Extract Vol.: 50 mL
Container ID:1065083006-A
Analyst: HKG

Hoefler Consulting Group

Print Date: 9/27/2006

Client Sample ID: **CLSW 91-06**
SGS Ref. #: 1065083006
Project ID: Camp Lonely 2006
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/28/06 12:30
Receipt Date/Time: 08/30/06 12:10

RCRA Metals

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Arsenic	7.32 J	10.0	5.00	ug/L	5	MMS4387	MXX18065	
Barium	293	3.00	0.940	ug/L	5	MMS4387	MXX18065	
Cadmium	ND	2.00	1.00	ug/L	5	MMS4387	MXX18065	
Chromium	17.8	4.00	1.20	ug/L	5	MMS4387	MXX18065	
Lead	1.20	1.00	0.310	ug/L	5	MMS4387	MXX18065	
Selenium	12.0	10.0	3.10	ug/L	5	MMS4387	MXX18065	
Silver	ND	2.00	0.620	ug/L	5	MMS4409	MXX18117	

Batch Information

Analytical Batch: MMS4387
Analytical Method: SW6020
Analysis Date/Time: 09/06/06 14:19
Dilution Factor: 5

Prep Batch: MXX18065
Prep Method: SW3010A
Prep Date/Time: 09/01/06 09:00

Initial Prep Wt./Vol.: 50 mL
Prep Extract Vol.: 50 mL
Container ID:1065083006-A
Analyst: SCL

Analytical Batch: MMS4409
Analytical Method: SW6020
Analysis Date/Time: 09/21/06 20:29
Dilution Factor: 5

Prep Batch: MXX18117
Prep Method: SW3010A
Prep Date/Time: 09/12/06 16:00

Initial Prep Wt./Vol.: 50 mL
Prep Extract Vol.: 50 mL
Container ID:1065083006-A
Analyst: SCL

Hoefler Consulting Group

Print Date: 9/27/2006

Client Sample ID: **CLSW 91-06**
SGS Ref. #: 1065083006
Project ID: Camp Lonely 2006
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/28/06 12:30
Receipt Date/Time: 08/30/06 12:10

Polynuclear Aromatics GC/MS

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Acenaphthylene	ND	0.0513	0.0154	ug/L	1	XMS3766	XXX17220	
2-Methylnaphthalene	0.0418 J	0.0513	0.0154	ug/L	1	XMS3766	XXX17220	
Acenaphthene	ND	0.0513	0.0154	ug/L	1	XMS3766	XXX17220	
Fluorene	ND	0.0513	0.0154	ug/L	1	XMS3766	XXX17220	
Phenanthrene	ND	0.103	0.0318	ug/L	1	XMS3766	XXX17220	
Anthracene	ND	0.0513	0.0154	ug/L	1	XMS3766	XXX17220	
Fluoranthene	ND	0.0513	0.0154	ug/L	1	XMS3766	XXX17220	
Pyrene	ND	0.0513	0.0154	ug/L	1	XMS3766	XXX17220	
Benzo(a)Anthracene	ND	0.0513	0.0154	ug/L	1	XMS3766	XXX17220	
Chrysene	ND	0.0513	0.0154	ug/L	1	XMS3766	XXX17220	
Benzo[b]Fluoranthene	ND	0.0513	0.0154	ug/L	1	XMS3766	XXX17220	
Benzo[a]pyrene	ND	0.0513	0.0154	ug/L	1	XMS3766	XXX17220	
Indeno[1,2,3-c,d] pyrene	ND	0.0513	0.0154	ug/L	1	XMS3766	XXX17220	
Dibenzo[a,h]anthracene	ND	0.0513	0.0154	ug/L	1	XMS3766	XXX17220	
Benzo[g,h,i]perylene	ND	0.0513	0.0154	ug/L	1	XMS3766	XXX17220	
Naphthalene	0.130	0.103	0.0318	ug/L	1	XMS3766	XXX17220	
1-Methylnaphthalene	0.213	0.103	0.0318	ug/L	1	XMS3766	XXX17220	
Benzo[k]fluoranthene	ND	0.0513	0.0154	ug/L	1	XMS3766	XXX17220	
Terphenyl-d14 <surr>	63.1	50-120		%	1	XMS3766	XXX17220	

Batch Information

Analytical Batch: XMS3766
Analytical Method: 8270C SIMS
Analysis Date/Time: 09/06/06 19:03
Dilution Factor: 1

Prep Batch: XXX17220
Prep Method: SW3510C
Prep Date/Time: 09/01/06 10:06

Initial Prep Wt./Vol.: 975 mL
Prep Extract Vol.: 1 mL
Container ID:1065083006-B
Analyst: KWM

Hoefler Consulting Group

Print Date: 9/27/2006

Client Sample ID: **CLSW 91**
SGS Ref. #: 1065083007
Project ID: Camp Lonely 2006
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/28/06 13:55
Receipt Date/Time: 08/30/06 12:10

Volatile Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Benzene	882	5.00	1.50	ug/L	10	VFC8018	VXX15901	
Toluene	1130	20.0	6.20	ug/L	10	VFC8018	VXX15901	
Ethylbenzene	89.7	2.00	0.620	ug/L	1	VFC8017	VXX15901	
P & M -Xylene	258	2.00	0.620	ug/L	1	VFC8017	VXX15901	
o-Xylene	183	2.00	0.620	ug/L	1	VFC8017	VXX15901	
1,4-Difluorobenzene <surr>	109	74-120		%	1	VFC8017	VXX15901	

Batch Information

Analytical Batch: VFC8017
Analytical Method: SW8021B
Analysis Date/Time: 09/05/06 17:57
Dilution Factor: 1

Prep Batch: VXX15901
Prep Method: SW5030B
Prep Date/Time: 09/05/06 08:00

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1065083007-A
Analyst: DNA

Analytical Batch: VFC8018
Analytical Method: SW8021B
Analysis Date/Time: 09/07/06 05:45
Dilution Factor: 10

Prep Batch: VXX15901
Prep Method: SW5030B
Prep Date/Time: 09/05/06 08:00

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1065083007-B
Analyst: DNA

Hoefler Consulting Group

Print Date: 9/27/2006

Client Sample ID: **Trip Blank**
SGS Ref. #: 1065083008
Project ID: Camp Lonely 2006
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/28/06 13:55
Receipt Date/Time: 08/30/06 12:10

Volatile Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Benzene	0.267 J	0.500	0.150	ug/L	1	VFC8017	VXX15901	
Toluene	ND	2.00	0.620	ug/L	1	VFC8017	VXX15901	
Ethylbenzene	ND	2.00	0.620	ug/L	1	VFC8017	VXX15901	
P & M -Xylene	ND	2.00	0.620	ug/L	1	VFC8017	VXX15901	
o-Xylene	ND	2.00	0.620	ug/L	1	VFC8017	VXX15901	
1,4-Difluorobenzene <surr>	89.8	74-120		%	1	VFC8017	VXX15901	

Batch Information

Analytical Batch: VFC8017
Analytical Method: SW8021B
Analysis Date/Time: 09/05/06 13:45
Dilution Factor: 1

Prep Batch: VXX15901
Prep Method: SW5030B
Prep Date/Time: 09/05/06 08:00

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 5 mL
Container ID:1065083008-A
Analyst: DNA

SGS Ref.#	724346	Method Blank	**Printed Date/Time**	09/27/2006	9:36
Client Name	Hoefler Consulting Group		**Prep**	**Batch**	XXX17220
Project Name/#	Camp Lonely 2006			**Method**	SW3510C
Matrix	Water (Surface, Eff., Ground)			**Date**	09/01/2006

QC results affect the following production samples:

1065083005, 1065083006

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Polynuclear Aromatics GC/MS					
Acenaphthylene	ND	0.0500	0.0150	ug/L	09/06/06
2-Methylnaphthalene	ND	0.0500	0.0150	ug/L	09/06/06
Acenaphthene	ND	0.0500	0.0150	ug/L	09/06/06
Fluorene	ND	0.0500	0.0150	ug/L	09/06/06
Phenanthrene	ND	0.100	0.0310	ug/L	09/06/06
Anthracene	ND	0.0500	0.0150	ug/L	09/06/06
Fluoranthene	ND	0.0500	0.0150	ug/L	09/06/06
Pyrene	ND	0.0500	0.0150	ug/L	09/06/06
Benzo(a)Anthracene	ND	0.0500	0.0150	ug/L	09/06/06
Chrysene	ND	0.0500	0.0150	ug/L	09/06/06
Benzo[b]Fluoranthene	ND	0.0500	0.0150	ug/L	09/06/06
Benzo[a]pyrene	ND	0.0500	0.0150	ug/L	09/06/06
Indeno[1,2,3-c,d] pyrene	ND	0.0500	0.0150	ug/L	09/06/06
Dibenzo[a,h]anthracene	ND	0.0500	0.0150	ug/L	09/06/06
Benzo[g,h,i]perylene	ND	0.0500	0.0150	ug/L	09/06/06
Naphthalene	ND	0.100	0.0310	ug/L	09/06/06
1-Methylnaphthalene	ND	0.100	0.0310	ug/L	09/06/06
Benzo[k]fluoranthene	ND	0.0500	0.0150	ug/L	09/06/06
Surrogates					
Terphenyl-d14 <surr>	116	50-120		%	09/06/06

Batch	XMS3766
Method	8270C SIMS
Instrument	HP 6890/5973 MS SVOA

SGS Ref.#	724501	Method Blank	**Printed Date/Time**	09/27/2006	9:36
Client Name	Hoefler Consulting Group		**Prep**	**Batch**	MXX18063
Project Name/#	Camp Lonely 2006			**Method**	METHOD
Matrix	Water (Surface, Eff., Ground)			**Date**	09/01/2006

QC results affect the following production samples:

1065083005, 1065083006

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Metals Department					
Mercury	ND	0.200	0.0620	ug/L	09/01/06

Batch MCV3485

Method SW7470A/E245.1

Instrument HgAA Leeman AutoAnalyzer PS200

SGS Ref.#	724664	Method Blank	**Printed Date/Time**	09/27/2006	9:36
Client Name	Hoefler Consulting Group		**Prep**	**Batch**	MXX18065
Project Name/#	Camp Lonely 2006			**Method**	SW3010A
Matrix	Water (Surface, Eff., Ground)			**Date**	09/01/2006

QC results affect the following production samples:

1065083005, 1065083006

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Metals by ICP/MS					
Arsenic	ND	10.0	5.00	ug/L	09/06/06
Barium	ND	3.00	0.940	ug/L	09/06/06
Cadmium	ND	2.00	1.00	ug/L	09/06/06
Chromium	ND	4.00	1.20	ug/L	09/06/06
Lead	ND	1.00	0.310	ug/L	09/06/06
Selenium	ND	10.0	3.10	ug/L	09/06/06

Batch MMS4387
Method SW6020
Instrument Perkin Elmer Sciex ICP-MS P3

SGS Ref.#	725385	Method Blank	**Printed Date/Time**	09/27/2006	9:36
Client Name	Hoefler Consulting Group		**Prep**	**Batch**	VXX15901
Project Name/#	Camp Lonely 2006			**Method**	SW5030B
Matrix	Water (Surface, Eff., Ground)			**Date**	09/05/2006

QC results affect the following production samples:

1065083001, 1065083002, 1065083005, 1065083007, 1065083008

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Volatile Fuels Department					
Benzene	ND	0.500	0.150	ug/L	09/05/06
Toluene	ND	2.00	0.620	ug/L	09/05/06
Ethylbenzene	ND	2.00	0.620	ug/L	09/05/06
P & M -Xylene	ND	2.00	0.620	ug/L	09/05/06
o-Xylene	ND	2.00	0.620	ug/L	09/05/06
Surrogates					
1,4-Difluorobenzene <surr>	91.4	74-120		%	09/05/06

Batch VFC8017
Method SW8021B
Instrument HP 5890 Series II PID+HECD VBA

SGS Ref.#	726778	Method Blank	**Printed Date/Time**		09/27/2006 9:36
Client Name	Hoefler Consulting Group		**Prep**	**Batch**	MXX18117
Project Name/#	Camp Lonely 2006			**Method**	SW3010A
Matrix	Water (Surface, Eff., Ground)			**Date**	09/12/2006

QC results affect the following production samples:

1065083005, 1065083006

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Metals by ICP/MS					
Arsenic	6.99 J	10.0	5.00	ug/L	09/18/06
Barium	ND	3.00	0.940	ug/L	09/18/06
Cadmium	ND	2.00	1.00	ug/L	09/18/06
Chromium	ND	4.00	1.20	ug/L	09/18/06
Lead	ND	1.00	0.310	ug/L	09/18/06
Selenium	6.09 J	10.0	3.10	ug/L	09/18/06
Silver	ND	2.00	0.620	ug/L	09/18/06

Batch MMS4404
Method SW6020
Instrument Perkin Elmer Sciex ICP-MS P3

SGS Ref.#	724347	Lab Control Sample	**Printed Date/Time**	09/27/2006	9:36
			Prep **Batch**	XXX17220	
Client Name	Hoefler Consulting Group		**Method**	SW3510C	
Project Name/#	Camp Lonely 2006		**Date**	09/01/2006	
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1065083005, 1065083006

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date

Polynuclear Aromatics GC/MS

SGS Ref.#	724347	Lab Control Sample	**Printed Date/Time**	09/27/2006	9:36
			Prep Batch	XXX17220	
Client Name	Hoefler Consulting Group		**Method**	SW3510C	
Project Name/#	Camp Lonely 2006		**Date**	09/01/2006	
Matrix	Water (Surface, Eff., Ground)				

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Polynuclear Aromatics GC/MS								
Acenaphthylene	LCS	0.327	65	(43-92)			0.5 ug/L	09/06/2006
2-Methylnaphthalene	LCS	0.315	63	(36-89)			0.5 ug/L	09/06/2006
Acenaphthene	LCS	0.325	65	(45-87)			0.5 ug/L	09/06/2006
Fluorene	LCS	0.326	65	(40-90)			0.5 ug/L	09/06/2006
Phenanthrene	LCS	0.330	66	(50-95)			0.5 ug/L	09/06/2006
Anthracene	LCS	0.305	61	(30-97)			0.5 ug/L	09/06/2006
Fluoranthene	LCS	0.376	75	(55-105)			0.5 ug/L	09/06/2006
Pyrene	LCS	0.387	77	(50-105)			0.5 ug/L	09/06/2006
Benzo(a)Anthracene	LCS	0.324	65	(58-136)			0.5 ug/L	09/06/2006
Chrysene	LCS	0.447	90	(55-110)			0.5 ug/L	09/06/2006
Benzo[b]Fluoranthene	LCS	0.340	68	(45-120)			0.5 ug/L	09/06/2006
Benzo[a]pyrene	LCS	0.299	60	(31-128)			0.5 ug/L	09/06/2006
Indeno[1,2,3-c,d] pyrene	LCS	0.380	76	(45-122)			0.5 ug/L	09/06/2006
Dibenzo[a,h]anthracene	LCS	0.374	75	(40-120)			0.5 ug/L	09/06/2006
Benzo[g,h,i]perylene	LCS	0.397	80	(40-117)			0.5 ug/L	09/06/2006
Naphthalene	LCS	0.346	69	(40-96)			0.5 ug/L	09/06/2006
1-Methylnaphthalene	LCS	0.325	65	(35-86)			0.5 ug/L	09/06/2006
Benzo[k]fluoranthene	LCS	0.252	50	(49-121)			0.5 ug/L	09/06/2006
Surrogates								
Terphenyl-d14 <surr>	LCS		79	(50-120)				09/06/2006

SGS Ref.#	724347	Lab Control Sample	**Printed Date/Time**	09/27/2006	9:36
			Prep **Batch**	XXX17220	
Client Name	Hoefler Consulting Group		**Method**	SW3510C	
Project Name/#	Camp Lonely 2006		**Date**	09/01/2006	
Matrix	Water (Surface, Eff., Ground)				

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date

Polynuclear Aromatics GC/MS

Batch	XMS3766
Method	8270C SIMS
Instrument	HP 6890/5973 MS SVOA

SGS Ref.#	724502	Lab Control Sample	**Printed Date/Time**	09/27/2006	9:36
			Prep **Batch**	MXX18063	
Client Name	Hoefler Consulting Group		**Method**	METHOD	
Project Name/#	Camp Lonely 2006		**Date**	09/01/2006	
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1065083005, 1065083006

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Metals Department								
Mercury	LCS	3.84	96	(85-115)			4 ug/L	09/01/2006

Batch	MCV3485
Method	SW7470A/E245.1
Instrument	HgAA Leeman AutoAnalyzer PS200

SGS Ref.#	724506	Lab Control Sample	**Printed Date/Time**	09/27/2006	9:36
			Prep **Batch**	MXX18063	
Client Name	Hoefler Consulting Group		**Method**	METHOD	
Project Name/#	Camp Lonely 2006		**Date**	09/01/2006	
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1065083005, 1065083006

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Metals Department								
Mercury	LCS	3.78	95	(85-115)			4 ug/L	09/01/2006

Batch	MCV3485
Method	SW7470A/E245.1
Instrument	HgAA Leeman AutoAnalyzer PS200

SGS Ref.#	724665	Lab Control Sample	**Printed Date/Time**	09/27/2006	9:36
			Prep **Batch**	MXX18065	
Client Name	Hoefler Consulting Group		**Method**	SW3010A	
Project Name/#	Camp Lonely 2006		**Date**	09/01/2006	
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1065083005, 1065083006

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Metals by ICP/MS								
Arsenic	LCS	996	100	(80-120)			1000 ug/L	09/06/2006
Barium	LCS	967	97	(80-120)			1000 ug/L	09/06/2006
Cadmium	LCS	993	99	(80-120)			1000 ug/L	09/06/2006
Chromium	LCS	1000	100	(80-120)			1000 ug/L	09/06/2006
Lead	LCS	987	99	(80-120)			1000 ug/L	09/06/2006
Selenium	LCS	1020	102	(80-120)			1000 ug/L	09/06/2006

Batch	MMS4387
Method	SW6020
Instrument	Perkin Elmer Sciex ICP-MS P3

SGS Ref.#	725386	Lab Control Sample	**Printed Date/Time**	09/27/2006	9:36
			Prep **Batch**	VXX15901	
Client Name	Hoefler Consulting Group		**Method**	SW5030B	
Project Name/#	Camp Lonely 2006		**Date**	09/05/2006	
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1065083001, 1065083002, 1065083005, 1065083007, 1065083008

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Fuels Department								
Benzene	LCS	52.4	105	(79-115)			50 ug/L	09/05/2006
Toluene	LCS	55.6	111	(85-117)			50 ug/L	09/05/2006
Ethylbenzene	LCS	57.6	115	(81-120)			50 ug/L	09/05/2006
P & M -Xylene	LCS	117	117	(87-119)			100 ug/L	09/05/2006
o-Xylene	LCS	55.3	111	(85-114)			50 ug/L	09/05/2006
Surrogates								
1,4-Difluorobenzene <surr>	LCS		101	(74-120)				09/05/2006

Batch	VFC8017
Method	SW8021B
Instrument	HP 5890 Series II PID+HECD VBA

SGS Ref.#	726779	Lab Control Sample	**Printed Date/Time**	09/27/2006	9:36
			Prep **Batch**	MXX18117	
Client Name	Hoefler Consulting Group		**Method**	SW3010A	
Project Name/#	Camp Lonely 2006		**Date**	09/12/2006	
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1065083005, 1065083006

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Metals by ICP/MS								
Arsenic	LCS	1040	104	(80-120)			1000 ug/L	09/18/2006
Barium	LCS	1060	106	(80-120)			1000 ug/L	09/18/2006
Cadmium	LCS	1080	108	(80-120)			1000 ug/L	09/18/2006
Chromium	LCS	1040	104	(80-120)			1000 ug/L	09/18/2006
Lead	LCS	989	99	(80-120)			1000 ug/L	09/18/2006
Selenium	LCS	1080	108	(80-120)			1000 ug/L	09/18/2006
Silver	LCS	113	113	(80-120)			100 ug/L	09/18/2006

Batch	MMS4404
Method	SW6020
Instrument	Perkin Elmer Sciex ICP-MS P3

SGS Ref.#	724472	Matrix Spike	**Printed Date/Time**		09/27/2006 9:36
	724473	Matrix Spike Duplicate	**Prep**	**Batch**	XXX17220
				Method	Liquid/Water Extraction for PA
				Date	09/01/2006
Original	1065042020				
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1065083005, 1065083006

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date

Polynuclear Aromatics GC/MS

SGS Ref.#	724472	Matrix Spike	**Printed Date/Time**	09/27/2006	9:36
	724473	Matrix Spike Duplicate	**Prep** **Batch**	XXX17220	
			Method	Liquid/Water Extraction for PA	
			Date	09/01/2006	
Original	1065042020				
Matrix	Water (Surface, Eff., Ground)				

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Polynuclear Aromatics GC/MS									
Acenaphthylene	MS	ND	.3	54	(43-92)			0.552 ug/L	09/06/2006
	MSD		0.342	62		13	(< 30)	0.552 ug/L	09/06/2006
2-Methylnaphthalene	MS	ND	.274	50	(36-89)			0.552 ug/L	09/06/2006
	MSD		0.314	57		14	(< 30)	0.552 ug/L	09/06/2006
Acenaphthene	MS	ND	.301	54	(45-87)			0.552 ug/L	09/06/2006
	MSD		0.341	62		13	(< 30)	0.552 ug/L	09/06/2006
Fluorene	MS	ND	.296	54	(40-90)			0.552 ug/L	09/06/2006
	MSD		0.343	62		15	(< 30)	0.552 ug/L	09/06/2006
Phenanthrene	MS	ND	.308	56	(50-95)			0.552 ug/L	09/06/2006
	MSD		0.363	66		16	(< 30)	0.552 ug/L	09/06/2006
Anthracene	MS	ND	.353	64	(30-97)			0.552 ug/L	09/06/2006
	MSD		0.362	66		3	(< 30)	0.552 ug/L	09/06/2006
Fluoranthene	MS	ND	.358	65	(55-105)			0.552 ug/L	09/06/2006
	MSD		0.408	74		13	(< 30)	0.552 ug/L	09/06/2006
Pyrene	MS	ND	.372	67	(50-105)			0.552 ug/L	09/06/2006
	MSD		0.429	78		14	(< 30)	0.552 ug/L	09/06/2006
Benzo(a)Anthracene	MS	ND	.3	54*	(58-136)			0.552 ug/L	09/06/2006
	MSD		0.413	75*		32 *	(< 30)	0.552 ug/L	09/06/2006
Chrysene	MS	ND	.378	69	(55-110)			0.552 ug/L	09/06/2006
	MSD		0.449	81		17	(< 30)	0.552 ug/L	09/06/2006
Benzo[b]Fluoranthene	MS	ND	.306	55	(45-120)			0.552 ug/L	09/06/2006
	MSD		0.439	79*		36 *	(< 30)	0.552 ug/L	09/06/2006
Benzo[a]pyrene	MS	ND	.455	82	(31-128)			0.552 ug/L	09/06/2006
	MSD		0.576	104		24	(< 30)	0.552 ug/L	09/06/2006
Indeno[1,2,3-c,d] pyrene	MS	ND	.343	62	(45-122)			0.552 ug/L	09/06/2006
	MSD		0.416	75		19	(< 30)	0.552 ug/L	09/06/2006
Dibenzo[a,h]anthracene	MS	ND	.338	61	(40-120)			0.552 ug/L	09/06/2006
	MSD		0.421	76		22	(< 30)	0.552 ug/L	09/06/2006
Benzo[g,h,i]perylene	MS	ND	.364	66	(40-117)			0.552 ug/L	09/06/2006
	MSD		0.434	79		18	(< 30)	0.552 ug/L	09/06/2006
Naphthalene	MS	ND	.311	56	(40-96)			0.552 ug/L	09/06/2006
	MSD		0.334	60		7	(< 30)	0.552 ug/L	09/06/2006
1-Methylnaphthalene	MS	ND	.353	64	(35-86)			0.552 ug/L	09/06/2006
	MSD		0.328	59		7	(< 30)	0.552 ug/L	09/06/2006
Benzo[k]fluoranthene	MS	ND	.425	77	(49-121)			0.552 ug/L	09/06/2006
	MSD		0.438	79		3	(< 30)	0.552 ug/L	09/06/2006
Surrogates									
Terphenyl-d14 <surr>	MS		.376	68	(50-120)				09/06/2006
	MSD		0.447	81		17			09/06/2006

SGS Ref.#	724472	Matrix Spike	**Printed Date/Time**	09/27/2006	9:36
	724473	Matrix Spike Duplicate	**Prep** **Batch**	XXX17220	
			Method	Liquid/Water Extraction for PA	
			Date	09/01/2006	
Original	1065042020				
Matrix	Water (Surface, Eff., Ground)				

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date

Polynuclear Aromatics GC/MS

Batch	XMS3766
Method	8270C SIMS
Instrument	HP 6890/5973 MS SVOA

SGS Ref.#	724503	Matrix Spike	**Printed Date/Time**		09/27/2006 9:36
			Prep	**Batch**	MXX18063
				Method	Digestion Mercury (W)
				Date	09/01/2006
Original	1064678001				
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1065083005, 1065083006

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount		Analysis Date
Metals Department										
Mercury	MS	ND	7.52	94	(85-115)			8	ug/L	09/01/2006

Batch MCV3485
Method SW7470A/E245.1
Instrument HgAA Leeman AutoAnalyzer PS200

SGS Ref.#	724507	Matrix Spike	**Printed Date/Time**		09/27/2006 9:36
	724508	Matrix Spike Duplicate	**Prep**	**Batch**	MXX18063
				Method	Digestion Mercury (W)
				Date	09/01/2006
Original	1065082015				
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1065083005, 1065083006

Parameter	Qualifiers		Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount		Analysis Date
Metals Department											
Mercury		MS	ND	7.72	97	(85-115)			8	ug/L	09/01/2006
		MSD		7.66	96				8	ug/L	09/01/2006

Batch MCV3485
Method SW7470A/E245.1
Instrument HgAA Leeman AutoAnalyzer PS200

SGS Ref.#	724666	Matrix Spike	**Printed Date/Time**		09/27/2006 9:36
			Prep	**Batch**	MXX18065
				Method	3010 H20 Digest for Metals ICI
				Date	09/01/2006
Original	1065083005				
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1065083005, 1065083006

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount		Analysis Date
Metals by ICP/MS										
Arsenic	MS	ND	1000	100	(80-120)			1000	ug/L	09/06/2006
Barium	MS	274	1180	89	(80-120)			1000	ug/L	09/06/2006
Cadmium	MS	ND	963	96	(80-120)			1000	ug/L	09/06/2006
Chromium	MS	10.2	997	98	(80-120)			1000	ug/L	09/06/2006
Lead	MS	0.879 J	941	94	(80-120)			1000	ug/L	09/06/2006
Selenium	MS	7.99 J	1010	100	(80-120)			1000	ug/L	09/06/2006

Batch MMS4387
Method SW6020
Instrument Perkin Elmer Sciex ICP-MS P3

SGS Ref.#	726780	Matrix Spike	**Printed Date/Time**	09/27/2006	9:36
	726781	Matrix Spike Duplicate	**Prep** **Batch**	MXX18117	
			Method	3010 H20 Digest for Metals ICI	
			Date	09/12/2006	
Original	1065115022				
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1065083005, 1065083006

Parameter	Qualifiers		Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount		Analysis Date
Metals by ICP/MS											
Arsenic		MS	ND	1020	102	(80-120)			1000	ug/L	09/18/2006
		MSD		997	100		2	(< 15)	1000	ug/L	09/18/2006
Barium		MS	14.8	1040	103	(80-120)			1000	ug/L	09/18/2006
		MSD		1050	103		0	(< 15)	1000	ug/L	09/18/2006
Cadmium		MS	ND	1030	103	(80-120)			1000	ug/L	09/18/2006
		MSD		1020	102		1	(< 15)	1000	ug/L	09/18/2006
Chromium		MS	10.1	996	99	(80-120)			1000	ug/L	09/18/2006
		MSD		995	99		0	(< 15)	1000	ug/L	09/18/2006
Lead		MS	0.346 J	965	97	(80-120)			1000	ug/L	09/18/2006
		MSD		977	98		1	(< 15)	1000	ug/L	09/18/2006
Selenium		MS	10.2	1040	103	(80-120)			1000	ug/L	09/18/2006
		MSD		1040	103		0	(< 15)	1000	ug/L	09/18/2006
Silver		MS	ND	109	109	(80-120)			100	ug/L	09/18/2006
		MSD		109	109		1	(< 15)	100	ug/L	09/18/2006

Batch MMS4404
Method SW6020
Instrument Perkin Elmer Sciex ICP-MS P3

SGS Ref.#	726782	Bench Spike DIGESTED	**Printed Date/Time**		09/27/2006 9:36
			Prep	**Batch**	MXX18117
				Method	3010 H20 Digest for Metals ICI
				Date	09/12/2006
Original	1065115022				
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1065083005, 1065083006

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount		Analysis Date
Metals by ICP/MS										
Arsenic	BND	ND	4690	94	(75-125)			5000	ug/L	09/18/2006
Barium	BND	14.8	5020	100	(75-125)			5000	ug/L	09/18/2006
Cadmium	BND	ND	4980	100	(75-125)			5000	ug/L	09/18/2006
Chromium	BND	10.1	4690	94	(75-125)			5000	ug/L	09/18/2006
Lead	BND	0.346 J	4520	90	(75-125)			5000	ug/L	09/18/2006
Selenium	BND	10.2	4840	97	(75-125)			5000	ug/L	09/18/2006
Silver	BND	ND	1240	99	(75-125)			1250	ug/L	09/18/2006

Batch MMS4404
Method SW6020
Instrument Perkin Elmer Sciex ICP-MS P3

SGS Ref.#	1065042002	Billable Matrix Spike	**Printed Date/Time**		09/27/2006 9:36
	1065042003	Billable Matrix Spike Dup.	**Prep**	**Batch**	VXX15901
				Method	Volatile Fuels Extraction (W)
				Date	09/05/2006
Original	1065042001				
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1065083001, 1065083002, 1065083005, 1065083007, 1065083008

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount		Analysis Date
Volatile Fuels Department										
Benzene	BMS	1.01	39.2	76*	(79-115)			50	ug/L	09/05/2006
	BMSD		41.1	80		5	(< 20)	50	ug/L	09/05/2006
Toluene	BMS	ND	42.8	86	(85-117)			50	ug/L	09/05/2006
	BMSD		46	92		7	(< 20)	50	ug/L	09/05/2006
Ethylbenzene	BMS	ND	44.3	89	(81-120)			50	ug/L	09/05/2006
	BMSD		46.4	93		5	(< 20)	50	ug/L	09/05/2006
P & M -Xylene	BMS	2.07	93.3	91	(87-119)			100	ug/L	09/05/2006
	BMSD		97.8	96		5	(< 20)	100	ug/L	09/05/2006
o-Xylene	BMS	ND	46.9	94	(85-114)			50	ug/L	09/05/2006
	BMSD		48.4	97		3	(< 20)	50	ug/L	09/05/2006
Surrogates										
1,4-Difluorobenzene <surr>	BMS		48.7	97	(74-120)					09/05/2006
	BMSD		47.9	96		2				09/05/2006

Batch	VFC8017
Method	SW8021B
Instrument	HP 5890 Series II PID+HECD VBA

SGS

CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

1065083

le
Iawaii
Maryland
Iorth Carolina

058300

(1)

CLIENT: Hoefler Consulting

CONTACT: Nathan Webb PHONE NO:( ) 563-2196

PROJECT: Camp Lovely 2006 SITE/PWSID#:

REPORTS TO: HCG FAX NO.:( ) 563-2164

INVOICE TO: HCG QUOTE #

P.O. NUMBER

SGS Reference:

PAGE 1 OF 1

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE (C= COMP, G= GRAB)	Glycols	BTEX	DRO/RRO	VOCs	PAH	RCRA Metals				REMARKS
Preservatives Used																
(1) A-F	CLPW01	8/28	1355	GW		G	1	1								
(2) A-F	CLPW02		1130	GW	6		1	1								
(3) A-C	CLSW12-06		1145	SW	3		1									
(4) A-B	CLSW02-06		1155		2		1									
(5) A-I	CLSW01-06		1230		9		1	1			1	1				
(8) A-C	Trip Blank		—													
(6) A-C	CLSW91-06		1230		3	G					1	1				
(7) A-C	CLPW91		1355		3	G		1								

(3) Analysis Required

(5)

Collected/Relinquished By:(1)	Date	Time	Received By:
	8/30	12	
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date 8/30/06	Time 1210	Received By:

(4)

Shipping Carrier: hand

Shipping Ticket No:

Samples Received Cold? (Circle) YES NO

Temperature °C: TB = 1.6 ; C = 4.2

Special Deliverable Requirements: Level IV

Chain of Custody Seal: (Circle) INTACT x1 BROKEN ABSENT

Requested Turnaround Time and Special Instructions: Normal TAT

40 of 54

White - Retained by Lab
Yellow - Returned with Report
Pink - Retained by Sampler

Poston, Shane (Anchorage)

From: Nathan Webb [nwebb@hoeflernet.com]
Sent: Wednesday, August 30, 2006 3:07 PM
To: Poston, Shane (Anchorage)
Subject: Glycol

1065083

Shane:

Last years analysis for glycols gave results for

Ethylene glycol
Propylene glycol
di-Ethylene glycol
tri-Ethylene glycol

I guess we should have these reported to maintain consistencey.
N

1065083

SGS

SAMPLE RECEIPT FORM

SGS WO#:

Yes	No	NA	
	✓		Are samples **RUSH**, priority, or *w/n 72 hrs.* of **hold time**?
		✓	If yes have you done *e-mail notification*?
	✓		Are samples *within 24 hrs.* of **hold time** or **due date**?
		✓	If yes, have you *spoken with* Supervisor?
		✓	Archiving bottles – if req., are they properly marked?
	✓		Are there any **problems**? PM Notified?
✓			Were samples preserved correctly and pH verified?
		✓	If this is for PWS, provide **PWSID.**
	✓		Will courier charges apply?
			Method of payment?
✓			Data package required? (Level: 1 / (2) / 3 / 4)
			Notes:
			Is this a DoD project? (USACE, Navy, AFCEE)

Due Date: 9/14/06
Received Date: 8/30/06
Received Time: 1210
Is **date/time conversion** necessary? no
# of hours to AK Local Time:
Thermometer ID: 69D

Cooler ID	Temp Blank	Cooler Temp
1	1.6 °C	4.2 °C
	°C	°C
	°C	°C
	°C	°C
	°C	°C

*Temperature readings include thermometer correction factors

Delivery method (circle all that apply): (Client) Alert Courier / UPS / FedEx / USPS / AA Goldstreak / NAC / ERA / PenAir / Carlile Lynden / SGS / Other:

Airbill #

Additional Sample Remarks: (√ *if applicable*)

- Extra Sample Volume?
- X Limited Sample Volume? (4) A-B
- Field preserved for volatiles?
- Field-filtered for dissolved?
- Lab-filtered for dissolved?
- X Ref Lab required? glycols
- Foreign Soil?

This section must be filled out for DoD projects (USACE, Navy, AFCEE)

Yes	No		
	✓		Is received temperature 4 ± 2°C? Exceptions: Temp Blank 1.6°C — Samples/Analyses Affected:
	✓		Rad Screen performed? Result:
	✓		Was there an airbill? *(Note # above in the right hand column)*
✓			Was cooler sealed with custody seals? # / where: 1 / one on front
✓			Were seal(s) intact upon arrival?
✓			Was there a COC with cooler?
✓	✓ 8/30/06		Was COC sealed in plastic bag & taped inside lid of cooler?
✓			Was the COC filled out properly?
	✓		Did the COC indicate COE / AFCEE / Navy project?
✓			Did the COC and samples correspond?
✓			Were all sample packed to prevent breakage? Packing material: bubblewrap
8/30/06 ✓	✓		Were all samples unbroken and clearly labeled? *
	✓		Were all samples sealed in separate plastic bags?
✓			Were all VOCs free of headspace and/or MeOH preserved?
✓			Were correct container / sample sizes submitted?
✓			Is sample condition good?
✓			Was copy of CoC, SRF, and custody seals given to PM to fax?

This section must be filled if problems are found.

Yes	No	
		Was client notified of problems?

Individual contacted:
Via: Phone / Fax / Email (*circle one*)
Date/Time:
Reason for contact:

Change Order Required?
SGS Contact:

Notes: only 2 vials provided for (4) A-B glycols ∴ limited vol.
* No labels were used for any of the jars, sample IDs written only on lids of vials/bottles

Completed by (sign): Erin Lee **(print):** Erin Lee
Login proof (check one): waived ____ required ____ performed by:

DOCUMENT\FORMS\approved\SRF_F004r15.doc Form # F004r15 6/

1065083

SGS

SAMPLE RECEIPT FORM (page 2)

SGS WO#:

#	Container ID	Matrix	Test	QC	TB	Container Volume: 1 L	500 mL	250 mL	125 mL	60 mL	40 mL	8oz (250 mL)	4oz (125 mL)	Other	Container Type: AG	CG	HDPE	Nalgene	Cubie	Coli	Septa	Other	Preservative: None	HCl	HNO_3	H_2SO_4	MeOH	$Na_2S_2O_3$	NaOH	Other
1-2	A-C	1	BTEX								3				X						X			X						
	D-F		glycols								3				X						X		X							
3	A-C	1	glycols								3				X						X		X							
4	A-B	1	glycols								~~3~~ 2	EM 8/30/06			X						X		X							
5	A-C	1	BTEX								3				X						X			X						
	D-F		glycols								3				X						X		X							
	G-H		PAH			2									X								X							
	I		RCRA met.					1									X								X					
6	A	1	RCRA met.					1									X								X					
	B-C		PAH			~~2~~ 2 EM 8/30/06									X								X	~~X~~ EM 8/30/06						
7	A-C	1	BTEX								3				X						X			X						
8	A-C	1	BTEX		X						3				X						X			X						
	Bottle Totals					4		2			23																			

Completed by: [signature] Date: 8/30/06

SGS Environmental

CUSTODY SEAL

Signature: Bill L

Date/Time: 8/28

BIO-CHEM
ENVIRONMENTAL
ANALYTICAL
LABORATORIES

1049 - 28th Street SE
Grand Rapids, MI 49508
Ph: 616/248-4900
Toll Free: 800/362-LABS
Fax: 616/248-4904

September 08, 2006

Forest Taylor
SGS Environmental
200 W. Potter Drive
Anchorage, AK 99518

TEL: (907) 562-2343
FAX (907) 561-5301

RE: Camp Lonely 2006

Dear Forest Taylor:

Order No. 0609003

BIO-CHEM Laboratories, Inc. received 5 samples on 9/1/2006 for the analyses presented in the following report.

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative.

If you have any questions regarding these tests results, please feel free to call.

Please note that unless otherwise instructed, residual samples will be held for sixty (60) days from the original report date. At that time, all non-hazardous samples will be disposed of in accordance with federal, state and local regulations and ordinances, and hazardous samples shall be returned to you. Please contact the laboratory within thirty (30) days if other arrangements for sample retention need to be made.

Sincerely,

Cindy Euwema

Cindy Euwema
Office Manager

Working with you to ensure a better tomorrow.

06090003

SGS

CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

Locations Nationwide
- Alaska
- Hawaii
- Louisiana
- Maryland
- New Jersey
- North Carolina
- West Virginia

www.us.sgs.com

062245

(1)

CLIENT: SGS - AK

CONTACT: FOREST TAYLOR PHONE NO: (907) 562 2343

PROJECT: CAMP LONELY 2006 SITE/PWSID#:

REPORTS TO: E-MAIL:

FAX NO.:( )

INVOICE TO: QUOTE #

P.O. NUMBER 1065083

SGS Reference: BIO-CHEM

PAGE 1 OF 1

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE (C= COMP, G= GRAB)	Analysis Required (3): GLYCOL / PROPYLENE	ETHYLENE	DIETHYLENE	TRIETHYLENE	REMARKS
	CLPW01	8/28/06	1355	H_2O	3	G	✓	✓			1065083001
	CLPW02		1130		3		✓	✓			1065083002
	CLSW 12-06		1145		3		✓	✓			1065083003
	CLSW02-06		1155		2		✓	✓			1065083004
	CLSW01-06	8/28/06	1230	H_2O	3	G	✓	✓			1065083005

Preservatives Used: — —

(5)

Collected/Relinquished By: (1)	Date	Time	Received By:
Forest Taylor	8/31/06	1025	UPS
Relinquished By: (2) UPS	9-1-06	10:12	L. Folkertsma
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date	Time	Received By:

(4)

Shipping Carrier:

Shipping Ticket No:

Special Deliverable Requirements: LEVEL II DATA PKG

Samples Received Cold? (Circle) YES NO

Temperature °C: -1 °F:

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Requested Turnaround Time and Special Instructions:

☐ 200 W. Potter Drive Anchorage, AK 99518 Tel: (907) 562-2343 Fax: (907) 561-5301
☐ 5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557
☐ 1270 Greenbrier Street Charleston, WV 25311 Tel: (304) 346-0725 Fax: (304) 346-0761

White - Retained by Lab
Yellow - Returned with Report
Pink - Retained by Sampler

BIO-CHEM Laboratories, Inc.

Date: *08-Sep-06*

CLIENT: SGS Environmental
Project: Camp Lonely 2006
Lab Order: 0609003

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received
0609003-01A	CLPW01	Aqueous	8/28/2006	9/1/2006
0609003-02A	CLPW02	Aqueous	8/28/2006	9/1/2006
0609003-03A	CLSW12-06	Aqueous	8/28/2006	9/1/2006
0609003-04A	CLSW02-06	Aqueous	8/28/2006	9/1/2006
0609003-05A	CLSW01-06	Aqueous	8/28/2006	9/1/2006

BIO-CHEM Laboratories, Inc. **Date:** *08-Sep-06*

CLIENT: SGS Environmental
Project: Camp Lonely 2006
Lab Order: 0609003

CASE NARRATIVE

Samples are routinely analyzed using methods outlined in the following references:

(SW) Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Ed.
(E) Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020.
(A) Standard Methods for the Examination of Water and Wastewater, APHA, 18th Ed.
(D) Annual Book of ASTM Standards.

Specific methods utilized for this project are provided in the analytical report and are identified by the reference document abbreviation ( ) followed by the method number.

All QA/QC and sample analyses met method, laboratory and/or regulatory data quality objectives unless otherwise specified below.

No data qualifications required.

BIO-CHEM Laboratories, Inc.

Date: *9/8/2006*

ANALYTICAL REPORT

CLIENT: SGS Environmental
Lab Order: 0609003
Project: Camp Lonely 2006
Lab Sample ID: 0609003-01A

Project Number: N/A
Client Sample ID: CLPW01
Collection Date: 8/28/2006
Matrix: AQUEOUS

Analyses	Method Ref.	Result	Q	PQL	Units	DF	Analyst	Date
Ethers and Glycols by GC/FID								
1. Diethylene glycol	SW8015B	< 2,000		2,000	ug/L	1	KLM	9/7/2006
2. Ethylene Glycol	SW8015B	< 2,000		2,000	ug/L	1	KLM	9/7/2006
3. Propylene Glycol	SW8015B	< 2,000		2,000	ug/L	1	KLM	9/7/2006
4. Triethylene Glycol	SW8015B	< 2,000		2,000	ug/L	1	KLM	9/7/2006

Definitions: PQL - Practical Quantitation Limit
DF - Dilution Factor

Qualifiers (Q): J - Detected below PQL but above MDL: Estimated
S - Spike Recovery Outside Acceptance Limits
B - Analyte detected in associated Method Blank
N - See case narrative for explanation

This report shall not be reproduced except in full, without the written approval of BIO-CHEM Laboratories, Inc.

Note: The sample results reported are based on the sample aliquot(s) tested.

BIO-CHEM Laboratories, Inc.

Date: *9/8/2006*

ANALYTICAL REPORT

CLIENT: SGS Environmental
Lab Order: 0609003
Project: Camp Lonely 2006
Lab Sample ID: 0609003-02A

Project Number: N/A
Client Sample ID: CLPW02
Collection Date: 8/28/2006
Matrix: AQUEOUS

Analyses	Method Ref.	Result	Q	PQL	Units	DF	Analyst	Date
Ethers and Glycols by GC/FID								
1. Diethylene glycol	SW8015B	< 2,000		2,000	ug/L	1	KLM	9/7/2006
2. Ethylene Glycol	SW8015B	< 2,000		2,000	ug/L	1	KLM	9/7/2006
3. Propylene Glycol	SW8015B	< 2,000		2,000	ug/L	1	KLM	9/7/2006
4. Triethylene Glycol	SW8015B	< 2,000		2,000	ug/L	1	KLM	9/7/2006

Definitions: PQL - Practical Quantitation Limit
DF - Dilution Factor

Qualifiers (Q): J - Detected below PQL but above MDL: Estimated
S - Spike Recovery Outside Acceptance Limits
B - Analyte detected in associated Method Blank
N - See case narrative for explanation

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Note: The sample results reported are based on the sample aliquot(s) tested.

BIO-CHEM Laboratories, Inc.

Date: *9/8/2006*

ANALYTICAL REPORT

CLIENT:	SGS Environmental	**Project Number:**	N/A
Lab Order:	0609003	**Client Sample ID:**	CLSW12-06
Project:	Camp Lonely 2006	**Collection Date:**	8/28/2006
Lab Sample ID:	0609003-03A	**Matrix:**	AQUEOUS

Analyses	Method Ref.	Result	Q	PQL	Units	DF	Analyst	Date
Ethers and Glycols by GC/FID								
1. Diethylene glycol	SW8015B	< 2,000		2,000	ug/L	1	KLM	9/7/2006
2. Ethylene Glycol	SW8015B	< 2,000		2,000	ug/L	1	KLM	9/7/2006
3. Propylene Glycol	SW8015B	< 2,000		2,000	ug/L	1	KLM	9/7/2006
4. Triethylene Glycol	SW8015B	< 2,000		2,000	ug/L	1	KLM	9/7/2006

Definitions: PQL - Practical Quantitation Limit
DF - Dilution Factor

Qualifiers (Q): J - Detected below PQL but above MDL: Estimated
S - Spike Recovery Outside Acceptance Limits
B - Analyte detected in associated Method Blank
N - See case narrative for explanation

This report shall not be reproduced except in full, without the written approval of BIO-CHEM Laboratories, Inc.

Note: The sample results reported are based on the sample aliquot(s) tested.

BIO-CHEM Laboratories, Inc.

Date: *9/8/2006*

ANALYTICAL REPORT

CLIENT: SGS Environmental
Lab Order: 0609003
Project: Camp Lonely 2006
Lab Sample ID: 0609003-04A

Project Number: N/A
Client Sample ID: CLSW02-06
Collection Date: 8/28/2006
Matrix: AQUEOUS

Analyses	Method Ref.	Result	Q	PQL	Units	DF	Analyst	Date
Ethers and Glycols by GC/FID								
1. Diethylene glycol	SW8015B	< 2,000		2,000	ug/L	1	KLM	9/7/2006
2. Ethylene Glycol	SW8015B	< 2,000		2,000	ug/L	1	KLM	9/7/2006
3. Propylene Glycol	SW8015B	< 2,000		2,000	ug/L	1	KLM	9/7/2006
4. Triethylene Glycol	SW8015B	< 2,000		2,000	ug/L	1	KLM	9/7/2006

Definitions: PQL - Practical Quantitation Limit
DF - Dilution Factor

Qualifiers (Q): J - Detected below PQL but above MDL: Estimated
S - Spike Recovery Outside Acceptance Limits
B - Analyte detected in associated Method Blank
N - See case narrative for explanation

This report shall not be reproduced except in full, without the written approval of BIO-CHEM Laboratories, Inc.

Note: The sample results reported are based on the sample aliquot(s) tested.

BIO-CHEM Laboratories, Inc.

Date: *9/8/2006*

ANALYTICAL REPORT

CLIENT: SGS Environmental
Lab Order: 0609003
Project: Camp Lonely 2006
Lab Sample ID: 0609003-05A

Project Number: N/A
Client Sample ID: CLSW01-06
Collection Date: 8/28/2006
Matrix: AQUEOUS

Analyses	Method Ref.	Result	Q	PQL	Units	DF	Analyst	Date
Ethers and Glycols by GC/FID								
1. Diethylene glycol	SW8015B	< 2,000		2,000	ug/L	1	KLM	9/7/2006
2. Ethylene Glycol	SW8015B	< 2,000		2,000	ug/L	1	KLM	9/7/2006
3. Propylene Glycol	SW8015B	< 2,000		2,000	ug/L	1	KLM	9/7/2006
4. Triethylene Glycol	SW8015B	< 2,000		2,000	ug/L	1	KLM	9/7/2006

Definitions: PQL - Practical Quantitation Limit
DF - Dilution Factor

Qualifiers (Q): J - Detected below PQL but above MDL: Estimated
S - Spike Recovery Outside Acceptance Limits
B - Analyte detected in associated Method Blank
N - See case narrative for explanation

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Note: The sample results reported are based on the sample aliquot(s) tested.

BIO-CHEM Laboratories, Inc.

9/8/2006

Lab Order: 0609003
Client: SGS Environmental
Project: Camp Lonely 2006

ANALYTICAL DETAIL REPORT

Sample ID	Client Sample ID	Matrix	Test Name	Date Sampled	TCLP/SPLP Date	Prep Date	QC Batch	Analysis Date	Analytical Batch
0609003-01A	CLPW01	Aqueous	Ethers and Glycols by GC/FID	8/28/2006		9/6/2006	22143	9/7/2006	GC_E_FID_060907A
0609003-02A	CLPW02	Aqueous	Ethers and Glycols by GC/FID	8/28/2006		9/6/2006	22143	9/7/2006	GC_E_FID_060907A
0609003-03A	CLSW12-06	Aqueous	Ethers and Glycols by GC/FID	8/28/2006		9/6/2006	22143	9/7/2006	GC_E_FID_060907A
0609003-04A	CLSW02-06	Aqueous	Ethers and Glycols by GC/FID	8/28/2006		9/6/2006	22143	9/7/2006	GC_E_FID_060907A
0609003-05A	CLSW01-06	Aqueous	Ethers and Glycols by GC/FID	8/28/2006		9/6/2006	22143	9/7/2006	GC_E_FID_060907A

SGS Environmental Services
Alaska Division
Level II Laboratory Data Report

Project:	Camp Lonely Landfill 2006
Client:	Hoefler Consulting Group
SGS Work Order:	1065125

Released by:

Contents:

Cover Page
Case Narrative
Final Report Pages
Quality Control Summary Forms
Chain of Custody/Sample Receipt Forms

Note:
Unless otherwise noted, all quality assurance/quality control criteria is in compliance with the standards set forth by the proper regulatory authority, the SGS Quality Assurance Program Plan, and the National Environmental Accreditation Conference.

Client Name: Hoefler Consulting Group
Project Name: Camp Lonely Landfill 2006
Workorder No.: 1065125

Sample Comments

Refer to the sample receipt form for information on sample condition.

Lab Sample ID	Sample Type	Client Sample ID
1065125002	PS	CLSS12E-2.0
	6020 - Detectable amount of Cr in the method blank. Concentration of Cr in the sample is 10X greater or non-detectable.	
1065125003	PS	CLSS12D-2.0
	6020 - Detectable amount of Cr in the method blank. Concentration of Cr in the sample is 10X greater or non-detectable.	
1065125004	PS	CLSS12C-2.0
	6020 - Detectable amount of Cr in the method blank. Concentration of Cr in the sample is 10X greater or non-detectable.	
1065125005	PS	CLSS12B-1.5
	6020 - Detectable amount of Cr in the method blank. Concentration of Cr in the sample is 10X greater or non-detectable.	
1065125007	PS	CLSS12A-2.0
	020 - Detectable amount of Cr in the method blank. Concentration of Cr in the sample is 10X greater or non-detectable.	
1065125009	PS	CLSS02-1.0
	Glycols were analyzed by Bio-Chem in Grand Rapids, MI.	
1065125010	PS	CLSS04-1.0
	Glycols were analyzed by Bio-Chem in Grand Rapids, MI.	
1065125011	PS	CLSS21-1.0
	8260 - LCS recovery for sec-butylbenzene is biased high and does not meet QC recovery goals (recovery = 116%, limit = 115%). Results for this analyte may be biased high in this sample. DRO - The pattern is consistent with a weathered middle distillate. RRO - Unknown hydrocarbon with several peaks is present. 6020 - CCV recovered 113%. Concentration of Cd in the sample is below the PQL. Glycols were analyzed by Bio-Chem in Grand Rapids, MI. 6020 - Cr was detected in the method blank greater than PQL.	
1065125012	PS	CLSS91-1.0
	8260 - LCS recovery for sec-butylbenzene is biased high and does not meet QC recovery goals (recovery = 116%, limit = 115%). Results for this analyte may be biased high in this sample.	
1065125013	PS	CLST01
	DRO - The pattern is consistent with a weathered middle distillate. RRO - Unknown hydrocarbon with several peaks is present.	
1065125014	PS	CLST02
	DRO - The pattern is consistent with a weathered middle distillate. RRO - Unknown hydrocarbon with several peaks is present.	
1065125015	PS	CLST03
	DRO - The pattern is consistent with a weathered middle distillate. RRO - Unknown hydrocarbon with several peaks is present.	
1065125016	PS	CLST04
	DRO/RRO - The pattern is consistent with a weathered middle distillate.	

1065125017	PS	CLST94
	DRO/RRO - The pattern is consistent with a weathered middle distillate.	
1065125018	PS	CLST05
	DRO - The pattern is consistent with a weathered middle distillate. RRO - Unknown hydrocarbon with several peaks is present.	
1065125019	PS	CLST06
	DRO - The pattern is consistent with a weathered middle distillate. RRO - The pattern is consistent with a lube oil.	
1065125020	PS	CLST07
	DRO - The pattern is consistent with a weathered middle distillate. RRO - Unknown hydrocarbon with several peaks is present.	
1065125021	PS	CLST08
	RRO - Surrogate is outside QC goals (biased high) due to hydrocarbon interference. DRO/RRO - The pattern is consistent with a lube oil.	
725759	MS	CLST05(1065125018MS)
	DRO/RRO - MS/MSD recoveries are outside of controls possibly due to a nonhomogeneous sample. See the LCS for accuracy.	
725760	MSD	CLST05(1065125018MSD)
	DRO/RRO - MS/MSD recoveries are outside of controls possibly due to a nonhomogeneous sample. See the LCS for accuracy.	
725768	MS	06NTHWMW03SO(1065132003MS
	PAHSIM - The MS/MSD recovery for several analytes are outside QC goals. The associated LCS met recovery goals.	
725769	MSD	06NTHWMW03SO(1065132003MS
	PAHSIM - The MS/MSD recovery for several analytes are outside QC goals. The associated LCS met recovery goals.	
725978	LCS	LCS for HBN 177109 [VXX/15913]
	8260 - LCS recovery for sec-butylbenzene is biased high and does not meet QC recovery goals (recovery = 116%, limit = 115%). Results for this analyte may be biased high in the associated samples.	
725979	LCSD	LCSD for HBN 177109 [VXX/15913
	8260 - LCSD recoveries for several analytes are biased high and do not meet QC recovery goals. Results are not affected as these analytes were not detected in the associated samples. 8260 - LCS/LCSD recoveries for 2-hexanone do not meet QC RPD goals. Results for this analyte are estimated in the associated samples.	
725985	MB	MB for HBN 177113 [VXX/15915]
	GRO/BTEX - MB results for p&m-xylene are above one half of the the PQL but less than the PQL.	
726106	CCV	CCV for HBN 177115 [VMS/8670]
	8260 - CCV recoveries for several analytes are biased high and do not meet QC recovery goals. Results are not affected as these analytes were not detected in the associated samples.	
726192	CCV	CCV for HBN 177147 [VMS/8673]
	8260 - CCV recovery for acetone is biased high (137%). Associated samples are non-detect for this analyte.	
726801	MB	MB for HBN 177254 [MXX/18119]
	6020 - Detectable amount of Cr in the method blank. Concentration of Cr in the sample is 10X greater or non-detectable.	
726803	MS	004-SS-07(1065116007MS)
	6020 - MS/MSD recoveries for Sb, Zn, As, Pb, Ag were outside of acceptance criteria. Post digestion spike was successful. 6020 - RPD for MS/MSD Ag, As, Pb were outside of acceptance limits. DUP result is homogeneous for Ag, As and Pb.	
726804	MSD	004-SS-07(1065116007MSD)
	6020 - MS/MSD recoveries for Sb, Zn, As, Pb, Ag were outside of acceptance criteria. Post digestion spike was successful. 6020 - RPD for MS/MSD Ag, As, Pb were outside of acceptance limits. DUP result is homogeneous for Ag, As and Pb.	
726806	DUP	004-SS-07(1065116007DUP)
	6020 - RPD for MS/MSD Ag, As, Pb were outside of acceptance limits. DUP result is homogeneous for Ag, As and Pb.	
726962	CCV	CCV for HBN 177287 [XMS/3773]

PAHSIM - The CCV recovery for benzo(a)anthracene is outside QC goals(biasaed high). This analyte was not found in the associated samples.

727379	MS	AOC06SS03-2.5(1065121021MS)

Hg SW7471 MSD recovery outside acceptance range; MS/MSD RPD was inside acceptance limits. Post digestion spike was unsuccessful. Sample result determined by MSA.

727380	MSD	AOC06SS03-2.5(1065121021MSD)

Hg SW7471 MSD recovery outside acceptance range; MS/MSD RPD was inside acceptance limits. Post digestion spike was unsuccessful. Sample result determined by MSA.

727381	BND	AOC06SS03-2.5(1065121021BND)

Hg SW7471 MSD recovery outside acceptance range; MS/MSD RPD was inside acceptance limits. Post digestion spike was unsuccessful. Sample result determined by MSA.

728322	QCS	QCS for HBN 177547 [MMS/4404]

6020 - QCS Mg recovered 111%. Concentration of Mg in the sample is below the PQL.

728337	CCV	CCV for HBN 177287 [XMS/3773]

PAHSIM - The CCV recovery for benzo(k)fluoranthene is outside QC goals(biasaed high). This analyte was not found in the associated samples.

Laboratory Analytical Report

Client: **Hoefler Consulting Group**
3401 Minnesota Drive, Ste 300
Anchorage, AK 99503

Attn: **Nathan Webb**
T: (907)563-2196 F:(907)563-2164

Project: **Camp Lonely Landfill 2006**

Workorder No.: **1065125**

Certification:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, other than the conditions noted on the sample data sheet(s) and/or the case narrative. This certification applies only to the tested parameters and the specific sample(s) received at the laboratory.

Released by:

Report Date

If you have any questions regarding this report, or if we can be of further assistance, please contact your SGS Project Manager.

Shane Poston

Shane_Poston@sgs.com

Project Manager / Assistant Technical Director

Print Date: 10/5/2006

Enclosed are the analytical results associated with this workorder.

As required by the state of Alaska and the USEPA, a formal Quality Assurance/Quality Control Program is maintained by SGS. A copy of our Quality Assurance Plan (QAP), which outlines this program is available at your request.

The laboratory certification numbers are AK971-05 (DW), UST-005 (CS) and AK00971 (Micro) for ADEC and 001327 for NELAP.

Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth by the SGS QAP, the National Environmental Laboratory Accreditation Program and, when applicable, other regulatory authorities.

If you have any questions regarding this report or if we can be of any assistance, please contact your SGS Project Manager at 907-562-2343.

The following descriptors may be found on your report which will serve to further qualify the data.

MDL	Method Detection Limit
PQL	Practical Quantitation Limit (reporting limit).
CL	Control Limit
U	Indicates the analyte was analyzed for but not detected.
F	Indicates value that is greater than or equal to the MDL.
J	The quantitation is an estimation.
ND	Indicates the analyte is not detected
B	Indicates the analyte is found in a blank associated with the sample.
*	The analyte has exceeded allowable regulatory or control limits.
GT	Greater Than
LT	Less Than
Q	QC parameter out of acceptance range.
M	A matrix effect was present.
E	The analyte result is above the calibrated range.
DF	Analytical Dilution Factor
JL	The analyte was positively identified, but the quantitation is a low estimation.
<Surr>	Surrogate QC spiked standard

Note: Soil samples are reported on a dry weight basis unless otherwise specified

SAMPLE SUMMARY

Print Date: 10/5/2006

Client Name: Hoefler Consulting Group
Project Name: Camp Lonely Landfill 2006
Workorder No.: 1065125

Analytical Methods

Method Description	Analytical Method
8270 PAH SIM Semi-Volatiles GC/MS	8270C SIMS
AFCEE 3.1 8260 Methanol Pres. (S)	SW8260B
AK101/8021 Combo. (S)	AK101
AK101/8021 Combo. (S)	SW8021B
Diesel/Residual Range Organics	AK102
Diesel/Residual Range Organics	AK103
Mercury 7471	SW7471A
Metals by ICP	SW6010B TCLP
Metals by ICP-MS	SW6020
Metals by ICP-MS (S)	SW6020
Percent Solids SM2540G	SM20 2540G
RCRA Metals by ICP-MS	SW6020
TCLP Full Characterization	TCLP

Sample ID Cross Reference

Lab Sample ID	Client Sample ID
1065125001	CLSS12F-1.5
1065125002	CLSS12E-2.0
1065125003	CLSS12D-2.0
1065125004	CLSS12C-2.0
1065125005	CLSS12B-1.5
1065125006	CLSS12A-0.5
1065125007	CLSS12A-2.0
1065125008	CLSS92A-0.5
1065125009	CLSS02-1.0
1065125010	CLSS04-1.0
1065125011	CLSS21-1.0
1065125012	CLSS91-1.0
1065125013	CLST01
1065125014	CLST02
1065125015	CLST03
1065125016	CLST04
1065125017	CLST94
1065125018	CLST05
1065125019	CLST06
1065125020	CLST07
1065125021	CLST08
1065125022	Trip Blank VW6-89-5
1065125023	CLSS12A-0.5

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **CLSS12E-2.0**
SGS Ref. #: 1065125002
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 81.3

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 12:09
Receipt Date/Time: 08/31/06 13:05

Metals by ICP/MS

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Chromium	9.88	0.471	0.141	mg/Kg	10	MMS4403	MXX18119	

Batch Information

Analytical Batch: MMS4403
Analytical Method: SW6020
Analysis Date/Time: 09/15/06 17:08
Dilution Factor: 10

Prep Batch: MXX18119
Prep Method: SW3050B
Prep Date/Time: 09/06/06 16:00

Initial Prep Wt./Vol.: 1.045 g
Prep Extract Vol.: 50 mL
Container ID:1065125002-A
Analyst: SCL

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **CLSS12E-2.0**
SGS Ref. #: 1065125002
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 81.3

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 12:09
Receipt Date/Time: 08/31/06 13:05

Solids

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Total Solids	81.3			%		SPT6954		

Batch Information

Analytical Batch: SPT6954
Analytical Method: SM20 2540G
Analysis Date/Time: 09/07/06 10:40

Initial Prep Wt./Vol.: 1 mL

Container ID:1065125002-A
Analyst: BNE

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **CLSS12D-2.0**
SGS Ref. #: 1065125003
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 85.3

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 12:25
Receipt Date/Time: 08/31/06 13:05

Metals by ICP/MS

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Chromium	10.4	0.455	0.136	mg/Kg	10	MMS4403	MXX18119	

Batch Information

Analytical Batch: MMS4403
Analytical Method: SW6020
Analysis Date/Time: 09/15/06 17:13
Dilution Factor: 10

Prep Batch: MXX18119
Prep Method: SW3050B
Prep Date/Time: 09/06/06 16:00

Initial Prep Wt./Vol.: 1.0312 g
Prep Extract Vol.: 50 mL
Container ID:1065125003-A
Analyst: SCL

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **CLSS12D-2.0**
SGS Ref. #: 1065125003
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 85.3

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 12:25
Receipt Date/Time: 08/31/06 13:05

Solids

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Total Solids	85.3			%		SPT6954		

Batch Information

Analytical Batch: SPT6954
Analytical Method: SM20 2540G
Analysis Date/Time: 09/07/06 10:40

Initial Prep Wt./Vol.: 1 mL

Container ID:1065125003-A
Analyst: BNE

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **CLSS12C-2.0**
SGS Ref. #: 1065125004
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 92.8

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 12:45
Receipt Date/Time: 08/31/06 13:05

Metals by ICP/MS

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Chromium	18.0	0.420	0.126	mg/Kg	10	MMS4403	MXX18119	

Batch Information

Analytical Batch: MMS4403
Analytical Method: SW6020
Analysis Date/Time: 09/15/06 17:18
Dilution Factor: 10

Prep Batch: MXX18119
Prep Method: SW3050B
Prep Date/Time: 09/06/06 16:00

Initial Prep Wt./Vol.: 1.0265 g
Prep Extract Vol.: 50 mL
Container ID:1065125004-A
Analyst: SCL

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **CLSS12C-2.0**
SGS Ref. #: 1065125004
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 92.8

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 12:45
Receipt Date/Time: 08/31/06 13:05

Solids

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Total Solids	92.8			%		SPT6954		

Batch Information

Analytical Batch: SPT6954
Analytical Method: SM20 2540G
Analysis Date/Time: 09/07/06 10:40

Initial Prep Wt./Vol.: 1 mL

Container ID:1065125004-A
Analyst: BNE

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **CLSS12B-1.5**
SGS Ref. #: 1065125005
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 90.8

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 13:23
Receipt Date/Time: 08/31/06 13:05

Metals by ICP/MS

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Chromium	75.7	0.428	0.128	mg/Kg	10	MMS4403	MXX18119	

Batch Information

Analytical Batch: MMS4403
Analytical Method: SW6020
Analysis Date/Time: 09/15/06 17:24
Dilution Factor: 10

Prep Batch: MXX18119
Prep Method: SW3050B
Prep Date/Time: 09/06/06 16:00

Initial Prep Wt./Vol.: 1.0299 g
Prep Extract Vol.: 50 mL
Container ID:1065125005-A
Analyst: SCL

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **CLSS12B-1.5**
SGS Ref. #: 1065125005
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 90.8

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 13:23
Receipt Date/Time: 08/31/06 13:05

Solids

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Total Solids	90.8			%		SPT6954		

Batch Information

Analytical Batch: SPT6954
Analytical Method: SM20 2540G
Analysis Date/Time: 09/07/06 10:40

Initial Prep Wt./Vol.: 1 mL

Container ID:1065125005-A
Analyst: BNE

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **CLSS12A-0.5**
SGS Ref. #: 1065125006
Project ID: Camp Lonely Landfill 2006
Matrix: Other Liquids

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 13:08
Receipt Date/Time: 08/31/06 13:05

Metals by ICP/MS

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Chromium	199000	320	96.0	ug/L	400	MMS4403	MXX18105	

Batch Information

Analytical Batch: MMS4403
Analytical Method: SW6020
Analysis Date/Time: 09/15/06 14:51
Dilution Factor: 400

Prep Batch: MXX18105
Prep Method: SW3010A
Prep Date/Time: 09/11/06 09:00

Initial Prep Wt./Vol.: 50 mL
Prep Extract Vol.: 50 mL
Container ID:1065125006-A
Analyst: SCL

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **CLSS12A-2.0**
SGS Ref. #: 1065125007
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 83.7

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 14:00
Receipt Date/Time: 08/31/06 13:05

Metals by ICP/MS

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Chromium	583	0.477	0.143	mg/Kg	10	MMS4403	MXX18119	

Batch Information

Analytical Batch: MMS4403
Analytical Method: SW6020
Analysis Date/Time: 09/15/06 17:29
Dilution Factor: 10

Prep Batch: MXX18119
Prep Method: SW3050B
Prep Date/Time: 09/06/06 16:00

Initial Prep Wt./Vol.: 1.0032 g
Prep Extract Vol.: 50 mL
Container ID:1065125007-A
Analyst: SCL

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **CLSS12A-2.0**
SGS Ref. #: 1065125007
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 83.7

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 14:00
Receipt Date/Time: 08/31/06 13:05

Solids

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Total Solids	83.7			%		SPT6954		

Batch Information

Analytical Batch: SPT6954
Analytical Method: SM20 2540G
Analysis Date/Time: 09/07/06 10:40

Initial Prep Wt./Vol.: 1 mL

Container ID:1065125007-A
Analyst: BNE

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **CLSS92A-0.5**
SGS Ref. #: 1065125008
Project ID: Camp Lonely Landfill 2006
Matrix: Other Solids (Wet Weight)

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 13:08
Receipt Date/Time: 08/31/06 13:05

Characterization

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Aqueous Phase, Total	0.0			%	1	TCLP4645		
Oil Phase, Total	0.0			%	1	TCLP4645		
Solid Phase, Total	100			%	1	TCLP4645		

Batch Information

Analytical Batch: TCLP4645
Analytical Method: TCLP
Analysis Date/Time: 09/03/06 09:00
Dilution Factor: 1

Initial Prep Wt./Vol.: 1 mL

Container ID:1065125008-A
Analyst: BJS

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **CLSS92A-0.5**
SGS Ref. #: 1065125008
Project ID: Camp Lonely Landfill 2006
Matrix: Other Solids (Wet Weight)

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 13:08
Receipt Date/Time: 08/31/06 13:05

TCLP Metals

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Chromium	15.0	0.200	0.0620	mg/L	1	MIP5152	MXT3973	

Batch Information

Analytical Batch: MIP5152
Analytical Method: SW6010B TCLP
Analysis Date/Time: 09/14/06 12:11
Dilution Factor: 1

Prep Batch: MXT3973
Prep Method: SW3010A
Prep Date/Time: 09/12/06 11:00

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 50 mL
Container ID:1065125008-A
Analyst: TK

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **CLSS21-1.0**
SGS Ref. #: 1065125011
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 89.5

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 16:40
Receipt Date/Time: 08/31/06 13:05

Metals Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Mercury	ND	43.4	13.0	ug/Kg	1	MCV3491	MXX18140	

Batch Information

Analytical Batch: MCV3491
Analytical Method: SW7471A
Analysis Date/Time: 09/14/06 11:11
Dilution Factor: 1

Prep Batch: MXX18140
Prep Method: METHOD
Prep Date/Time: 09/13/06 10:30

Initial Prep Wt./Vol.: 0.6176 g
Prep Extract Vol.: 50 mL
Container ID:1065125011-E
Analyst: HKG

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **CLSS21-1.0**
SGS Ref. #: 1065125011
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 89.5

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 16:40
Receipt Date/Time: 08/31/06 13:05

RCRA Metals

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Arsenic	4.23	1.08	0.335	mg/Kg	10	MMS4403	MXX18119	
Barium	159	0.324	0.101	mg/Kg	10	MMS4403	MXX18119	
Cadmium	0.200 J	0.216	0.0669	mg/Kg	10	MMS4403	MXX18119	
Chromium	4.28	0.432	0.130	mg/Kg	10	MMS4403	MXX18119	B
Lead	5.05	0.216	0.0669	mg/Kg	10	MMS4411	MXX18119	
Selenium	ND	0.540	0.162	mg/Kg	10	MMS4403	MXX18119	
Silver	ND	0.108	0.0335	mg/Kg	10	MMS4403	MXX18119	

Batch Information

Analytical Batch: MMS4403
Analytical Method: SW6020
Analysis Date/Time: 09/15/06 17:46
Dilution Factor: 10

Prep Batch: MXX18119
Prep Method: SW3050B
Prep Date/Time: 09/06/06 16:00

Initial Prep Wt./Vol.: 1.0347 g
Prep Extract Vol.: 50 mL
Container ID:1065125011-E
Analyst: SCL

Analytical Batch: MMS4411
Analytical Method: SW6020
Analysis Date/Time: 09/19/06 15:39
Dilution Factor: 10

Prep Batch: MXX18119
Prep Method: SW3050B
Prep Date/Time: 09/06/06 16:00

Initial Prep Wt./Vol.: 1.0347 g
Prep Extract Vol.: 50 mL
Container ID:1065125011-E
Analyst: SCL

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **CLSS21-1.0**
SGS Ref. #: 1065125011
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 89.5

All Dates/Times are Alaska Local Time
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Receipt Date/Time: 08/31/06 13:05

Volatile Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Gasoline Range Organics	11100	3920	783	ug/Kg	1	VFC8022	VXX15915	
Benzene	334	19.6	6.26	ug/Kg	1	VFC8022	VXX15915	
Toluene	1010	78.3	23.5	ug/Kg	1	VFC8022	VXX15915	
Ethylbenzene	205	78.3	23.5	ug/Kg	1	VFC8022	VXX15915	
P & M -Xylene	1000	78.3	23.5	ug/Kg	1	VFC8022	VXX15915	
o-Xylene	488	78.3	23.5	ug/Kg	1	VFC8022	VXX15915	
1,4-Difluorobenzene <surr>	95.9	81-108		%	1	VFC8022	VXX15915	
4-Bromofluorobenzene <surr>	114	50-150		%	1	VFC8022	VXX15915	

Batch Information

Analytical Batch: VFC8022
Analytical Method: AK101
Analysis Date/Time: 09/09/06 07:09
Dilution Factor: 1

Prep Batch: VXX15915
Prep Method: AK101
Prep Date/Time: 08/26/06 16:40

Initial Prep Wt./Vol.: 35.67 g
Prep Extract Vol.: 25 mL
Container ID:1065125011-A
Analyst: HM

Analytical Batch: VFC8022
Analytical Method: SW8021B
Analysis Date/Time: 09/09/06 07:09
Dilution Factor: 1

Prep Batch: VXX15915
Prep Method: AK101
Prep Date/Time: 08/26/06 16:40

Initial Prep Wt./Vol.: 35.67 g
Prep Extract Vol.: 25 mL
Container ID:1065125011-A
Analyst: HM

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **CLSS21-1.0**
SGS Ref. #: 1065125011
Project ID: Camp Lonely Landfill 2006
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Percent Solids: 89.5

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Semivolatile Organic Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Diesel Range Organics	133	22.1	2.21	mg/Kg	1	XFC7142	XXX17248	
Residual Range Organics	166	22.1	2.21	mg/Kg	1	XFC7142	XXX17248	
n-Triacontane-d62 <surr>	116	50-150		%	1	XFC7142	XXX17248	
5a Androstane <surr>	106	50-150		%	1	XFC7142	XXX17248	

Batch Information

Analytical Batch: XFC7142
Analytical Method: AK102
Analysis Date/Time: 09/09/06 15:27
Dilution Factor: 1

Prep Batch: XXX17248
Prep Method: SW3550B
Prep Date/Time: 09/08/06 14:36

Initial Prep Wt./Vol.: 30.366 g
Prep Extract Vol.: 1 mL
Container ID:1065125011-D
Analyst: JE

Analytical Batch: XFC7142
Analytical Method: AK103
Analysis Date/Time: 09/09/06 15:27
Dilution Factor: 1

Prep Batch: XXX17248
Prep Method: SW3550B
Prep Date/Time: 09/08/06 14:36

Initial Prep Wt./Vol.: 30.366 g
Prep Extract Vol.: 1 mL
Container ID:1065125011-D
Analyst: JE

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **CLSS21-1.0**
SGS Ref. #: 1065125011
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 89.5

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 16:40
Receipt Date/Time: 08/31/06 13:05

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Dichlorodifluoromethane	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
Chloromethane	ND	137	42.8	ug/Kg	1	VMS8670	VXX15913	
Vinyl chloride	ND	16.4	4.39	ug/Kg	1	VMS8670	VXX15913	
Bromomethane	ND	110	34.0	ug/Kg	1	VMS8670	VXX15913	
Chloroethane	ND	110	34.0	ug/Kg	1	VMS8670	VXX15913	
Trichlorofluoromethane	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
1,1-Dichloroethene	ND	54.8	16.4	ug/Kg	1	VMS8670	VXX15913	
Methylene chloride	ND	110	34.0	ug/Kg	1	VMS8670	VXX15913	
Acetone	ND	1100	340	ug/Kg	1	VMS8670	VXX15913	
trans-1,2-Dichloroethene	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
1,1-Dichloroethane	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
2,2-Dichloropropane	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
cis-1,2-Dichloroethene	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
2-Butanone (MEK)	ND	274	85.5	ug/Kg	1	VMS8670	VXX15913	
Bromochloromethane	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
Chloroform	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
1,1,1-Trichloroethane	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
Carbon tetrachloride	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
1,1-Dichloropropene	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
Benzene	289	14.3	4.39	ug/Kg	1	VMS8670	VXX15913	
1,2-Dichloroethane	ND	14.3	4.39	ug/Kg	1	VMS8670	VXX15913	
Trichloroethene	ND	21.9	11.0	ug/Kg	1	VMS8670	VXX15913	
1,2-Dichloropropane	ND	14.3	7.13	ug/Kg	1	VMS8670	VXX15913	
Dibromomethane	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
Bromodichloromethane	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
2-Chloroethyl Vinyl Ether	ND	274	34.0	ug/Kg	1	VMS8670	VXX15913	
cis-1,3-Dichloropropene	ND	21.9	6.80	ug/Kg	1	VMS8670	VXX15913	
Toluene	672	54.8	16.4	ug/Kg	1	VMS8670	VXX15913	
trans-1,3-Dichloropropene	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
1,1,2-Trichloroethane	ND	16.4	5.48	ug/Kg	1	VMS8670	VXX15913	
Tetrachloroethene	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
1,3-Dichloropropane	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
Dibromochloromethane	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
1,2-Dibromoethane	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
Chlorobenzene	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
1,1,1,2-Tetrachloroethane	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
Ethylbenzene	118	54.8	16.4	ug/Kg	1	VMS8670	VXX15913	

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Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
P & M -Xylene	432	54.8	16.4	ug/Kg	1	VMS8670	VXX15913	
o-Xylene	264	54.8	8.55	ug/Kg	1	VMS8670	VXX15913	
Styrene	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
Bromoform	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
Isopropylbenzene (Cumene)	24.7 J	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
Bromobenzene	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
1,1,2,2-Tetrachloroethane	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
1,2,3-Trichloropropane	ND	54.8	17.5	ug/Kg	1	VMS8670	VXX15913	
n-Propylbenzene	49.6	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
2-Chlorotoluene	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
4-Chlorotoluene	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
1,3,5-Trimethylbenzene	231	54.8	16.4	ug/Kg	1	VMS8670	VXX15913	
tert-Butylbenzene	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
1,2,4-Trimethylbenzene	687	54.8	16.4	ug/Kg	1	VMS8670	VXX15913	
sec-Butylbenzene	59.2	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
1,3-Dichlorobenzene	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
4-Isopropyltoluene	80.6	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
1,4-Dichlorobenzene	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
1,2-Dichlorobenzene	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
n-Butylbenzene	111	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
1,2-Dibromo-3-chloropropane	ND	110	34.0	ug/Kg	1	VMS8670	VXX15913	
1,2,4-Trichlorobenzene	ND	32.9	9.87	ug/Kg	1	VMS8670	VXX15913	
Hexachlorobutadiene	ND	32.9	9.87	ug/Kg	1	VMS8670	VXX15913	
Naphthalene	644	54.8	16.4	ug/Kg	1	VMS8670	VXX15913	
Methyl-t-butyl ether	ND	27.4	11.0	ug/Kg	1	VMS8670	VXX15913	
1,2,3-Trichlorobenzene	ND	32.9	9.87	ug/Kg	1	VMS8670	VXX15913	
4-Methyl-2-pentanone (MIBK)	ND	274	85.5	ug/Kg	1	VMS8670	VXX15913	
2-Hexanone	ND	274	85.5	ug/Kg	1	VMS8670	VXX15913	
1-Chlorohexane	ND	27.4	8.55	ug/Kg	1	VMS8670	VXX15913	
Dibromofluoromethane <surr>	100	83-119		%	1	VMS8670	VXX15913	
1,2-Dichloroethane-D4 <surr>	104	85-115		%	1	VMS8670	VXX15913	
Toluene-d8 <surr>	107	87-115		%	1	VMS8670	VXX15913	
4-Bromofluorobenzene <surr>	78.2	50-154		%	1	VMS8670	VXX15913	

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Matrix: Soil/Solid
Percent Solids: 89.5

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Collection Date/Time: 08/26/06 16:40
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Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers

Batch Information

Analytical Batch: VMS8670
Analytical Method: SW8260B
Analysis Date/Time: 09/07/06 18:33
Dilution Factor: 1

Prep Batch: VXX15913
Prep Method: SW5035A
Prep Date/Time: 08/26/06 16:40

Initial Prep Wt./Vol.: 50.95 g
Prep Extract Vol.: 25 mL
Container ID:1065125011-B
Analyst: SPM

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Print Date: 10/5/2006

Client Sample ID: **CLSS21-1.0**
SGS Ref. #: 1065125011
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 89.5

All Dates/Times are Alaska Local Time
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Receipt Date/Time: 08/31/06 13:05

Polynuclear Aromatics GC/MS

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Acenaphthylene	ND	4.15	1.25	ug/Kg	1	XMS3773	XXX17249	
2-Methylnaphthalene	90.6	4.15	1.25	ug/Kg	1	XMS3773	XXX17249	
Acenaphthene	ND	4.15	1.25	ug/Kg	1	XMS3773	XXX17249	
Fluorene	2.37 J	4.15	1.25	ug/Kg	1	XMS3773	XXX17249	
Phenanthrene	1.41 J	4.15	1.25	ug/Kg	1	XMS3773	XXX17249	
Anthracene	ND	4.15	1.25	ug/Kg	1	XMS3773	XXX17249	
Fluoranthene	1.56 J	4.15	1.25	ug/Kg	1	XMS3773	XXX17249	
Pyrene	ND	4.15	1.25	ug/Kg	1	XMS3773	XXX17249	
Benzo(a)Anthracene	ND	4.15	1.25	ug/Kg	1	XMS3773	XXX17249	
Chrysene	ND	4.15	1.25	ug/Kg	1	XMS3773	XXX17249	
Benzo[b]Fluoranthene	ND	4.15	1.25	ug/Kg	1	XMS3773	XXX17249	
Benzo[a]pyrene	ND	4.15	1.25	ug/Kg	1	XMS3773	XXX17249	
Indeno[1,2,3-c,d] pyrene	ND	4.15	1.25	ug/Kg	1	XMS3773	XXX17249	
Dibenzo[a,h]anthracene	ND	4.15	1.25	ug/Kg	1	XMS3773	XXX17249	
Benzo[g,h,i]perylene	ND	4.15	1.25	ug/Kg	1	XMS3773	XXX17249	
Naphthalene	45.1	4.15	1.25	ug/Kg	1	XMS3773	XXX17249	
1-Methylnaphthalene	106	4.15	1.25	ug/Kg	1	XMS3773	XXX17249	
Benzo[k]fluoranthene	ND	4.15	1.25	ug/Kg	1	XMS3773	XXX17249	
Terphenyl-d14 <surr>	86	30-125		%	1	XMS3773	XXX17249	

Batch Information

Analytical Batch: XMS3773
Analytical Method: 8270C SIMS
Analysis Date/Time: 09/13/06 00:48
Dilution Factor: 1

Prep Batch: XXX17249
Prep Method: SW3550B
Prep Date/Time: 09/08/06 13:30

Initial Prep Wt./Vol.: 30.28 g
Prep Extract Vol.: 1 mL
Container ID:1065125011-C
Analyst: KWM

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Print Date: 10/5/2006

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Solids

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Total Solids	89.5			%		SPT6954		

Batch Information

Analytical Batch: SPT6954
Analytical Method: SM20 2540G
Analysis Date/Time: 09/07/06 10:40

Initial Prep Wt./Vol.: 1 mL

Container ID:1065125011-E
Analyst: BNE

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Print Date: 10/5/2006

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Project ID: Camp Lonely Landfill 2006
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Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Dichlorodifluoromethane	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
Chloromethane	ND	135	42.3	ug/Kg	1	VMS8673	VXX15913	
Vinyl chloride	ND	16.3	4.34	ug/Kg	1	VMS8673	VXX15913	
Bromomethane	ND	108	33.6	ug/Kg	1	VMS8673	VXX15913	
Chloroethane	ND	108	33.6	ug/Kg	1	VMS8673	VXX15913	
Trichlorofluoromethane	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
1,1-Dichloroethene	ND	54.2	16.3	ug/Kg	1	VMS8673	VXX15913	
Methylene chloride	91.6 J	108	33.6	ug/Kg	1	VMS8673	VXX15913	
Acetone	ND	1080	336	ug/Kg	1	VMS8673	VXX15913	
trans-1,2-Dichloroethene	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
1,1-Dichloroethane	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
2,2-Dichloropropane	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
cis-1,2-Dichloroethene	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
2-Butanone (MEK)	86.2 J	271	84.5	ug/Kg	1	VMS8673	VXX15913	
Bromochloromethane	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
Chloroform	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
1,1,1-Trichloroethane	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
Carbon tetrachloride	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
1,1-Dichloropropene	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
Benzene	267	14.1	4.34	ug/Kg	1	VMS8673	VXX15913	
1,2-Dichloroethane	ND	14.1	4.34	ug/Kg	1	VMS8673	VXX15913	
Trichloroethene	ND	21.7	10.8	ug/Kg	1	VMS8673	VXX15913	
1,2-Dichloropropane	ND	14.1	7.05	ug/Kg	1	VMS8673	VXX15913	
Dibromomethane	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
Bromodichloromethane	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
2-Chloroethyl Vinyl Ether	ND	271	33.6	ug/Kg	1	VMS8673	VXX15913	
cis-1,3-Dichloropropene	ND	21.7	6.72	ug/Kg	1	VMS8673	VXX15913	
Toluene	683	54.2	16.3	ug/Kg	1	VMS8673	VXX15913	
trans-1,3-Dichloropropene	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
1,1,2-Trichloroethane	ND	16.3	5.42	ug/Kg	1	VMS8673	VXX15913	
Tetrachloroethene	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
1,3-Dichloropropane	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
Dibromochloromethane	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
1,2-Dibromoethane	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
Chlorobenzene	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
1,1,1,2-Tetrachloroethane	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
Ethylbenzene	119	54.2	16.3	ug/Kg	1	VMS8673	VXX15913	

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Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
P & M -Xylene	424	54.2	16.3	ug/Kg	1	VMS8673	VXX15913	
o-Xylene	251	54.2	8.45	ug/Kg	1	VMS8673	VXX15913	
Styrene	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
Bromoform	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
Isopropylbenzene (Cumene)	23.6 J	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
Bromobenzene	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
1,1,2,2-Tetrachloroethane	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
1,2,3-Trichloropropane	ND	54.2	17.3	ug/Kg	1	VMS8673	VXX15913	
n-Propylbenzene	53.1	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
2-Chlorotoluene	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
4-Chlorotoluene	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
1,3,5-Trimethylbenzene	243	54.2	16.3	ug/Kg	1	VMS8673	VXX15913	
tert-Butylbenzene	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
1,2,4-Trimethylbenzene	703	54.2	16.3	ug/Kg	1	VMS8673	VXX15913	
sec-Butylbenzene	60.7	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
1,3-Dichlorobenzene	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
4-Isopropyltoluene	87.5	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
1,4-Dichlorobenzene	12.7 J	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
1,2-Dichlorobenzene	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
n-Butylbenzene	111	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
1,2-Dibromo-3-chloropropane	ND	108	33.6	ug/Kg	1	VMS8673	VXX15913	
1,2,4-Trichlorobenzene	ND	32.5	9.76	ug/Kg	1	VMS8673	VXX15913	
Hexachlorobutadiene	ND	32.5	9.76	ug/Kg	1	VMS8673	VXX15913	
Naphthalene	677	54.2	16.3	ug/Kg	1	VMS8673	VXX15913	
Methyl-t-butyl ether	ND	27.1	10.8	ug/Kg	1	VMS8673	VXX15913	
1,2,3-Trichlorobenzene	ND	32.5	9.76	ug/Kg	1	VMS8673	VXX15913	
4-Methyl-2-pentanone (MIBK)	ND	271	84.5	ug/Kg	1	VMS8673	VXX15913	
2-Hexanone	ND	271	84.5	ug/Kg	1	VMS8673	VXX15913	
1-Chlorohexane	ND	27.1	8.45	ug/Kg	1	VMS8673	VXX15913	
Dibromofluoromethane <surr>	103	83-119		%	1	VMS8673	VXX15913	
1,2-Dichloroethane-D4 <surr>	101	85-115		%	1	VMS8673	VXX15913	
Toluene-d8 <surr>	107	87-115		%	1	VMS8673	VXX15913	
4-Bromofluorobenzene <surr>	79.3	50-154		%	1	VMS8673	VXX15913	

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Print Date: 10/5/2006

Client Sample ID: **CLSS91-1.0**
SGS Ref. #: 1065125012
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 16:40
Receipt Date/Time: 08/31/06 13:05

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers

Batch Information

Analytical Batch: VMS8673
Analytical Method: SW8260B
Analysis Date/Time: 09/08/06 18:18
Dilution Factor: 1

Prep Batch: VXX15913
Prep Method: SW5035A
Prep Date/Time: 08/26/06 16:40

Initial Prep Wt./Vol.: 46.13 g
Prep Extract Vol.: 25 mL
Container ID:1065125012-A
Analyst: SPM

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Print Date: 10/5/2006

Client Sample ID: **CLST01**
SGS Ref. #: 1065125013
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 95.9

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 18:45
Receipt Date/Time: 08/31/06 13:05

Semivolatile Organic Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Diesel Range Organics	72.7	20.6	2.06	mg/Kg	1	XFC7142	XXX17248	
Residual Range Organics	68.0	20.6	2.06	mg/Kg	1	XFC7142	XXX17248	
n-Triacontane-d62 <surr>	101	50-150		%	1	XFC7142	XXX17248	
5a Androstane <surr>	119	50-150		%	1	XFC7142	XXX17248	

Batch Information

Analytical Batch: XFC7142
Analytical Method: AK102
Analysis Date/Time: 09/09/06 15:32
Dilution Factor: 1

Prep Batch: XXX17248
Prep Method: SW3550B
Prep Date/Time: 09/08/06 14:36

Initial Prep Wt./Vol.: 30.313 g
Prep Extract Vol.: 1 mL
Container ID:1065125013-A
Analyst: JE

Analytical Batch: XFC7142
Analytical Method: AK103
Analysis Date/Time: 09/09/06 15:32
Dilution Factor: 1

Prep Batch: XXX17248
Prep Method: SW3550B
Prep Date/Time: 09/08/06 14:36

Initial Prep Wt./Vol.: 30.313 g
Prep Extract Vol.: 1 mL
Container ID:1065125013-A
Analyst: JE

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **CLST01**
SGS Ref. #: 1065125013
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 95.9

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 18:45
Receipt Date/Time: 08/31/06 13:05

Solids

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Total Solids	95.9			%		SPT6954		

Batch Information

Analytical Batch: SPT6954
Analytical Method: SM20 2540G
Analysis Date/Time: 09/07/06 10:40

Initial Prep Wt./Vol.: 1 mL

Container ID:1065125013-A
Analyst: BNE

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **CLST02**
SGS Ref. #: 1065125014
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 94.5

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 19:15
Receipt Date/Time: 08/31/06 13:05

Semivolatile Organic Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Diesel Range Organics	69.0	20.6	2.06	mg/Kg	1	XFC7142	XXX17248	
Residual Range Organics	112	20.6	2.06	mg/Kg	1	XFC7142	XXX17248	
5a Androstane <surr>	81.2	50-150		%	1	XFC7142	XXX17248	
n-Triacontane-d62 <surr>	101	50-150		%	1	XFC7142	XXX17248	

Batch Information

Analytical Batch: XFC7142
Analytical Method: AK102
Analysis Date/Time: 09/09/06 15:36
Dilution Factor: 1

Prep Batch: XXX17248
Prep Method: SW3550B
Prep Date/Time: 09/08/06 14:36

Initial Prep Wt./Vol.: 30.83 g
Prep Extract Vol.: 1 mL
Container ID:1065125014-A
Analyst: JE

Analytical Batch: XFC7142
Analytical Method: AK103
Analysis Date/Time: 09/09/06 15:36
Dilution Factor: 1

Prep Batch: XXX17248
Prep Method: SW3550B
Prep Date/Time: 09/08/06 14:36

Initial Prep Wt./Vol.: 30.83 g
Prep Extract Vol.: 1 mL
Container ID:1065125014-A
Analyst: JE

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **CLST02**
SGS Ref. #: 1065125014
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 94.5

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 19:15
Receipt Date/Time: 08/31/06 13:05

Solids

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Total Solids	94.5			%		SPT6954		

Batch Information

Analytical Batch: SPT6954
Analytical Method: SM20 2540G
Analysis Date/Time: 09/07/06 10:40

Initial Prep Wt./Vol.: 1 mL

Container ID:1065125014-A
Analyst: BNE

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **CLST03**
SGS Ref. #: 1065125015
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 93.3

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 18:49
Receipt Date/Time: 08/31/06 13:05

Semivolatile Organic Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Diesel Range Organics	285	20.8	2.08	mg/Kg	1	XFC7142	XXX17248	
Residual Range Organics	154	20.8	2.08	mg/Kg	1	XFC7142	XXX17248	
n-Triacontane-d62 <surr>	129	50-150		%	1	XFC7142	XXX17248	
5a Androstane <surr>	106	50-150		%	1	XFC7142	XXX17248	

Batch Information

Analytical Batch: XFC7142
Analytical Method: AK102
Analysis Date/Time: 09/09/06 15:45
Dilution Factor: 1

Prep Batch: XXX17248
Prep Method: SW3550B
Prep Date/Time: 09/08/06 14:36

Initial Prep Wt./Vol.: 30.957 g
Prep Extract Vol.: 1 mL
Container ID:1065125015-A
Analyst: JE

Analytical Batch: XFC7142
Analytical Method: AK103
Analysis Date/Time: 09/09/06 15:45
Dilution Factor: 1

Prep Batch: XXX17248
Prep Method: SW3550B
Prep Date/Time: 09/08/06 14:36

Initial Prep Wt./Vol.: 30.957 g
Prep Extract Vol.: 1 mL
Container ID:1065125015-A
Analyst: JE

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Print Date: 10/5/2006

Client Sample ID: **CLST03**
SGS Ref. #: 1065125015
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 93.3

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 18:49
Receipt Date/Time: 08/31/06 13:05

Solids

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Total Solids	93.3			%		SPT6954		

Batch Information

Analytical Batch: SPT6954
Analytical Method: SM20 2540G
Analysis Date/Time: 09/07/06 10:40

Initial Prep Wt./Vol.: 1 mL

Container ID:1065125015-A
Analyst: BNE

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Print Date: 10/5/2006

Client Sample ID: **CLST04**
SGS Ref. #: 1065125016
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 93.5

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 19:11
Receipt Date/Time: 08/31/06 13:05

Semivolatile Organic Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Diesel Range Organics	2620	105	10.5	mg/Kg	5	XFC7147	XXX17248	
Residual Range Organics	357	105	10.5	mg/Kg	5	XFC7147	XXX17248	
n-Triacontane-d62 <surr>	137	50-150		%	5	XFC7147	XXX17248	
5a Androstane <surr>	123	50-150		%	5	XFC7147	XXX17248	

Batch Information

Analytical Batch: XFC7147
Analytical Method: AK102
Analysis Date/Time: 09/12/06 18:05
Dilution Factor: 5

Prep Batch: XXX17248
Prep Method: SW3550B
Prep Date/Time: 09/08/06 14:36

Initial Prep Wt./Vol.: 30.634 g
Prep Extract Vol.: 1 mL
Container ID:1065125016-A
Analyst: JE

Analytical Batch: XFC7147
Analytical Method: AK103
Analysis Date/Time: 09/12/06 18:05
Dilution Factor: 5

Prep Batch: XXX17248
Prep Method: SW3550B
Prep Date/Time: 09/08/06 14:36

Initial Prep Wt./Vol.: 30.634 g
Prep Extract Vol.: 1 mL
Container ID:1065125016-A
Analyst: JE

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Print Date: 10/5/2006

Client Sample ID: **CLST04**
SGS Ref. #: 1065125016
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 93.5

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 19:11
Receipt Date/Time: 08/31/06 13:05

Solids

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Total Solids	93.5			%		SPT6954		

Batch Information

Analytical Batch: SPT6954
Analytical Method: SM20 2540G
Analysis Date/Time: 09/07/06 10:40

Initial Prep Wt./Vol.: 1 mL

Container ID:1065125016-A
Analyst: BNE

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Print Date: 10/5/2006

Client Sample ID: **CLST94**
SGS Ref. #: 1065125017
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 94.2

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 19:11
Receipt Date/Time: 08/31/06 13:05

Semivolatile Organic Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Diesel Range Organics	2340	104	10.4	mg/Kg	5	XFC7147	XXX17248	
Residual Range Organics	327	104	10.4	mg/Kg	5	XFC7147	XXX17248	
n-Triacontane-d62 <surr>	148	50-150		%	5	XFC7147	XXX17248	
5a Androstane <surr>	128	50-150		%	5	XFC7147	XXX17248	

Batch Information

Analytical Batch: XFC7147
Analytical Method: AK102
Analysis Date/Time: 09/12/06 18:09
Dilution Factor: 5

Prep Batch: XXX17248
Prep Method: SW3550B
Prep Date/Time: 09/08/06 14:36

Initial Prep Wt./Vol.: 30.68 g
Prep Extract Vol.: 1 mL
Container ID:1065125017-A
Analyst: JE

Analytical Batch: XFC7147
Analytical Method: AK103
Analysis Date/Time: 09/12/06 18:09
Dilution Factor: 5

Prep Batch: XXX17248
Prep Method: SW3550B
Prep Date/Time: 09/08/06 14:36

Initial Prep Wt./Vol.: 30.68 g
Prep Extract Vol.: 1 mL
Container ID:1065125017-A
Analyst: JE

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Print Date: 10/5/2006

Client Sample ID: **CLST94**
SGS Ref. #: 1065125017
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 94.2

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 19:11
Receipt Date/Time: 08/31/06 13:05

Solids

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Total Solids	94.2			%		SPT6954		

Batch Information

Analytical Batch: SPT6954
Analytical Method: SM20 2540G
Analysis Date/Time: 09/07/06 10:40

Initial Prep Wt./Vol.: 1 mL

Container ID:1065125017-A
Analyst: BNE

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Print Date: 10/5/2006

Client Sample ID: **CLST05**
SGS Ref. #: 1065125018
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 94.0

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 18:50
Receipt Date/Time: 08/31/06 13:05

Semivolatile Organic Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Diesel Range Organics	132	21.1	2.11	mg/Kg	1	XFC7142	XXX17248	
Residual Range Organics	151	21.1	2.11	mg/Kg	1	XFC7142	XXX17248	
n-Triacontane-d62 <surr>	111	50-150		%	1	XFC7142	XXX17248	
5a Androstane <surr>	105	50-150		%	1	XFC7142	XXX17248	

Batch Information

Analytical Batch: XFC7142
Analytical Method: AK102
Analysis Date/Time: 09/09/06 16:02
Dilution Factor: 1

Prep Batch: XXX17248
Prep Method: SW3550B
Prep Date/Time: 09/08/06 14:36

Initial Prep Wt./Vol.: 30.32 g
Prep Extract Vol.: 1 mL
Container ID:1065125018-A
Analyst: JE

Analytical Batch: XFC7142
Analytical Method: AK103
Analysis Date/Time: 09/09/06 16:02
Dilution Factor: 1

Prep Batch: XXX17248
Prep Method: SW3550B
Prep Date/Time: 09/08/06 14:36

Initial Prep Wt./Vol.: 30.32 g
Prep Extract Vol.: 1 mL
Container ID:1065125018-A
Analyst: JE

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Print Date: 10/5/2006

Client Sample ID: **CLST05**
SGS Ref. #: 1065125018
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 94.0

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 18:50
Receipt Date/Time: 08/31/06 13:05

Solids

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Total Solids	94.0			%		SPT6954		

Batch Information

Analytical Batch: SPT6954
Analytical Method: SM20 2540G
Analysis Date/Time: 09/07/06 10:40

Initial Prep Wt./Vol.: 1 mL

Container ID:1065125018-A
Analyst: BNE

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Print Date: 10/5/2006

Client Sample ID: **CLST06**
SGS Ref. #: 1065125019
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 95.5

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 19:07
Receipt Date/Time: 08/31/06 13:05

Semivolatile Organic Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Diesel Range Organics	201	20.8	2.08	mg/Kg	1	XFC7142	XXX17248	
Residual Range Organics	417	20.8	2.08	mg/Kg	1	XFC7142	XXX17248	
n-Triacontane-d62 <surr>	72.1	50-150		%	1	XFC7142	XXX17248	
5a Androstane <surr>	119	50-150		%	1	XFC7142	XXX17248	

Batch Information

Analytical Batch: XFC7142
Analytical Method: AK102
Analysis Date/Time: 09/09/06 16:06
Dilution Factor: 1

Prep Batch: XXX17248
Prep Method: SW3550B
Prep Date/Time: 09/08/06 14:36

Initial Prep Wt./Vol.: 30.165 g
Prep Extract Vol.: 1 mL
Container ID:1065125019-A
Analyst: JE

Analytical Batch: XFC7142
Analytical Method: AK103
Analysis Date/Time: 09/09/06 16:06
Dilution Factor: 1

Prep Batch: XXX17248
Prep Method: SW3550B
Prep Date/Time: 09/08/06 14:36

Initial Prep Wt./Vol.: 30.165 g
Prep Extract Vol.: 1 mL
Container ID:1065125019-A
Analyst: JE

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **CLST06**
SGS Ref. #: 1065125019
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 95.5

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 19:07
Receipt Date/Time: 08/31/06 13:05

Solids

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Total Solids	95.5			%		SPT6954		

Batch Information

Analytical Batch: SPT6954
Analytical Method: SM20 2540G
Analysis Date/Time: 09/07/06 10:40

Initial Prep Wt./Vol.: 1 mL

Container ID:1065125019-A
Analyst: BNE

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Print Date: 10/5/2006

Client Sample ID: **CLST07**
SGS Ref. #: 1065125020
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 93.7

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 18:53
Receipt Date/Time: 08/31/06 13:05

Semivolatile Organic Fuels Department

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Diesel Range Organics	363	21.0	2.10	mg/Kg	1	XFC7142	XXX17248	
Residual Range Organics	310	21.0	2.10	mg/Kg	1	XFC7142	XXX17248	
n-Triacontane-d62 <surr>	71.6	50-150		%	1	XFC7142	XXX17248	
5a Androstane <surr>	131	50-150		%	1	XFC7142	XXX17248	

Batch Information

Analytical Batch: XFC7142
Analytical Method: AK102
Analysis Date/Time: 09/09/06 16:11
Dilution Factor: 1

Prep Batch: XXX17248
Prep Method: SW3550B
Prep Date/Time: 09/08/06 14:36

Initial Prep Wt./Vol.: 30.485 g
Prep Extract Vol.: 1 mL
Container ID:1065125020-A
Analyst: JE

Analytical Batch: XFC7142
Analytical Method: AK103
Analysis Date/Time: 09/09/06 16:11
Dilution Factor: 1

Prep Batch: XXX17248
Prep Method: SW3550B
Prep Date/Time: 09/08/06 14:36

Initial Prep Wt./Vol.: 30.485 g
Prep Extract Vol.: 1 mL
Container ID:1065125020-A
Analyst: JE

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **CLST07**
SGS Ref. #: 1065125020
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 93.7

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 18:53
Receipt Date/Time: 08/31/06 13:05

Solids

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Total Solids	93.7			%		SPT6954		

Batch Information

Analytical Batch: SPT6954
Analytical Method: SM20 2540G
Analysis Date/Time: 09/07/06 10:40

Initial Prep Wt./Vol.: 1 mL

Container ID:1065125020-A
Analyst: BNE

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Print Date: 10/5/2006

Client Sample ID: **CLST08**
SGS Ref. #: 1065125021
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 97.4

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 19:02
Receipt Date/Time: 08/31/06 13:05

Semivolatile Organic Fuels Department

Parameter	Result		PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Diesel Range Organics	28.0		20.3	2.03	mg/Kg	1	XFC7142	XXX17248	
Residual Range Organics	158		20.3	2.03	mg/Kg	1	XFC7142	XXX17248	
n-Triacontane-d62 <surr>	276	*	50-150		%	1	XFC7142	XXX17248	
5a Androstane <surr>	108		50-150		%	1	XFC7142	XXX17248	

Batch Information

Analytical Batch: XFC7142
Analytical Method: AK102
Analysis Date/Time: 09/09/06 16:20
Dilution Factor: 1

Prep Batch: XXX17248
Prep Method: SW3550B
Prep Date/Time: 09/08/06 14:36

Initial Prep Wt./Vol.: 30.405 g
Prep Extract Vol.: 1 mL
Container ID:1065125021-A
Analyst: JE

Analytical Batch: XFC7142
Analytical Method: AK103
Analysis Date/Time: 09/09/06 16:20
Dilution Factor: 1

Prep Batch: XXX17248
Prep Method: SW3550B
Prep Date/Time: 09/08/06 14:36

Initial Prep Wt./Vol.: 30.405 g
Prep Extract Vol.: 1 mL
Container ID:1065125021-A
Analyst: JE

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **CLST08**
SGS Ref. #: 1065125021
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 97.4

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 19:02
Receipt Date/Time: 08/31/06 13:05

Solids

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Total Solids	97.4			%		SPT6954		

Batch Information

Analytical Batch: SPT6954
Analytical Method: SM20 2540G
Analysis Date/Time: 09/07/06 10:40

Initial Prep Wt./Vol.: 1 mL

Container ID:1065125021-A
Analyst: BNE

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **Trip Blank VW6-89-5**
SGS Ref. #: 1065125022
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 100

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 16:40
Receipt Date/Time: 08/31/06 13:05

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Dichlorodifluoromethane	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
Chloromethane	ND	129	40.1	ug/Kg	1	VMS8673	VXX15913	
Vinyl chloride	ND	15.4	4.11	ug/Kg	1	VMS8673	VXX15913	
Bromomethane	ND	103	31.9	ug/Kg	1	VMS8673	VXX15913	
Chloroethane	ND	103	31.9	ug/Kg	1	VMS8673	VXX15913	
Trichlorofluoromethane	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
1,1-Dichloroethene	ND	51.4	15.4	ug/Kg	1	VMS8673	VXX15913	
Methylene chloride	81.8 J	103	31.9	ug/Kg	1	VMS8673	VXX15913	
Acetone	ND	1030	319	ug/Kg	1	VMS8673	VXX15913	
trans-1,2-Dichloroethene	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
1,1-Dichloroethane	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
2,2-Dichloropropane	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
cis-1,2-Dichloroethene	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
2-Butanone (MEK)	ND	257	80.2	ug/Kg	1	VMS8673	VXX15913	
Bromochloromethane	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
Chloroform	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
1,1,1-Trichloroethane	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
Carbon tetrachloride	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
1,1-Dichloropropene	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
Benzene	ND	13.4	4.11	ug/Kg	1	VMS8673	VXX15913	
1,2-Dichloroethane	ND	13.4	4.11	ug/Kg	1	VMS8673	VXX15913	
Trichloroethene	ND	20.6	10.3	ug/Kg	1	VMS8673	VXX15913	
1,2-Dichloropropane	ND	13.4	6.68	ug/Kg	1	VMS8673	VXX15913	
Dibromomethane	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
Bromodichloromethane	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
2-Chloroethyl Vinyl Ether	ND	257	31.9	ug/Kg	1	VMS8673	VXX15913	
cis-1,3-Dichloropropene	ND	20.6	6.38	ug/Kg	1	VMS8673	VXX15913	
Toluene	ND	51.4	15.4	ug/Kg	1	VMS8673	VXX15913	
trans-1,3-Dichloropropene	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
1,1,2-Trichloroethane	ND	15.4	5.14	ug/Kg	1	VMS8673	VXX15913	
Tetrachloroethene	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
1,3-Dichloropropane	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
Dibromochloromethane	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
1,2-Dibromoethane	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
Chlorobenzene	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
1,1,1,2-Tetrachloroethane	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
Ethylbenzene	ND	51.4	15.4	ug/Kg	1	VMS8673	VXX15913	

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **Trip Blank VW6-89-5**
SGS Ref. #: 1065125022
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 100

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 16:40
Receipt Date/Time: 08/31/06 13:05

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
P & M -Xylene	ND	51.4	15.4	ug/Kg	1	VMS8673	VXX15913	
o-Xylene	ND	51.4	8.02	ug/Kg	1	VMS8673	VXX15913	
Styrene	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
Bromoform	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
Isopropylbenzene (Cumene)	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
Bromobenzene	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
1,1,2,2-Tetrachloroethane	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
1,2,3-Trichloropropane	ND	51.4	16.5	ug/Kg	1	VMS8673	VXX15913	
n-Propylbenzene	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
2-Chlorotoluene	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
4-Chlorotoluene	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
1,3,5-Trimethylbenzene	ND	51.4	15.4	ug/Kg	1	VMS8673	VXX15913	
tert-Butylbenzene	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
1,2,4-Trimethylbenzene	ND	51.4	15.4	ug/Kg	1	VMS8673	VXX15913	
sec-Butylbenzene	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
1,3-Dichlorobenzene	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
4-Isopropyltoluene	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
1,4-Dichlorobenzene	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
1,2-Dichlorobenzene	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
n-Butylbenzene	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
1,2-Dibromo-3-chloropropane	ND	103	31.9	ug/Kg	1	VMS8673	VXX15913	
1,2,4-Trichlorobenzene	ND	30.9	9.26	ug/Kg	1	VMS8673	VXX15913	
Hexachlorobutadiene	ND	30.9	9.26	ug/Kg	1	VMS8673	VXX15913	
Naphthalene	ND	51.4	15.4	ug/Kg	1	VMS8673	VXX15913	
Methyl-t-butyl ether	ND	25.7	10.3	ug/Kg	1	VMS8673	VXX15913	
1,2,3-Trichlorobenzene	ND	30.9	9.26	ug/Kg	1	VMS8673	VXX15913	
4-Methyl-2-pentanone (MIBK)	ND	257	80.2	ug/Kg	1	VMS8673	VXX15913	
2-Hexanone	ND	257	80.2	ug/Kg	1	VMS8673	VXX15913	
1-Chlorohexane	ND	25.7	8.02	ug/Kg	1	VMS8673	VXX15913	
Dibromofluoromethane <surr>	103	83-119		%	1	VMS8673	VXX15913	
1,2-Dichloroethane-D4 <surr>	99.3	85-115		%	1	VMS8673	VXX15913	
Toluene-d8 <surr>	107	87-115		%	1	VMS8673	VXX15913	
4-Bromofluorobenzene <surr>	102	50-154		%	1	VMS8673	VXX15913	

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **Trip Blank VW6-89-5**
SGS Ref. #: 1065125022
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 100

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 16:40
Receipt Date/Time: 08/31/06 13:05

Volatile Gas Chromatography/Mass Spectroscopy

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers

Batch Information

Analytical Batch: VMS8673
Analytical Method: SW8260B
Analysis Date/Time: 09/08/06 17:45
Dilution Factor: 1

Prep Batch: VXX15913
Prep Method: SW5035A
Prep Date/Time: 08/26/06 16:40

Initial Prep Wt./Vol.: 48.62 g
Prep Extract Vol.: 25 mL
Container ID:1065125022-A
Analyst: SPM

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **Trip Blank VW6-89-5**
SGS Ref. #: 1065125022
Project ID: Camp Lonely Landfill 2006
Matrix: Soil/Solid
Percent Solids: 100

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 16:40
Receipt Date/Time: 08/31/06 13:05

Solids

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Total Solids	100			%		SPT6954		

Batch Information

Analytical Batch: SPT6954
Analytical Method: SM20 2540G
Analysis Date/Time: 09/07/06 10:40

Initial Prep Wt./Vol.: 1 mL

Container ID:1065125022-A
Analyst: BNE

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **CLSS12A-0.5**
SGS Ref. #: 1065125023
Project ID: Camp Lonely Landfill 2006
Matrix: Other Solids (Wet Weight)

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 13:08
Receipt Date/Time: 08/31/06 13:05

Characterization

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Aqueous Phase, Total	0.0			%	1	TCLP4645		
Oil Phase, Total	0.0			%	1	TCLP4645		
Solid Phase, Total	100			%	1	TCLP4645		

Batch Information

Analytical Batch: TCLP4645
Analytical Method: TCLP
Analysis Date/Time: 09/03/06 09:00
Dilution Factor: 1

Initial Prep Wt./Vol.: 1 mL

Container ID:1065125023-A
Analyst: BJS

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **CLSS12A-0.5**
SGS Ref. #: 1065125023
Project ID: Camp Lonely Landfill 2006
Matrix: Other Solids (Wet Weight)

All Dates/Times are Alaska Local Time
Collection Date/Time: 08/26/06 13:08
Receipt Date/Time: 08/31/06 13:05

TCLP Metals

Parameter	Result	PQL/CL	MDL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Chromium	14.9	0.200	0.0620	mg/L	1	MIP5152	MXT3973	

Batch Information

Analytical Batch: MIP5152
Analytical Method: SW6010B TCLP
Analysis Date/Time: 09/14/06 12:14
Dilution Factor: 1

Prep Batch: MXT3973
Prep Method: SW3010A
Prep Date/Time: 09/12/06 11:00

Initial Prep Wt./Vol.: 5 mL
Prep Extract Vol.: 50 mL
Container ID:1065125023-A
Analyst: TK

Hoefler Consulting Group

Print Date: 10/5/2006

Client Sample ID: **1065281002**
SGS Ref. #: 726323
Project ID: Camp Lonely Landfill 2006
Matrix: Water (Surface, Eff., Ground)

All Dates/Times are Alaska Local Time
Collection Date/Time: 09/05/06 21:45
Receipt Date/Time: 09/11/06 18:40

Metals by ICP/MS

Parameter	Result	PQL/CL	Units	DF	Analytical Batch	Prep Batch	Qualifiers
Aluminum	ND	100	ug/L	5	MMS4403	MXX18105	
Antimony	ND	1.00	ug/L	5	MMS4403	MXX18105	
Arsenic	ND	10.0	ug/L	5	MMS4403	MXX18105	
Barium	817	3.00	ug/L	5	MMS4403	MXX18105	
Beryllium	ND	1.00	ug/L	5	MMS4403	MXX18105	
Bismuth	ND	2.00	ug/L	5	MMS4403	MXX18105	
Cadmium	ND	2.00	ug/L	5	MMS4403	MXX18105	
Calcium	115000	1000	ug/L	5	MMS4403	MXX18105	
Chromium	ND	4.00	ug/L	5	MMS4403	MXX18105	
Cobalt	ND	1.00	ug/L	5	MMS4403	MXX18105	
Copper	ND	6.00	ug/L	5	MMS4403	MXX18105	
Iron	ND	1000	ug/L	5	MMS4403	MXX18105	
Lead	ND	1.00	ug/L	5	MMS4403	MXX18105	
Phosphorus	ND	500	ug/L	5	MMS4403	MXX18105	
Potassium	4710	1000	ug/L	5	MMS4403	MXX18105	
Selenium	15.7	10.0	ug/L	5	MMS4403	MXX18105	
Silver	ND	2.00	ug/L	5	MMS4403	MXX18105	
Sodium	57900	1000	ug/L	5	MMS4403	MXX18105	
Thallium	ND	1.00	ug/L	5	MMS4403	MXX18105	
Vanadium	ND	20.0	ug/L	5	MMS4403	MXX18105	
Zinc	44.5	25.0	ug/L	5	MMS4403	MXX18105	
Magnesium	13100	1000	ug/L	5	MMS4403	MXX18105	
Manganese	651	2.00	ug/L	5	MMS4403	MXX18105	
Molybdenum	ND	5.00	ug/L	5	MMS4403	MXX18105	
Nickel	7.27	2.00	ug/L	5	MMS4403	MXX18105	

Batch Information

Analytical Batch: MMS4403
Analytical Method: SW6020
Analysis Date/Time: 09/15/06 14:23
Dilution Factor: 5

Prep Batch: MXX18105
Prep Method: SW3010A
Prep Date/Time: 09/11/06 09:00

Initial Prep Wt./Vol.: 50 mL
Prep Extract Vol.: 50 mL
Container ID:
Analyst: SCL

SGS Ref.#	725219	Method Blank	**Printed Date/Time**	10/05/2006 14:48
Client Name	Hoefler Consulting Group		**Prep**	**Batch**
Project Name/#	Camp Lonely Landfill 2006			**Method**
Matrix	Soil/Solid			**Date**

QC results affect the following production samples:

1065125002, 1065125003, 1065125004, 1065125005, 1065125007, 1065125011, 1065125013, 1065125014, 1065125015, 1065125016, 1065125017, 1065125018, 1065125019, 1065125020, 1065125021, 1065125022

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Solids					
Total Solids	100			%	09/07/06
Batch SPT6954					
Method SM20 2540G					
Instrument					

SGS Ref.#	725757	Method Blank	**Printed Date/Time**		10/05/2006 14:48
Client Name	Hoefler Consulting Group		**Prep**	**Batch**	XXX17248
Project Name/#	Camp Lonely Landfill 2006			**Method**	SW3550B
Matrix	Soil/Solid			**Date**	09/08/2006

QC results affect the following production samples:

1065125011, 1065125013, 1065125014, 1065125015, 1065125016, 1065125017, 1065125018, 1065125019, 1065125020, 1065125021

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Semivolatile Organic Fuels Department					
Diesel Range Organics	2.08 J	19.8	1.98	mg/Kg	09/09/06
Surrogates					
5a Androstane <surr>	105	60-120		%	09/09/06
Batch XFC7142					
Method AK102					
Instrument HP 5890 Series II FID SV A F					
Residual Range Organics	2.83 J	19.8	1.98	mg/Kg	09/09/06
Surrogates					
n-Triacontane-d62 <surr>	107	60-120		%	09/09/06
Batch XFC7142					
Method AK103					
Instrument HP 5890 Series II FID SV A F					

SGS Ref.#	725764	Method Blank	**Printed Date/Time**	10/05/2006 14:48
Client Name	Hoefler Consulting Group		**Prep Batch**	XXX17249
Project Name/#	Camp Lonely Landfill 2006		**Method**	SW3550B
Matrix	Soil/Solid		**Date**	09/08/2006

QC results affect the following production samples:

1065125011

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Polynuclear Aromatics GC/MS					
Acenaphthylene	ND	4.95	1.49	ug/Kg	09/12/06
2-Methylnaphthalene	ND	4.95	1.49	ug/Kg	09/12/06
Acenaphthene	ND	4.95	1.49	ug/Kg	09/12/06
Fluorene	ND	4.95	1.49	ug/Kg	09/12/06
Phenanthrene	ND	4.95	1.49	ug/Kg	09/12/06
Anthracene	ND	4.95	1.49	ug/Kg	09/12/06
Fluoranthene	ND	4.95	1.49	ug/Kg	09/12/06
Pyrene	ND	4.95	1.49	ug/Kg	09/12/06
Benzo(a)Anthracene	ND	4.95	1.49	ug/Kg	09/12/06
Chrysene	ND	4.95	1.49	ug/Kg	09/12/06
Benzo[b]Fluoranthene	ND	4.95	1.49	ug/Kg	09/12/06
Benzo[a]pyrene	ND	4.95	1.49	ug/Kg	09/12/06
Indeno[1,2,3-c,d] pyrene	ND	4.95	1.49	ug/Kg	09/12/06
Dibenzo[a,h]anthracene	ND	4.95	1.49	ug/Kg	09/12/06
Benzo[g,h,i]perylene	ND	4.95	1.49	ug/Kg	09/12/06
Naphthalene	ND	4.95	1.49	ug/Kg	09/12/06
1-Methylnaphthalene	ND	4.95	1.49	ug/Kg	09/12/06
Benzo[k]fluoranthene	ND	4.95	1.49	ug/Kg	09/12/06
Surrogates					
Terphenyl-d14 <surr>	99.8	30-125		%	09/12/06

Batch	XMS3773
Method	8270C SIMS
Instrument	HP 6890/5973 MS SVOA

SGS Ref.#	725977	Method Blank	**Printed Date/Time**		10/05/2006 14:48
Client Name	Hoefler Consulting Group		**Prep**	**Batch**	VXX15913
Project Name/#	Camp Lonely Landfill 2006			**Method**	SW5035A
Matrix	Soil/Solid			**Date**	09/07/2006

QC results affect the following production samples:

1065125011, 1065125012, 1065125022

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
1-Chlorohexane	ND	25.0	7.80	ug/Kg	09/07/06

Batch VMS8670
Method SW8260B
Instrument HP 5890 Series II MS1 VMA

Volatile Gas Chromatography/Mass Spectroscopy

SGS Ref.#	725977	Method Blank	**Printed Date/Time**	10/05/2006 14:48
Client Name	Hoefler Consulting Group		**Prep Batch**	VXX15913
Project Name/#	Camp Lonely Landfill 2006		**Method**	SW5035A
Matrix	Soil/Solid		**Date**	09/07/2006

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy					
Dichlorodifluoromethane	ND	25.0	7.80	ug/Kg	09/07/06
Chloromethane	ND	25.0	7.80	ug/Kg	09/07/06
Vinyl chloride	ND	25.0	7.80	ug/Kg	09/07/06
Bromomethane	ND	200	62.0	ug/Kg	09/07/06
Chloroethane	ND	200	62.0	ug/Kg	09/07/06
Trichlorofluoromethane	ND	25.0	7.80	ug/Kg	09/07/06
1,1-Dichloroethene	ND	25.0	7.80	ug/Kg	09/07/06
Acetone	ND	250	78.0	ug/Kg	09/07/06
Methylene chloride	ND	100	31.0	ug/Kg	09/07/06
trans-1,2-Dichloroethene	ND	25.0	7.80	ug/Kg	09/07/06
2-Butanone (MEK)	ND	250	78.0	ug/Kg	09/07/06
2,2-Dichloropropane	ND	25.0	7.80	ug/Kg	09/07/06
cis-1,2-Dichloroethene	ND	25.0	7.80	ug/Kg	09/07/06
1,1,1-Trichloroethane	ND	25.0	7.80	ug/Kg	09/07/06
1,1-Dichloroethane	ND	25.0	7.80	ug/Kg	09/07/06
Bromochloromethane	ND	25.0	7.80	ug/Kg	09/07/06
Chloroform	ND	25.0	7.80	ug/Kg	09/07/06
Carbon tetrachloride	ND	25.0	7.80	ug/Kg	09/07/06
Benzene	ND	13.0	3.90	ug/Kg	09/07/06
1,2-Dichloroethane	ND	25.0	7.80	ug/Kg	09/07/06
1,1-Dichloropropene	ND	25.0	7.80	ug/Kg	09/07/06
Trichloroethene	ND	25.0	7.80	ug/Kg	09/07/06
1,2-Dichloropropane	ND	25.0	7.80	ug/Kg	09/07/06
Dibromomethane	ND	25.0	7.80	ug/Kg	09/07/06
Bromodichloromethane	ND	25.0	7.80	ug/Kg	09/07/06
2-Chloroethyl Vinyl Ether	ND	100	31.0	ug/Kg	09/07/06
1,1,2-Trichloroethane	ND	25.0	7.80	ug/Kg	09/07/06
cis-1,3-Dichloropropene	ND	25.0	7.80	ug/Kg	09/07/06
4-Methyl-2-pentanone (MIBK)	ND	250	78.0	ug/Kg	09/07/06
Toluene	ND	50.0	15.0	ug/Kg	09/07/06
trans-1,3-Dichloropropene	ND	25.0	7.80	ug/Kg	09/07/06
Tetrachloroethene	ND	25.0	7.80	ug/Kg	09/07/06
1,3-Dichloropropane	ND	25.0	7.80	ug/Kg	09/07/06
2-Hexanone	ND	250	78.0	ug/Kg	09/07/06
Dibromochloromethane	ND	25.0	7.80	ug/Kg	09/07/06
1,2-Dibromoethane	ND	25.0	7.80	ug/Kg	09/07/06
1,1,1,2-Tetrachloroethane	ND	25.0	7.80	ug/Kg	09/07/06
Chlorobenzene	ND	25.0	7.80	ug/Kg	09/07/06
Ethylbenzene	ND	25.0	7.80	ug/Kg	09/07/06

SGS Ref.#	725977	Method Blank	**Printed Date/Time**	10/05/2006 14:48
Client Name	Hoefler Consulting Group		**Prep Batch**	VXX15913
Project Name/#	Camp Lonely Landfill 2006		**Method**	SW5035A
Matrix	Soil/Solid		**Date**	09/07/2006

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy					
P & M -Xylene	ND	50.0	15.0	ug/Kg	09/07/06
o-Xylene	ND	50.0	15.0	ug/Kg	09/07/06
Styrene	ND	25.0	7.80	ug/Kg	09/07/06
Bromoform	ND	25.0	7.80	ug/Kg	09/07/06
Isopropylbenzene (Cumene)	ND	25.0	7.80	ug/Kg	09/07/06
Bromobenzene	ND	25.0	7.80	ug/Kg	09/07/06
1,2,3-Trichloropropane	ND	50.0	15.0	ug/Kg	09/07/06
n-Propylbenzene	ND	25.0	7.80	ug/Kg	09/07/06
1,1,2,2-Tetrachloroethane	ND	50.0	15.0	ug/Kg	09/07/06
2-Chlorotoluene	ND	25.0	7.80	ug/Kg	09/07/06
4-Chlorotoluene	ND	25.0	7.80	ug/Kg	09/07/06
1,3,5-Trimethylbenzene	ND	25.0	7.80	ug/Kg	09/07/06
tert-Butylbenzene	ND	25.0	7.80	ug/Kg	09/07/06
1,2,4-Trimethylbenzene	ND	25.0	7.80	ug/Kg	09/07/06
sec-Butylbenzene	ND	25.0	7.80	ug/Kg	09/07/06
1,3-Dichlorobenzene	ND	25.0	7.80	ug/Kg	09/07/06
4-Isopropyltoluene	ND	25.0	7.80	ug/Kg	09/07/06
1,4-Dichlorobenzene	ND	25.0	7.80	ug/Kg	09/07/06
1,2-Dichlorobenzene	ND	25.0	7.80	ug/Kg	09/07/06
n-Butylbenzene	ND	25.0	7.80	ug/Kg	09/07/06
1,2-Dibromo-3-chloropropane	ND	100	31.0	ug/Kg	09/07/06
1,2,4-Trichlorobenzene	ND	50.0	15.0	ug/Kg	09/07/06
Hexachlorobutadiene	ND	50.0	15.0	ug/Kg	09/07/06
Naphthalene	ND	50.0	15.0	ug/Kg	09/07/06
Methyl-t-butyl ether	ND	40.0	12.0	ug/Kg	09/07/06
1,2,3-Trichlorobenzene	ND	50.0	15.0	ug/Kg	09/07/06
Surrogates					
Dibromofluoromethane <surr>	97	83-119		%	09/07/06
1,2-Dichloroethane-D4 <surr>	93.6	85-115		%	09/07/06
Toluene-d8 <surr>	105	87-115		%	09/07/06
4-Bromofluorobenzene <surr>	105	50-154		%	09/07/06

Batch	VMS8670
Method	SW8260B
Instrument	HP 5890 Series II MS1 VMA

SGS Ref.#	725985	Method Blank	**Printed Date/Time**		10/05/2006 14:48
Client Name	Hoefler Consulting Group		**Prep**	**Batch**	VXX15915
Project Name/#	Camp Lonely Landfill 2006			**Method**	AK101
Matrix	Soil/Solid			**Date**	09/08/2006

QC results affect the following production samples:

1065125011

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Volatile Fuels Department					
Gasoline Range Organics	ND	2500	500	ug/Kg	09/08/06
Surrogates					
4-Bromofluorobenzene <surr>	91.7	60-120		%	09/08/06
Batch VFC8022					
Method AK101					
Instrument HP 5890 Series II PID+FID VDA					
Benzene	ND	12.5	4.00	ug/Kg	09/08/06
Toluene	ND	50.0	15.0	ug/Kg	09/08/06
Ethylbenzene	ND	50.0	15.0	ug/Kg	09/08/06
P & M -Xylene	49.6 J	50.0	15.0	ug/Kg	09/08/06
o-Xylene	17.1 J	50.0	15.0	ug/Kg	09/08/06
Surrogates					
1,4-Difluorobenzene <surr>	96.2	81-108		%	09/08/06
Batch VFC8022					
Method SW8021B					
Instrument HP 5890 Series II PID+FID VDA					

SGS Ref.#	726339	Method Blank	**Printed Date/Time**	10/05/2006 14:48
Client Name	Hoefler Consulting Group		**Prep Batch**	MXX18105
Project Name/#	Camp Lonely Landfill 2006		**Method**	SW3010A
Matrix	Water (Surface, Eff., Ground)		**Date**	09/11/2006

QC results affect the following production samples:

1065125006

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Metals by ICP/MS					
Aluminum	ND	100	31.0	ug/L	09/15/06
Antimony	ND	1.00	0.310	ug/L	09/15/06
Arsenic	ND	10.0	5.00	ug/L	09/15/06
Barium	ND	3.00	0.940	ug/L	09/15/06
Beryllium	ND	1.00	0.500	ug/L	09/15/06
Bismuth	ND	2.00	0.620	ug/L	09/15/06
Cadmium	ND	2.00	1.00	ug/L	09/15/06
Calcium	ND	1000	310	ug/L	09/15/06
Chromium	3.42 J	4.00	1.20	ug/L	09/15/06
Cobalt	ND	1.00	0.310	ug/L	09/15/06
Iron	ND	1000	310	ug/L	09/15/06
Copper	ND	6.00	1.80	ug/L	09/15/06
Lead	ND	1.00	0.310	ug/L	09/15/06
Phosphorus	ND	500	250	ug/L	09/15/06
Potassium	ND	1000	310	ug/L	09/15/06
Selenium	7.80 J	10.0	3.10	ug/L	09/15/06
Silver	ND	2.00	0.620	ug/L	09/15/06
Sodium	ND	1000	310	ug/L	09/15/06
Thallium	ND	1.00	0.310	ug/L	09/15/06
Vanadium	ND	20.0	6.20	ug/L	09/15/06
Zinc	ND	25.0	7.80	ug/L	09/15/06
Magnesium	ND	1000	310	ug/L	09/15/06
Manganese	ND	2.00	0.620	ug/L	09/15/06
Molybdenum	ND	5.00	1.50	ug/L	09/15/06
Nickel	ND	2.00	0.620	ug/L	09/15/06

Batch MMS4403
Method SW6020
Instrument Perkin Elmer Sciex ICP-MS P3

SGS Ref.#	726635	Method Blank	**Printed Date/Time**		10/05/2006 14:48
Client Name	Hoefler Consulting Group		**Prep**	**Batch**	MXT3973
Project Name/#	Camp Lonely Landfill 2006			**Method**	SW3010A
Matrix	Water (Surface, Eff., Ground)			**Date**	09/12/2006

QC results affect the following production samples:

1065125008, 1065125023

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
TCLP Metals					
Chromium	ND	0.0200	0.00620	mg/L	09/14/06
Batch	MIP5152				
Method	SW6010B TCLP				
Instrument	TJA Enviro II ICP P2				

SGS Ref.#	726801	Method Blank	**Printed Date/Time**	10/05/2006 14:48
Client Name	Hoefler Consulting Group		**Prep Batch**	MXX18119
Project Name/#	Camp Lonely Landfill 2006		**Method**	SW3050B
Matrix	Soil/Solid		**Date**	09/06/2006

QC results affect the following production samples:

1065125002, 1065125003, 1065125004, 1065125005, 1065125007, 1065125011

Parameter	Results		Reporting/Control Limit	MDL	Units	Analysis Date
Metals by ICP/MS						
Arsenic	ND		1.00	0.310	mg/Kg	09/14/06
Barium	ND		0.300	0.0940	mg/Kg	09/14/06
Cadmium	ND		0.200	0.0620	mg/Kg	09/14/06
Chromium	0.603	*	0.400	0.120	mg/Kg	09/14/06
Lead	ND		0.200	0.0620	mg/Kg	09/14/06
Selenium	ND		0.500	0.150	mg/Kg	09/14/06
Silver	ND		0.100	0.0310	mg/Kg	09/14/06

Batch MMS4395
Method SW6020
Instrument Perkin Elmer Sciex ICP-MS P3

SGS Ref.#	727377	Method Blank	**Printed Date/Time**		10/05/2006 14:48
Client Name	Hoefler Consulting Group		**Prep**	**Batch**	MXX18140
Project Name/#	Camp Lonely Landfill 2006			**Method**	METHOD
Matrix	Soil/Solid			**Date**	09/13/2006

QC results affect the following production samples:

1065125011

Parameter	Results	Reporting/Control Limit	MDL	Units	Analysis Date
Metals Department					
Mercury	ND	40.0	12.0	ug/Kg	09/14/06
Batch	MCV3491				
Method	SW7471A				
Instrument	PSA Millennium mercury AA				

SGS Ref.#	725649	Duplicate	**Printed Date/Time**	10/05/2006	14:48
Client Name	Hoefler Consulting Group		**Prep**	**Batch**	
Project Name/#	Camp Lonely Landfill 2006			**Method**	
Original	1065125013			**Date**	
Matrix	Soil/Solid				

QC results affect the following production samples:

1065125002, 1065125003, 1065125004, 1065125005, 1065125007, 1065125011, 1065125013, 1065125014, 1065125015, 1065125016, 1065125017, 1065125018, 1065125019, 1065125020, 1065125021, 1065125022

Parameter	Original Result	QC Result	Units	RPD	RPD Limits	Analysis Date
Solids						
Total Solids	95.9	95.9	%	0	(< 5)	09/07/2006

Batch SPT6954
Method SM20 2540G
Instrument

SGS Ref.#	726806	Duplicate	**Printed Date/Time**		10/05/2006 14:48
Client Name	Hoefler Consulting Group		**Prep**	**Batch**	MXX18119
Project Name/#	Camp Lonely Landfill 2006			**Method**	SW3050B
Original	1065116007			**Date**	9/6/2006 4:00:00PM
Matrix	Soil/Solid				

QC results affect the following production samples:

1065125002, 1065125003, 1065125004, 1065125005, 1065125007, 1065125011

Parameter	Original Result	QC Result	Units	RPD	RPD Limits	Analysis Date
Metals by ICP/MS						
Arsenic	1920	1905	mg/Kg	1	(< 20)	09/15/2006
Lead	1720	1784	mg/Kg	4	(< 20)	09/15/2006
Silver	155	162	mg/Kg	4	(< 20)	09/15/2006

Batch MMS4403
Method SW6020
Instrument Perkin Elmer Sciex ICP-MS P3

SGS Ref.#	725758	Lab Control Sample	**Printed Date/Time**	10/05/2006	14:48
			Prep **Batch**	XXX17248	
Client Name	Hoefler Consulting Group		**Method**	SW3550B	
Project Name/#	Camp Lonely Landfill 2006		**Date**	09/08/2006	
Matrix	Soil/Solid				

QC results affect the following production samples:

1065125011, 1065125013, 1065125014, 1065125015, 1065125016, 1065125017, 1065125018, 1065125019, 1065125020, 1065125021

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Semivolatile Organic Fuels Department								
Diesel Range Organics	LCS	30.7	93	(75-125)			33.1 mg/Kg	09/09/2006
Surrogates								
5a Androstane <surr>	LCS		92	(60-120)				09/09/2006
Batch XFC7142								
Method AK102								
Instrument HP 5890 Series II FID SV A F								
Residual Range Organics	LCS	32.0	97	(60-120)			33.1 mg/Kg	09/09/2006
Surrogates								
n-Triacontane-d62 <surr>	LCS		94	(60-120)				09/09/2006
Batch XFC7142								
Method AK103								
Instrument HP 5890 Series II FID SV A F								

SGS Ref.#	725765	Lab Control Sample	**Printed Date/Time**	10/05/2006	14:48
			Prep **Batch**	XXX17249	
Client Name	Hoefler Consulting Group		**Method**	SW3550B	
Project Name/#	Camp Lonely Landfill 2006		**Date**	09/08/2006	
Matrix	Soil/Solid				

QC results affect the following production samples:

1065125011

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date

Polynuclear Aromatics GC/MS

SGS Ref.#	725765	Lab Control Sample	**Printed Date/Time**	10/05/2006	14:48
			Prep Batch	XXX17249	
Client Name	Hoefler Consulting Group		**Method**	SW3550B	
Project Name/#	Camp Lonely Landfill 2006		**Date**	09/08/2006	
Matrix	Soil/Solid				

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Polynuclear Aromatics GC/MS								
Acenaphthylene	LCS	12.6	58	(46-97)			21.8 ug/Kg	09/12/2006
2-Methylnaphthalene	LCS	12.2	56	(43-95)			21.8 ug/Kg	09/12/2006
Acenaphthene	LCS	12.4	57	(50-92)			21.8 ug/Kg	09/12/2006
Fluorene	LCS	14.1	64	(53-95)			21.8 ug/Kg	09/12/2006
Phenanthrene	LCS	16.3	75	(56-104)			21.8 ug/Kg	09/12/2006
Anthracene	LCS	14.0	64	(47-88)			21.8 ug/Kg	09/12/2006
Fluoranthene	LCS	15.9	73	(60-108)			21.8 ug/Kg	09/12/2006
Pyrene	LCS	16.3	75	(58-109)			21.8 ug/Kg	09/12/2006
Benzo(a)Anthracene	LCS	20.6	94	(50-110)			21.8 ug/Kg	09/12/2006
Chrysene	LCS	19.7	90	(60-102)			21.8 ug/Kg	09/12/2006
Benzo[b]Fluoranthene	LCS	19.9	91	(47-115)			21.8 ug/Kg	09/12/2006
Benzo[a]pyrene	LCS	19.5	90	(29-98)			21.8 ug/Kg	09/12/2006
Indeno[1,2,3-c,d] pyrene	LCS	19.0	87	(52-113)			21.8 ug/Kg	09/12/2006
Dibenzo[a,h]anthracene	LCS	18.8	86	(47-116)			21.8 ug/Kg	09/12/2006
Benzo[g,h,i]perylene	LCS	21.3	98	(56-105)			21.8 ug/Kg	09/12/2006
Naphthalene	LCS	12.0	55	(44-93)			21.8 ug/Kg	09/12/2006
1-Methylnaphthalene	LCS	12.2	56	(45-96)			21.8 ug/Kg	09/12/2006
Benzo[k]fluoranthene	LCS	18.5	85	(64-103)			21.8 ug/Kg	09/12/2006
Surrogates								
Terphenyl-d14 <surr>	LCS		82	(30-125)				09/12/2006

SGS Ref.#	725765	Lab Control Sample	**Printed Date/Time**	10/05/2006	14:48
			Prep **Batch**	XXX17249	
Client Name	Hoefler Consulting Group		**Method**	SW3550B	
Project Name/#	Camp Lonely Landfill 2006		**Date**	09/08/2006	
Matrix	Soil/Solid				

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date

Polynuclear Aromatics GC/MS

Batch	XMS3773
Method	8270C SIMS
Instrument	HP 6890/5973 MS SVOA

SGS Ref.#	725978	Lab Control Sample	**Printed Date/Time**	10/05/2006	14:48
	725979	Lab Control Sample Duplicate	**Prep** **Batch**	VXX15913	
Client Name	Hoefler Consulting Group		**Method**	SW5035A	
Project Name/#	Camp Lonely Landfill 2006		**Date**	09/07/2006	
Matrix	Soil/Solid				

QC results affect the following production samples:

1065125011, 1065125012, 1065125022

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
1-Chlorohexane	LCS	1160	103	(60-135)			1130 ug/Kg	09/07/2006
	LCSD	1180	105		2	(< 20)	1130 ug/Kg	09/07/2006

Batch	VMS8670
Method	SW8260B
Instrument	HP 5890 Series II MS1 VMA

Volatile Gas Chromatography/Mass Spectroscopy

SGS Ref.#	725978	Lab Control Sample	**Printed Date/Time**	10/05/2006	14:48
	725979	Lab Control Sample Duplicate	**Prep Batch**	VXX15913	
Client Name	Hoefler Consulting Group		**Method**	SW5035A	
Project Name/#	Camp Lonely Landfill 2006		**Date**	09/07/2006	
Matrix	Soil/Solid				

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy								
Dichlorodifluoromethane	LCS	762	102	(69-126)			750 ug/Kg	09/07/2006
	LCSD	728	97		5	(< 20)	750 ug/Kg	09/07/2006
Chloromethane	LCS	785	105	(52-129)			750 ug/Kg	09/07/2006
	LCSD	752	100		4	(< 20)	750 ug/Kg	09/07/2006
Vinyl chloride	LCS	857	114	(66-125)			750 ug/Kg	09/07/2006
	LCSD	818	109		5	(< 20)	750 ug/Kg	09/07/2006
Bromomethane	LCS	716	95	(54-141)			750 ug/Kg	09/07/2006
	LCSD	733	98		2	(< 20)	750 ug/Kg	09/07/2006
Chloroethane	LCS	596	79	(41-141)			750 ug/Kg	09/07/2006
	LCSD	543	72		9	(< 20)	750 ug/Kg	09/07/2006
Trichlorofluoromethane	LCS	721	96	(68-139)			750 ug/Kg	09/07/2006
	LCSD	688	92		5	(< 20)	750 ug/Kg	09/07/2006
1,1-Dichloroethene	LCS	807	108	(85-130)			750 ug/Kg	09/07/2006
	LCSD	826	110		2	(< 20)	750 ug/Kg	09/07/2006
Acetone	LCS	2970	132	(68-141)			2250 ug/Kg	09/07/2006
	LCSD	3260	145 *		9	(< 20)	2250 ug/Kg	09/07/2006
Methylene chloride	LCS	777	104	(79-117)			750 ug/Kg	09/07/2006
	LCSD	793	106		2	(< 20)	750 ug/Kg	09/07/2006
trans-1,2-Dichloroethene	LCS	820	109	(86-129)			750 ug/Kg	09/07/2006
	LCSD	818	109		0	(< 20)	750 ug/Kg	09/07/2006
2-Butanone (MEK)	LCS	2400	107	(40-135)			2250 ug/Kg	09/07/2006
	LCSD	2690	119		11	(< 20)	2250 ug/Kg	09/07/2006
2,2-Dichloropropane	LCS	741	99	(85-131)			750 ug/Kg	09/07/2006
	LCSD	728	97		2	(< 20)	750 ug/Kg	09/07/2006
cis-1,2-Dichloroethene	LCS	796	106	(85-119)			750 ug/Kg	09/07/2006
	LCSD	825	110		4	(< 20)	750 ug/Kg	09/07/2006
1,1,1-Trichloroethane	LCS	734	98	(85-118)			750 ug/Kg	09/07/2006
	LCSD	743	99		1	(< 20)	750 ug/Kg	09/07/2006

SGS Ref.#	725978	Lab Control Sample	**Printed Date/Time**	10/05/2006	14:48
	725979	Lab Control Sample Duplicate	**Prep Batch**	VXX15913	
Client Name	Hoefler Consulting Group		**Method**	SW5035A	
Project Name/#	Camp Lonely Landfill 2006		**Date**	09/07/2006	
Matrix	Soil/Solid				

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy								
1,1-Dichloroethane	LCS	730	97	(85-120)			750 ug/Kg	09/07/2006
	LCSD	730	97		0	(< 20)	750 ug/Kg	09/07/2006
Bromochloromethane	LCS	798	106	(82-125)			750 ug/Kg	09/07/2006
	LCSD	848	113		6	(< 20)	750 ug/Kg	09/07/2006
Chloroform	LCS	741	99	(80-122)			750 ug/Kg	09/07/2006
	LCSD	738	98		0	(< 20)	750 ug/Kg	09/07/2006
Carbon tetrachloride	LCS	763	102	(81-127)			750 ug/Kg	09/07/2006
	LCSD	778	104		2	(< 20)	750 ug/Kg	09/07/2006
Benzene	LCS	789	105	(85-121)			750 ug/Kg	09/07/2006
	LCSD	812	108		3	(< 20)	750 ug/Kg	09/07/2006
1,2-Dichloroethane	LCS	714	95	(85-125)			750 ug/Kg	09/07/2006
	LCSD	695	93		3	(< 20)	750 ug/Kg	09/07/2006
1,1-Dichloropropene	LCS	762	102	(88-118)			750 ug/Kg	09/07/2006
	LCSD	764	102		0	(< 20)	750 ug/Kg	09/07/2006
Trichloroethene	LCS	774	103	(85-123)			750 ug/Kg	09/07/2006
	LCSD	806	107		4	(< 20)	750 ug/Kg	09/07/2006
1,2-Dichloropropane	LCS	736	98	(80-116)			750 ug/Kg	09/07/2006
	LCSD	825	110		11	(< 20)	750 ug/Kg	09/07/2006
Dibromomethane	LCS	743	99	(84-124)			750 ug/Kg	09/07/2006
	LCSD	790	105		6	(< 20)	750 ug/Kg	09/07/2006
Bromodichloromethane	LCS	709	95	(85-119)			750 ug/Kg	09/07/2006
	LCSD	736	98		4	(< 20)	750 ug/Kg	09/07/2006
2-Chloroethyl Vinyl Ether	LCS	1140	102	(70-139)			1130 ug/Kg	09/07/2006
	LCSD	1190	106		4	(< 20)	1130 ug/Kg	09/07/2006
1,1,2-Trichloroethane	LCS	799	107	(81-111)			750 ug/Kg	09/07/2006
	LCSD	889	119 *		11	(< 20)	750 ug/Kg	09/07/2006
cis-1,3-Dichloropropene	LCS	751	100	(85-125)			750 ug/Kg	09/07/2006

SGS Ref.#	725978	Lab Control Sample	**Printed Date/Time**	10/05/2006	14:48
	725979	Lab Control Sample Duplicate	**Prep Batch**	VXX15913	
Client Name	Hoefler Consulting Group		**Method**	SW5035A	
Project Name/#	Camp Lonely Landfill 2006		**Date**	09/07/2006	
Matrix	Soil/Solid				

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy								
	LCSD	785	105		5	(< 20)	750 ug/Kg	09/07/2006
4-Methyl-2-pentanone (MIBK)	LCS	2140	95	(74-136)			2250 ug/Kg	09/07/2006
	LCSD	2420	108		12	(< 20)	2250 ug/Kg	09/07/2006
Toluene	LCS	769	102	(86-116)			750 ug/Kg	09/07/2006
	LCSD	818	109		6	(< 20)	750 ug/Kg	09/07/2006
trans-1,3-Dichloropropene	LCS	775	103	(82-119)			750 ug/Kg	09/07/2006
	LCSD	819	109		6	(< 20)	750 ug/Kg	09/07/2006
Tetrachloroethene	LCS	843	112	(85-115)			750 ug/Kg	09/07/2006
	LCSD	901	120 *		7	(< 20)	750 ug/Kg	09/07/2006
1,3-Dichloropropane	LCS	759	101	(80-118)			750 ug/Kg	09/07/2006
	LCSD	854	114		12	(< 20)	750 ug/Kg	09/07/2006
2-Hexanone	LCS	2320	103	(57-145)			2250 ug/Kg	09/07/2006
	LCSD	2920	130		23 *	(< 20)	2250 ug/Kg	09/07/2006
Dibromochloromethane	LCS	746	100	(72-122)			750 ug/Kg	09/07/2006
	LCSD	791	105		6	(< 20)	750 ug/Kg	09/07/2006
1,2-Dibromoethane	LCS	769	102	(85-117)			750 ug/Kg	09/07/2006
	LCSD	864	115		12	(< 20)	750 ug/Kg	09/07/2006
1,1,1,2-Tetrachloroethane	LCS	772	103	(84-118)			750 ug/Kg	09/07/2006
	LCSD	826	110		7	(< 20)	750 ug/Kg	09/07/2006
Chlorobenzene	LCS	795	106	(85-120)			750 ug/Kg	09/07/2006
	LCSD	855	114		7	(< 20)	750 ug/Kg	09/07/2006
Ethylbenzene	LCS	779	104	(85-115)			750 ug/Kg	09/07/2006
	LCSD	814	108		4	(< 20)	750 ug/Kg	09/07/2006
P & M -Xylene	LCS	1620	108	(85-115)			1500 ug/Kg	09/07/2006
	LCSD	1710	114		5	(< 20)	1500 ug/Kg	09/07/2006
o-Xylene	LCS	802	107	(85-115)			750 ug/Kg	09/07/2006
	LCSD	852	114		6	(< 20)	750 ug/Kg	09/07/2006

SGS Ref.#	725978	Lab Control Sample	**Printed Date/Time**	10/05/2006	14:48
	725979	Lab Control Sample Duplicate	**Prep Batch**	VXX15913	
Client Name	Hoefler Consulting Group		**Method**	SW5035A	
Project Name/#	Camp Lonely Landfill 2006		**Date**	09/07/2006	
Matrix	Soil/Solid				

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy								
Styrene	LCS	803	107	(87-121)			750 ug/Kg	09/07/2006
	LCSD	880	117		9	(< 20)	750 ug/Kg	09/07/2006
Bromoform	LCS	804	107	(70-130)			750 ug/Kg	09/07/2006
	LCSD	931	124		15	(< 20)	750 ug/Kg	09/07/2006
Isopropylbenzene (Cumene)	LCS	783	104	(85-115)			750 ug/Kg	09/07/2006
	LCSD	827	110		5	(< 20)	750 ug/Kg	09/07/2006
Bromobenzene	LCS	789	105	(85-115)			750 ug/Kg	09/07/2006
	LCSD	793	106		1	(< 20)	750 ug/Kg	09/07/2006
1,2,3-Trichloropropane	LCS	792	106	(75-121)			750 ug/Kg	09/07/2006
	LCSD	848	113		7	(< 20)	750 ug/Kg	09/07/2006
n-Propylbenzene	LCS	813	108	(88-120)			750 ug/Kg	09/07/2006
	LCSD	804	107		1	(< 20)	750 ug/Kg	09/07/2006
1,1,2,2-Tetrachloroethane	LCS	852	114	(71-118)			750 ug/Kg	09/07/2006
	LCSD	957	128 *		12	(< 20)	750 ug/Kg	09/07/2006
2-Chlorotoluene	LCS	794	106	(85-120)			750 ug/Kg	09/07/2006
	LCSD	768	102		3	(< 20)	750 ug/Kg	09/07/2006
4-Chlorotoluene	LCS	788	105	(86-115)			750 ug/Kg	09/07/2006
	LCSD	771	103		2	(< 20)	750 ug/Kg	09/07/2006
1,3,5-Trimethylbenzene	LCS	813	108	(85-125)			750 ug/Kg	09/07/2006
	LCSD	786	105		3	(< 20)	750 ug/Kg	09/07/2006
tert-Butylbenzene	LCS	815	109	(85-120)			750 ug/Kg	09/07/2006
	LCSD	805	107		1	(< 20)	750 ug/Kg	09/07/2006
1,2,4-Trimethylbenzene	LCS	848	113	(86-115)			750 ug/Kg	09/07/2006
	LCSD	809	108		5	(< 20)	750 ug/Kg	09/07/2006
sec-Butylbenzene	LCS	872	116 *	(85-115)			750 ug/Kg	09/07/2006
	LCSD	849	113		3	(< 20)	750 ug/Kg	09/07/2006
1,3-Dichlorobenzene	LCS	809	108	(85-115)			750 ug/Kg	09/07/2006
	LCSD	797	106		2	(< 20)	750 ug/Kg	09/07/2006

SGS Ref.#	725978	Lab Control Sample	**Printed Date/Time**	10/05/2006	14:48
	725979	Lab Control Sample Duplicate	**Prep Batch**	VXX15913	
Client Name	Hoefler Consulting Group		**Method**	SW5035A	
Project Name/#	Camp Lonely Landfill 2006		**Date**	09/07/2006	
Matrix	Soil/Solid				

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy								
4-Isopropyltoluene	LCS	824	110	(85-115)			750 ug/Kg	09/07/2006
	LCSD	809	108		2	(< 20)	750 ug/Kg	09/07/2006
1,4-Dichlorobenzene	LCS	803	107	(87-125)			750 ug/Kg	09/07/2006
	LCSD	844	113		5	(< 20)	750 ug/Kg	09/07/2006
1,2-Dichlorobenzene	LCS	770	103	(85-115)			750 ug/Kg	09/07/2006
	LCSD	783	104		2	(< 20)	750 ug/Kg	09/07/2006
n-Butylbenzene	LCS	818	109	(87-120)			750 ug/Kg	09/07/2006
	LCSD	798	106		2	(< 20)	750 ug/Kg	09/07/2006
1,2-Dibromo-3-chloropropane	LCS	700	93	(66-123)			750 ug/Kg	09/07/2006
	LCSD	804	107		14	(< 20)	750 ug/Kg	09/07/2006
1,2,4-Trichlorobenzene	LCS	791	105	(84-120)			750 ug/Kg	09/07/2006
	LCSD	821	109		4	(< 20)	750 ug/Kg	09/07/2006
Hexachlorobutadiene	LCS	801	107	(81-124)			750 ug/Kg	09/07/2006
	LCSD	821	109		3	(< 20)	750 ug/Kg	09/07/2006
Naphthalene	LCS	782	104	(74-119)			750 ug/Kg	09/07/2006
	LCSD	856	114		9	(< 20)	750 ug/Kg	09/07/2006
Methyl-t-butyl ether	LCS	1130	100	(82-122)			1130 ug/Kg	09/07/2006
	LCSD	1140	101		1	(< 20)	1130 ug/Kg	09/07/2006
1,2,3-Trichlorobenzene	LCS	792	106	(85-116)			750 ug/Kg	09/07/2006
	LCSD	849	113		7	(< 20)	750 ug/Kg	09/07/2006
Surrogates								
Dibromofluoromethane <surr>	LCS		100	(83-119)				09/07/2006
	LCSD		101		1			09/07/2006
1,2-Dichloroethane-D4 <surr>	LCS		93	(85-115)				09/07/2006
	LCSD		91		2			09/07/2006
Toluene-d8 <surr>	LCS		103	(87-115)				09/07/2006
	LCSD		111		8			09/07/2006

SGS Ref.#	725978	Lab Control Sample	**Printed Date/Time**	10/05/2006	14:48
	725979	Lab Control Sample Duplicate	**Prep Batch**	VXX15913	
Client Name	Hoefler Consulting Group		**Method**	SW5035A	
Project Name/#	Camp Lonely Landfill 2006		**Date**	09/07/2006	
Matrix	Soil/Solid				

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Gas Chromatography/Mass Spectroscopy							
4-Bromofluorobenzene <surr>	LCS	101	(50-154)				09/07/2006
	LCSD	98		3			09/07/2006

Batch	VMS8670
Method	SW8260B
Instrument	HP 5890 Series II MS1 VMA

SGS Ref.#	725986	Lab Control Sample	**Printed Date/Time**	10/05/2006	14:48
			Prep **Batch**	VXX15915	
Client Name	Hoefler Consulting Group		**Method**	AK101	
Project Name/#	Camp Lonely Landfill 2006		**Date**	09/08/2006	
Matrix	Soil/Solid				

QC results affect the following production samples:

1065125011

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Fuels Department								
Benzene	LCS	1210	97	(84-115)			1250 ug/Kg	09/08/2006
Toluene	LCS	1300	104	(90-119)			1250 ug/Kg	09/08/2006
Ethylbenzene	LCS	1380	110	(88-122)			1250 ug/Kg	09/08/2006
P & M -Xylene	LCS	2740	110	(91-121)			2500 ug/Kg	09/08/2006
o-Xylene	LCS	1370	109	(88-114)			1250 ug/Kg	09/08/2006
Surrogates								
1,4-Difluorobenzene <surr>	LCS		95	(81-108)				09/08/2006

Batch	VFC8022
Method	SW8021B
Instrument	HP 5890 Series II PID+FID VDA

SGS Ref.#	725987	Lab Control Sample	**Printed Date/Time**	10/05/2006	14:48
			Prep **Batch**	VXX15915	
Client Name	Hoefler Consulting Group		**Method**	AK101	
Project Name/#	Camp Lonely Landfill 2006		**Date**	09/08/2006	
Matrix	Soil/Solid				

QC results affect the following production samples:

1065125011

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Volatile Fuels Department								
Gasoline Range Organics	LCS	9350	83	(60-120)			11300 ug/Kg	09/08/2006
Surrogates								
4-Bromofluorobenzene <surr>	LCS		96	(60-120)				09/08/2006

Batch VFC8022
Method AK101
Instrument HP 5890 Series II PID+FID VDA

SGS Ref.#	726340	Lab Control Sample	**Printed Date/Time**	10/05/2006	14:48
			Prep **Batch**	MXX18105	
Client Name	Hoefler Consulting Group		**Method**	SW3010A	
Project Name/#	Camp Lonely Landfill 2006		**Date**	09/11/2006	
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1065125006

Parameter	QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date

Metals by ICP/MS

SGS Ref.#	726340	Lab Control Sample	**Printed Date/Time**	10/05/2006 14:48
			Prep **Batch**	MXX18105
Client Name	Hoefler Consulting Group		**Method**	SW3010A
Project Name/#	Camp Lonely Landfill 2006		**Date**	09/11/2006
Matrix	Water (Surface, Eff., Ground)			

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Metals by ICP/MS								
Aluminum	LCS	984	98	(80-120)			1000 ug/L	09/15/2006
Antimony	LCS	974	97	(80-120)			1000 ug/L	09/15/2006
Arsenic	LCS	957	96	(80-120)			1000 ug/L	09/15/2006
Barium	LCS	952	95	(80-120)			1000 ug/L	09/15/2006
Beryllium	LCS	939	94	(80-120)			1000 ug/L	09/15/2006
Bismuth	LCS	917	92	(80-120)			1000 ug/L	09/15/2006
Cadmium	LCS	994	99	(80-120)			1000 ug/L	09/15/2006
Calcium	LCS	9360	94	(80-120)			10000 ug/L	09/15/2006
Chromium	LCS	953	95	(80-120)			1000 ug/L	09/15/2006
Cobalt	LCS	924	92	(80-120)			1000 ug/L	09/15/2006
Iron	LCS	962 J	96	(80-120)			1000 ug/L	09/15/2006
Copper	LCS	1030	103	(80-120)			1000 ug/L	09/15/2006
Lead	LCS	961	96	(80-120)			1000 ug/L	09/15/2006
Phosphorus	LCS	9850	99	(80-120)			10000 ug/L	09/15/2006
Potassium	LCS	9580	96	(80-120)			10000 ug/L	09/15/2006
Selenium	LCS	955	96	(80-120)			1000 ug/L	09/15/2006
Silver	LCS	211	105	(80-120)			200 ug/L	09/15/2006
Sodium	LCS	9580	96	(80-120)			10000 ug/L	09/15/2006
Thallium	LCS	199	100	(80-120)			200 ug/L	09/15/2006
Vanadium	LCS	972	97	(80-120)			1000 ug/L	09/15/2006
Zinc	LCS	942	94	(80-120)			1000 ug/L	09/15/2006

SGS Ref.#	726340	Lab Control Sample	**Printed Date/Time**	10/05/2006	14:48
			Prep **Batch**	MXX18105	
Client Name	Hoefler Consulting Group		**Method**	SW3010A	
Project Name/#	Camp Lonely Landfill 2006		**Date**	09/11/2006	
Matrix	Water (Surface, Eff., Ground)				

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Metals by ICP/MS								
Magnesium	LCS	9640	96	(80-120)			10000 ug/L	09/15/2006
Manganese	LCS	983	98	(80-120)			1000 ug/L	09/15/2006
Molybdenum	LCS	931	93	(80-120)			1000 ug/L	09/15/2006
Nickel	LCS	922	92	(80-120)			1000 ug/L	09/15/2006

Batch	MMS4403
Method	SW6020
Instrument	Perkin Elmer Sciex ICP-MS P3

SGS Ref.#	726636	Lab Control Sample	**Printed Date/Time**	10/05/2006	14:48
			Prep **Batch**	MXT3973	
Client Name	Hoefler Consulting Group		**Method**	SW3010A	
Project Name/#	Camp Lonely Landfill 2006		**Date**	09/12/2006	
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1065125008, 1065125023

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
TCLP Metals								
Chromium	LCS	1.00	100	(80-120)			1 mg/L	09/14/2006

Batch	MIP5152
Method	SW6010B TCLP
Instrument	TJA Enviro II ICP P2

SGS Ref.#	726802	Lab Control Sample	**Printed Date/Time**	10/05/2006	14:48
			Prep **Batch**	MXX18119	
Client Name	Hoefler Consulting Group		**Method**	SW3050B	
Project Name/#	Camp Lonely Landfill 2006		**Date**	09/06/2006	
Matrix	Soil/Solid				

QC results affect the following production samples:

1065125002, 1065125003, 1065125004, 1065125005, 1065125007, 1065125011

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Metals by ICP/MS								
Arsenic	LCS	49.6	99	(80-120)			50 mg/Kg	09/14/2006
Barium	LCS	49.1	98	(80-120)			50 mg/Kg	09/14/2006
Cadmium	LCS	49.5	99	(80-120)			50 mg/Kg	09/14/2006
Chromium	LCS	49.5	99	(80-120)			50 mg/Kg	09/14/2006
Lead	LCS	48.1	96	(80-120)			50 mg/Kg	09/15/2006
Selenium	LCS	49.5	99	(80-120)			50 mg/Kg	09/14/2006
Silver	LCS	5.00	100	(80-120)			5 mg/Kg	09/14/2006

Batch	MMS4395
Method	SW6020
Instrument	Perkin Elmer Sciex ICP-MS P3

SGS Ref.#	727378	Lab Control Sample	**Printed Date/Time**	10/05/2006	14:48
			Prep **Batch**	MXX18140	
Client Name	Hoefler Consulting Group		**Method**	METHOD	
Project Name/#	Camp Lonely Landfill 2006		**Date**	09/13/2006	
Matrix	Soil/Solid				

QC results affect the following production samples:

1065125011

Parameter		QC Results	Pct Recov	LCS/LCSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Metals Department								
Mercury	LCS	159	95	(83-118)			167 ug/Kg	09/14/2006

Batch	MCV3491
Method	SW7471A
Instrument	PSA Millennium mercury AA

SGS Ref.#	725759	Matrix Spike	**Printed Date/Time**		10/05/2006 14:48
	725760	Matrix Spike Duplicate	**Prep**	**Batch**	XXX17248
				Method	Sonication Extraction Soil AK1
				Date	09/08/2006
Original	1065125018				
Matrix	Soil/Solid				

QC results affect the following production samples:

1065125011, 1065125013, 1065125014, 1065125015, 1065125016, 1065125017, 1065125018, 1065125019, 1065125020, 1065125021

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Semivolatile Organic Fuels Department									
Diesel Range Organics	MS	132	94	-109*	(60-140)			35.1 mg/Kg	09/09/2006
	MSD		111	-60*		17	(< 50)	35.2 mg/Kg	09/09/2006
Surrogates									
5a Androstane <surr>	MS		3.17	90	(50-150)				09/09/2006
	MSD		2.7	77		16			09/09/2006

Batch XFC7142
Method AK102
Instrument HP 5890 Series II FID SV A F

Residual Range Organics	MS	151	126	-72*	(60-140)			35.1 mg/Kg	09/09/2006
	MSD		126	-72*		0	(< 50)	35.2 mg/Kg	09/09/2006
Surrogates									
n-Triacontane-d62 <surr>	MS		3.67	104	(50-150)				09/09/2006
	MSD		2.71	77		30			09/09/2006

Batch XFC7142
Method AK103
Instrument HP 5890 Series II FID SV A F

SGS Ref.#	725768	Matrix Spike	**Printed Date/Time**		10/05/2006 14:48
	725769	Matrix Spike Duplicate	**Prep**	**Batch**	XXX17249
				Method	Sonication Extraction Soil 8270
				Date	09/08/2006
Original	1065132003				
Matrix	Soil/Solid				

QC results affect the following production samples:

1065125011

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date

Polynuclear Aromatics GC/MS

SGS Ref.#	725768	Matrix Spike	**Printed Date/Time**	10/05/2006 14:48
	725769	Matrix Spike Duplicate	**Prep** **Batch**	XXX17249
			Method	Sonication Extraction Soil 8270
			Date	09/08/2006
Original	1065132003			
Matrix	Soil/Solid			

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Polynuclear Aromatics GC/MS									
Acenaphthylene	MS	ND	25.9	96	(46-97)			26.8	ug/Kg09/13/2006
	MSD		25.3	94		2	(< 30)	26.9	ug/Kg 09/13/2006
2-Methylnaphthalene	MS	ND	22.4	84	(43-95)			26.8	ug/Kg09/13/2006
	MSD		23.2	86		3	(< 30)	26.9	ug/Kg 09/13/2006
Acenaphthene	MS	ND	23.5	88	(50-92)			26.8	ug/Kg09/13/2006
	MSD		24.3	90		3	(< 30)	26.9	ug/Kg 09/13/2006
Fluorene	MS	ND	26.1	97*	(53-95)			26.8	ug/Kg09/13/2006
	MSD		27.8	103*		6	(< 30)	26.9	ug/Kg 09/13/2006
Phenanthrene	MS	ND	36.2	135*	(56-104)			26.8	ug/Kg09/13/2006
	MSD		30	112*		19	(< 30)	26.9	ug/Kg 09/13/2006
Anthracene	MS	ND	31.2	117*	(47-88)			26.8	ug/Kg09/13/2006
	MSD		30.7	114*		2	(< 30)	26.9	ug/Kg 09/13/2006
Fluoranthene	MS	ND	18	67	(60-108)			26.8	ug/Kg09/13/2006
	MSD		20.4	76		13	(< 30)	26.9	ug/Kg 09/13/2006
Pyrene	MS	ND	19.6	73	(58-109)			26.8	ug/Kg09/13/2006
	MSD		21.9	81		11	(< 30)	26.9	ug/Kg 09/13/2006
Benzo(a)Anthracene	MS	ND	79.3	296*	(50-110)			26.8	ug/Kg09/13/2006
	MSD		36.2	135*		75 *	(< 30)	26.9	ug/Kg 09/13/2006
Chrysene	MS	ND	29.2	109*	(60-102)			26.8	ug/Kg09/13/2006
	MSD		27.8	103*		6	(< 30)	26.9	ug/Kg 09/13/2006
Benzo[b]Fluoranthene	MS	ND	38.5	144*	(47-115)			26.8	ug/Kg09/13/2006
	MSD		35.7	133*		8	(< 30)	26.9	ug/Kg 09/13/2006
Benzo[a]pyrene	MS	ND	50.3	188*	(29-98)			26.8	ug/Kg09/13/2006
	MSD		42.3	157*		17	(< 30)	26.9	ug/Kg 09/13/2006
Indeno[1,2,3-c,d] pyrene	MS	ND	33	123*	(52-113)			26.8	ug/Kg09/13/2006
	MSD		30.9	115*		7	(< 30)	26.9	ug/Kg 09/13/2006
Dibenzo[a,h]anthracene	MS	ND	36.6	136*	(47-116)			26.8	ug/Kg09/13/2006
	MSD		32.6	121*		11	(< 30)	26.9	ug/Kg 09/13/2006
Benzo[g,h,i]perylene	MS	ND	42.4	158*	(56-105)			26.8	ug/Kg09/13/2006
	MSD		39.8	148*		6	(< 30)	26.9	ug/Kg 09/13/2006
Naphthalene	MS	ND	19.5	73	(44-93)			26.8	ug/Kg09/13/2006
	MSD		20.7	77		6	(< 30)	26.9	ug/Kg 09/13/2006
1-Methylnaphthalene	MS	ND	22.9	85	(45-96)			26.8	ug/Kg09/13/2006
	MSD		23	86		1	(< 30)	26.9	ug/Kg 09/13/2006
Benzo[k]fluoranthene	MS	ND	42.1	157*	(64-103)			26.8	ug/Kg09/13/2006
	MSD		41.6	155*		1	(< 30)	26.9	ug/Kg 09/13/2006
Surrogates									
Terphenyl-d14 <surr>	MS		22.9	86	(30-125)				09/13/2006
	MSD		25.2	94		9			09/13/2006

SGS Ref.#	725768	Matrix Spike	**Printed Date/Time**		10/05/2006 14:48
	725769	Matrix Spike Duplicate	**Prep**	**Batch**	XXX17249
				Method	Sonication Extraction Soil 8270
				Date	09/08/2006
Original	1065132003				
Matrix	Soil/Solid				

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date

Polynuclear Aromatics GC/MS

Batch	XMS3773
Method	8270C SIMS
Instrument	HP 6890/5973 MS SVOA

SGS Ref.#	725988	Matrix Spike	**Printed Date/Time**	10/05/2006	14:48
	725989	Matrix Spike Duplicate	**Prep** **Batch**	VXX15915	
			Method	AK101 Extraction (S)	
			Date	09/08/2006	
Original	1065121036				
Matrix	Soil/Solid				

QC results affect the following production samples:

1065125011

Parameter	Qualifiers		Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount		Analysis Date
Volatile Fuels Department											
Benzene		MS	8.05 J	1720	96	(84-115)			1770	ug/Kg	09/08/2006
		MSD		1700	95		1	(< 20)	1770	ug/Kg	09/08/2006
Toluene		MS	41.8 J	1800	99	(90-119)			1770	ug/Kg	09/08/2006
		MSD		1790	98		1	(< 20)	1770	ug/Kg	09/08/2006
Ethylbenzene		MS	34.8 J	1890	104	(88-122)			1770	ug/Kg	09/08/2006
		MSD		1880	103		1	(< 20)	1770	ug/Kg	09/08/2006
P & M -Xylene		MS	146	3810	103	(91-121)			3560	ug/Kg	09/08/2006
		MSD		3750	101		2	(< 20)	3560	ug/Kg	09/08/2006
o-Xylene		MS	50.2 J	1890	103	(88-114)			1770	ug/Kg	09/08/2006
		MSD		1890	103		0	(< 20)	1770	ug/Kg	09/08/2006
Surrogates											
1,4-Difluorobenzene <surr>		MS		1810	102	(81-108)					09/08/2006
		MSD		1730	97		4				09/08/2006

Batch	VFC8022
Method	SW8021B
Instrument	HP 5890 Series II PID+FID VDA

SGS Ref.#	725990	Matrix Spike	**Printed Date/Time**		10/05/2006 14:48
	725991	Matrix Spike Duplicate	**Prep**	**Batch**	VXX15915
				Method	AK101 Extraction (S)
				Date	09/08/2006
Original	1065121036				
Matrix	Soil/Solid				

QC results affect the following production samples:

1065125011

Parameter	Qualifiers		Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount		Analysis Date
Volatile Fuels Department											
Gasoline Range Organics		MS	914 J	13800	80	(60-120)			16000	ug/Kg	09/08/2006
		MSD		14200	83		3	(< 20)	16000	ug/Kg	09/09/2006
Surrogates											
4-Bromofluorobenzene <surr>		MS		1710	96	(50-150)					09/08/2006
		MSD		1710	96		0				09/09/2006

Batch	VFC8022
Method	AK101
Instrument	HP 5890 Series II PID+FID VDA

SGS Ref.#	726341	Matrix Spike	**Printed Date/Time**		10/05/2006 14:48
	726342	Matrix Spike Duplicate	**Prep**	**Batch**	MXX18105
				Method	3010 H20 Digest for Metals ICI
				Date	09/11/2006
Original	726323				
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1065125006

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date

Metals by ICP/MS

SGS

SGS Ref.#	726341	Matrix Spike	**Printed Date/Time**	10/05/2006 14:48
	726342	Matrix Spike Duplicate	**Prep** **Batch**	MXX18105
			Method	3010 H20 Digest for Metals ICI
			Date	09/11/2006
Original	726323			
Matrix	Water (Surface, Eff., Ground)			

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Metals by ICP/MS									
Aluminum	MS	ND	1110	111	(80-120)			1000 ug/L	09/15/2006
	MSD		1060	106		4	(< 15)	1000 ug/L	09/15/2006
Antimony	MS	ND	1100	110	(80-120)			1000 ug/L	09/15/2006
	MSD		1090	109		1	(< 15)	1000 ug/L	09/15/2006
Arsenic	MS	ND	1040	104	(80-120)			1000 ug/L	09/15/2006
	MSD		1040	104		0	(< 15)	1000 ug/L	09/15/2006
Barium	MS	817	1720	90	(80-120)			1000 ug/L	09/15/2006
	MSD		1680	86		2	(< 15)	1000 ug/L	09/15/2006
Beryllium	MS	ND	1060	106	(80-120)			1000 ug/L	09/15/2006
	MSD		1040	104		2	(< 15)	1000 ug/L	09/15/2006
Bismuth	MS	ND	996	100	(80-120)			1000 ug/L	09/15/2006
	MSD		992	99		0	(< 15)	1000 ug/L	09/15/2006
Cadmium	MS	ND	1100	110	(80-120)			1000 ug/L	09/15/2006
	MSD		1080	108		2	(< 15)	1000 ug/L	09/15/2006
Calcium	MS	115000	97400	-181*	(80-120)			10000 ug/L	09/15/2006
	MSD		93800	-217*		4	(< 15)	10000 ug/L	09/15/2006
Chromium	MS	ND	1060	106	(80-120)			1000 ug/L	09/15/2006
	MSD		1030	103		2	(< 15)	1000 ug/L	09/15/2006
Iron	MS	ND	1470	147*	(80-120)			1000 ug/L	09/15/2006
	MSD		1490	149*		1	(< 15)	1000 ug/L	09/15/2006
Copper	MS	ND	1100	110	(80-120)			1000 ug/L	09/15/2006
	MSD		1070	107		2	(< 15)	1000 ug/L	09/15/2006
Lead	MS	ND	1050	105	(80-120)			1000 ug/L	09/15/2006
	MSD		1030	103		2	(< 15)	1000 ug/L	09/15/2006
Phosphorus	MS	ND	11200	112	(80-120)			10000 ug/L	09/15/2006
	MSD		11100	111		1	(< 15)	10000 ug/L	09/15/2006
Potassium	MS	4710	14000	93	(80-120)			10000 ug/L	09/15/2006
	MSD		14200	95		1	(< 15)	10000 ug/L	09/15/2006
Selenium	MS	15.7	1050	103	(80-120)			1000 ug/L	09/15/2006
	MSD		1040	102		1	(< 15)	1000 ug/L	09/15/2006
Silver	MS	ND	231	115	(80-120)			200 ug/L	09/15/2006
	MSD		228	114		1	(< 15)	200 ug/L	09/15/2006
Sodium	MS	57900	54400	-36*	(80-120)			10000 ug/L	09/15/2006
	MSD		53000	-49*		3	(< 15)	10000 ug/L	09/15/2006
Thallium	MS	ND	215	108	(80-120)			200 ug/L	09/15/2006
	MSD		212	106		2	(< 15)	200 ug/L	09/15/2006
Vanadium	MS	ND	1120	112	(80-120)			1000 ug/L	09/15/2006
	MSD		1090	109		2	(< 15)	1000 ug/L	09/15/2006
Zinc	MS	44.5	1070	103	(80-120)			1000 ug/L	09/15/2006
	MSD		1060	101		1	(< 15)	1000 ug/L	09/15/2006

SGS Ref.#	726341	Matrix Spike	**Printed Date/Time**		10/05/2006 14:48
	726342	Matrix Spike Duplicate	**Prep**	**Batch**	MXX18105
				Method	3010 H20 Digest for Metals ICI
				Date	09/11/2006
Original	726323				
Matrix	Water (Surface, Eff., Ground)				

Parameter	Qualifiers		Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount		Analysis Date
Metals by ICP/MS											
Cobalt		MS	ND	997	100	(80-120)			1000	ug/L	09/15/2006
		MSD		978	98		2	(< 15)	1000	ug/L	09/15/2006
Magnesium		MS	13100	20800	77*	(80-120)			10000	ug/L	09/15/2006
		MSD		20200	71*		3	(< 15)	10000	ug/L	09/15/2006
Manganese		MS	651	1570	92	(80-120)			1000	ug/L	09/15/2006
		MSD		1540	89		2	(< 15)	1000	ug/L	09/15/2006
Molybdenum		MS	ND	1030	103	(80-120)			1000	ug/L	09/15/2006
		MSD		1030	103		0	(< 15)	1000	ug/L	09/15/2006
Nickel		MS	7.27	998	99	(80-120)			1000	ug/L	09/15/2006
		MSD		978	97		2	(< 15)	1000	ug/L	09/15/2006

Batch MMS4403
Method SW6020
Instrument Perkin Elmer Sciex ICP-MS P3

SGS Ref.#	726343	Bench Spike DIGESTED	**Printed Date/Time**		10/05/2006 14:48
			Prep	**Batch**	MXX18105
				Method	3010 H20 Digest for Metals ICI
				Date	09/11/2006
Original	726323				
Matrix	Water (Surface, Eff., Ground)				

QC results affect the following production samples:

1065125006

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Metals by ICP/MS									
Aluminum	BND	ND	5830	117	(75-125)			5000	ug/L09/15/2006
Antimony	BND	ND	6260	125	(75-125)			5000	ug/L09/15/2006
Arsenic	BND	ND	5790	116	(75-125)			5000	ug/L09/15/2006
Barium	BND	817	6710	118	(75-125)			5000	ug/L09/15/2006
Beryllium	BND	ND	5850	117	(75-125)			5000	ug/L09/15/2006
Bismuth	BND	ND	5550	111*				5000	ug/L09/15/2006
Cadmium	BND	ND	6070	121	(75-125)			5000	ug/L09/15/2006
Calcium	BND	115000	123000	29*	(75-125)			25000	ug/L09/15/2006
Chromium	BND	ND	5780	116	(75-125)			5000	ug/L09/15/2006
Iron	BND	ND	28900	116	(75-125)			25000	ug/L09/15/2006
Copper	BND	ND	5590	112	(75-125)			5000	ug/L09/15/2006
Lead	BND	ND	5630	113	(75-125)			5000	ug/L09/15/2006
Phosphorus	BND	ND	3090	124	(75-125)			2500	ug/L09/15/2006
Potassium	BND	4710	32400	111	(75-125)			25000	ug/L09/15/2006
Selenium	BND	15.7	5810	116	(75-125)			5000	ug/L09/15/2006
Silver	BND	ND	1480	118	(75-125)			1250	ug/L09/15/2006
Sodium	BND	57900	75300	70*	(75-125)			25000	ug/L09/15/2006
Thallium	BND	ND	1410	113	(75-125)			1250	ug/L09/15/2006
Vanadium	BND	ND	5960	119	(75-125)			5000	ug/L09/15/2006
Zinc	BND	44.5	5730	114	(75-125)			5000	ug/L09/15/2006
Cobalt	BND	ND	5780	116	(75-125)			5000	ug/L09/15/2006
Magnesium	BND	13100	39600	106	(75-125)			25000	ug/L09/15/2006
Manganese	BND	651	6350	114	(75-125)			5000	ug/L09/15/2006
Molybdenum	BND	ND	5960	119	(75-125)			5000	ug/L09/15/2006
Nickel	BND	7.27	5530	110	(75-125)			5000	ug/L09/15/2006

Batch MMS4403
Method SW6020
Instrument Perkin Elmer Sciex ICP-MS P3

SGS Ref.#	726637	Matrix Spike	**Printed Date/Time**		10/05/2006 14:48
	726638	Matrix Spike Duplicate	**Prep**	**Batch**	MXT3973
				Method	Waters Digest for Metals by ICI
				Date	09/12/2006
Original	1065169001				
Matrix	Other Solids (Wet Weight)				

QC results affect the following production samples:

1065125008, 1065125023

Parameter	Qualifiers		Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount		Analysis Date
TCLP Metals											
Chromium		MS	ND	9.46	95	(50-125)			10	mg/L	09/14/2006
		MSD		9.68	97		2	(< 20)	10	mg/L	09/14/2006

Batch MIP5152
Method SW6010B TCLP
Instrument TJA Enviro II ICP P2

SGS Ref.#	726803	Matrix Spike	**Printed Date/Time**		10/05/2006 14:48
	726804	Matrix Spike Duplicate	**Prep**	**Batch**	MXX18119
				Method	Soils/Solids Digest for Metals b
				Date	09/06/2006
Original	1065116007				
Matrix	Soil/Solid				

QC results affect the following production samples:

1065125002, 1065125003, 1065125004, 1065125005, 1065125007, 1065125011

Parameter	Qualifiers		Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount		Analysis Date
Metals by ICP/MS											
Arsenic		MS	1920	1620	-419*	(80-120)			70.9	mg/Kg	09/19/2006
		MSD		2450	768*		41 *	(< 20)	69.1	mg/Kg	09/19/2006
Barium		MS	27.9	103	106	(80-120)			70.9	mg/Kg	09/15/2006
		MSD		101	105		2	(< 20)	69.1	mg/Kg	09/15/2006
Cadmium		MS	6.56	83.9	109	(80-120)			70.9	mg/Kg	09/15/2006
		MSD		78.8	104		6	(< 20)	69.1	mg/Kg	09/15/2006
Chromium		MS	3.43	78	105	(80-120)			70.9	mg/Kg	09/15/2006
		MSD		76.1	105		3	(< 20)	69.1	mg/Kg	09/15/2006
Lead		MS	1720	1480	-348*	(80-120)			70.9	mg/Kg	09/19/2006
		MSD		2190	674*		39 *	(< 20)	69.1	mg/Kg	09/19/2006
Selenium		MS	1.01	71.3	99	(80-120)			70.9	mg/Kg	09/15/2006
		MSD		72.2	103		1	(< 20)	69.1	mg/Kg	09/15/2006
Silver		MS	155	126	-411*	(80-120)			7.09	mg/Kg	09/19/2006
		MSD		187	467*		39 *	(< 20)	6.91	mg/Kg	09/19/2006

Batch	MMS4411
Method	SW6020
Instrument	Perkin Elmer Sciex ICP-MS P3

SGS Ref.#	726805	Bench Spike DIGESTED	**Printed Date/Time**		10/05/2006 14:48
			Prep	**Batch**	MXX18119
				Method	Soils/Solids Digest for Metals b
				Date	09/06/2006
Original	1065116007				
Matrix	Soil/Solid				

QC results affect the following production samples:

1065125002, 1065125003, 1065125004, 1065125005, 1065125007, 1065125011

Parameter	Qualifiers	Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount	Analysis Date
Metals by ICP/MS									
Arsenic	BND	1920	28600	95	(75-125)			28100	mg/Kg09/19/2006
Barium	BND	27.9	728	100	(75-125)			703	mg/Kg09/15/2006
Cadmium	BND	6.56	736	104	(75-125)			703	mg/Kg09/15/2006
Chromium	BND	3.43	706	100	(75-125)			703	mg/Kg09/15/2006
Lead	BND	1720	26500	88	(75-125)			28100	mg/Kg09/19/2006
Selenium	BND	1.01	687	98	(75-125)			703	mg/Kg09/15/2006
Silver	BND	155	6640	92	(75-125)			7030	mg/Kg09/19/2006

Batch MMS4411
Method SW6020
Instrument Perkin Elmer Sciex ICP-MS P3

SGS Ref.#	727379	Matrix Spike	**Printed Date/Time**		10/05/2006 14:48
	727380	Matrix Spike Duplicate	**Prep**	**Batch**	MXX18140
				Method	Digestion Mercury (S)
				Date	09/13/2006
Original	1065121021				
Matrix	Soil/Solid				

QC results affect the following production samples:

1065125011

Parameter	Qualifiers		Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount		Analysis Date
Metals Department											
Mercury		MS	ND	289	85	(83-118)			339	ug/Kg	09/14/2006
		MSD		278	81*		4	(< 20)	345	ug/Kg	09/14/2006

Batch MCV3491
Method SW7471A
Instrument PSA Millennium mercury AA

SGS Ref.#	727381	Bench Spike DIGESTED	**Printed Date/Time**		10/05/2006 14:48
	727380	Matrix Spike Duplicate	**Prep**	**Batch**	MXX18140
				Method	Digestion Mercury (S)
				Date	09/13/2006
Original	1065121021				
Matrix	Soil/Solid				

QC results affect the following production samples:

1065125011

Parameter	Qualifiers		Original Result	QC Result	Pct Recov	MS/MSD Limits	RPD	RPD Limits	Spiked Amount		Analysis Date
Metals Department											
Mercury		BND	ND	268	78*	(85-115)			346	ug/Kg	09/14/2006
		MSD		278	81*		4	(< 20)	345	ug/Kg	09/14/2006

Batch MCV3491
Method SW7471A
Instrument PSA Millennium mercury AA

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(1)

CLIENT: HCG Inc

CONTACT: Nathan Webb PHONE NO:(907) 563-2196

PROJECT: Camp Lonely Landfill SITE/PWSID#: 2006

REPORTS TO: HCG Inc 3401 Minnesota Dr Ste 300 Anch AK 99503 FAX NO.:( ) 563 2164

INVOICE TO: HCG QUOTE # 7675

P.O. NUMBER

SGS Reference:

PAGE 1 OF 3

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE (C= COMP, G= GRAB)	Total Chrome RCRA	Hexavalent Chrome	GRO/BTEX	VOC 8260	DRO/RRO	PAH SIM	Glycol	TCLP Chrome	RCRA (8)	REMARKS
Preservatives Used									meth	meth						
Analysis Required (3)																
(1) A	CLSS12F-1.5	8/26	12 00	S	1	G	Hold	Hold								
(2)	CLSS12E-2.0		1209		1		1	Hold								
(3)	CLSS12D-2.0		1225		1		1	Hold								
(4)	CLSS12C-2.0		1245		1		1	Hold								
(5)	CLSS12B-1.5		1323		1		1	Hold								
(6) A-B	CLSS12A-0.5		1308		2		1	1					1			free product
(7) A	CLSS12A-2.0		1400		1		1	Hold								
(8)	CLSS92A-0.5		1308		1								1			free product
(9)	CLSS02-1.0		1630		1							1				
(10)	CLSS04-1.0		1615		1							1				

(5)

Collected/Relinquished By:(1)	Date	Time	Received By:
[signature]	8/31	7pm	
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	8/31/06	1305	Received By: [signature]

(4)

Shipping Carrier:

Shipping Ticket No:

Samples Received Cold? (Circle) YES NO

Temperature °C: TB FROZEN T: 1.6

Special Deliverable Requirements: Level II

Chain of Custody Seal: (Circle) INTACT BROKEN x1 ABSENT

Requested Turnaround Time and Special Instructions:

Normal TAT

106 of 121

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- Maryland
- North Carolina

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058341

(1)

CLIENT: HCG Inc

CONTACT: Nathan Webb PHONE NO:( ) 563-2196

PROJECT: Camp Lonely Landfill SITE/PWSID#: 2006

REPORTS TO: HCG Inc 3401 Minnesota Dr Ste 300 Anch AK 99503 FAX NO.:( ) 563-2164

INVOICE TO: HCG QUOTE #

P.O. NUMBER

SGS Reference:

PAGE 2 OF 3

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE (C= COMP, G= GRAB)	GRO/BTEX	VOC 8260	DRO/RRO	PAH SIM	Glycols	RCRA(8)				REMARKS
Preservatives Used								Meth	Meth							
(11) A-F	CLSS21-1.0	8/26	16:40	S	6	G	1	1	1	1	1	1				
(12) A	CLSS91-1.0		16:40		1			1								
(13)	CLST01		18:45		1				1							
(14)	CLST02		19:15		1				1							
(15)	CLST03		18:49		1				1							
(16)	CLST04		19:11		1				1							
(17)	CLST94		19:11		1				1							
(18)	CLST05		18:50		1				1							
(19)	CLST06		19:07		1				1							
(20)	CLST07		18:53		1				1							Hot Sample
									1							Hot Sample

(3) Analysis Required

(5)

Collected/Relinquished By:(1)	Date	Time	Received By:
[signature]	8/31	1pm	
Relinquished By: (2)	Date	Time	Received By:
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date	Time	Received By:
	8/31/06	1305	[signature]

(4)

Shipping Carrier:

Shipping Ticket No:

Samples Received Cold? (Circle) YES NO

Temperature °C: TB Frozen; 1.6

Special Deliverable Requirements: Level II

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Requested Turnaround Time and Special Instructions: Normal TAT

☐ 200 W. Potter Drive Anchorage, AK 99518 Tel: (907) 562-2343 Fax: (907) 561-5301
☐ 5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557
☐ 1258 Greenbrier Street Charleston, WV 25311 Tel: (304) 346-0725 Fax: (304) 346-0761

White - Retained by Lab
Yellow - Returned with Report
Pink - Retained by Sampler

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058342

(1)

CLIENT: HCG Inc

CONTACT: Nathan Webb PHONE NO:( ) 563-2196

PROJECT: Camp Lonely Landfill 2006 SITE/PWSID# :

REPORTS TO: HCG Inc 3401 Minnesota Dr Ste 300 Anch AK 99503 FAX NO.:( ) 563-2164

INVOICE TO: HCG QUOTE #

P.O. NUMBER

SGS Reference:

PAGE 3 OF 3

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE (C= COMP, G= GRAB)	DRO/RRO	VOC 8260									REMARKS
Preservatives Used																	
(21) A	CLST08	8/26	19:02	S	1	G	1										
(22) A	Trip Blank VWG-89-5	—	—	—	1	—		1									

(3) Analysis Required

(5)

Collected/Relinquished By:(1)	Date	Time	Received By:
[signature]	8/31	1PM	
Relinquished By: (2)	Date	Time	Received By:
108			
Relinquished By: (3)	Date	Time	Received By:
121			
Relinquished By: (4)	Date 8/31/06	Time 1305	Received By: [signature]

(4)

Shipping Carrier:

Shipping Ticket No:

Samples Received Cold? (Circle) YES NO

Temperature °C: TB Frozen 1.6

Special Deliverable Requirements: Level II

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Requested Turnaround Time and Special Instructions: Normal TAT

1065125

SGS

SAMPLE RECEIPT FORM

SGS WO#:

Yes	No	NA	
	✓		Are samples **RUSH**, priority, or *w/n 72 hrs.* of **hold time**?
		✓	If yes have you done *e-mail notification*?
	✓		Are samples *within 24 hrs.* of **hold time** or **due date**?
		✓	If yes, have you *spoken with* Supervisor?
		✓	Archiving bottles – if req., are they properly marked?
	✓		Are there any **problems**? PM Notified?
		✓	Were samples preserved correctly and pH verified?
		✓	If this is for PWS, provide **PWSID.**
	✓		Will courier charges apply?
			Method of payment?
✓			Data package required? (Level: 1 / (2) / 3 / 4)
			Notes:
	✓		Is this a DoD project? (USACE, Navy, AFCEE)

Due Date: 9/15/06
Received Date: 8/31/06
Received Time: 1305
Is **date/time conversion** necessary? no
# of hours to AK Local Time: —
Thermometer ID: 70D

Cooler ID	Temp Blank	Cooler Temp
1	frozen °C	1.6 °C
	°C	°C
	°C	°C
	°C	°C
	°C	°C

*Temperature readings include thermometer correction factors

Delivery method (circle all that apply): Client / Alert Courier / UPS / FedEx / USPS / AA Goldstreak / NAC / ERA / PenAir / Carlile Lynden / SGS / Other:

Airbill #

Additional Sample Remarks: (√ *if applicable*)

- ____ Extra Sample Volume?
- ____ Limited Sample Volume?
- X Field preserved for volatiles? MeOH
- ____ Field-filtered for dissolved?
- ____ Lab-filtered for dissolved?
- X Ref Lab required? glycol
- ____ Foreign Soil?

This section must be filled out for DoD projects (USACE, Navy, AFCEE)

Yes	No	
	X	Is received temperature 4 ± 2°C? Exceptions: Samples/Analyses Affected:
	X	Rad Screen performed? Result:
	X	Was there an airbill? *(Note # above in the right hand column)*
X		Was cooler sealed with custody seals? # / where: ~~2 on~~ one on front
	X	Were seal(s) intact upon arrival?
X		Was there a COC with cooler?
X		Was COC sealed in plastic bag & taped inside lid of cooler?
X		Was the COC filled out properly?
	X	Did the COC indicate COE / AFCEE / Navy project?
X		Did the COC and samples correspond?
X		Were all sample packed to prevent breakage? Packing material: bubblewrap, cardboard
X		Were all samples unbroken and clearly labeled?
X EMW 8/31/06	X	Were all samples sealed in separate plastic bags?
X		Were all VOCs free of headspace and/or MeOH preserved?
X		Were correct container / sample sizes submitted?
X		Is sample condition good?
X		Was copy of CoC, SRF, and custody seals given to PM to fax?

This section must be filled if problems are found.

Yes	No	
		Was client notified of problems?

Individual contacted:
Via: Phone / Fax / Email (*circle one*)
Date/Time:
Reason for contact:

Change Order Required?
SGS Contact:

Notes: - per COC, samples (1) A is being Held
- we no longer do Hexchrome on soil,

Completed by (sign): [signature] **(print):** Erin Lee

Login proof (check one): waived ____ required ____ performed by:

1065125

SGS

SAMPLE RECEIPT FORM (page 2)

SGS WO#:

#	Container ID	Matrix	Test	QC	TB	Container Volume: 1 L	500 mL	250 mL	125 mL	60 mL	40 mL	8oz (250 mL)	4oz (125 mL)	Other	Container Type: AG	CG	HDPE	Nalgene	Cubie	Coli	Septa	Other	Preservative: None	HCl	HNO_3	H_2SO_4	MeOH	$Na_2S_2O_3$	NaOH	Other
1-5,7	A	2	total chrome										6		X								X							
6	A	2	total chrome										1		X								X							
	B		~~TCLP chrome~~ ~~extra vol~~									1			X								X							
8	A	2	TCLP chrome									1			X								X							
9-10	A	2	glycols										2		X								X							
11	A	2	GRO/BTEX										1		X						X						X			
	B		VOC 8260										1		X						X						X			
	C		DRO/RRO										1		X								X							
	D		PAH SIMS										1		X								X							
	E		RCRA metals										1		X								X							
	F		glycols										1		X								X							
12	A	2	8260										1		X						X						X			
13-21	A	2	DRO/RRO										9		X								X							
22	A	2	8260		X								1		X						X						X			
			Bottle Totals									2	26																	

Completed by: [signature] Date: 8/ 9/01/06

10 of 121

1065125

SGS Environmental Services Inc.
200 W. Potter Dr., Anchorage, AK 99518 P: 907-562-23
3180 Peger Rd., Fairbanks, AK 99701 P: 907-474-8656, F: 907-474-9685
255 Sand Island Rd. Unit1B, Honolulu, HI 96819 P: 808-224-6217, F: 808-845-2287

Sample Kit Request

Client Name: Hoefler
Ordered By: Nathan Webb
Phone/Fax:
Project Name: Camp Lonely Landfill 2006

Deliver To:
ATTN:
pick to Fly

☑ Client pickup on: 8-2-06 4:00 pm
☐ Deliver to client:
☐ Shipment Method:
Date to ship by:
Notes:

Taken by: SJM Date: 8-1-06
Prepared by: GW Date: 8/2/06
Checked by: Date:
Shipped by: Date:

No. Samples	Matrix	Analysis	Bottle Type	Bottle Lot #	Pres.	Pres. Log #	Hold Time	# QC Bottles	Total Bottles
2	soil	GRO/BTEX	preweighed/septa		MeOH		28/14 d		2
2	soil	VOC 8260	preweighed/septa		MeOH		14 d		2
10	soil	DRO/ARO/%solid	4 oz w/m		4°C		14 d		10
1	soil	PAH SIM	4 oz w/m		4°C		14 d		1
8	soil	RCRA Metal/Cr^{+6}	4 oz w/m		4°C		6 m		8
3	soil	Glycol (Ref lab	4 oz w/m		4°C		14 d		3
2	soil	TCLP Metal	8 oz w/m		4°C		6 m		2
2	water	BTEX	3 x 40 mL VOA		HCl/4°C		14 d		6
2	↓	PAH SIM	2 x 1 L amber		4°C		7 d		4
2		RCRA Metal	1 x ~~225~~ 250 mL HDPE		HNO3		6 m		2
3		Glycol	2 x 40 mL VOA		4°C		14 d		6
			unpreserved						

☐ Department of Defense (DOD) project (AFCEE, Navy, USACE)?
☐ Foreign Soils?
☐ Total # Containers includes extra bottles for QC
☑ Total # Containers includes bottles for Percent Solids

Est. Sample Return Date:
Notes:

☑ Temperature Blank: (125 mL) / 500 mL (circle one)
☑ VOA Trip Blank (circle matrix): (soil) water
ID: 1 soil TB
1 water TB
☐ Chlorinated DW: Ascorbic Acid Req'd? ____ yes ____ no
☑ Blue Ice ☑ SGS COCs 8 copies
☑ Labels ☑ Custody Seals
☑ Bubble Wrap ☑ Coolers
Other:

Sampling Instructions:
1. Do not rinse container before filling and be aware of any acid preservative in container.
2. Fill container to top, but do not overfill (except volatiles which should be headspace free).
3. Label the container with your sample/site ID, as well as the date & time of collection.
4. Fill in the Chain of Custoday.
5. Add frozen gel packs or ice to your cooler & pack to prevent breakage.

If you have any questions concerning this sample kit, please contact your Project Manager for assistance. *Thank you.*

1065125

SGS Environmental

CUSTODY SEAL

Signature: William R Lawrence

Date/Time: 8-31

TB : FROZEN

COOLER: 1.6

SGS Environmental Services

TCLP SAMPLE CHARACTERIZATION

HSN#: 5125-6B **Date:** 8 9/3/06 **Analyst:** BJS

Sample Vol. (mL): 250 Container Volume (mL): 250

Top_____% (xylene miscible) Description / Notes: _____

Middle_____% (water miscible) Description / Notes: _____

23/ Bottom 100 % (solids) Description / Notes: Thick black liquid w/ sludge in bottom

Percent Solids Determination:

Original Sample & Container weight (g):		Solid % of sample:	
Empty Original Container weight (g):		Liquid % of sample:	
Clean Container weight (g):		Weight solids extracted (g):	
Original Sample weight (g):		Extraction Fluid:	
Filter weight (g):		Vol. Original Liquid Added Back (mL)	
Clean Container & Liquid weight (g):		Liquid Volume (mL):	
Liquid weight (g):			
Filter & Solid Sample weight (g):			
Solid weight (g):			

Notes: TCLP Chromium - Unfiltrable

HSN#: 5125-8B **Date:** 9/3/06 **Analyst:** BJS

Sample Volume (mL): 250 Container Volume (mL): 250

Top_____% (xylene miscible) Description / Notes: _____

Middle_____% (water miscible) Description / Notes: _____

23/ Bottom 100 % (solids) Description / Notes: Thick black liquid w/ sludge

ae 9/5

cs 9/5

#8

Percent Solids Determination:

Original Sample & Container weight (g):		Solid % of sample:	
Empty Original Container weight (g):		Liquid % of sample:	
Clean Container weight (g):		Weight solids extracted (g):	
Original Sample weight (g):		Extraction Fluid:	
Filter weight (g):		Vol. Original Liquid Added Back (mL)	
Clean Container & Liquid weight (g):		Liquid Volume (mL):	
Liquid weight (g):			
Filter & Solid Sample weight (g):			
Solid weight (g):			

Notes: TCLP Chromium - Unfiltrable

BIO-CHEM
ENVIRONMENTAL
ANALYTICAL
LABORATORIES

1049 - 28th Street SE
Grand Rapids, MI 49508
Ph: 616/248-4900
Toll Free: 800/362-LABS
Fax: 616/248-4904

October 02, 2006

Forest Taylor
SGS Environmental
200 W. Potter Drive
Anchorage, AK 99518

TEL: (907) 562-2343
FAX (907) 561-5301

RE: Camp Lonely Landfill 2006

Dear Forest Taylor: Order No.: 0609167

BIO-CHEM Laboratories, Inc. received 3 samples on 9/26/2006 for the analyses presented in the following report.

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative.

If you have any questions regarding these tests results, please feel free to call.

Please note that unless otherwise instructed, residual samples will be held for sixty (60) days from the original report date. At that time, all non-hazardous samples will be disposed of in accordance with federal, state and local regulations and ordinances, and hazardous samples shall be returned to you. Please contact the laboratory within thirty (30) days if other arrangements for sample retention need to be made.

Sincerely,

Cindy Euwema

Cindy Euwema
Office Manager

Working with you to ensure a better tomorrow.

SGS

CHAIN OF CUSTODY RECORD
SGS Environmental Services Inc.

0609167

Locations Nationwide
- Alaska
- Louisiana
- New Jersey
- West Virginia
- Hawaii
- Maryland
- North Carolina

www.us.sgs.com

063841

(1)
CLIENT: SGS-AK
CONTACT: FOREST TAYLOR PHONE NO: 907 562 2343
PROJECT: CAMP LONELY LANDFILL 2006 SITE/PWSID#:
REPORTS TO: E-MAIL:
FAX NO.:( )
INVOICE TO: QUOTE #
P.O. NUMBER 1065125

SGS Reference: BIO CHEM

PAGE 1 OF 1

(2)

LAB NO.	SAMPLE IDENTIFICATION	DATE	TIME	MATRIX	No CONTAINERS	SAMPLE TYPE (C= COMP, G= GRAB)	Preservatives Used										REMARKS
							Analysis Required (3)	GLYCOL PROPYLENE	GLYCOL ETHYLENE	GLYCOL DIETHYLENE	TRIETHYLENE						
	CLSS02-1.0	8/26/06	1630	SOIL	1	G		L	L								1065125009
	CLSS04-1.0	"	1615	"	1	"		L	L								1065125010
	CLSS21-1.0	8/26/06	1640	SOIL	1	G		L	L								1065125011

(5)

Collected/Relinquished By: (1)	Date	Time	Received By:
Forest Taylor	9/25/06	0925	UPS
Relinquished By: (2) UPS	9-26-06	9:20	L. Folkertsma
Relinquished By: (3)	Date	Time	Received By:
Relinquished By: (4)	Date	Time	Received By:

(4)
Shipping Carrier:
Shipping Ticket No:
Samples Received Cold? (Circle) YES NO
Temperature °C: 10 °F
Special Deliverable Requirements: LEVEL II PKG
Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT
Requested Turnaround Time and Special Instructions: RUN PAST HOLD TIME

☐ 200 W. Potter Drive Anchorage, AK 99518 Tel: (907) 562-2343 Fax: (907) 561-5301
☐ 5500 Business Drive Wilmington, NC 28405 Tel: (910) 350-1903 Fax: (910) 350-1557
☐ 1270 Greenbrier Street Charleston, WV 25311 Tel: (304) 346-0725 Fax: (304) 346-0761

White - Retained by Lab
Yellow - Returned with Report
Pink - Retained by Sampler

BIO-CHEM Laboratories, Inc.

Date: *02-Oct-06*

CLIENT: SGS Environmental
Project: Camp Lonely Landfill 2006
Lab Order: 0609167

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Matrix	Collection Date	Date Received
0609167-01A	CLSS02-1.0	Soil	8/26/2006	9/26/2006
0609167-02A	CLSS04-1.0	Soil	8/26/2006	9/26/2006
0609167-03A	CLSS21-1.0	Soil	8/26/2006	9/26/2006

BIO-CHEM Laboratories, Inc. **Date:** *02-Oct-06*

CLIENT: SGS Environmental
Project: Camp Lonely Landfill 2006
Lab Order: 0609167

CASE NARRATIVE

Samples are routinely analyzed using methods outlined in the following references:

(SW) Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Ed.
(E) Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020.
(A) Standard Methods for the Examination of Water and Wastewater, APHA, 18th Ed.
(D) Annual Book of ASTM Standards.

Specific methods utilized for this project are provided in the analytical report and are identified by the reference document abbreviation ( ) followed by the method number.

All QA/QC and sample analyses met method, laboratory and/or regulatory data quality objectives unless otherwise specified below.

Comments for Method Glycols
Sample 0609167-01A through 0609167-03A

Samples were received past the established EPA holding time, results should be considered estimated.

BIO-CHEM Laboratories, Inc.

Date: *10/2/2006*

ANALYTICAL REPORT

CLIENT: SGS Environmental
Lab Order: 0609167
Project: Camp Lonely Landfill 2006
Lab Sample ID: 0609167-01A

Project Number: N/A
Client Sample ID: CLSS02-1.0
Collection Date: 8/26/2006
Matrix: SOIL

Analyses	Method Ref.	Result	Q	PQL	Units	DF	Analyst	Date
Ethers and Glycols by GC\FID								
1. Diethylene glycol	SW8015B	< 2,000		2,000	µg/Kg-dry	1	KLM	9/29/2006
2. Ethylene Glycol	SW8015B	< 2,000		2,000	µg/Kg-dry	1	KLM	9/29/2006
3. Propylene Glycol	SW8015B	< 2,000		2,000	µg/Kg-dry	1	KLM	9/29/2006
4. Triethylene Glycol	SW8015B	< 2,000		2,000	µg/Kg-dry	1	KLM	9/29/2006

Definitions: PQL - Practical Quantitation Limit
DF - Dilution Factor

Qualifiers (Q): J - Detected below PQL but above MDL: Estimated
S - Spike Recovery Outside Acceptance Limits
B - Analyte detected in associated Method Blank
N - See case narrative for explanation

This report shall not be reproduced except in full, without the written approval of BIO-CHEM Laboratories, Inc.

Note: The sample results reported are based on the sample aliquot(s) tested.

BIO-CHEM Laboratories, Inc.

Date: *10/2/2006*

ANALYTICAL REPORT

CLIENT:	SGS Environmental	**Project Number:**	N/A
Lab Order:	0609167	**Client Sample ID:**	CLSS04-1.0
Project:	Camp Lonely Landfill 2006	**Collection Date:**	8/26/2006
Lab Sample ID:	0609167-02A	**Matrix:**	SOIL

Analyses	Method Ref.	Result	Q	PQL	Units	DF	Analyst	Date
Ethers and Glycols by GC\FID								
1. Diethylene glycol	SW8015B	< 2,000		2,000	µg/Kg-dry	1	KLM	9/29/2006
2. Ethylene Glycol	SW8015B	< 2,000		2,000	µg/Kg-dry	1	KLM	9/29/2006
3. Propylene Glycol	SW8015B	< 2,000		2,000	µg/Kg-dry	1	KLM	9/29/2006
4. Triethylene Glycol	SW8015B	< 2,000		2,000	µg/Kg-dry	1	KLM	9/29/2006

Definitions: PQL - Practical Quantitation Limit
DF - Dilution Factor

Qualifiers (Q): J - Detected below PQL but above MDL: Estimated
S - Spike Recovery Outside Acceptance Limits
B - Analyte detected in associated Method Blank
N - See case narrative for explanation

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Note: The sample results reported are based on the sample aliquot(s) tested.

BIO-CHEM Laboratories, Inc.

Date: *10/2/2006*

ANALYTICAL REPORT

CLIENT: SGS Environmental
Lab Order: 0609167
Project: Camp Lonely Landfill 2006
Lab Sample ID: 0609167-03A

Project Number: N/A
Client Sample ID: CLSS21-1.0
Collection Date: 8/26/2006
Matrix: SOIL

Analyses	Method Ref.	Result	Q	PQL	Units	DF	Analyst	Date
Ethers and Glycols by GC\FID								
1. Diethylene glycol	SW8015B	< 2,000		2,000	µg/Kg-dry	1	KLM	9/29/2006
2. Ethylene Glycol	SW8015B	< 2,000		2,000	µg/Kg-dry	1	KLM	9/29/2006
3. Propylene Glycol	SW8015B	< 2,000		2,000	µg/Kg-dry	1	KLM	9/29/2006
4. Triethylene Glycol	SW8015B	< 2,000		2,000	µg/Kg-dry	1	KLM	9/29/2006

Definitions: PQL - Practical Quantitation Limit
DF - Dilution Factor

Qualifiers (Q): J - Detected below PQL but above MDL: Estimated
S - Spike Recovery Outside Acceptance Limits
B - Analyte detected in associated Method Blank
N - See case narrative for explanation

This report shall not be reproduced except in full, without the written approval of BIO-CHEM Laboratories, Inc.

Note: The sample results reported are based on the sample aliquot(s) tested.

BIO-CHEM Laboratories, Inc.

10/2/2006

Lab Order: 0609167
Client: SGS Environmental
Project: Camp Lonely Landfill 2006

ANALYTICAL DETAIL REPORT

Sample ID	Client Sample ID	Matrix	Test Name	Date Sampled	TCLP/SPLP Date	Prep Date	QC Batch	Analysis Date	Analytical Batch
0609167-01A	CLSS02-1.0	Soil	Ethers and Glycols by GC\FID	8/26/2006		9/28/2006	22285	9/29/2006	GC_E_FID_060929A
0609167-02A	CLSS04-1.0	Soil	Ethers and Glycols by GC\FID	8/26/2006		9/28/2006	22285	9/29/2006	GC_E_FID_060929A
0609167-03A	CLSS21-1.0	Soil	Ethers and Glycols by GC\FID	8/26/2006		9/28/2006	22285	9/29/2006	GC_E_FID_060929A

Analytical Resources, Incorporated
Analytical Chemists and Consultants

20 October 2006

Nathan Webb
HCG
3401 Minnesota
Anchorage, AK 99503

RE: Client Project – Camp Lonely
ARI Job KA84

Dear Nathan:

Please find enclosed the final results for samples from the project referenced above. Analytical Resources, Inc. accepted three water samples on October 13, 2006. The samples were analyzed for hexavalent chromium as requested.

A matrix spike (MS) was prepared and analyzed in conjunction with sample CLSS12B-1.5. The percent recovery for hexavalent chromium was low following the initial analysis of the MS. Since the percent recovery was within acceptable QC limits for the corresponding SRM, it was concluded that the sample matrix was the cause of the low MS recovery. No corrective actions were taken.

There were no further analytical complications noted.

A copy of these reports and all supporting data will be kept on file with ARI. Should you have any questions please feel free to call me at any time.

Sincerely,

ANALYTICAL RESOURCES, INC.

Mark D. Harris
Project Manager
206/695-6210
markh@arilabs.com

Enclosures

cc: file KA84

MDH/mdh

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: KA84	Turn-around Requested: Normal
ARI Client Company: HCG	Phone: (907) 563 2196
Client Contact: Nathan WEBB	
Client Project Name: Camp Lonely	
Client Project #: —	Samplers: (W)

Page: 1 of 1

Date: 10/12/06 | Ice Present? Y

No. of Coolers: 1 | Cooler Temps: 8.4

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	Cr 6+ by MSA 20-4.3 7196								Notes/Comments
CLSS12A-0.5	8/26	1308	S	1	X								
CLSS12A-2.0		1400			X								
CLSS12B-1.5		1323			X								

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
	Printed Name: Nathan WEBB	Printed Name: Emily Bolaenauski	Printed Name:	Printed Name:
	Company: HCG	Company: ARI	Company:	Company:
	Date & Time: 10/12, 12P	Date & Time: 10/13/06 0945	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

METHOD BLANK RESULTS-CONVENTIONALS
KA84-HCG

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 10/19/06

Project: CAMP LONELY
Event: NA
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	Blank
Hexavalent Chrome	10/17/06	mg/kg	< 0.112 U
Total Solids	10/16/06	Percent	< 0.01 U
	10/16/06		< 0.01 U

SAMPLE RESULTS-CONVENTIONALS
KA84-HCG

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 10/19/06

Project: CAMP LONELY
Event: NA
Date Sampled: 08/26/06
Date Received: 10/13/06

Client ID: CLSS12A-0.5
ARI ID: 06-19307 KA84A

Analyte	Date	Method	Units	RL	Sample
Hexavalent Chrome	10/17/06 101706#1	SM3500Cr-D	mg/kg	55.2	< 55.2
Total Solids	10/16/06 101606#1	EPA 160.3	Percent	0.01	39.20

RL Analytical reporting limit
U Undetected at reported detection limit

Hexavalent Chrome performed on KH2PO4 Extracts.

SAMPLE RESULTS-CONVENTIONALS
KA84-HCG

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 10/19/06

Project: CAMP LONELY
Event: NA
Date Sampled: 08/26/06
Date Received: 10/13/06

Client ID: CLSS12A-2.0
ARI ID: 06-19308 KA84B

Analyte	Date	Method	Units	RL	Sample
Hexavalent Chrome	10/17/06 101706#1	SM3500Cr-D	mg/kg	2.68	< 2.68
Total Solids	10/16/06 101606#1	EPA 160.3	Percent	0.01	83.20

RL Analytical reporting limit
U Undetected at reported detection limit

Hexavalent Chrome performed on KH2PO4 Extracts.

SAMPLE RESULTS-CONVENTIONALS
KA84-HCG

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 10/19/06

Project: CAMP LONELY
Event: NA
Date Sampled: 08/26/06
Date Received: 10/13/06

Client ID: CLSS12B-1.5
ARI ID: 06-19309 KA84C

Analyte	Date	Method	Units	RL	Sample
Hexavalent Chrome	10/17/06 101706#1	SM3500Cr-D	mg/kg	0.124	< 0.124 U
Total Solids	10/16/06 101606#1	EPA 160.3	Percent	0.01	91.00

RL Analytical reporting limit
U Undetected at reported detection limit

Hexavalent Chrome performed on KH2PO4 Extracts.

REPLICATE RESULTS-CONVENTIONALS
KA84-HCG

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 10/19/06

Project: CAMP LONELY
Event: NA
Date Sampled: 08/26/06
Date Received: 10/13/06

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: KA84A Client ID: CLSS12A-0.5					
Total Solids	10/16/06	Percent	39.20	38.70 37.90	1.7%
ARI ID: KA84C Client ID: CLSS12B-1.5					
Hexavalent Chrome	10/17/06	mg/kg	< 0.124	< 0.122 < 0.120	NA

MS/MSD RESULTS-CONVENTIONALS
KA84-HCG

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 10/19/06

Project: CAMP LONELY
Event: NA
Date Sampled: 08/26/06
Date Received: 10/13/06

Analyte	Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: KA84C Client ID: CLSS12B-1.5						
Hexavalent Chrome	10/17/06	mg/kg	< 0.124	1.07	6.70	16.0%

STANDARD REFERENCE RESULTS-CONVENTIONALS
KA84-HCG

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 10/19/06

Project: CAMP LONELY
Event: NA
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
Hexavalent Chrome Soil Hexavalent Chrome	10/17/06	mg/kg	6.10	6.30	96.8%

Appendix C

ADEC Qualified Persons

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APPENDIX C
Qualified Personnel Form

Assessment Firm Name HCG, Inc. d.b.a. Hoefler Consulting Group
Address 3401 Minnesota Drive, Suite 300
City, State, Zip Code Anchorage, Alaska, 99503
Phone Number (907) 563-2137
Fax Number (907) 563-2164
Email bberglund@hoeflernet.com
POC (Group Leader) Bret Berglund
Phone Number (907) 563-2128

QUALIFIED PERSONNEL

The personnel listed below are "qualified" as defined in 18 AAC 78 and 18 AAC 75. A "qualified person" is a person who actively practices environmental science or engineering, geology, physical science, hydrology, or a related field and meets the following minimum requirements: (A) a bachelor's degree or equivalent from an accredited postsecondary institution in environmental science or engineering, geology, hydrology, physical science, or a related field; "equivalent" means that the person earned at least 128 semester hours, 168 trimester hours, or 192 quarter hours, at an accredited postsecondary institution, of which at least 24 semester credits (or at least 18 percent of credits) were in the science major and at least 16 semester credits (or at least 13 percent of credits) were in upper division level courses; and (B) at least one year of professional experience in environmental science or engineering, geology, physical science, or a related field, completed after the degree described in (A) was obtained. The list below includes names of qualified persons who conducted work, including sample collection, for HCG on this project. The field work was conducted by Bill Lawrence and Jeremy Craner. The Field Team Leader was Bill Lawrence. The Project Manager was Bret Berglund. The Project Chemist was Nathan Webb.

Name	Degree Year		Educational Institution / Majors	Years of Professional Experience	ADEC Qualified Person
Berglund, Bret	BA 1985	MS 1989	Carleton College/Geology; Texas A&M/Oceanography - Marine Geology	16	Yes
Craner, Jeremy	BS 2002	MS 2006	University of Idaho/Geology; Oregon State University/Hydrogeology	1	In Training
Lawrence, Bill (CPG)	BS 1993	MS 1995	University of Idaho / Geology, Hydrology	10	Yes
Webb, Nathan	BS 1984	MS 1988	University of Colorado, Boulder Chemistry & Environmental Biology, Biology	16	Yes

Appendix D

Laboratory Data Quality Assurance and Quality Control

ADEC Checklist

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Camp Lonely
Quality Assurance Summary

The Camp Lonely sampling effort was completed during August 2006. Soil and water samples were collected in accordance with the Camp Lonely Site Characterization Work Plan and the methods specified by the commercial laboratory contracted for the analyses, SGS-Environmental Services Inc., Anchorage, AK.

Samples were analyzed for:

Benzene, toluene, ethylbenzene, and xylenes (BTEX) by SW 8021B
Volatile organic compounds (VOCs) by SW 8260
Polynuclear aromatic hydrocarbons (PAHs) by 8270C SIMS
Glycols by 8015
Gasoline range organic compounds (GRO) by AK 101
Diesel range organic compounds (DRO) by AK 102
Residual range organic compounds (RRO) by AK 103
RCRA Metals by 6020/7471
Hexavalent Chromium by MSA 20-4.3 7196

The analytic data was reviewed for consistency with the *ADEC Technical Memorandum of 2006, Environmental Laboratory Data and Quality Assurance* (ADEC 2006b) requirements. An ADEC Laboratory Data Review Checklist was completed following this report.

The chains of custody were completed as the samples were packaged into coolers for transport. Trip blanks, temperature blanks, and gel ice were added as required. The samples were maintained at a temperature of 4 +/-2ºC from the time of collection to laboratory delivery. SGS receiving staff processed samples and designated them as two separate work orders: 1065083 and 1065125. Hexavalent chromium samples were analyzed by ARI of Tukwila WA and not assigned a work order.

The SGS final reports were presented as hard copy Level 2 data deliverable packages and electronic deliverables compatible with MS Access database. An MS Access query was developed to filter and review the project samples and the laboratory quality assurance data: continuous calibration verification (CCV), lab control sample and duplicate (LCS/LCSD), matrix spike and duplicate (MS/MSD) and the blank analyses.

Application of Data Flags
General data quality flagging conventions in the following table were used to indicate quality control anomalies.

Qualifier	Description
J	The analyte was positively identified, the quantitation was an estimate.
ND	The analyte was analyzed for, but not detected. The associated numerical value was at or below the MDL.
F	The analyte was positively identified but the associated numerical value was below the PQL.
R	The data are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria.
B	The analyte was found in an associated blank, as well as in the sample.
M	A matrix effect was present.

Temperature and Hold Time
Sample delivery temperatures were met for both work orders.

The glycol soil samples were analyzed after hold time, but the samples were maintained refrigerated at less than 4 degrees C. Glycols are relatively non-volatile; therefore, the concentrations in the sample containers should have been stable. Consequently, the data was considered usable. The data was J flagged (listed as an estimated concentration) and noted to be analyzed past hold times. In each case a low bias was possible for the sample detections.

There were no further hold time anomalies.

PARCCS
In regards to the October 9, 2006 ADEC Technical Memorandum 06-002 QA Summary Requirements the six parameters of precision, accuracy, representativeness, comparability, completeness, and sensitivity are stated clearly and concisely in the following.

Precision
Precision was measured from the field duplicate and LCS and LCSD analyses. Field duplicates, indicating the measure of precision relative to the sample collection, were found to have been acceptable for analyses (RPD less than 20%) of BTEX, PAHs, TCLP Chrome, and most VOC compounds. The exceptions were high RPDs, greater than 20%, for the duplicate VOC analyses, however these were non-target analytes.

Accuracy
Accuracy was measured from the surrogate recoveries and determined to be acceptable. Surrogate recoveries outside of laboratory control limits due to sample carry over and matrix interference were summarized. These samples were flagged with a J qualifier indicating an estimated quantification.

There were no rejected data related to surrogate failures.

Representativeness
The data deliverables of both work orders were consistent with the conditions of the Camp Lonely Work Plan. Samples were collected from locations specified in the approved work plan.

Comparability
Comparability between laboratories was not applicable to this investigation. Standard EPA method SW846 methods were used by the ADEC certified laboratory.

Completeness
The data set was 100% complete with no omissions or rejections. The information fulfilled the data quality objectives delineating and characterizing the site contamination.

Sensitivity
There were no trip blank analysis anomalies.

There were detectable quantities of chromium found in the method blank. The concentration in the sample was ten times greater than in the method blank. A B flag was applied to the affected chromium samples.

There were no further blank analysis anomalies.

Laboratory Data Review Checklist

1. Laboratory

   a. Did an ADEC CS approved laboratory receive and perform all of the submitted sample analyses?

   ☒ Yes ☐ No Comments:

   SGS Environmental - Work Order # 1065083

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses ADEC CS approved?

   ☐ Yes ☐ No Comments:

   Unknown: Glycol analysis by Bio-Chem in Grand Rapids Mich.

2. Chain of Custody (COC)

   a. COC information completed, signed, and dated (including released/received by)?

   ☒ Yes ☐ No Comments:

   b. Correct analyses requested?

   ☒ Yes ☐ No Comments:

3. Laboratory Sample Receipt Documentation

   a. Sample/cooler temperature documented and within range at receipt (4° ± 2° C)?

   ☒ Yes ☐ No Comments:

   b. Sample preservation acceptable – acidified waters, Methanol preserved VOC soil (GRO, BTEX, Volatile Chlorinated Solvents, etc.)?

   ☒ Yes ☐ No Comments:

   c. Sample condition documented – broken, leaking (Methanol), zero headspace (VOC vials)?

   ☒ Yes ☐ No Comments:

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, etc.?

☐ Yes ☒ No Comments:

No discrepancies.

e. Data quality or usability affected? Explain.

Comments:

No.

4. Case Narrative

a. Present and understandable?

☒ Yes ☐ No Comments:

b. Discrepancies, errors or QC failures identified by the lab?

☒ Yes ☐ No Comments:

c. Were all corrective actions documented?

☒ Yes ☐ No Comments:

d. What is the effect on data quality/usability according to the case narrative?

Comments:

No effect on the data usability.

5. Samples Results

a. Correct analyses performed/reported as requested on COC?

☒ Yes ☐ No Comments:

b. All applicable holding times met?

☐ Yes ☒ No Comments:

The glycol samples were analyzed after hold time but the samples were maintained refrigerated at less than 4 degrees C. Glycols are relatively non volatile, the concentrations in the sample containers should have been stable. Therefore, the data was considered usable. The data was J flagged (listed as an estimated concentration) and noted to be analyzed past hold times.

c. All soils reported on a dry weight basis?

☒ Yes ☐ No Comments:

N/A

d. Are the reported PQLs less than the Cleanup Level or the minimum required detection level for the project?

☒ Yes ☐ No Comments:

e. Data quality or usability affected? Explain.

Comments:

No.

6. <u>QC Samples</u>

a. Method Blank

i. One method blank reported per matrix, analysis and 20 samples?

☒ Yes ☐ No Comments:

ii. All method blank results less than PQL?

☒ Yes ☐ No Comments:

iii. If above PQL, what samples are affected?

Comments:

N/A

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

☐ Yes ☒ No Comments:

v. Data quality or usability affected? Explain.

Comments:

No.

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – One LCS/LCSD reported per matrix, analysis and 20 samples?

☐ Yes ☒ No Comments:

LCSD not performed.

ii. Metals/Inorganics – one LCS and one sample duplicate reported per matrix, analysis and 20 samples?

☐ Yes ☒ No Comments:

LCSD not performed.

iii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)

☒ Yes ☐ No Comments:

iv. Precision – All relative percent differences (RPD) reported and less than method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)

☐ Yes ☒ No Comments:

LCSD not performed.

v. If %R or RPD is outside of acceptable limits, what samples are affected?

Comments:

N/A

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

☐ Yes ☐ No Comments:

N/A

vii. Data quality or usability affected? Explain.

Comments:

N/A

c. Surrogates – Organics Only

i. Are surrogate recoveries reported for organic analyses – field, QC and laboratory samples?

☒ Yes ☐ No Comments:

ii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods 50-150 %R; all other analyses see the laboratory report pages)

☒ Yes ☐ No Comments:

iii. Do the sample results with failed surrogate recoveries have data flags? If so, are the data flags clearly defined?

☐ Yes ☐ No Comments:

N/A

iv. Data quality or usability affected? Explain.

Comments:

N/A

d. Trip blank – Volatile analyses only (GRO, BTEX, Volatile Chlorinated Solvents, etc.): Water and Soil

i. One trip blank reported per matrix, analysis and cooler?

☒ Yes ☐ No Comments:

Run for BTEX, initially not ordered on COC. Analyst found the omission and ran TB.

ii. All results less than PQL?

☒ Yes ☐ No Comments:

iii. If above PQL, what samples are affected?

Comments:

N/A

iv. Data quality or usability affected? Explain.

Comments:

N/A

e. Field Duplicate

i. One field duplicate submitted per matrix, analysis and 10 project samples?

☒ Yes ☐ No Comments:

BTEX 8021, RCRA Metals, and PAH SIM

ii. Submitted blind to lab?

☒ Yes ☐ No Comments:

By sample nomenclature convention.

iii. Precision – All relative percent differences (RPD) less than specified DQOs? (Recommended: 30% water, 50% soil)

RPD (%) = Absolute value of: $\frac{(R_1-R_2)}{((R_1+R_2)/2)} \times 100$

Where R_1 = Sample Concentration
R_2 = Field Duplicate Concentration

☒ Yes ☐ No Comments:

All less than 10% RPD

iv. Data quality or usability affected? Explain.

Comments:

No affect to the data usability.

f. Decontamination or Equipment Blank (if applicable)

☐ Yes ☐ No ☒ Not Applicable

i. All results less than PQL?

☐ Yes ☐ No Comments:

ii. If above PQL, what samples are affected?

Comments:

iii. Data quality or usability affected? Explain.

Comments:

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Defined and appropriate?

☐ Yes ☐ No Comments:

Completed by:	Nathan Webb
Title:	Staff Scientist
Date:	Wednesday, May 16, 2007
CS Report Name:	Camp Lonely
Report Date:	Tuesday, May 29, 2007
Consultant Firm:	Hoefler Consulting Group
Laboratory Name:	SGS Environmental Services
Laboratory Report Number:	1065083
ADEC File Number:	
ADEC RecKey Number:	

Laboratory Data Review Checklist

1. Laboratory

   a. Did an ADEC CS approved laboratory receive and perform all of the submitted sample analyses?

   ☒ Yes ☐ No Comments:

   SGS Environmental - Work Order # 1065125

   b. If the samples were transferred to another "network" laboratory or sub-contracted to an alternate laboratory, was the laboratory performing the analyses ADEC CS approved?

   ☒ Yes ☐ No Comments:

   Unknown: Glycol and hexavalent chrome analyses by Bio-Chem in GrandRapids Mich. and ARI in Tukwila WA, respectively.

2. Chain of Custody (COC)

   a. COC information completed, signed, and dated (including released/received by)?

   ☒ Yes ☐ No Comments:

   b. Correct analyses requested?

   ☒ Yes ☐ No Comments:

3. Laboratory Sample Receipt Documentation

   a. Sample/cooler temperature documented and within range at receipt (4° ± 2° C)?

   ☒ Yes ☐ No Comments:

   b. Sample preservation acceptable – acidified waters, Methanol preserved VOC soil (GRO, BTEX, Volatile Chlorinated Solvents, etc.)?

   ☒ Yes ☐ No Comments:

   c. Sample condition documented – broken, leaking (Methanol), zero headspace (VOC vials)?

   ☒ Yes ☐ No Comments:

d. If there were any discrepancies, were they documented? For example, incorrect sample containers/preservation, sample temperature outside of acceptable range, insufficient or missing samples, etc.?

☐ Yes ☒ No Comments:

No discrepancies.

e. Data quality or usability affected? Explain.

Comments:

No.

4. Case Narrative

a. Present and understandable?

☒ Yes ☐ No Comments:

b. Discrepancies, errors or QC failures identified by the lab?

☒ Yes ☐ No Comments:

c. Were all corrective actions documented?

☒ Yes ☐ No Comments:

d. What is the effect on data quality/usability according to the case narrative?

Comments:

No effect on the data usability.

5. Samples Results

a. Correct analyses performed/reported as requested on COC?

☒ Yes ☐ No Comments:

b. All applicable holding times met?

☒ Yes ☐ No Comments:

c. All soils reported on a dry weight basis?

☒ Yes ☐ No Comments:

N/A

d. Are the reported PQLs less than the Cleanup Level or the minimum required detection level for the project?

☒ Yes ☐ No Comments:

e. Data quality or usability affected? Explain.

Comments:

No.

6. QC Samples

a. Method Blank

i. One method blank reported per matrix, analysis and 20 samples?

☒ Yes ☐ No Comments:

ii. All method blank results less than PQL?

☐ Yes ☒ No Comments:

Chromium above PQL

iii. If above PQL, what samples are affected?

Comments:

CLSS12E-2.0, -D2.0, -C-2.0, -B-1.5, -A-2.0, and CLSS21-1.0.

iv. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

☒ Yes ☐ No Comments:

Data was flagged with B qualifier.

v. Data quality or usability affected? Explain.

Comments:

No. Trace level in blank 3 is orders of magnitude less than sample detections.

b. Laboratory Control Sample/Duplicate (LCS/LCSD)

i. Organics – One LCS/LCSD reported per matrix, analysis and 20 samples?

☒ Yes ☐ No Comments:

ii. Metals/Inorganics – one LCS and one sample duplicate reported per matrix, analysis and 20 samples?

☒ Yes ☐ No Comments:

iii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods: AK101 60%-120%, AK102 75%-125%, AK103 60%-120%; all other analyses see the laboratory QC pages)

☒ Yes ☐ No Comments:

iv. Precision – All relative percent differences (RPD) reported and less than method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods 20%; all other analyses see the laboratory QC pages)

☒ Yes ☐ No Comments:

v. If %R or RPD is outside of acceptable limits, what samples are affected?

Comments:

N/A

vi. Do the affected sample(s) have data flags? If so, are the data flags clearly defined?

☐ Yes ☐ No Comments:

N/A

vii. Data quality or usability affected? Explain.

Comments:

N/A

c. Surrogates – Organics Only

i. Are surrogate recoveries reported for organic analyses – field, QC and laboratory samples?

☒ Yes ☐ No Comments:

ii. Accuracy – All percent recoveries (%R) reported and within method or laboratory limits? And project specified DQOs, if applicable. (AK Petroleum methods 50-150 %R; all other analyses see the laboratory report pages)

☐ Yes ☒ No Comments:

iii. Do the sample results with failed surrogate recoveries have data flags? If so, are the data flags clearly defined?

☐ Yes ☒ No Comments:

Non target analyate.

iv. Data quality or usability affected? Explain.

Comments:

RRO data was not used.

d. Trip blank – Volatile analyses only (GRO, BTEX, Volatile Chlorinated Solvents, etc.): Water and Soil

i. One trip blank reported per matrix, analysis and cooler?

☒ Yes ☐ No Comments:

8260 VOC

ii. All results less than PQL?

☒ Yes ☐ No Comments:

iii. If above PQL, what samples are affected?

Comments:

N/A

iv. Data quality or usability affected? Explain.

Comments:

N/A

e. Field Duplicate

i. One field duplicate submitted per matrix, analysis and 10 project samples?

☒ Yes ☐ No Comments:

TCLP Chrome and 8260VOC

ii. Submitted blind to lab?

☒ Yes ☐ No Comments:

By sample nomenclature convention.

iii. Precision – All relative percent differences (RPD) less than specified DQOs? (Recommended: 30% water, 50% soil)

RPD (%) = Absolute value of: $\frac{(R_1-R_2)}{((R_1+R_2)/2)} \times 100$

Where R_1 = Sample Concentration
R_2 = Field Duplicate Concentration

☒ Yes ☐ No Comments:

All less than 10% RPD

iv. Data quality or usability affected? Explain.

Comments:

No affect to the data usability.

f. Decontamination or Equipment Blank (if applicable)

☐ Yes ☐ No ☒ Not Applicable

i. All results less than PQL?

☐ Yes ☐ No Comments:

ii. If above PQL, what samples are affected?

Comments:

iii. Data quality or usability affected? Explain.

Comments:

7. Other Data Flags/Qualifiers (ACOE, AFCEE, Lab Specific, etc.)

a. Defined and appropriate?

☐ Yes ☐ No Comments:

Completed by:	Nathan Webb
Title:	Satff Scientist
Date:	Wednesday, May 16, 2007
CS Report Name:	Camp Lonely
Report Date:	Tuesday, May 29, 2007
Consultant Firm:	Hoefler Consulting Group
Laboratory Name:	SGS Environmental Services
Laboratory Report Number:	1065125
ADEC File Number:	
ADEC RecKey Number:	

Appendix E

TPH Concentration vs. Sheen Type (MWH 2003)

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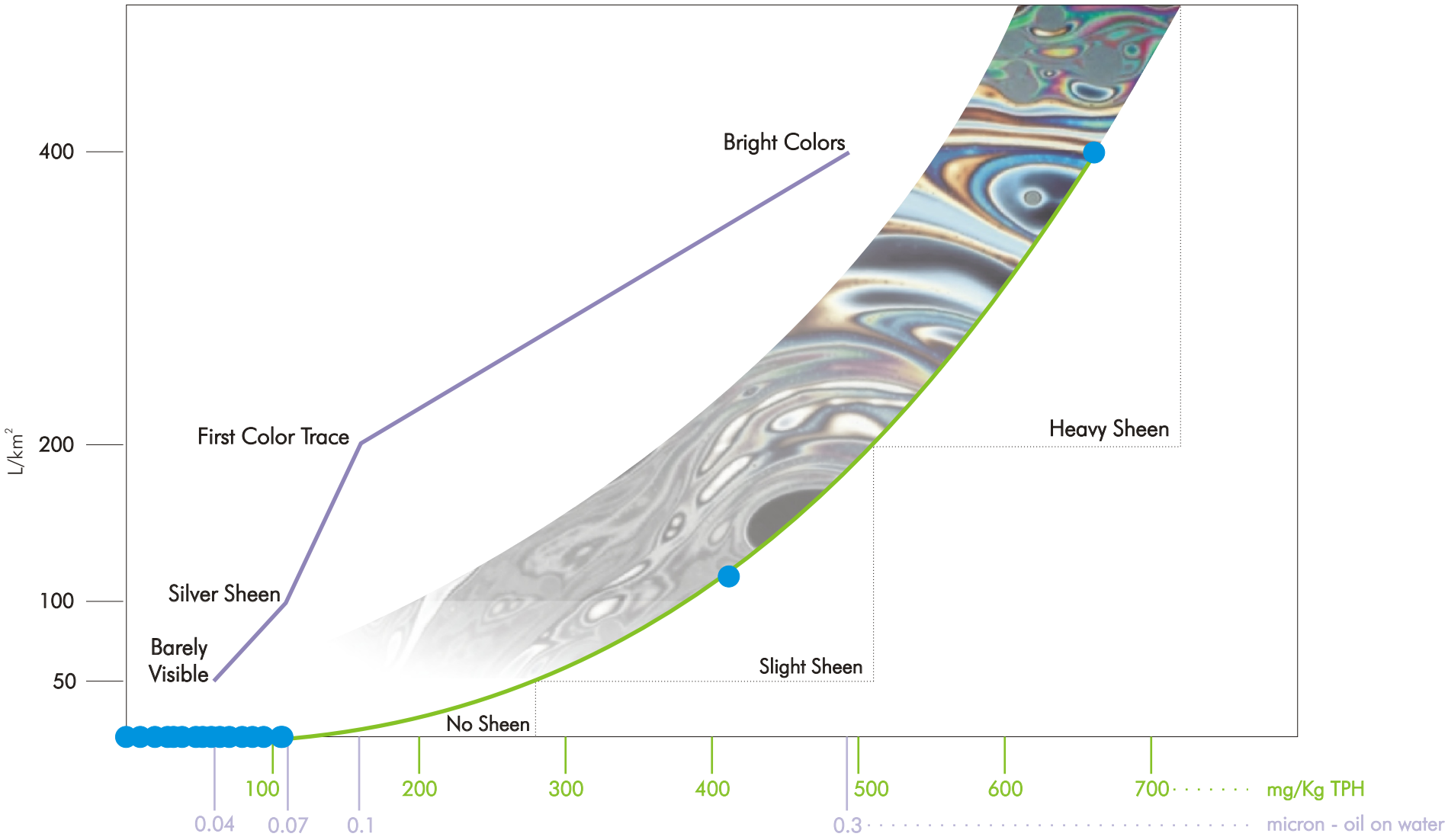
JOB No. 1850982.010101



MWH
Anchorage, Alaska

"Oil Spill Slide Rule" 1985 Government Publishing Office The Hague, The Netherlands

extrapolated curve based on 418.1 TPH results vs. observed sheen

418.1 TPH results vs. observed sheen

FIGURE 5

BP EXPLORATION (ALASKA) INC.
EOA PRODUCTION RESERVE PIT WINTER FIELD SCREENING TRIAL

TPH CONCENTRATION VS. SHEEN TYPE

Appendix F

Results of 2005 Geophysical Surveys

Figure 1 – EM-61 Survey (GAEA 2005)

Figure 2 – EM-61 Survey (USGS 2005)

2005 USGS Report (Only the portion of the report pertinent to the Camp Lonely site is provided)

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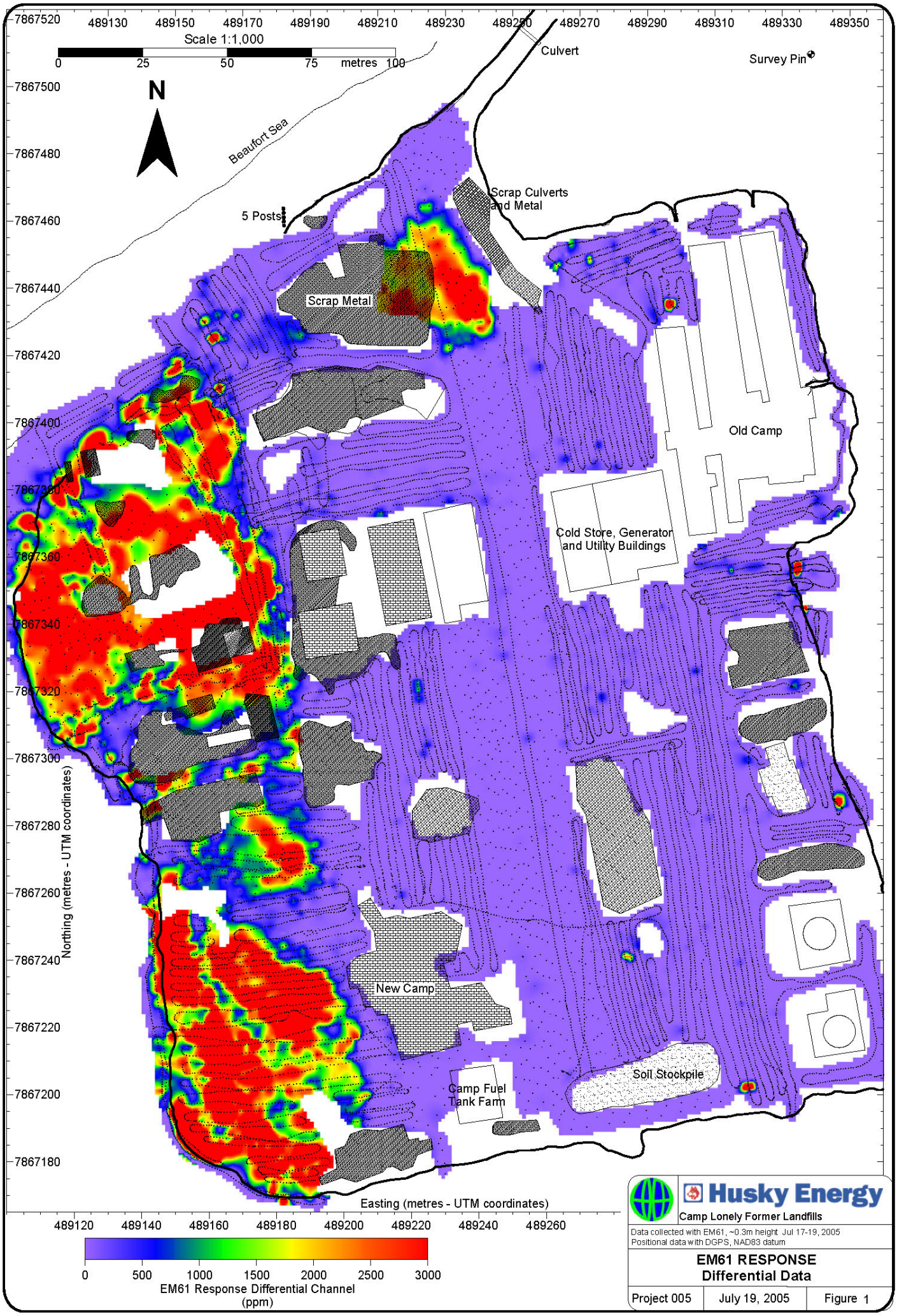
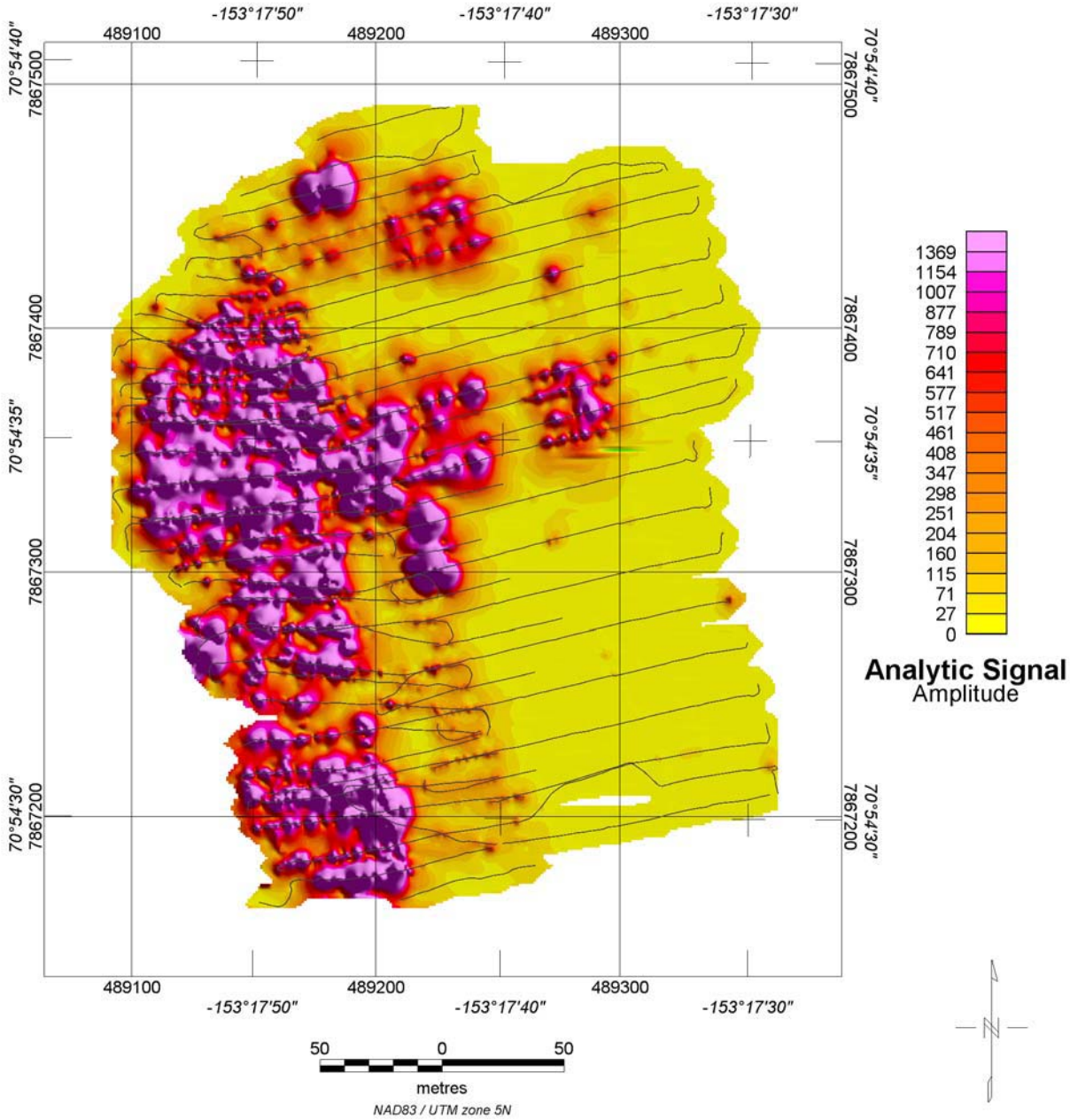

Scale 1:1,000
0 25 50 75 metres 100
N
Beaufort Sea
Culvert
Survey Pin
5 Posts
Scrap Culverts and Metal
Scrap Metal
Old Camp
Cold Store, Generator and Utility Buildings
New Camp
Camp Fuel Tank Farm
Soil Stockpile
Northing (metres - UTM coordinates)
Easting (metres - UTM coordinates)
7867520
7867500
7867480
7867460
7867440
7867420
7867400
7867380
7867360
7867340
7867320
7867300
7867280
7867260
7867240
7867220
7867200
7867180
489120 489130 489140 489150 489160 489170 489180 489190 489200 489210 489220 489230 489240 489250 489260 489270 489290 489310 489330 489350
0 500 1000 1500 2000 2500 3000
EM61 Response Differential Channel (ppm)
Husky Energy
Camp Lonely Former Landfills
Data collected with EM61, ~0.3m height Jul 17-19, 2005
Positional data with DGPS, NAD83 datum
EM61 RESPONSE
Differential Data
Project 005
July 19, 2005
Figure 1



USGS magnetometer survey of Camp Lonely Pad in August, 2005.
Figure taken from USGS 2006 report.

Figure 2

Bureau of Land Management Alaska Northern Field Office

Geophysical Investigations of Selected Infrastructure Sites within the National Petroleum Reserve, Alaska

By Jared D. Abraham, Eric D. Anderson, Bethany L. Burton, and Jeffrey E. Lucius

Administrative Report 2006-LAI-05-0015

U.S. Department of the Interior
U.S. Geological Survey

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Geophysical Investigations of Selected Infrastructure Sites within the National Petroleum Reserve, Alaska

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Executive Summary

The Crustal Imaging and Characterization Team of the U.S. Geological Survey entered into an Intra-agency Agreement with the U.S. Bureau of Land Management Alaskan Northern Field Office to study the geophysical response of anthropogenic impacts in the National Petroleum Reserve-Alaska (NPRA), located on Alaska's North Slope. The North Slope of Alaska presents new challenges in our ability to clearly identify and understand subsurface anomalies. The complexity of the tundra soil, which consists of intermixed ice lenses, permafrost, saline sediments, and air pockets, increases the difficulty of interpreting geophysical measurements. Rapid shoreline erosion over the last five years along the Beaufort and Chukchi Seas is now impacting infrastructure within the NPRA. Erosion along the shoreline of Teshekpuk Lake and the Colville River is also of concern. In 2005, 38 NPRA infrastructure sites were identified as being in a high risk category for shoreline erosion. Infrastructure sites include airstrips, current and former Distant Early Warning sites, gravel pads, road segments, old landfills, and legacy exploration/research wells with associated reserve pits, flare pits, and fuel pits.

The 2005 geophysical investigation of selected infrastructure sites within the NPRA had two primary objectives. One objective was to develop a better understanding of the use of broadband EM

induction equipment to provide accurate volume estimates. The second objective was to geophysically characterize impacts and signatures of wastes or artifacts within the infrastructure sites.

The first objective, to better utilize portable broadband EM induction systems to determine volumes of materials, resulted in the development of new procedures in the collection, processing and inversion of EM data. To ensure robust inversions of the geophysical data collected from a broadband EM induction instrument (Geophex GEM-2), a new resistivity instrument that utilizes capacitive-coupling (Geometrics Ohmmapper) was deployed in conjunction with a traditional total field magnetometer (Geometrics G-858).

For the first time, a capacitively coupled resistivity system was used to calibrate the response of the GEM-2. This system, while extremely portable and efficient, has its own limitations. Noise was the predominate problem with the capacitively coupled resistivity data. We developed a new procedure to remove noise by using the measured voltage at the receivers. This procedure facilitated the inversion of the capacitively coupled resistivity data, which were subsequently used to develop the forward models for the calculation of the GEM-2 calibration offsets.

For the inversion of the EM induction data, methods determined from earlier investigations were used at a site-wide scale. This use led to the development of procedures for the identification and delineation of anomalies in 3-D within the NPRA. Volume calculations and aerial extents could then be estimated within the study sites.

The second objective of this study was to geophysically characterize the subsurface at selected sites within the NPRA. Eleven NPRA infrastructure sites were studied during August 2005 using geophysical methods. Extent and volume of potential contamination and buried waste were determined. Additionally, indications on the extent and presence of permafrost below the sites were observed. Appropriate ground truth needs to be used to obtain the largest benefit from the geophysical surveys. This includes sampling anomalous areas for each site and evaluating

contaminant potential by accurately placing sample and boring locations. If sampling results indicate that contaminated materials need to be removed, the geophysical data and 3-D geophysical volume models can better constrain the area and the amount of material that needs to be moved offsite. Use of the DEM and magnetic interpretive maps will greatly assist in the remediation of the sites.

3.2 Camp Lonely Landfill

3.2.1 Site Description

Camp Lonely is located near the Arctic coast approximately 135 km southeast of Barrow, AK (figure 3.2.1.1) and approximately 1 km west of the Point Lonely (POW-1) DEW line station, which

began operation in 1953. Camp Lonely was first used by the US Navy for exploration activities for the NPRA and by NPRA contractor Husky Oil. The USGS took over exploration activities from the US Navy in 1977. In 1977, Husky Oil was granted a solid waste permit, which was amended in 1978 to include the USGS, Husky Oil, and the Point Lonely DEW station contractor. The landfill at Camp Lonely operated from approximately 1977 to 1986. Most waste was incinerated before being placed in the landfill. In addition to the authorized solid waste, such as metal, glass, ash, rubber, chemicals, and domestic waste, Husky Oil allowed disposal of unauthorized waste such as batteries, waste oil, paint solvents, epoxy, and 55 gallon drums (Alaska DEC, 2005). Husky Oil abandoned the camp in 1981. Waste disposal continued until the camp was closed in 1986. The US Air Force and the BLM have conducted site visits and assessments from 1990, when the landfill was closed, to the present.

Figure 3.2.1.2 shows a 1979 picture of the site when it was still an active camp. Figure 3.2.1.3 shows the camp as it appeared in 2003 before the few remaining buildings were removed in 2005; the extent of shoreline erosion is also identified. Figure 3.2.1.4 shows how the site appeared in August 2005 when the USGS geophysical surveys were performed. Magnetic total field and EM induction data were collected August 22 and 25, 2005. The capacitively coupled resistivity system was not used at this site due to time constraints.

3.2.2 GPS

The GPS base station was set up on the same location for both acquisition events at Camp Lonely, August 22 and 25, 2005. The 2.5 hours of data from the first day were submitted to OPUS for processing. Table 3.2.2.1 shows the OPUS-corrected base station coordinates. A high-resolution DEM was created from these surveys and is shown in figure 3.2.2.1. The NAVD88 elevation ranges from 1.8 to 4.8 m.

Table 3.2.2.1 Camp Lonely GPS base station coordinates

ITRF00 Latitude (North)	ITRF00 Longitude (West)	ITRF00 Ellipsoid	UTM NAD83 Zone 5N X	UTM NAD83 Zone 5N Y	NAVD88 Elevation (m)

		(m)	(m)	(m)	
70° 54’ 33.60641”	153° 17’ 49.36398”	0.499	467041.90	7864412.63	3.49

3.2.3 Total Magnetic Field

Approximately 8188 line meters of MVG and total field data were collected at Camp Lonely. The magnetic data were collected and processed as described in the Methods section. The nominal line spacing was 10 meters, trending E/W over an area of approximately 75,000 m^2 (figure 3.2.3.1). The location of ferrous metallic objects can be clearly interpreted from the high amplitude anomalies in the analytic signal. Although a few discrete anomalies were observed, the majority of the anomalies can be characterized as large sections or cells containing ferrous metallic objects. The main section of the landfill is along the western side of the site. However, there are two additional anomalous regions that span several survey path lines located in the northeastern quadrant of the site. As shown in figure 3.2.3.2, large amounts of debris have collected along the western side of the former camp along the edge of the one meter embankment that separated a freshly leveled section from the relatively undisturbed salt marsh to the west. This debris included drift wood and large metallic objects such as pipes and barrels. Barrel lids were also observed on the surface in the southwest section.

3.2.4 EM Induction

The EM induction survey was acquired in the same manner as the magnetic survey: parallel E/W trending, 10 m spaced lines (figure 3.2.4.1), acquiring 7,774 line meters of data over 75,000 m^2. Because there were no capacitively coupled resistivity data to calibrate the EM induction data, the EM data were simply corrected for temporal drift using the pre- and post-calibration files. These drift-corrected data, however, were still inverted using the methods described above. After inversion and processing 7,072 line meters on EM induction data were georeferenced. A 3-D voxel model of the site was produced with a 1 x 1 x 0.5 m (x,y,z) grid cell size using the resistivity sections.

Figure 3.2.4.1 shows the resistivity sections inverted from the EM induction data along each of the survey paths. The majority of the site is resistive with values 100 ohm-m and greater, with resistivity increasing with depth. There are also areas of very low resistivity (red shades) along the western side and to the north. To aid in the interpretation of the 3-D inverted EM induction data, three 2-D depth slices at 0, 2.5, and 5 m are shown in figures 3.2.4.2 through 3.2.4.4, respectively. The low resistivity areas observed on the surface continue to the maximum depth of the model at about 7 m below the surface. The majority of the site is relatively resistive and tends to increase with depth. The metallic waste buried along the western portion of the site is contributing to the low resistivity values. Depth of waste can not be determined from the EM induction measurements in this area.

3.2.5 Combined Results

Figure 3.2.5.1 shows the combined magnetic field and EM induction interpretations for Camp Lonely. The main anomalous area, present in both datasets, is the landfill area on the west side of the site. The analytic signal amplitudes are very high and the resistivity is very low over this area, indicating large amounts of ferrous metal and possibly other conductive waste. The magnetic field data also indicate that ferrous metal is present in the discrete, low resistivity areas in the north-central portion of the site. The very high analytic signal amplitudes cover approximately 23,300 m^2, and the secondary magnetic anomalies with smaller amplitudes cover an additional 2,740 m^2. The volume of ferrous material cannot be determined from these data, because the magnetic field was not inverted for depth, and the presence of large amounts of metal creates artifacts in the EM inversion. Therefore, determination of the true depth to which the landfill extends is not possible with these datasets. As a reference, however, the volume of material with moderately low resistivity values of 100 ohm-m or less is 191,700 m^3, and the volume of material with very low resistivity values of 25 ohm-m or less is 138,900 m^3. The area of 100 ohm-m and less is interpreted to represent the disturbed areas of the landfill containing small debris and miscellaneous conductive waste. The area of 25 ohm-m or less

represents areas of large metallic objects and waste. At the ground surface, the 100 ohm-m and 25 ohm-m threshold resistivity values cover areas of 22,520 m^2 and 9,010 m^2, respectively, as shown in figure 3.2.5.1.

Other anomalies of interest are the linear, north-south trending lower resistivity anomaly on the southeastern section of the site and the higher resistivity regions observed in the EM induction data. The linear feature is about 13 m wide and 110 m long. Because this anomaly does not appear in the magnetic data, it is probably a non-ferrous source. There are also regions in the EM induction data that exhibit higher resistivity than the surrounding areas. These variations may be due to different levels of compaction from when this former camp was re-graded. The geophysical anomalies from Camp Lonely are summarized in table 3.2.5.1.

Table 3.2.5.1 Summary of Camp Lonely anomalies

NAME OF ANOMALY	**AREA (M^2)**	**VOLUME (M^3)**	**METHOD**	**INTERPRETED SOURCE**
100 ohm-m or less	22,520	191,700	EM induction	Miscellaneous waste
25 ohm-m or less	9,010	138,900	EM induction	Large metallic objects
Very High magnetic	23,300	NA	Magnetic analytical signal amplitude	Main dump large ferrous metallic wastes
Secondary magnetic	2,740	NA	Magnetic analytical signal amplitude	Small amounts of ferrous metal waste and debris

4.0 Conclusions

The 2005 geophysical investigation of selected infrastructure sites within the National Petroleum Reserve, Alaska had two primary objectives. One objective was to develop an improved understanding of the use of broadband EM induction equipment to better provide accurate volume estimates. The second objective was to geophysically characterize impacts and signatures of wastes or artifacts in the geologically unique tundra and permafrost environments found on the North Slope of Alaska.

The first objective, to better utilize man-portable broadband EM induction systems to determine volumes of materials, resulted in the development of new procedures in data collection, processing and inversion. As part of this objective, and to ensure robust inversions of the geophysical data collected from a broadband EM induction instrument, a new resistivity instrument that utilizes capacitive coupling was deployed in conjunction with a traditional MVG magnetometer. These efforts lead to the development of new procedures for data collection and inversion of EM induction data.

The study utilized the Geophex GEM-2 EM induction system. It is important that the quality of the acquired GEM-2 data be inspected in the field. The standard field procedure was to download, plot, and inspect the raw apparent conductivity data before demobilizing. Unfortunately, it was determined that the GEM-2 had malfunctioned in the field at the Kogru Landfill and North Kalikpik well site after demobilization. The malfunctions were not apparent in the field inspection of the data using the standard inspection procedure. It is suggested that a procedure be developed to automate the checking of the GEM-2 data in the field. What needs to be developed is the inspection of the in-phase and quadrature components, and field inversions of data, to determine the correct frequency scaling and linear response of the system. This is currently out of the scope of this study, but crucial for future utilization of this technique.

For the first time, a capacitively coupled resistivity system was used to calibrate the response of the GEM-2. This system, while extremely portable and efficient, has its own limitations. Noise was the predominate problem with the utilization of the capacitively coupled resistivity data. Therefore, a new procedure was developed to perform noise removal by utilizing the measured voltage at the receivers. Also, a better understanding of the initial inversion settings was required to better determine an accurate depth structure for the resistivity. This included smoothing the inverted parameters to ensure the model was not fitting the noise in the data. These inverted capacitively coupled resistivity sections were used to develop the forward models for the calculation of the GEM-2 calibration offsets. It was found that the calibration offsets were dependent on the magnitude of the GEM-2 response. A better calibration approach may be to utilize calibration coils having a known response to determine a two-point calibration for each component of each frequency utilized by the GEM-2 in the field.

For processing the Alaska EM data, a new program was developed to convert raw GEM-2 data to appropriate formats to allow accurate inversion. This program allowed for decimation of data based on a radial search, as well as applying calibration offsets and removal of drift.

For the inversion of the EM induction data, the application of the procedures determined from earlier investigations (Abraham and others, 2006) was used. For the specific application at the study sites in Alaska it was determined that the in-phase values were unstable and were not used in any of the inversions. The instability of the in-phase measurements from the GEM-2 may limit the ability to resolve fine structure in the resistivity models. However, this needs to be investigated in detail with the addition of better calibrations using calibration coils in controlled environments.

To better estimate the depth of penetration of the EM induction and to eliminate the effects of a reference model on the final inversion, two reference models were used in the inversions and compared. A GUI windows program (ConvertToPa, a USGS in-house program, information available from the author) was written to compare the two models and output a data structure that could be geo-located and imported into graphical display programs with a few mouse clicks. This is the first approach to automating the inversion and QC/QA of the EM induction data.

The second objective of this study was to geophysically characterize the subsurface at selected sites within the NPRA. Eleven NPRA infrastructure sites were studied during August 2005 using geophysical methods to determine the extent and volume of potential contamination and buried waste. Additionally, indications on the presence and extent of permafrost below the sites were observed. This was accomplished as described in the Results section on the individual sites. However, we feel this is only the first step in the utilization of the geophysical data. Because a low resistivity anomaly can be caused by several factors, environmental sampling needs to be accomplished to identify the source of geophysical anomalies. Appropriate ground truth needs to be used to obtain the largest benefit from the geophysical surveys. This includes the sampling of indicated anomalous areas for each site and evaluation of contaminant potential by “better drilling and sampling”. If sampling results indicate that contaminated materials need to be removed, the geophysical data and 3-D geophysical volume calculations can better constrain the area and amount of material that needs to be moved offsite.

Utilization of the DEM and magnetic interpretive maps will greatly assist in the remediation of the sites.

In conclusion, these geophysical studies also helped advance the state-of-the-art in the application of geophysical methods in arctic environments. Further study and research in the calibration of broadband EM induction instruments needs to be completed. This should also include the development of an efficient method of checking data quality in the field. Finally, indications of the absence of permafrost beneath some study sites needs further investigation to identify potential correlations with accelerated erosion rates.

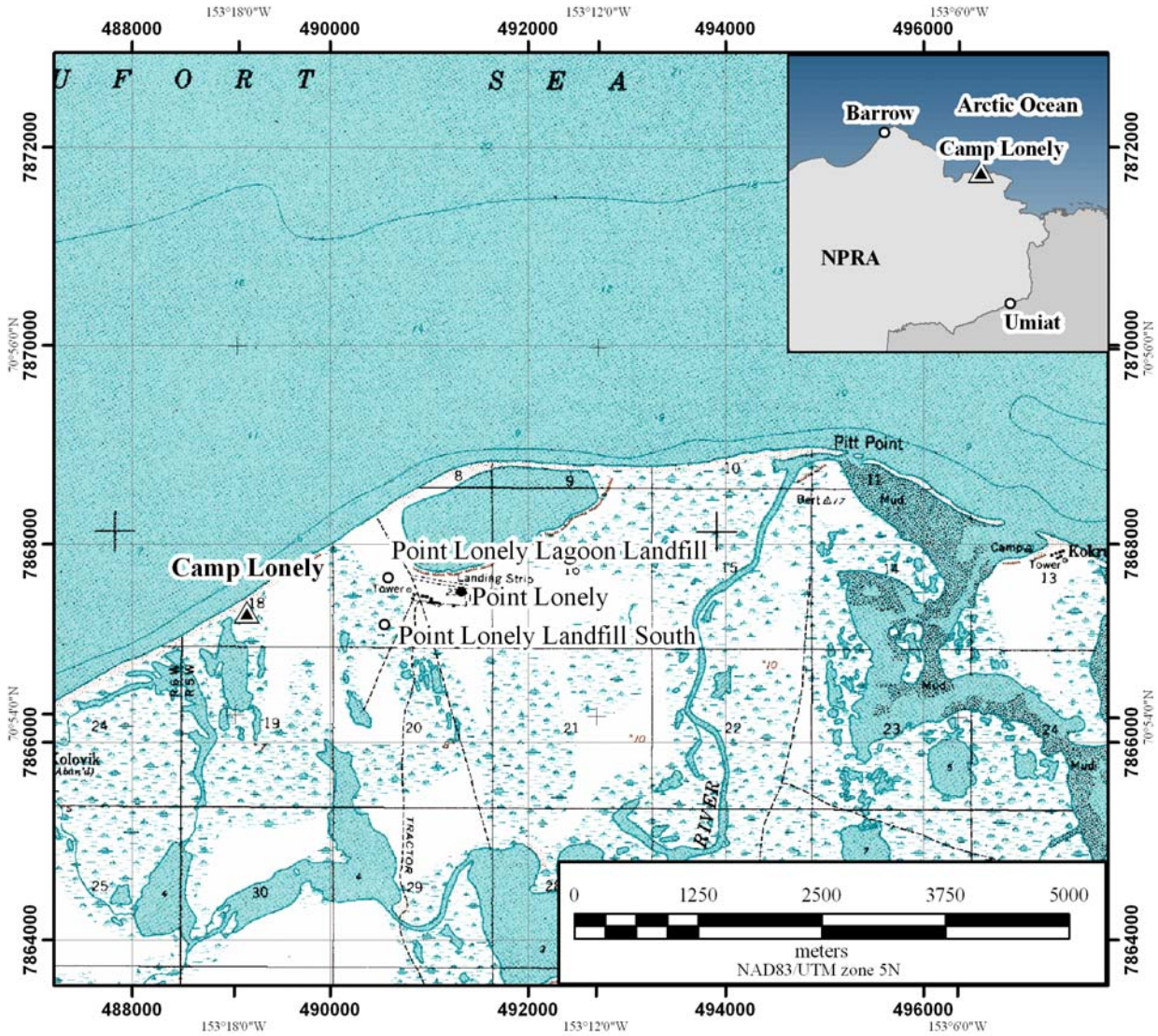

Figure 3.2.1.1. Location map for Camp Lonely Landfill in Alaska, USA. Locations of Point Lonely Lagoon Landfill and Point Lonely Landfill South are shown for reference.

Figure 3.2.1.2. Aerial view of Camp Lonely during its operation in 1979 (photograph courtesy of BLM). View is to the southwest.

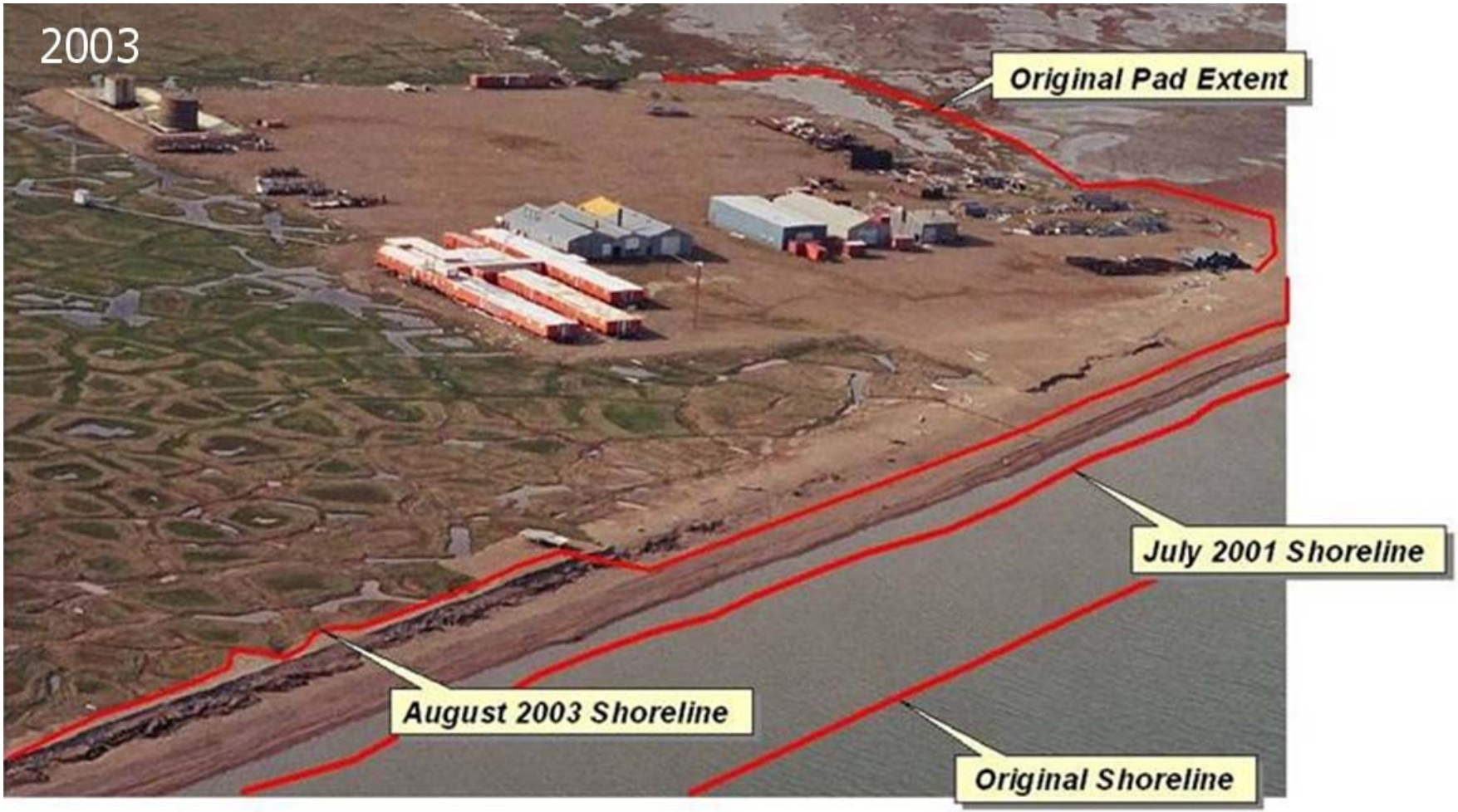

Figure 3.2.1.3. Aerial view of Camp Lonely in 2003 showing building and operations at that time and erosion extents (photograph courtesy of BLM). View is to the southwest.

Figure 3.2.1.4. Aerial view of Camp Lonely in August 2005 when the geophysical surveys were performed. View is to the west.

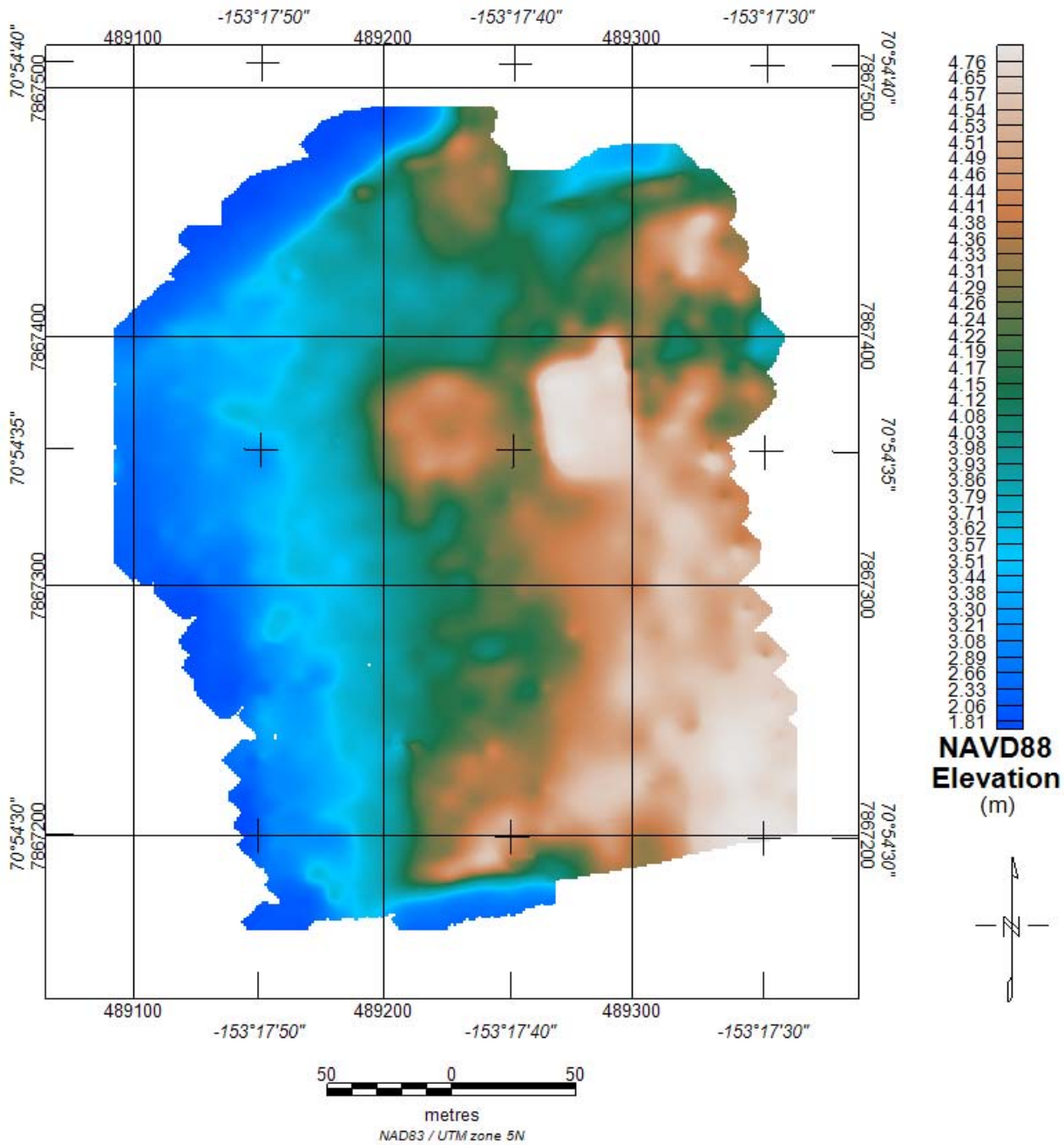

Figure 3.2.2.1. Map of the high-resolution DEM of Camp Lonely, August 2005.

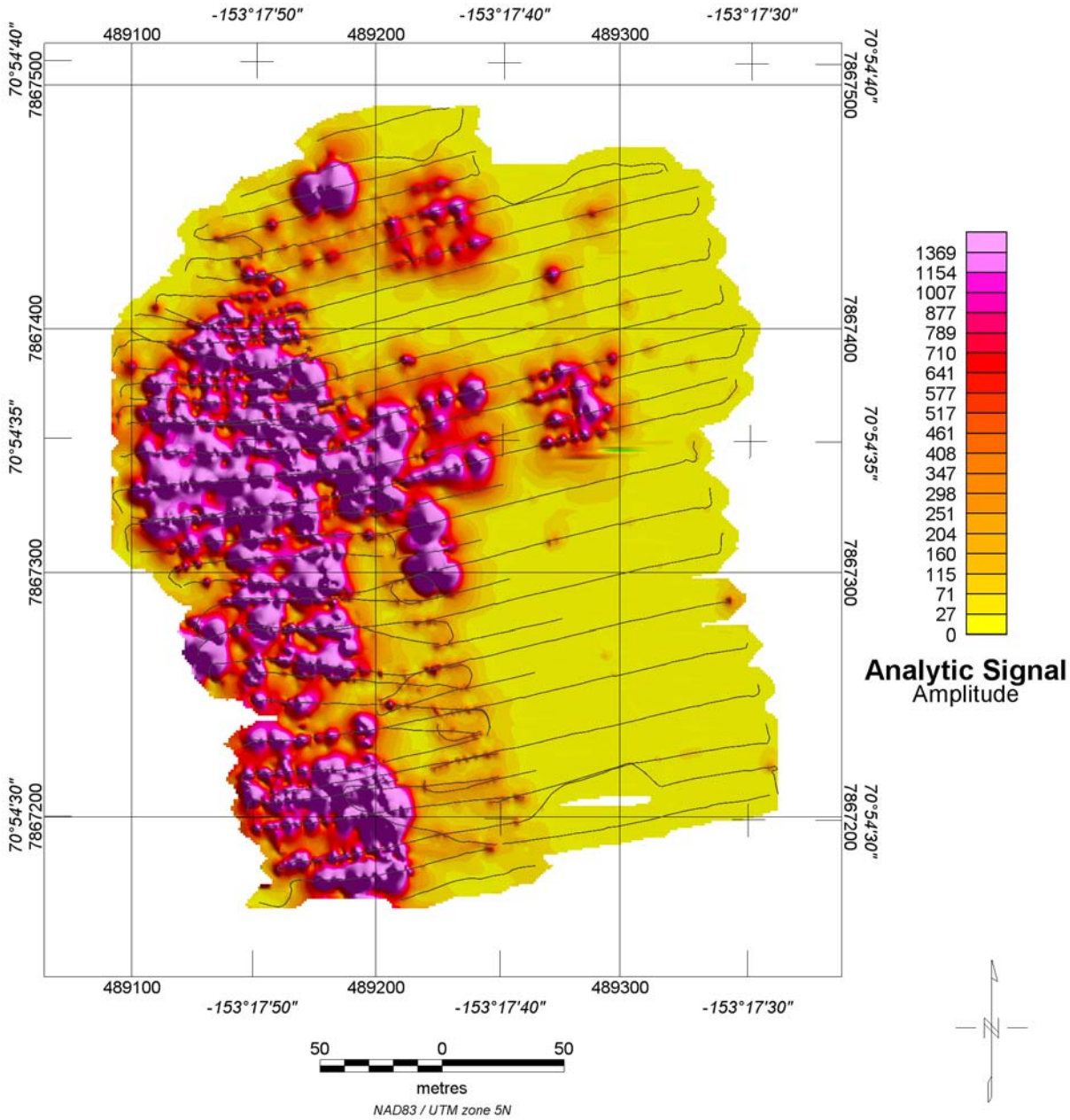

Figure 3.2.3.1. Map of the analytic signal of the bottom sensor total magnetic field of Camp Lonely, August 2005, with the survey path lines overlaid in gray.

Figure 3.2.3.2. August 2005 aerial view of Camp Lonely. Debris such as driftwood and metal waste is exposed on the edge of the three-foot embankment that separates the freshly leveled section from the relatively undisturbed salt marsh to the west. View is to the east-northeast.

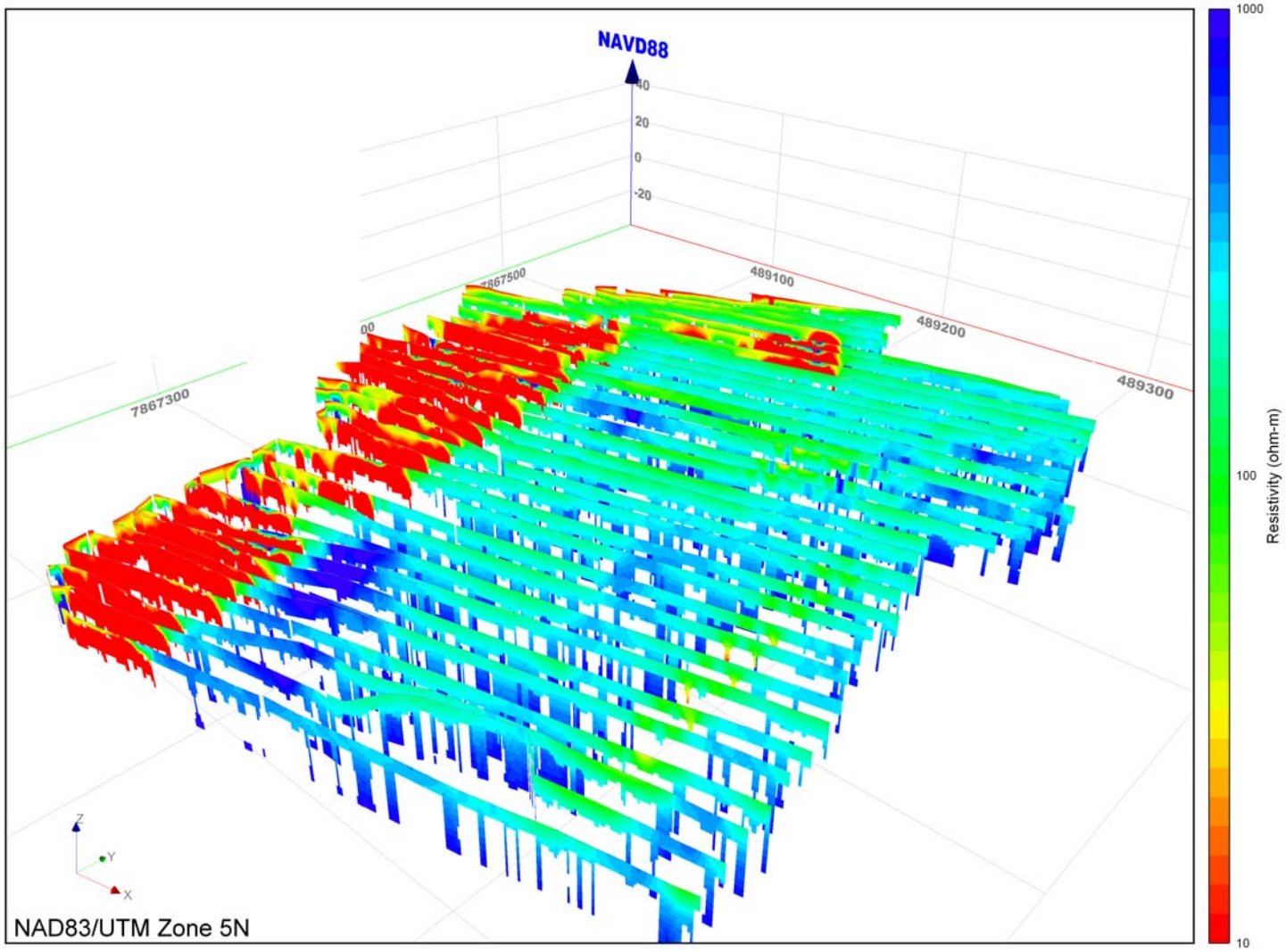

Figure 3.2.4.1. Oblique view of resistivity sections from the inverted EM induction data at Camp Lonely, August 2005.

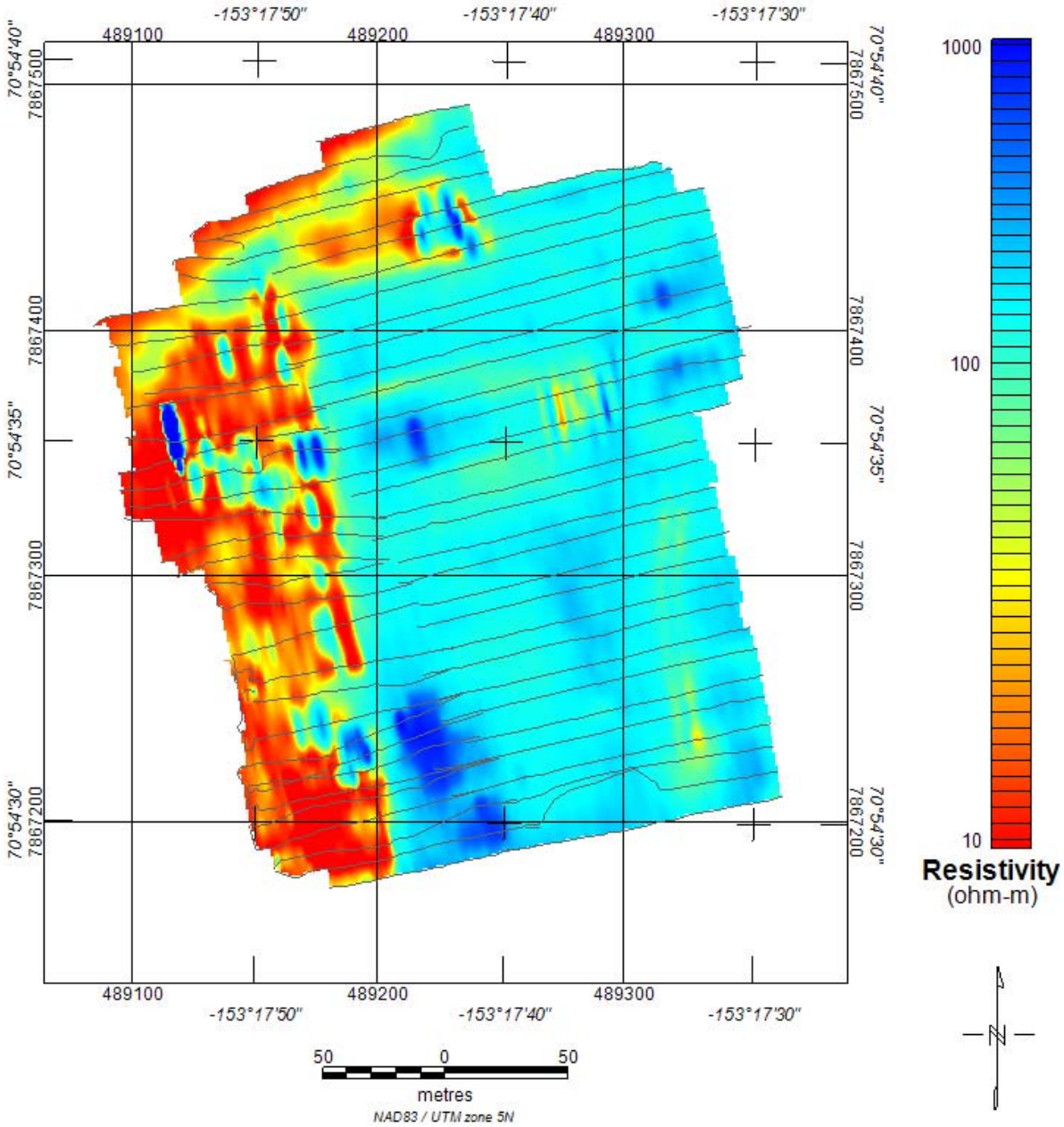

Figure 3.2.4.2. Depth slice 0.0 m below ground surface of the 3-D resistivity model constructed from the EM induction data inversions at Camp Lonely, August 2005. Data collection line locations are also shown.

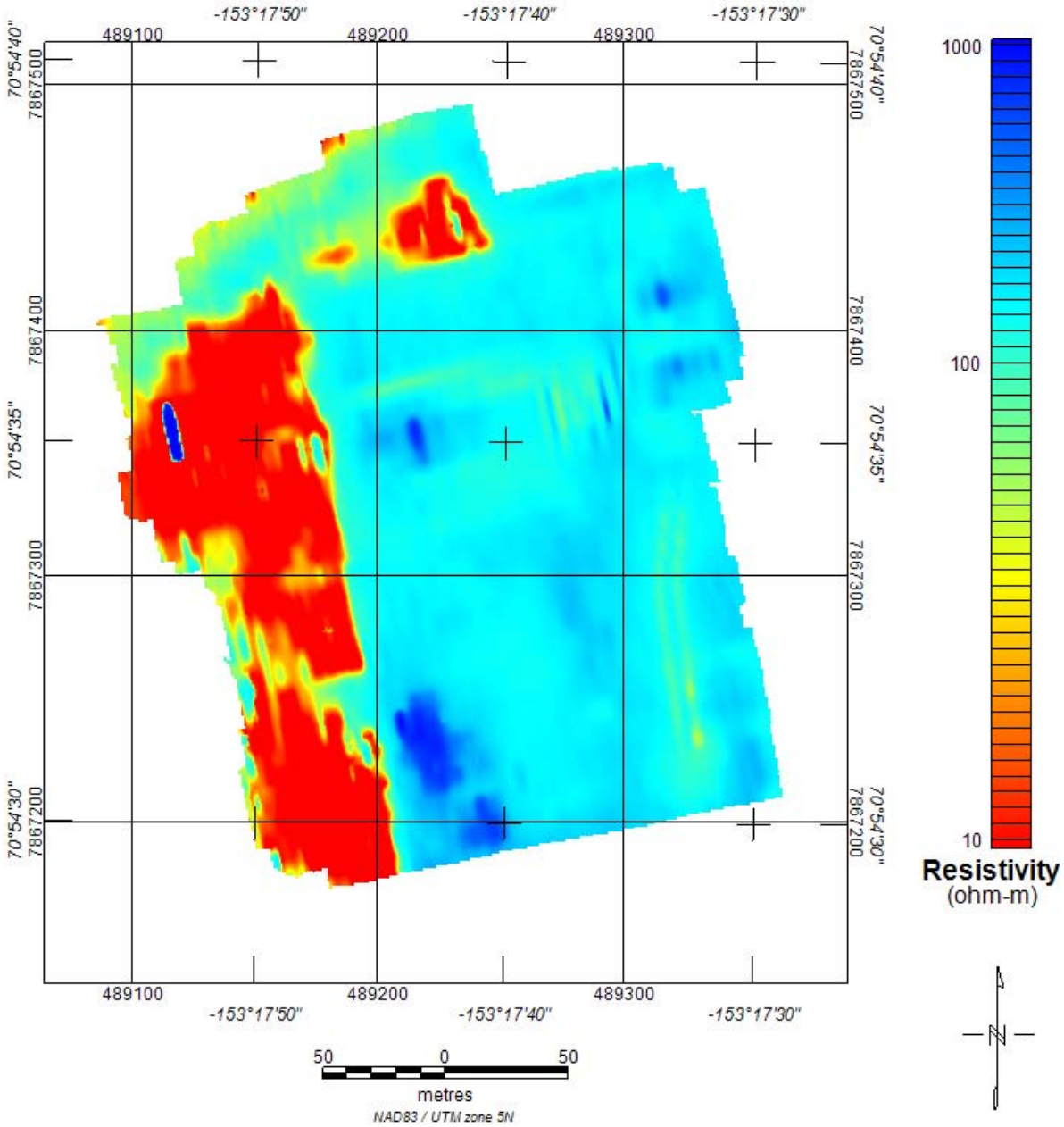

Figure 3.2.4.3. Depth slice 2.5 m below ground surface of the 3-D resistivity model constructed from the EM induction data inversions at Camp Lonely, August 2005.

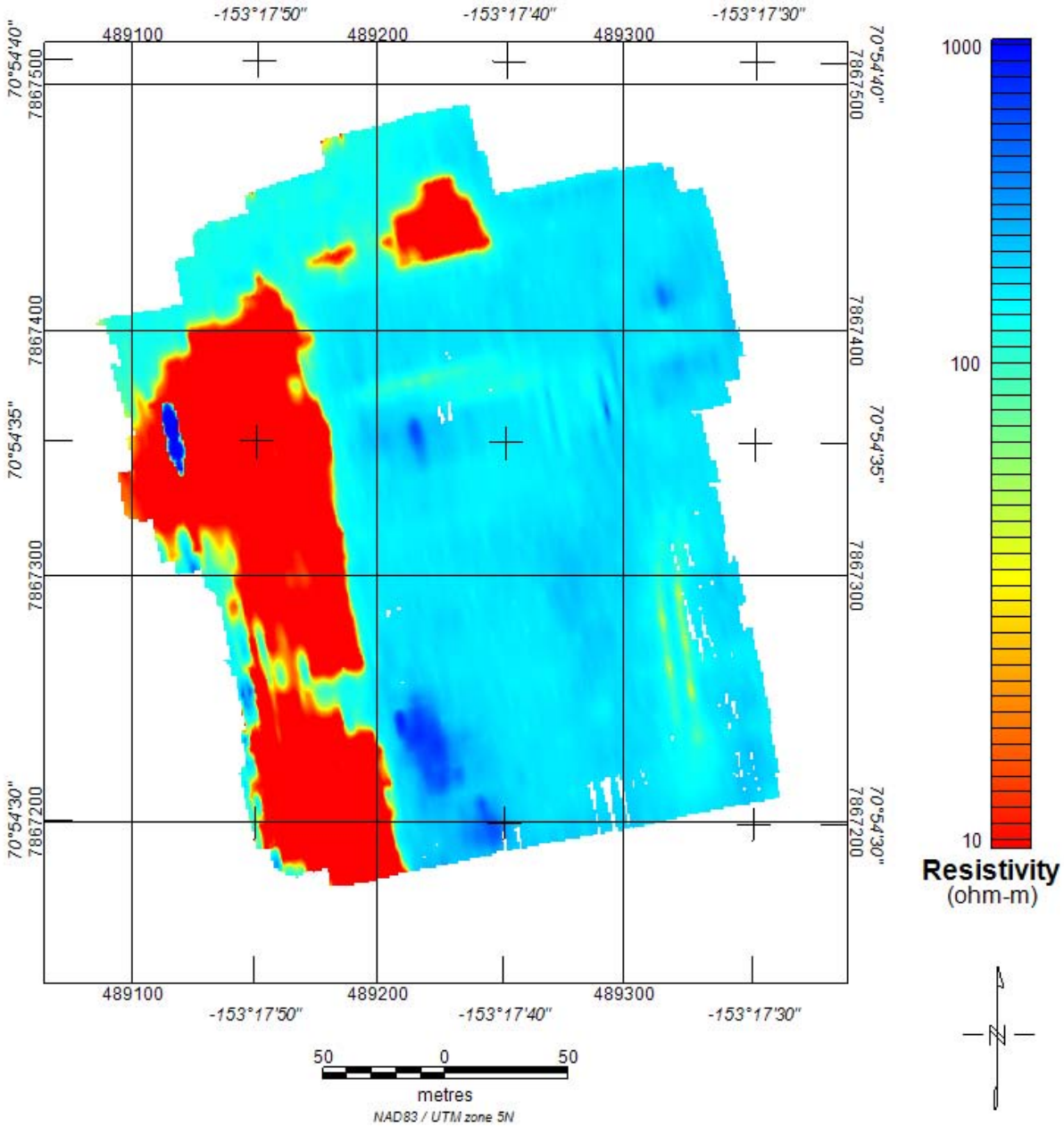

Figure 3.2.4.4. Depth slice 5.0 m below ground surface of the 3-D resistivity model constructed from the EM induction data inversions at Camp Lonely, August 2005.

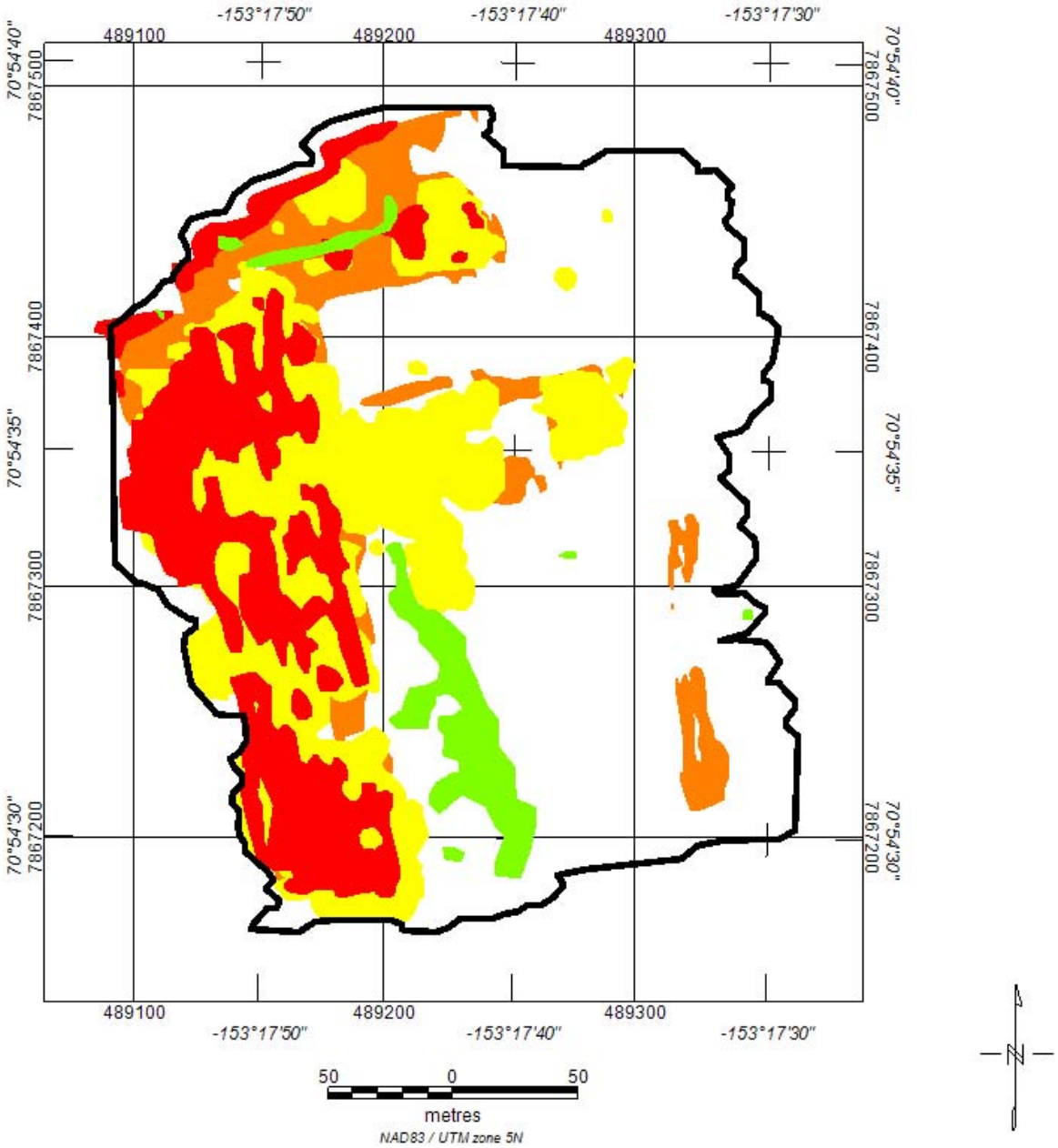

Figure 3.2.5.1. Map of the interpreted anomalies from Camp Lonely, August 2005. The high-amplitude magnetic anomalies are shown in yellow and the secondary, lower amplitude magnetic anomalies are shown in green. Low-resistivity anomalies (100 ohm-m and lower) are shown in orange and very low resistivity anomalies (25 ohm-m and lower) are shown in red. The black line outlines the extent of the magnetic survey.