

ATTACHMENT 5

TABLE 1
Soil Survey, Frisco, Texas
SOIL ANALYTICAL RESULTS

Sample I.D.	Sample Date	Type	Total Solids %	Lead (mg/Kg)
TRRP Tier 1 ^{Total} Soil _{Comb} Residential Soil PCL (0.5-Acre Source Area)			N/A	500
Texas Specific Background Concentration			N/A	15
FSS-HS-003	03/15/10	Total Fraction	75	20.8
		Fine Fraction	96	21.5
FSS-FS-017	3/15/10	Total Fraction	67	20.3
		Fine Fraction	96	182
FSS-HS-019	3/15/10	Total Fraction	74	22.0
		Fine Fraction	95	23.4
FSS-SC-031	3/16/10	Total Fraction	75	31.0
		Fine Fraction	94	55.2
FSS-BG-038	3/16/10	Total Fraction	85	135
		Fine Fraction	96	16.4

mg/Kg - milligrams/Kilogram

N/A - Not Applicable



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Report of Sample Analysis

Southwest Geoscience
 2351 W. Northwest Hwy, Suite 3321
 Dallas, TX 75220
 ATTN: Liz Scaggs

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 Project: Frisco Soil Sampling
 Project #: 0105035B
 Print Date/Time: 07/30/10 11:40

Attached is our analytical report for the samples received for your project. Below is a list of your individual sample descriptions with our corresponding laboratory number. We also have enclosed a copy of the Chain of Custody that was received with your samples and a form documenting the condition of your samples upon arrival. Please note any unused portion of the samples may be discarded upon expiration of the EPA holding time for the analysis performed or after 30 days from the above report date, unless you have requested otherwise.

ERM Environmental Laboratories certifies that all results contained in this report were produced in accordance with the requirements of the National Environmental Laboratory Accreditation Program (NELAP) unless otherwise noted. The results presented apply to the samples analyzed in accordance with the chain-of-custody document(s) furnished with the samples. This report is intended for the sole use of the customer for whom the work was performed and must be reproduced, without modification, in its entirety.

Sample Identification

<u>Laboratory ID #</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Sampled Date/Time</u>	<u>Received Date/Time</u>
1007392-01	FSS-HS-003 [Total Fraction]	Solid	03/15/10 09:40	07/14/10 12:34
1007392-02	FSS-HS-003 [Fine Fraction]	Solid	03/15/10 09:40	07/14/10 12:34
1007392-03	FSS-FS-017 [Total Fraction]	Solid	03/15/10 16:50	07/14/10 12:34
1007392-04	FSS-FS-017 [Fine Fraction]	Solid	03/15/10 16:50	07/14/10 12:34
1007392-05	FSS-HS-019 [Total Fraction]	Solid	03/15/10 09:40	07/14/10 12:34
1007392-06	FSS-HS-019 [Fine Fraction]	Solid	03/15/10 09:40	07/14/10 12:34

Case Narrative

These samples were originally received on 03/17/10 at 1015 and were immediately placed on hold pending results from the EPA. On 07/14/10 it was requested that these samples be pulled off of hold and analyzed for Total and Fine Lead using special preparation instructions provided to us via email by Liz Scaggs.



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Dallas, TX 75220
ATTN: Liz Scaggs

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The analytical data and results contained in this report, as well as their supporting data, conform with Texas Risk Reduction Program (TRRP), 30 TAC, Section 350, requirements and are of sufficient and documented quality to meet both TRRP objectives, TCEQ regulatory guidance No. RG-366/TRRP-13 and the project-based objective of achieving the lowest method detection limit (i.e., the TRRP Critical PCL where reasonably achievable or, if not reasonably achievable, the MQL). All information concerning analytical parameters, methods and protocols that might bear upon or otherwise affect the accuracy of the analytical data in this report have been provided or otherwise disclosed herein. The data were obtained using applicable and appropriate EPA SW-846 or Texas Commission on Environmental Quality approved analytical protocols, methodologies and quality assurance/quality control standards. **ERMI Environmental Laboratories** certifies that its quality control program is substantially and materially consistent with the International Organization for Standardization "Guide 25: General Requirements the Competence of Calibration and Testing Laboratories (ISO 25 3rd Edition, 1990)," as amended or the quality standards outlined in the National Environmental Laboratory Accreditation Program, as amended. The entire analytical data package for this report, including the supporting quality control data, will be retained and maintained for at least five (5) years (or such longer period of time as may be required by TRRP) from the report date at the offices of **ERMI Environmental Laboratories, 400 W. Bethany, Suite 190, Allen, Texas 75013.**

I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Thank you for the opportunity to serve your environmental chemistry analysis needs. If you have any questions or concerns regarding this report please contact our Customer Service Department at the phone number below.

Respectfully submitted,

Kendall K. Brown
President

TRRP Rpt 5 - v.2.5-071510

Local: (972) 727-1123

Long Distance: (800) 228-ERMI

FAX: (972) 727-1175



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<u>Laboratory ID #:</u> 1007392-01	<u>Sample Type</u> Composite	<u>Matrix</u> Solid	<u>Sample Collected By</u> Melissa Smith [US EPA]	<input type="text" value="Customer"/>
<u>Sample Description</u> FSS-HS-003 [Total Fraction]		<u>Sample Date/Time</u> 03/15/10 0940		

Analyte(s)	Result	SDL	MQL	Units	F*	Inst	Batch	Analysis Date/Time	Ahlst	Flag
Conventional Chemistry Parameters, SM 2540G										
% Solids	75	0.040	0.2	%	1.00	W3	0G20028	07/20/10 1655	KBM	S-14
Metals (Total), EPA 3050B										
Acid Digestion of Sludges/Solids	Completed	N/A	N/A		52.63	DB2	0G20018	07/20/10 1246	SPS	
Metals (Total), EPA 6010B										
Cadmium	ND	0.28	0.04	mg/kg dry	5.26	M4	0G20018	07/21/10 1401	SPS	R-01
Lead	20.8	0.70	0.1	mg/kg dry	5.26	M4	0G20018	07/21/10 1401	SPS	R-01



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<u>Laboratory ID #:</u> 1007392-02	<u>Sample Type</u> Composite	<u>Matrix</u> Solid	<u>Sample Collected By</u> Melissa Smith [US EPA]	Customer
<u>Sample Description</u> FSS-HS-003 [Fine Fraction]		<u>Sample Date/Time</u> 03/15/10 0940		

Analyte(s)	Result	SDL	MQL	Units	F*	Inst	Batch	Analysis Date/Time	Anlst	Flag
Conventional Chemistry Parameters, SM 2540G										
% Solids	96	0.040	0.2	%	1.00	W3	0G20028	07/20/10 1655	KBM	S-14
Metals (Total), EPA 3050B										
Acid Digestion of Sludges/Solids	Completed	N/A	N/A		100.00	DB2	0G20018	07/20/10 1246	SPS	
Metals (Total), EPA 6010B										
Cadmium	ND	0.42	0.04	mg/kg dry	10.00	M4	0G20018	07/21/10 1408	SPS	R-01
Lead	21.5	1.04	0.1	mg/kg dry	10.00	M4	0G20018	07/21/10 1408	SPS	R-01



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<u>Laboratory ID #:</u> 1007392-03	<u>Sample Type</u> Composite	<u>Matrix</u> Solid	<u>Sample Collected By</u> Melissa Smith [US EPA]	<u>Customer</u>
<u>Sample Description</u> FSS-FS-017 [Total Fraction]		<u>Sample Date/Time</u> 03/15/10 1650		

Analyte(s)	Result	SDL	MQL	Units	F*	Inst	Batch	Analysis Date/Time	Anlst	Flag
Conventional Chemistry Parameters, SM 2540G										
% Solids	67	0.040	0.2	%	1.00	W3	OG20028	07/20/10 1655	KBM	S-14
Metals (Total), EPA 3050B										
Acid Digestion of Sludges/Solids	Completed	N/A	N/A		52.08	DB2	OG20018	07/20/10 1246	SPS	
Metals (Total), EPA 6010B										
Cadmium	ND	0.31	0.04	mg/kg dry	5.21	M4	OG20018	07/21/10 1414	SPS	R-01
Lead	20.3	0.78	0.1	mg/kg dry	5.21	M4	OG20018	07/21/10 1414	SPS	R-01



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<u>Laboratory ID #:</u> 1007392-04	<u>Sample Type</u> Composite	<u>Matrix</u> Solid	<u>Sample Collected By</u> Melissa Smith [US EPA]	Customer
<u>Sample Description</u> FSS-FS-017 [Fine Fraction]		<u>Sample Date/Time</u> 03/15/10 1650		

Analyte(s)	Result	SDL	MQL	Units	F*	Inst	Batch	Analysis Date/Time	Anlst	Flag
Conventional Chemistry Parameters, SM 2540G										
% Solids	96	0.040	0.2	%	1.00	W3	0G20028	07/20/10 1655	KBM	S-14
Metals (Total), EPA 3050B										
Acid Digestion of Sludges/Solids	Completed	N/A	N/A	-	98.04	DB2	0G20018	07/20/10 1246	SPS	
Metals (Total), EPA 6010B										
Cadmium	0.82	0.41	0.04	mg/kg dry	9.80	M4	0G20018	07/21/10 1421	SPS	R-01
Lead	182	1.03	0.1	mg/kg dry	9.80	M4	0G20018	07/21/10 1421	SPS	R-01



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<u>Laboratory ID #:</u> 1007392-05	<u>Sample Type</u> Composite	<u>Matrix</u> Solid	<u>Sample Collected By</u> Melissa Smith [US EPA]	<u>Customer</u>
<u>Sample Description</u> FSS-HS-019 [Total Fraction]		<u>Sample Date/Time</u> 03/15/10 0940		

Analyte(s)	Result	SDL	MQL	Units	F*	Inst	Batch	Analysis Date/Time	Anlst	Flag
Conventional Chemistry Parameters, SM 2540G										
% Solids	74	0.040	0.2	%	1.00	W3	0G20028	07/20/10 1655	KBM	S-14
Metals (Total), EPA 3050B										
Acid Digestion of Sludges/Solids	Completed	N/A	N/A		49.02	DB2	0G20018	07/20/10 1246	SPS	
Metals (Total), EPA 6010B										
Cadmium	ND	0.27	0.04	mg/kg dry	4.90	M4	0G20018	07/21/10 1428	SPS	R-01
Lead	22.0	0.66	0.1	mg/kg dry	4.90	M4	0G20018	07/21/10 1428	SPS	R-01



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<u>Laboratory ID #:</u> 1007392-06	<u>Sample Type</u> Composite	<u>Matrix</u> Solid	<u>Sample Collected By</u> Melissa Smith [US EPA]	Customer
<u>Sample Description</u> FSS-HS-019 [Fine Fraction]		<u>Sample Date/Time</u> 03/15/10 0940		

Analyte(s)	Result	SDL	MQL	Units	F*	Inst	Batch	Analysis Date/Time	Anlst	Flag
Conventional Chemistry Parameters, SM 2540G										
% Solids	95	0.040	0.2	%	1.00	W3	0G20028	07/20/10 1655	KBM	S-14
Metals (Total), EPA 3050B										
Acid Digestion of Sludges/Solids	Completed	N/A	N/A		102.04	DB2	0G20018	07/20/10 1246	SPS	
Metals (Total), EPA 6010B										
Cadmium	ND	0.43	0.04	mg/kg dry	10.20	M4	0G20018	07/21/10 1435	SPS	R-01
Lead	23.4	1.07	0.1	mg/kg dry	10.20	M4	0G20018	07/21/10 1435	SPS	R-01



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Conventional Chemistry Parameters - Quality Control

Analyte(s)	Result	*SDI	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Flag
Blank (0G20028-BLK1)									
Prepared & Analyzed: 07/20/10 16:55									
% Solids	ND	0.040	%						
Duplicate (0G20028-DUP1)									
Prepared & Analyzed: 07/20/10 16:55									
					Source: 1007389-01				
% Solids	76	0.040	%		75		1	4	
Duplicate (0G20028-DUP2)									
Prepared & Analyzed: 07/20/10 16:55									
					Source: 1007459-01				
% Solids	88	0.040	%		90		2	4	



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Metals (Total) - Quality Control

Analyte(s)	Result	*SDI	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Blank (0G20018-BLK1)										
Prepared & Analyzed: 07/20/10 12:46										
Acid Digestion of Sludges/Solids	Completed	N/A	-							
Cadmium	ND	N/A	mg/kg wet							
Lead	ND	N/A	mg/kg wet							
Laboratory Control Sample (0G20018-BS1)										
Prepared & Analyzed: 07/20/10 12:46										
Acid Digestion of Sludges/Solids	Completed	N/A	-				0-0			
Cadmium	24.1	N/A	mg/kg wet	25.0		96	85-115			
Lead	24.5	N/A	mg/kg wet	25.0		98	85-114			
Laboratory Control Sample Duplicate (0G20018-BSD1)										
Prepared & Analyzed: 07/20/10 12:46										
Acid Digestion of Sludges/Solids	Completed	N/A	-				0-0		0	
Cadmium	24.3	N/A	mg/kg wet	25.0		97	85-115	1	5	
Lead	24.8	N/A	mg/kg wet	25.0		99	85-114	1	5	
Matrix Spike (0G20018-MS1)										
Prepared & Analyzed: 07/20/10 12:46										
Source: 1007387-01										
Acid Digestion of Sludges/Solids	Completed	N/A	-		ND		0-0			
Cadmium	27.9	N/A	mg/kg wet	26.0	ND	107	75-125			
Lead	31.4	N/A	mg/kg wet	26.0	2.65	110	75-125			
Matrix Spike (0G20018-MS2)										
Prepared & Analyzed: 07/20/10 12:46										
Source: 1007392-06										
Acid Digestion of Sludges/Solids	Completed	N/A	-		ND		0-0			
Cadmium	53.9	N/A	mg/kg dry	52.5	ND	103	75-125			
Lead	76.5	N/A	mg/kg dry	52.5	23.4	101	75-125			



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Metals (Total) - Quality Control

Analyte(s)	Result	*SDI	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Matrix Spike Duplicate (0G20018-MSD1)				Source: 1007387-01						
Prepared & Analyzed: 07/20/10 12:46										
Acid Digestion of Sludges/Solids Completed										
Cadmium	26.7	N/A	mg/kg wet	25.5	ND	105	75-125	4	15	
Lead	29.9	N/A	mg/kg wet	25.5	2.65	107	75-125	5	20	
Matrix Spike Duplicate (0G20018-MSD2)				Source: 1007392-06						
Prepared & Analyzed: 07/20/10 12:46										
Acid Digestion of Sludges/Solids Completed										
Cadmium	57.1	N/A	mg/kg dry	53.5	ND	107	75-125	6	15	
Lead	86.1	N/A	mg/kg dry	53.5	23.4	117	75-125	12	20	
Post Spike (0G20018-PS1)				Source: 1007387-01						
Prepared: 07/20/10 12:46 Analyzed: 07/21/10 12:42										
Cadmium	0.97	N/A	mg/l	1.00	-0.004	97	75-120			
Lead	1.11	N/A	mg/l	1.00	0.05	106	75-125			



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Notes and Definitions

The results presented in this report were generated using those methods given in 40 CFR Part 136 for Water and Wastewater samples and in SW-846 for RCRA/Solid Waste samples.

- R-01 The higher reporting limit is due to dilutions required for analysis as a result of a high concentration of target and/or non-target parameters in this sample.
- S-14 This analysis was performed outside the recommended holding time. This analysis is used only for dry weight calculation and is representative of the total solids present in the sample at the time the dry weight corrected analyses were performed.
- ND Analyte NOT DETECTED at or above the reporting limit
- dry Sample results reported on a dry weight basis
- LCS/LCSD Laboratory Control Sample/Laboratory Control Sample Duplicate
- MS/MSD Matrix Spike/Matrix Spike Duplicate
- RPD Relative Percent Difference
- mg/kg milligrams per kilogram
- mg/l milligrams per liter
- ug/kg micrograms per kilogram
- ug/l micrograms per liter
- exc Not covered under scope of NELAP accreditation.
- F* Calculated factor rounded to 3 significant figures. Concentration factor when <1.00 and dilution factor when >1.00.
- Inst Instrument Identification
- AnIst Analyst Initials
- SDL Sample Detection Limit
- MQL Method Quantitation Limit
- naa This analysis/parameter is not accreditable under the current NELAP program

Laboratory Data Package Cover Page

This data package for Laboratory Job Number 1007392 consists of:

- This signature page, the laboratory review checklist, and the following reportable data:
- R1** Field chain-of-custody documentation;
- R2** Sample identification cross-reference;
- R3** Test reports (analytical data sheets) for each environmental sample that includes:
 - a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
 - b) dilution factors,
 - c) preparation methods,
 - d) cleanup methods, and
 - e) if required for the project, tentatively identified compounds (TICs).
- R4** Surrogate recovery data including:
 - a) Calculated recovery (%R), and
 - b) The laboratory's surrogate QC limits.
- R5** Test reports/summary forms for blank samples;
- R6** Test reports/summary forms for laboratory control samples (LCSs) including:
 - a) LCS spiking amounts,
 - b) Calculated %R for each analyte, and
 - c) The laboratory's LCS QC limits.
- R7** Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
 - a) Samples associated with the MS/MSD clearly identified,
 - b) MS/MSD spiking amounts,
 - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d) Calculated %Rs and relative percent differences (RPDs), and
 - e) The laboratory's MS/MSD QC limits
- R8** Laboratory analytical duplicate (if applicable) recovery and precision:
 - a) the amount of analyte measured in the duplicate,
 - b) the calculated RPD, and
 - c) the laboratory's QC limits for analytical duplicates.
- R9** List of method quantitation limits (MQLs) for each analyte for each method and matrix;
- R10** Other problems or anomalies.
- The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release Statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: [] This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Kendall K. Brown	<i>Kendall K. Brown</i>	President	07/26/10
Name (Printed)	Signature	Official Title (Printed)	Date



Laboratory Review Checklist: Reportable Data

Laboratory Name: ERMI Environmental Laboratories		LRC Date: 07/26/10					
Project Name: Frisco Soil Sampling		Laboratory Job Number: 1007392					
Reviewer Name: Leslie Underwood		Prep Batch Number(s): 0G20018,0G20028,0G22017					
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?		X			E001
		Other than those results < MQL, were all other raw values bracketed by calibration standards?			X		
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample quantitation limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		If required for the project, TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS)					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs)					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?			X		
		Are unadjusted MQLs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Were all necessary corrective actions performed for the reported data?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference affects on the sample results?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
 2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).
 3. NA = Not applicable.
 4. NR = Not reviewed.
 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).



Laboratory Review Checklist: Reportable Data

Laboratory Name:		ERMJ Environmental Laboratories	LRC Date:		07/26/10		
Project Name:		Frisco Soil Sampling	Laboratory Job		1007392		
Reviewer Name:		Leslie Underwood	Prep Batch Number(s):		0G20018,0G20028,0G22017		
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
S1	O	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?			X		
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?			X		
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	O	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?			X		
S5	O	Raw data (NELAC section 1 appendix A glossary, and section 5.12 or ISO/IEC 17026 section					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Totally identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Inference Check Sample (ICS) results					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	O	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	O	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	O	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	O	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	O	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 4?	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	O	Verification/validation documentation for methods (NELAC Chap 5 or ISO/IEC 17026 Section 6)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	O	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed?	X				

- Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
- O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
- NA = Not applicable;
- NR = Not reviewed;
- ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).



Laboratory Review Checklist: Exception Reports

Laboratory Name: ERMI Environmental Laboratories		LRC Date: 07/26/10	
Project Name: Frisco Soil Sampling		Laboratory Job: 1007392	
Reviewer Name: Leslie Underwood		Prep Batch Number(s): 0G20018,0G20028,0G22017	
ER# ¹	Description		
E001	<p>Sample 1007392-01 failed hold criteria for Dry Weight 2540G. -This analysis was performed outside the recommended holding time. This analysis is used only for dry weight calculation and is representative of the total solids present in the sample at the time the dry weight corrected analyses were performed.</p> <p>Sample 1007392-02 failed hold criteria for Dry Weight 2540G. -This analysis was performed outside the recommended holding time. This analysis is used only for dry weight calculation and is representative of the total solids present in the sample at the time the dry weight corrected analyses were performed.</p> <p>Sample 1007392-03 failed hold criteria for Dry Weight 2540G. -This analysis was performed outside the recommended holding time. This analysis is used only for dry weight calculation and is representative of the total solids present in the sample at the time the dry weight corrected analyses were performed.</p> <p>Sample 1007392-04 failed hold criteria for Dry Weight 2540G. -This analysis was performed outside the recommended holding time. This analysis is used only for dry weight calculation and is representative of the total solids present in the sample at the time the dry weight corrected analyses were performed.</p> <p>Sample 1007392-05 failed hold criteria for Dry Weight 2540G. -This analysis was performed outside the recommended holding time. This analysis is used only for dry weight calculation and is representative of the total solids present in the sample at the time the dry weight corrected analyses were performed.</p> <p>Sample 1007392-06 failed hold criteria for Dry Weight 2540G. -This analysis was performed outside the recommended holding time. This analysis is used only for dry weight calculation and is representative of the total solids present in the sample at the time the dry weight corrected analyses were performed.</p>		

1. ER# = Exception Report Identification number (an Exception Report should be completed for an item if "NR" or "No" is checked on the LRC)



CHAIN OF CUSTODY RECORD

<h1 style="margin: 0;">Southwest</h1> <h2 style="margin: 0;">GEOSCIENCE</h2> <p style="margin: 0; font-size: small;">Environmental & Hydrogeologic Consultants</p>		<p style="margin: 0; font-size: large; font-weight: bold;">ERMI</p>		<p style="margin: 0; font-size: small;">Lab use only Due Date:</p>						
<p style="margin: 0; font-size: large; font-weight: bold;">DALLAS</p>		<p style="margin: 0;">Address:</p>		<p style="margin: 0; font-size: small;">Temp. of coolers when received (C°):</p>						
<p style="margin: 0;">Office Location</p>		<p style="margin: 0;">Contact:</p>		<p style="margin: 0; font-size: small;">1/16/02 3 2 1 5</p>						
<p style="margin: 0;">Project Manager <u>Liz Scappo</u></p>		<p style="margin: 0;">Phone:</p>		<p style="margin: 0;">Page <u>1</u> of <u>3</u></p>						
<p style="margin: 0;">Sampler's Name <u>Melissa Smith (USEPA)</u></p>		<p style="margin: 0;">PO/SO #: <u>0105035B</u></p>		<p style="margin: 0; font-size: large; font-weight: bold;">ANALYSIS REQUESTED</p> <p style="margin: 0; font-size: x-large; font-weight: bold; transform: rotate(-45deg);">TH Pb, Cd (250 ml) (250 ml) (250 ml)</p>						
<p style="margin: 0;">Project No. <u>0105035B</u></p>		<p style="margin: 0;">Project Name <u>Frisco Soil Sampling</u></p>				<p style="margin: 0; font-size: small;">Lab Sample ID (Lab Use Only)</p> <p style="margin: 0; font-size: x-large; font-weight: bold;">1007392-01/02</p>				
<p style="margin: 0;">Sampler's Signature <u>Melissa Smith</u></p>		<p style="margin: 0;">No/Type of Containers <u>2/903g</u></p>								
<p style="margin: 0; font-size: small;">Matrix</p>	<p style="margin: 0; font-size: small;">Date</p>	<p style="margin: 0; font-size: small;">Time</p>	<p style="margin: 0; font-size: small;">Identifying Marks of Sample(s)</p>					<p style="margin: 0; font-size: small;">VOA</p>	<p style="margin: 0; font-size: small;">AG 1L</p>	<p style="margin: 0; font-size: small;">250 ml P/O</p>
<p style="margin: 0;">S</p>	<p style="margin: 0;">3/15/10</p>	<p style="margin: 0;">0852</p>	<p style="margin: 0;">FSS-HS-001</p>					<p style="margin: 0;">☐</p>	<p style="margin: 0;">☐</p>	<p style="margin: 0;">☐</p>
<p style="margin: 0;"> </p>	<p style="margin: 0;"> </p>	<p style="margin: 0;">0924</p>	<p style="margin: 0;">FSS-HS-002</p>					<p style="margin: 0;">☐</p>	<p style="margin: 0;">☐</p>	<p style="margin: 0;">☐</p>
<p style="margin: 0;"> </p>	<p style="margin: 0;"> </p>	<p style="margin: 0;">0940</p>	<p style="margin: 0;">FSS-HS-003</p>					<p style="margin: 0;">☐</p>	<p style="margin: 0;">☐</p>	<p style="margin: 0;">☐</p>
<p style="margin: 0;"> </p>	<p style="margin: 0;"> </p>	<p style="margin: 0;">1005</p>	<p style="margin: 0;">FSS-HS-004</p>					<p style="margin: 0;">☐</p>	<p style="margin: 0;">☐</p>	<p style="margin: 0;">☐</p>
<p style="margin: 0;"> </p>	<p style="margin: 0;"> </p>	<p style="margin: 0;">1100</p>	<p style="margin: 0;">FSS-IL-005</p>					<p style="margin: 0;">☐</p>	<p style="margin: 0;">☐</p>	<p style="margin: 0;">☐</p>
<p style="margin: 0;"> </p>	<p style="margin: 0;"> </p>	<p style="margin: 0;">1118</p>	<p style="margin: 0;">FSS-IL-006</p>					<p style="margin: 0;">☐</p>	<p style="margin: 0;">☐</p>	<p style="margin: 0;">☐</p>
<p style="margin: 0;"> </p>	<p style="margin: 0;"> </p>	<p style="margin: 0;">1135</p>	<p style="margin: 0;">FSS-IL-007</p>	<p style="margin: 0;">☐</p>	<p style="margin: 0;">☐</p>			<p style="margin: 0;">☐</p>		
<p style="margin: 0;"> </p>	<p style="margin: 0;"> </p>	<p style="margin: 0;">1220</p>	<p style="margin: 0;">FSS-ZI-008</p>	<p style="margin: 0;">☐</p>	<p style="margin: 0;">☐</p>	<p style="margin: 0;">☐</p>				
<p style="margin: 0;"> </p>	<p style="margin: 0;"> </p>	<p style="margin: 0;">1235</p>	<p style="margin: 0;">FSS-ZI-009</p>	<p style="margin: 0;">☐</p>	<p style="margin: 0;">☐</p>	<p style="margin: 0;">☐</p>				
<p style="margin: 0;">↓</p>	<p style="margin: 0;">↓</p>	<p style="margin: 0;">1405</p>	<p style="margin: 0;">FSS-ZI-010</p>	<p style="margin: 0;">☐</p>	<p style="margin: 0;">☐</p>	<p style="margin: 0;">☐</p>				
<p style="margin: 0; font-size: small;">Tury arochl time</p>		<p style="margin: 0; font-size: small;">☐ Normal</p>		<p style="margin: 0; font-size: small;">☐ 25% Rush</p>		<p style="margin: 0; font-size: small;">☐ 50% Rush</p>		<p style="margin: 0; font-size: small;">☐ 100% Rush</p>		
<p style="margin: 0; font-size: small;">Relinquished by (Signature)</p>		<p style="margin: 0; font-size: small;">Date:</p>		<p style="margin: 0; font-size: small;">Time:</p>		<p style="margin: 0; font-size: small;">Received by (Signature)</p>		<p style="margin: 0; font-size: small;">Date:</p>		
<p style="margin: 0; font-size: small;">Relinquished by (Signature)</p>		<p style="margin: 0; font-size: small;">Date:</p>		<p style="margin: 0; font-size: small;">Time:</p>		<p style="margin: 0; font-size: small;">Received by (Signature)</p>		<p style="margin: 0; font-size: small;">Date:</p>		
<p style="margin: 0; font-size: small;">Relinquished by (Signature)</p>		<p style="margin: 0; font-size: small;">Date:</p>		<p style="margin: 0; font-size: small;">Time:</p>		<p style="margin: 0; font-size: small;">Received by (Signature)</p>		<p style="margin: 0; font-size: small;">Date:</p>		
<p style="margin: 0; font-size: small;">Relinquished by (Signature)</p>		<p style="margin: 0; font-size: small;">Date:</p>		<p style="margin: 0; font-size: small;">Time:</p>		<p style="margin: 0; font-size: small;">Received by (Signature)</p>		<p style="margin: 0; font-size: small;">Date:</p>		

Matrix: WW - Wastewater, A/G - 40 ml vial
 Container: W - Water, S - Soil, SD - Solid, L - Liquid, 250 ml - Glass wide mouth, A - Air Bag, C - Charcoal tube, P/O - Plastic or other, SL - sludge, O - Oil

CHAIN OF CUSTODY RECORD

<h1 style="margin: 0;">Southwest</h1> <h2 style="margin: 0;">GEOSCIENCE</h2> <p style="margin: 0;">Environmental & Hydrogeologic Consultants</p>		<p style="margin: 0;">Laboratory: ERM I</p> <p style="margin: 0;">Address: _____</p> <p style="margin: 0;">Contact: _____</p> <p style="margin: 0;">Phone: _____</p> <p style="margin: 0;">PO/ISO #: 0105035B</p>		<p style="margin: 0;">AnalYSIS REQUESTED</p> <p style="margin: 0; font-size: 2em; transform: rotate(-45deg);">THP, Cd (250 Micro-sieve)</p>		<p style="margin: 0;">Lab use only</p> <p style="margin: 0;">Due Date: _____</p> <p style="margin: 0;">Temp. of coolers when received (C°): _____</p> <p style="margin: 0;">Page 3 of 3</p>	
<p style="margin: 0;">Office Location DAVIAS</p> <p style="margin: 0;">Project Manager Viz Scagggs</p>		<p style="margin: 0;">Sampler's Name</p> <p style="margin: 0; font-size: 1.5em;">Melissa Smith (USEPA)</p> <p style="margin: 0; font-size: 1.5em;">Nathan Smith</p>		<p style="margin: 0;">Project Name</p> <p style="margin: 0; font-size: 1.5em;">Frisco Soil Sampling</p>		<p style="margin: 0;">No/Type of Containers</p> <p style="margin: 0; font-size: 1.5em;">2 / 9oz G</p>	
Matrix	Date	Time	Identifying Marks of Sample(s)	VOA	A/G	250 ml	P/O
S	3.15.10	1500	FSS-DF-021		1 U		
↓	↓	1525	FSS-DF-022				
<p style="margin: 0;">Turn around time <input type="checkbox"/> Normal <input type="checkbox"/> 25% Rush <input type="checkbox"/> 50% Rush <input type="checkbox"/> 100% Rush</p>							
Relinquished by (Signature)		Date:	Time:	Received by (Signature)		Date:	Time:
<i>[Signature]</i>		3/16/10	1804	<i>[Signature]</i>		3/16/10	1806
Relinquished by (Signature)		Date:	Time:	Received by (Signature)		Date:	Time:
<i>[Signature]</i>		3/17/10	0825	<i>[Signature]</i>		3/17/10	0825
Relinquished by (Signature)		Date:	Time:	Received by (Signature)		Date:	Time:
<i>[Signature]</i>		3/17/10	9:18	<i>[Signature]</i>		3/17/10	9:18
Relinquished by (Signature)		Date:	Time:	Received by (Signature)		Date:	Time:
<i>[Signature]</i>		3/17/10	10:15	<i>[Signature]</i>		3/17/10	10:15

Matrix Container: WW - Wastewater (40 ml vial), W - Water (A/G - Amber / Or Glass 1 Liter), S - Soil (SD - Solid 250 ml - Glass wide mouth), L - Liquid (250 ml - Glass wide mouth), A - Air Bag, C - Charcoal tube, P/O - Plastic or other, SL - sludge, O - Oil

1007392

cooler 1
1.80C

cooler 2
4.80C

cooler 3
2.20C

ERMI

Custody Seal

Sample I.D. No. 005035B Date 3-17-10

Signature [Signature]

ERMI

X-484

ERMI

Custody Seal

Sample I.D. No. 005035B Date 3-17-10

Signature [Signature]

ERMI

X-484

ERMI

Custody Seal

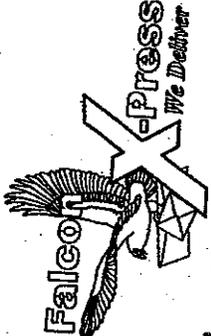
Sample I.D. No. 005035B Date 3-17-10

Signature [Signature]

ERMI

X-484

1007312



P.O. BOX 940303
PLANO, TX 75094-0303
(972) 881-7577

NOTARY SERVICE AVAILABLE

NAME		DATE		Type of Delivery	
ADDRESS		3/17/10		<input type="checkbox"/> 24-Hour	
CITY				<input type="checkbox"/> 2 HOUR	
REFERENCE NO.				<input type="checkbox"/> 4 HOUR	
NAME				<input type="checkbox"/> NIGHT-WEEKEND	
ADDRESS				<input type="checkbox"/> NEXT DAY	
CITY					
STATE					
DESCRIPTION AND REMARKS					
NO. FOR					
WAITING TIME					
NOT RESPONSIBLE FOR FREIGHT CLAIMS AFTER 72 HRS. NOT RESPONSIBLE FOR CONGEALED DAMAGE, DUE AND PAYABLE PLANO, COLLIN COUNTY, TEXAS					
DRIVER NAME & NO.		10:15		TOTAL CHARGES	
TIME OF DEL.				RECEIVED BY	
\$60 DECLARED VALUE UNLESS SPECIFIED HERE \$				X Kathy Weems	

Lab Number(s): 1007392

ERMI

Sample Preservation Documentation*

On Ice (Circle One): YES OR NO (check if on Dry Ice _____)

Parameters	Containers #	Size	Required Preservation	Sample Container	Circle pH Note any discrepancy
Metals			pH < 2	Glass or Plastic	pH < 2
Dissolved Metals			Unpreserved prior to being filtered; Cool**	Glass or Plastic	
Hexavalent Chromium			CWA - pH 9.3-9.7, Cool; RCRA - Cool	Glass or Plastic	Checked At Analysis
Semivolatiles, Pesticides, PCBs, Herbicides			Cool	Glass only with Teflon lid	Chlorine <input type="checkbox"/> yes <input type="checkbox"/> no
VOA (BTEX, MTBE, 624, 8260, TPH-GRO)			Cool, pH < 2 Zero Head Space	40 ml VOA vial	DO NOT OPEN
VOA (TPH-1005)			Cool, Zero Head Space Please check if collected in pre-weighed vials	40 ml VOA vial	DO NOT OPEN
Phos., NO ₃ /NO ₂ , NH ₃ N, COD, TKN, TOC			Cool, pH < 2	Glass or Plastic	pH < 2
TDS, BOD, CBOD, Cond, pH, TSS, F, SO ₄ , Cl, Alk, Sulfite			Cool	Glass or Plastic, Plastic only if F	
Phenols, TPH-DRO			Cool, pH < 2	Glass only Teflon lid _____ Foil lid _____	pH < 2
Oil & Grease, TPH (by 1664a)			Cool, pH < 2	Glass only Teflon lid _____ Foil lid _____	DO NOT CHECK pH
Cyanide			Cool, pH > 12	Glass or Plastic	pH > 12 Chlorine <input type="checkbox"/> yes <input type="checkbox"/> no Sulfide <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> na
Sulfide			Cool, pH > 9	Glass or Plastic	pH > 9
Bacteria			Cool	Plastic Sterile Cup	
Soil, Sludge, Solid, Oil, Liquid	44	400	Cool Note: please check if collected in pre-weighed vials	Slur	

Metals Preserved By Login yes no

Trip Blanks Received yes no

COMMENTS:

Only 3 off held at this time. DC 7/12/10

*This form is used to document sample preservation. Circle parameter requested. Fill in number and size of containers received. Check pH (adjust if needed) and note if different from what is required and make a notation of any samples not received on ice. Note any incorrect sample containers or preservation on chain-of-custody.

**Cool means cooled to ≤6°C but not frozen.

Preservation Checked By *CSA*

08/10
Date

1151
Time

1000.0-3.2 2/17/09

ky 7/10/08



Environmental Laboratories
 Bethany Tech Center • Suite 190
 400 W. Bethany Rd. • Allen, Texas 75013

State Certifications
 Arkansas: 88-0647
 Oklahoma: 8727



Louisiana: 02007
 Kansas: E-10388
 Texas: T104704232-10-1

Report of Sample Analysis

Southwest Geoscience
 2351 W. Northwest Hwy, Suite 3321
 Dallas, TX 75220
 ATTN: Liz Scaggs

Page: Page 1 of 10
 Project: Frisco Soil Sampling
 Project #: 0105035B
 Print Date/Time: 07/30/10 11:18

Attached is our analytical report for the samples received for your project. Below is a list of your individual sample descriptions with our corresponding laboratory number. We also have enclosed a copy of the Chain of Custody that was received with your samples and a form documenting the condition of your samples upon arrival. Please note any unused portion of the samples may be discarded upon expiration of the EPA holding time for the analysis performed or after 30 days from the above report date, unless you have requested otherwise.

ERMI Environmental Laboratories certifies that all results contained in this report were produced in accordance with the requirements of the National Environmental Laboratory Accreditation Program (NELAP) unless otherwise noted. The results presented apply to the samples analyzed in accordance with the chain-of-custody document(s) furnished with the samples. This report is intended for the sole use of the customer for whom the work was performed and must be reproduced, without modification, in its entirety.

Sample Identification

<u>Laboratory ID #</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Sampled Date/Time</u>	<u>Received Date/Time</u>
1007389-01	FSS-SC-031 [Total Fraction]	Solid	03/16/10 14:37	07/14/10 12:34
1007389-02	FSS-SC-031 [Fine Fraction]	Solid	03/16/10 14:37	07/14/10 12:34
1007389-03	FSS-BG-038 [Total Fraction]	Solid	03/16/10 16:35	07/14/10 12:34
1007389-04	FSS-BG-038 [Fine Fraction]	Solid	03/16/10 16:35	07/14/10 12:34

Case Narrative

These samples were originally received on 03/17/10 at 1015 and were immediately placed on hold pending results from the EPA. On 07/14/10 it was requested that these samples be pulled off of hold and analyzed for Total and Fine Lead using special preparation instructions provided to us via email by Liz Scaggs.



Environmental Laboratories
Bethany Tech Center • Suite 190
400 W. Bethany Rd. • Allen, Texas 75013

State Certifications

Arkansas: 88-0647
Oklahoma: 8727



Louisiana: 02007
Kansas: E-10388
Texas: T104704232-10-1

Report of Sample Analysis

Southwest Geoscience
2351 W. Northwest Hwy, Suite 3321
Dallas, TX 75220
ATTN: Liz Scaggs

Page: Page 2 of 10
Project: Frisco Soil Sampling
Project #: 0105035B
Print Date/Time: 07/30/10 11:18

The analytical data and results contained in this report, as well as their supporting data, conform with Texas Risk Reduction Program (TRRP), 30 TAC, Section 350, requirements and are of sufficient and documented quality to meet both TRRP objectives, TCEQ regulatory guidance No. RG-366/TRRP-13 and the project-based objective of achieving the lowest method detection limit (i.e., the TRRP Critical PCL where reasonably achievable or, if not reasonably achievable, the MQL). All information concerning analytical parameters, methods and protocols that might bear upon or otherwise affect the accuracy of the analytical data in this report have been provided or otherwise disclosed herein. The data were obtained using applicable and appropriate EPA SW-846 or Texas Commission on Environmental Quality approved analytical protocols, methodologies and quality assurance/quality control standards. **ERMI Environmental Laboratories** certifies that its quality control program is substantially and materially consistent with the International Organization for Standardization "Guide 25: General Requirements the Competence of Calibration and Testing Laboratories (ISO 25 3rd Edition, 1990)," as amended or the quality standards outlined in the National Environmental Laboratory Accreditation Program, as amended. The entire analytical data package for this report, including the supporting quality control data, will be retained and maintained for at least five (5) years (or such longer period of time as may be required by TRRP) from the report date at the offices of **ERMI Environmental Laboratories, 400 W. Bethany, Suite 190, Allen, Texas 75013.**

I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Thank you for the opportunity to serve your environmental chemistry analysis needs. If you have any questions or concerns regarding this report please contact our Customer Service Department at the phone number below.

Respectfully submitted,

Kendall K. Brown
President



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 Bethany Tech Center • Suite 190
 400 W. Bethany Rd. • Allen, Texas 75013

State Certifications
 Arkansas: 88-0647
 Oklahoma: 8727



Louisiana: 02007
 Kansas: E-10388
 Texas: T104704232-10-1

Report of Sample Analysis

Southwest Geoscience
 2351 W. Northwest Hwy, Suite 3321
 Dallas, TX 75220
 ATTN: Liz Scaggs

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 Project: Frisco Soil Sampling
 Project #: 0105035B
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<u>Laboratory ID #:</u> 1007389-01	<u>Sample Type</u> Composite	<u>Matrix</u> Solid	<u>Sample Collected By</u> Melissa Smith [US EPA]	<input type="text" value="Customer"/>
<u>Sample Description</u> FSS-SC-031 [Total Fraction]		<u>Sample Date/Time</u> 03/16/10 1437		

Analyte(s)	Result	SDL	MQL	Units	F*	Inst	Batch	Analysis Date/Time	Anist	Flag
Conventional Chemistry Parameters, SM 2540G										
% Solids	75	0.040	0.2	%	1.00	W3	0G20028	07/20/10 1655	KBM	S-14
Metals (Total), EPA 3050B										
Acid Digestion of Sludges/Solids	Completed	N/A	N/A		52.63	DB2	0G20018	07/20/10 1246	SPS	
Metals (Total), EPA 6010B										
Cadmium	ND	0.28	0.04	mg/kg dry	5.26	M4	0G20018	07/21/10 1333	SPS	R-01
Lead	31.0	0.70	0.1	mg/kg dry	5.26	M4	0G20018	07/21/10 1333	SPS	R-01



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<u>Laboratory ID #:</u> 1007389-02	<u>Sample Type</u> Composite	<u>Matrix</u> Solid	<u>Sample Collected By</u> Melissa Smith [US EPA]	Customer
<u>Sample Description</u> FSS-SC-031 [Fine Fraction]		<u>Sample Date/Time</u> 03/16/10 1437		

Analyte(s)	Result	SDL	MQL	Units	F*	Inst	Batch	Analysis Date/Time	Anlst	Flag
Conventional Chemistry Parameters, SM 2540G										
% Solids	94	0.040	0.2	%	1.00	W3	0G20028	07/20/10 1655	KBM	S-14
Metals (Total), EPA 3050B										
Acid Digestion of Sludges/Solids	Completed	N/A	N/A		100.00	DB2	0G20018	07/20/10 1246	SPS	
Metals (Total), EPA 6010B										
Cadmium	ND	0.43	0.04	mg/kg dry	10.00	M4	0G20018	07/21/10 1340	SPS	R-01
Lead	55.2	1.06	0.1	mg/kg dry	10.00	M4	0G20018	07/21/10 1340	SPS	R-01



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<u>Laboratory ID #:</u> 1007389-03	<u>Sample Type</u> Composite	<u>Matrix</u> Solid	<u>Sample Collected By</u> Melissa Smith [US EPA]	Customer
<u>Sample Description</u> FSS-BG-038 [Total Fraction]		<u>Sample Date/Time</u> 03/16/10 1635		

Analyte(s)	Result	SDL	MQL	Units	F*	Inst	Batch	Analysis Date/Time	Anlst	Flag
Conventional Chemistry Parameters, SM 2540G										
% Solids	85	0.040	0.2	%	1.00	W3	0G20028	07/20/10 1655	KBM	S-14
Metals (Total), EPA 3050B										
Acid Digestion of Sludges/Solids	Completed	N/A	N/A		51.02	DB2	0G20018	07/20/10 1246	SPS	
Metals (Total), EPA 6010B										
Cadmium	0.81	0.24	0.04	mg/kg dry	5.10	M4	0G20018	07/21/10 1347	SPS	R-01
Lead	135	0.60	0.1	mg/kg dry	5.10	M4	0G20018	07/21/10 1347	SPS	R-01



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 Project: Frisco Soil Sampling
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<u>Laboratory ID #:</u> 1007389-04	<u>Sample Type</u> Composite	<u>Matrix</u> Solid	<u>Sample Collected By</u> Melissa Smith [US EPA]	Customer
<u>Sample Description</u> FSS-BG-038 [Fine Fraction]		<u>Sample Date/Time</u> 03/16/10 1635		

Analyte(s)	Result	SDL	MQL	Units	F*	Inst	Batch	Analysis Date/Time	Anlst	Ftag
Conventional Chemistry Parameters, SM 2540G										
% Solids	96	0.040	0.2	%	1.00	W3	0G20028	07/20/10 1655	KBM	S-14
Metals (Total), EPA 3050B										
Acid Digestion of Sludges/Solids	Completed	N/A	N/A		100.00	DB2	0G20018	07/20/10 1246	SPS	
Metals (Total), EPA 6010B										
Cadmium	ND	0.42	0.04	mg/kg dry	10.00	M4	0G20018	07/21/10 1354	SPS	R-01
Lead	16.4	1.05	0.1	mg/kg dry	10.00	M4	0G20018	07/21/10 1354	SPS	R-01



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 Project: Frisco Soil Sampling
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Conventional Chemistry Parameters - Quality Control

Analyte(s)	Result	*SDI	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Blank (0G20028-BLK1)										
Prepared & Analyzed: 07/20/10 16:55										
% Solids	ND	0.040	%							
Duplicate (0G20028-DUP1)										
Prepared & Analyzed: 07/20/10 16:55										
% Solids	76	0.040	%		75			1	4	
Duplicate (0G20028-DUP2)										
Prepared & Analyzed: 07/20/10 16:55										
% Solids	88	0.040	%		90			2	4	



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 Project: Frisco Soil Sampling
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Metals (Total) - Quality Control

Analyte(s)	Result	*SDI	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Blank (0G20018-BLK1)										
Prepared & Analyzed: 07/20/10 12:46										
Acid Digestion of Sludges/Solids	Completed	N/A	-							
Cadmium	ND	N/A	mg/kg wet							
Lead	ND	N/A	mg/kg wet							
Laboratory Control Sample (0G20018-BS1)										
Prepared & Analyzed: 07/20/10 12:46										
Acid Digestion of Sludges/Solids	Completed	N/A	-				0-0			
Cadmium	24.1	N/A	mg/kg wet	25.0		96	85-115			
Lead	24.5	N/A	mg/kg wet	25.0		98	85-114			
Laboratory Control Sample Duplicate (0G20018-BSD1)										
Prepared & Analyzed: 07/20/10 12:46										
Acid Digestion of Sludges/Solids	Completed	N/A	-				0-0		0	
Cadmium	24.3	N/A	mg/kg wet	25.0		97	85-115	1	5	
Lead	24.8	N/A	mg/kg wet	25.0		99	85-114	1	5	
Matrix Spike (0G20018-MS1)										
Prepared & Analyzed: 07/20/10 12:46										
Source: 1007387-01										
Acid Digestion of Sludges/Solids	Completed	N/A	-		ND		0-0			
Cadmium	27.9	N/A	mg/kg wet	26.0	ND	107	75-125			
Lead	31.4	N/A	mg/kg wet	26.0	2.65	110	75-125			
Matrix Spike (0G20018-MS2)										
Prepared & Analyzed: 07/20/10 12:46										
Source: 1007392-06										
Acid Digestion of Sludges/Solids	Completed	N/A	-		ND		0-0			
Cadmium	53.9	N/A	mg/kg dry	52.5	ND	103	75-125			
Lead	76.5	N/A	mg/kg dry	52.5	23.4	101	75-125			



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 Project #: 0105035B
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Metals (Total) - Quality Control

Analyte(s)	Result	*SDI	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Matrix Spike Duplicate (0G20018-MSD1)										
Prepared & Analyzed: 07/20/10 12:46					Source: 1007387-01					
Acid Digestion of Sludges/Solids										
	Completed	N/A	-		ND		0-0		0	
Cadmium	26.7	N/A	mg/kg wet	25.5	ND	105	75-125	4	15	
Lead	29.9	N/A	mg/kg wet	25.5	2.65	107	75-125	5	20	
Matrix Spike Duplicate (0G20018-MSD2)										
Prepared & Analyzed: 07/20/10 12:46					Source: 1007392-06					
Acid Digestion of Sludges/Solids										
	Completed	N/A	-		ND		0-0		0	
Cadmium	57.1	N/A	mg/kg dry	53.5	ND	107	75-125	6	15	
Lead	86.1	N/A	mg/kg dry	53.5	23.4	117	75-125	12	20	
Post Spike (0G20018-PS1)										
Prepared: 07/20/10 12:46 Analyzed: 07/21/10 12:42					Source: 1007387-01					
Cadmium	0.97	N/A	mg/l	1.00	-0.004	97	75-120			
Lead	1.11	N/A	mg/l	1.00	0.05	106	75-125			



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 Project: Frisco Soil Sampling
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Notes and Definitions

The results presented in this report were generated using those methods given in 40 CFR Part 136 for Water and Wastewater samples and in SW-846 for RCRA/Solid Waste samples.

- R-01 The higher reporting limit is due to dilutions required for analysis as a result of a high concentration of target and/or non-target parameters in this sample.
- S-14 This analysis was performed outside the recommended holding time. This analysis is used only for dry weight calculation and is representative of the total solids present in the sample at the time the dry weight corrected analyses were performed.
- ND Analyte NOT DETECTED at or above the reporting limit
- dry Sample results reported on a dry weight basis
- LCS/LCSD Laboratory Control Sample/Laboratory Control Sample Duplicate
- MS/MSD Matrix Spike/Matrix Spike Duplicate
- RPD Relative Percent Difference
- mg/kg milligrams per kilogram
- mg/l milligrams per liter
- ug/kg micrograms per kilogram
- ug/l micrograms per liter
- exc Not covered under scope of NELAP accreditation.
- F* Calculated factor rounded to 3 significant figures. Concentration factor when <1.00 and dilution factor when >1.00.
- Inst Instrument Identification
- Anist Analyst Initials
- SDL Sample Detection Limit
- MQL Method Quantitation Limit
- naa This analysis/parameter is not accreditable under the current NELAP program

Laboratory Data Package Cover Page

This data package for Laboratory Job Number 1007389 consists of:

- This signature page, the laboratory review checklist, and the following reportable data:
- R1 Field chain-of-custody documentation;
- R2 Sample identification cross-reference;
- R3 Test reports (analytical data sheets) for each environmental sample that includes:
 - a) Items consistent with NELAC 5.13 or ISO/IEC 17025 Section 5.10
 - b) dilution factors,
 - c) preparation methods,
 - d) cleanup methods, and
 - e) if required for the project, tentatively identified compounds (TICs).
- R4 Surrogate recovery data including:
 - a) Calculated recovery (%R), and
 - b) The laboratory's surrogate QC limits.
- R5 Test reports/summary forms for blank samples;
- R6 Test reports/summary forms for laboratory control samples (LCSs) including:
 - a) LCS spiking amounts,
 - b) Calculated %R for each analyte, and
 - c) The laboratory's LCS QC limits.
- R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
 - a) Samples associated with the MS/MSD clearly identified,
 - b) MS/MSD spiking amounts,
 - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d) Calculated %Rs and relative percent differences (RPDs), and
 - e) The laboratory's MS/MSD QC limits
- R8 Laboratory analytical duplicate (if applicable) recovery and precision:
 - a) the amount of analyte measured in the duplicate,
 - b) the calculated RPD, and
 - c) the laboratory's QC limits for analytical duplicates.
- R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;
- R10 Other problems or anomalies.
- The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release Statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

Check, if applicable: [] This laboratory is an in-house laboratory controlled by the person responding to rule. The official signing the cover page of the rule-required report (for example, the APAR) in which these data are used is responsible for releasing this data package and is by signature affirming the above release statement is true.

Kendall K. Brown
Name (Printed)

Kendall K. Brown
Signature

President
Official Title (Printed)

07/26/10
Date



Laboratory Review Checklist: Reportable Data

Laboratory Name: ERMI Environmental Laboratories		LRC Date: 07/26/10					
Project Name: Frisco Soil Sampling		Laboratory Job Number: 1007389					
Reviewer Name: Leslie Underwood		Prep Batch Number(s): 0G20018,0G20028,0G22017					
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
R1	OI	Chain-of-custody (C-O-C)					
		Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		Were all departures from standard conditions described in an exception report?	X				
R2	OI	Sample and quality control (QC) identification					
		Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test reports					
		Were all samples prepared and analyzed within holding times?		X			E001
		Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		Were calculations checked by a peer or supervisor?	X				
		Were all analyte identifications checked by a peer or supervisor?	X				
		Were sample quantitation limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?	X				
		Were % moisture (or solids) reported for all soil and sediment samples?	X				
		If required for the project, TICs reported?			X		
R4	O	Surrogate recovery data					
		Were surrogates added prior to extraction?			X		
		Were surrogate percent recoveries in all samples within the laboratory QC limits?			X		
R5	OI	Test reports/summary forms for blank samples					
		Were appropriate type(s) of blanks analyzed?	X				
		Were blanks analyzed at the appropriate frequency?	X				
		Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		Were blank concentrations < MQL?	X				
R6	OI	Laboratory control samples (LCS)					
		Were all COCs included in the LCS?	X				
		Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		Were LCSs analyzed at the required frequency?	X				
		Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SDLs?	X				
		Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix spike (MS) and matrix spike duplicate (MSD) data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		Were MS/MSD analyzed at the appropriate frequency?	X				
		Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?	X				
		Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical duplicate data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		Were analytical duplicates analyzed at the appropriate frequency?	X				
		Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method quantitation limits (MQLs)					
		Are the MQLs for each method analyte included in the laboratory data package?	X				
		Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?			X		
		Are unadjusted MQLs included in the laboratory data package?	X				
R10	OI	Other problems/anomalies					
		Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				
		Were all necessary corrective actions performed for the reported data?	X				
		Was applicable and available technology used to lower the SDL to minimize the matrix interference affects on the sample results?	X				

1. Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
 2. O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
 3. NA = Not applicable;
 4. NR = Not reviewed;
 5. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).



Laboratory Review Checklist: Reportable Data

Laboratory Name: ERMI Environmental Laboratories		LRC Date: 07/26/10					
Project Name: Frisco Soil Sampling		Laboratory Job: 1007389					
Reviewer Name: Leslie Underwood		Prep Batch Number(s): 0G20018,0G20028,0G22017					
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
S1	O	Initial calibration (ICAL)					
		Were response factors and/or relative response factors for each analyte within QC limits?	X				
		Were percent RSDs or correlation coefficient criteria met?			X		
		Was the number of standards recommended in the method used for all analytes?	X				
		Were all points generated between the lowest and highest standard used to calculate the curve?			X		
		Are ICAL data available for all instruments used?	X				
		Has the initial calibration curve been verified using an appropriate second source standard?	X				
S2	O	Initial and continuing calibration verification (ICCV and CCV) and continuing calibration					
		Was the CCV analyzed at the method-required frequency?	X				
		Were percent differences for each analyte within the method-required QC limits?	X				
		Was the ICAL curve verified for each analyte?	X				
		Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X				
S3	O	Mass spectral tuning:					
		Was the appropriate compound for the method used for tuning?			X		
		Were ion abundance data within the method-required QC limits?			X		
S4	O	Internal standards (IS)					
		Were IS area counts and retention times within the method-required QC limits?			X		
S5	O	Raw data (NELAC section 4 appendix A glossary, and section 5.12 or ISO/IEC 17025 section 6.12)					
		Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		Were data associated with manual integrations flagged on the raw data?	X				
S6	O	Dual column confirmation					
		Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively identified compounds (TICs)					
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) results:					
		Were percent recoveries within method QC limits?	X				
S9	I	Serial dilutions, post digestion spikes, and method of standard additions					
		Were percent differences, recoveries, and the linearity within the QC limits specified in the method?	X				
S10	O	Method detection limit (MDL) studies					
		Was a MDL study performed for each reported analyte?	X				
		Is the MDL either adjusted or supported by the analysis of DCSSs?	X				
S11	O	Proficiency test reports					
		Was the laboratory's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	O	Standards documentation					
		Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	O	Compound/analyte identification procedures					
		Are the procedures for compound/analyte identification documented?	X				
S14	O	Demonstration of analyst competency (DOC)					
		Was DOC conducted consistent with NELAC Chapter 5C or ISO/IEC 47	X				
		Is documentation of the analyst's competency up-to-date and on file?	X				
S15	O	Verification/validation documentation for methods (NELAC Chap. 6 or ISO/IEC 17025 Section 6)					
		Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	O	Laboratory standard operating procedures (SOPs)					
		Are laboratory SOPs current and on file for each method performed?	X				

- Items identified by the letter "R" must be included in the laboratory data package submitted in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.
- O = organic analyses; I = inorganic analyses (and general chemistry, when applicable);
- NA = Not applicable;
- NR = Not reviewed;
- ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).



Laboratory Review Checklist: Exception Reports

Laboratory Name: ERMI Environmental Laboratories		LRC Date: 07/26/10	
Project Name: Frisco Soil Sampling		Laboratory Job: 1007389	
Reviewer Name: Leslie Underwood		Prep Batch Number(s): 0G20018,0G20028,0G22017	
ER# ¹	Description		
E001	<p>Sample 1007389-01 failed hold criteria for Dry Weight 2540G. -This analysis was performed outside the recommended holding time. This analysis is used only for dry weight calculation and is representative of the total solids present in the sample at the time the dry weight corrected analyses were performed.</p> <p>Sample 1007389-02 failed hold criteria for Dry Weight 2540G. -This analysis was performed outside the recommended holding time. This analysis is used only for dry weight calculation and is representative of the total solids present in the sample at the time the dry weight corrected analyses were performed.</p> <p>Sample 1007389-03 failed hold criteria for Dry Weight 2540G. -This analysis was performed outside the recommended holding time. This analysis is used only for dry weight calculation and is representative of the total solids present in the sample at the time the dry weight corrected analyses were performed.</p> <p>Sample 1007389-04 failed hold criteria for Dry Weight 2540G. -This analysis was performed outside the recommended holding time. This analysis is used only for dry weight calculation and is representative of the total solids present in the sample at the time the dry weight corrected analyses were performed.</p>		

1. ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked on the LRC)



CHAIN OF CUSTODY RECORD

Southwest GEOSCIENCE
Environmental & Hydrogeologic Consultants

Office Location Dallas

Laboratory: ERM E

Address: _____

Contact: _____

Phone: _____

Project Manager Liz Steggs

PO/SO #: 0105035B

Sampler's Name Melissa Smith (USERA)

Sampler's Signature *Melissa Smith*

Matrix	Date	Time	Project Name		No/Type of Containers			Lab Sample ID (Lab Use Only)
			C O M P	G A B	Identifying Marks of Sample(s)	VOA	AG 1 L	
S	3.16.10	0955	X		Frisco Soil Sampling	2	1903 G	
		1005			FSS-PD-023			
		1050			FSS-PD-024			
		1120			FSS-CT-025			
		1135			FSS-CT-026			
		1310			FSS-CT-027			
		1324			FSS-OP-028			
		1335			FSS-OP-029			
		1437			FSS-OP-030			
		1447			FSS-SC-031			
					FSS-HC-032			1007389-01 / 02

Turn around time Normal 25% Rush 50% Rush 100% Rush

Relinquished by (Signature) _____ Date: 3.16.10 Time: 1804 Received by (Signature) _____ Date: 3.16.10 Time: 1805

Relinquished by (Signature) _____ Date: 3.17.10 Time: 0825 Received by (Signature) _____ Date: 3.17.10 Time: 0825

Relinquished by (Signature) _____ Date: 3.17.10 Time: 9:18 Received by (Signature) _____ Date: 3.17.10 Time: 9:19

Relinquished by (Signature) _____ Date: 3.17.10 Time: 10:15 Received by (Signature) _____ Date: 3.17.10 Time: 10:15

ANALYSIS REQUESTED: TH Pb, Cd (250 ml) (250 ml) (250 ml)

Lab use only Due Date: _____

Temp. of coolers when received (C°): 18.0

Page 1 of 2

NOTES: _____

Matrix Container: WW - Wastewater VOA - 40 ml Vial

W - Water S - Soil SD - Solid A/G - Amber / Or Glass 1 Liter

L - Liquid A - Air Bag 250 ml - Glass wide mouth

C - Charcoal tube SL - sludge O - Oil

CHAIN OF CUSTODY RECORD

Laboratory: **ERM**
 Address: _____
 Contact: _____
 Phone: _____
 PO/ISO #: **0105035B**
 Sampler's Signature: *Melissa Smith*

Project Name: **Frisco Soil Sampling**
 No/Type of Containers: **2 / 903 G**
 Matrix: **S**
 Date: **3.16.10** Time: **1520**
 Identifying Marks of Sample(s): **FSS-GR-033**
 VOA: **2** / 1 L
 AG: **250** ml
 P/O: _____

Matrix	Date	Time	Identifying Marks of Sample(s)	VOA	AG	P/O	ANALYSIS REQUESTED
S	3.16.10	1520	FSS-GR-033		250		TH Pkg'd (250 micron)
		1527	FSS-GR-034				
		1552	FSS-GR-035				
		1600	FSS-GR-036				
		1632	FSS-BG-037				
		1635	FSS-BG-038				

Turnaround time: Normal 25% Rush 50% Rush 100% Rush

Relinquished by (Signature): *[Signature]* Date: **3.16.10** Time: **1804** Received by (Signature): *[Signature]* Date: **3.16.10** Time: **1905**

Relinquished by (Signature): *[Signature]* Date: **3.17.10** Time: **0825** Received by (Signature): *[Signature]* Date: **3.17.10** Time: **0825**

Relinquished by (Signature): *[Signature]* Date: **3.17.10** Time: **918** Received by (Signature): *[Signature]* Date: **3.17.10** Time: **918**

Relinquished by (Signature): *[Signature]* Date: **3.17.10** Time: **1015** Received by (Signature): *[Signature]* Date: **3.17.10** Time: **1015**

Lab use only
 Due Date: _____
 Temp. of coolers when received (C°): **18.0**
 Page **2** of **2**

Lab Sample ID (Lab Use Only): **1007389-03/04**

NOTES: _____

Container: **WV - Wastewater** W - Water S - Soil SD - Solid L - Liquid A - Air Bag
 VOA - 40 ml vial A/G - Amber / Or Glass 1 Liter 250 ml - Glass wide mouth

SL - sludge O - Oil

1007389

Cooler 1
1.80C

Cooler 2
4.80C

Cooler 3
2.20C

ERMI

Custody Seal

Sample I.D. No. 000051B Date 3-17-10

Signature [Signature]

ERMI

X-484

ERMI

Custody Seal

Sample I.D. No. 000052B Date 3-17-10

Signature [Signature]

ERMI

X-484

ERMI

Custody Seal

Sample I.D. No. 000053B Date 3-17-10

Signature [Signature]

ERMI

X-484

Lab Number(s): 1007389

ERMI

Sample Preservation Documentation*

On Ice (Circle One): YES OR NO (check if on Dry Ice _____)

Parameters	Containers		Required Preservation	Sample Container	Circle pH Note any discrepancy
	#	Size			
Metals			pH < 2	Glass or Plastic	pH < 2
Dissolved Metals			Unpreserved prior to being filtered, Cool**	Glass or Plastic	
Hexavalent Chromium			CWA - pH 9.3-9.7, Cool; RCRA - Cool	Glass or Plastic	
Semivolatiles, Pesticides, PCBs, Herbicides			Cool	Glass only with Teflon lid	Chlorine <input type="checkbox"/> Yes <input type="checkbox"/> No
VOA (BTEX, MTBE, 624, 8260, TPH-GRO)			Cool, pH < 2 Zero Head Space	40 ml VOA vial	
VOA (TPH-1005)			Cool, Zero Head Space Please check if collected in pre-weighed vials	40 ml VOA vial	
Phos., NO ₃ /NO ₂ , NH ₃ N, COD, TKN, TOC			Cool, pH < 2	Glass or Plastic	pH < 2
TDS, BOD, CBOD, Cond, pH, TSS, F, SO ₄ , Cl, Alk, Sulfite			Cool	Glass or Plastic, Plastic only if F	
Phenols, TPH-DRO			Cool, pH < 2	Glass only Teflon lid _____ Foil lid _____	pH < 2
Oil & Grease, TPH (by 1664a)			Cool, pH < 2	Glass only Teflon lid _____ Foil lid _____	
Cyanide			Cool, pH > 12	Glass or Plastic	pH > 12 Chlorine <input type="checkbox"/> Yes <input type="checkbox"/> No Sulfide <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Na
Sulfide			Cool, pH > 9	Glass or Plastic	pH > 9
Bacteria			Cool	Plastic Sterile Cup	
Soil, Sludge, Solid, Oil, Liquid	32	907	Cool Note: please check if collected in pre-weighed vials	glass	

Metals Preserved By Login Yes No Trip Blanks Received Yes No

COMMENTS: Only 2 left held at this time. DC 7/11/09

*This form is used to document sample preservation. Circle parameter requested. Fill in number and size of containers received. Check pH (adjust if needed) and note if different from what is required and make a notation of any samples not received on ice. Note any incorrect sample containers or preservation on chain-of-custody.
**Cool means cooled to ≤6°C but not frozen

Preservation Checked By [Signature] Date 3-19-10 Time 1159

1000.0-3.2 2/17/09

