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Metcalf & Eddy, Inc.

13450 West Sunrise Boulevard, Suite 200, Sunrise, Florida 33323
T 954.745.7200 F 954.745.7299 www.m-e.aecom.com

February 26, 2007

Mr. David Phillips
State of Florida
Department of Environmental Protection
Site Investigation Section, MS 4515
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Site Investigation Report Addendum
Dade Work Camp
18500 SW 424th Street
Florida City, Florida
FDEP Site #29SL – TA-SL-09D

Dear Mr. Phillips:

Metcalf & Eddy (M&E) coordinated the sampling of four initial hand auger soil borings at the Dade Work Camp (DWC) in Florida City, Miami-Dade County, Florida. This work was conducted for the Florida Department of Environmental Protection (FDEP) State-Owned Lands program under Task Assignment (TA) #SL-09D for Contract HW-510. A copy of the TA is attached as **Appendix A**. Refer to **Figure 1** for a portion of a USGS quadrangle map, which depicts the location of the DWC. An aerial photo of the DWC, showing the locations of buildings, firing ranges, a cellular telephone tower, and nearby wetlands, is attached as **Figure 2**.

Summary of Previous Work

Metcalf & Eddy prepared a Preliminary Site Investigation Report (SIR) for the site in April 2003. The PSIR discussed the sampling of seven soil borings (SB001 through SB007) and identified four areas of concern (AOCs) in which arsenic soil concentrations exceeded Chapter 62-777 Florida Administrative Code (FAC) soil residential direct-exposure criteria. These areas were: a maintenance building (AOC #2), flammable materials storage area (AOC #3), a concrete pad with an unknown metal structure

(AOC #5), and a potential dump site (AOC #7). A fifth AOC (AOC #1, which was an outdoor sink at the maintenance building) was sampled for arsenic; however the arsenic concentration was reported as below lab detection limits (BDL). The AOCs are shown on **Figure 3**. At the time the PSIR was prepared the then applicable Chapter 62-777 FAC soil residential direct-exposure criteria for arsenic was 0.8 milligrams per Kilogram (mg/Kg). The PSIR recommended additional soil sampling for arsenic at the DWC facility.

Following the PSIR, M&E advanced an additional 26 soil borings (SB008 through SB033) from September 2003 through January 2004. Two borings (SB008 and SB009) were advanced in the previously unsampled AOCs #4 (a firing range) and #6 (an active dump site) to ascertain if arsenic was present in the soil in these two areas. The remaining 24 borings were conducted in AOCs 2, 3, 5, and 7 to further delineate arsenic concentrations in the soil at these four AOCs. The additional soil sampling results indicated that arsenic in AOC #4 and AOC #6 was reported as BDL. Arsenic concentrations exceeding the Chapter 62-777 FAC soil residential direct-exposure criteria of 0.8 mg/Kg were detected in AOCs #2, 3, #5, and #7. In addition, arsenic concentrations in AOC #3 (SB021) and AOC #5 (SB013 and SB017) exceeded the Chapter 62-777 FAC soil industrial direct-exposure criteria of 3.7 mg/Kg. Metcalf & Eddy prepared a Site Investigation Report (SIR) which was submitted to the FDEP in January 2004. The SIR recommended that no further arsenic assessment be conducted in the soil in AOCs #1 and #4. The SIR did recommend further assessment of the arsenic in the soil in AOC #5.

Metcalf & Eddy prepared a cost proposal for submittal to the FDEP in April 2006. That proposal recommended the advancement, and sampling for total arsenic, of four additional soil borings (SB034 through SB037). The FDEP approved the proposal by issuing TA #SL-09D in May 2006.

Soil Boring Placement Rationale and Sampling

A Metcalf & Eddy field scientist visited the DWC on July 17 and August 16, 2006 to locate and sample SB034 through SB037. The SBs were advanced in the vicinity of the concrete pad, firing range and the maintenance shop to assess the extent of suspected arsenic contamination in the soil. Soil borings SB034 and SB035 were advanced approximately 120 feet southeast and due east, respectively of the maintenance shop (AOC #2). The other two borings SB036 and SB037 were advanced along the base of a 12 foot high berm located immediately north of the firing range and approximately 180 feet northwest of the firing range, respectively. The soil boring locations are shown on **Figure 3**. Each soil boring was advanced to 2 feet below grade by using a stainless steel hand auger. A massive limestone unit, approximately 2 feet below grade, resulted in hand auger refusal at that depth. Soil samples were collected from the 2-foot depth in each borehole and placed into 4-ounce unpreserved glass jars. The jars were transported to a State-certified environmental laboratory for analysis of total arsenic.

Soil Sampling Results

The soil analytical results indicated that total arsenic concentrations of 3.68, 4.35, and 3.16 mg/Kg were detected in SB035, SB036, and SB037, respectively. These concentrations exceeded the current Chapter 62-777 FAC soil residential direct-exposure criteria of 2.1 mg/Kg, but were below the current Chapter 62-777 FAC soil industrial direct-exposure criteria of 12 mg/Kg. The arsenic concentration in SB034 was below the Chapter 62-777 FAC soil residential direct-exposure criteria. The arsenic exceedance in SB037 required that another soil boring be advanced to the northwest of SB037 to delineate the soil arsenic plume in the parking areas northwest of the concrete pad. Therefore, SB038 was advanced on November 14, 2006 approximately 75 feet northwest of SB037. The total arsenic concentration in SB038 was below the Chapter 62-777 FAC soil residential direct-exposure criteria. Although SB036 and SB037 exceeded the residential soil direct-exposure criteria, additional soil

sampling/delineation was not conducted to the northeast of these two borings due to inundated wetlands being located immediately adjacent to these borings. The wetlands are indicated on **Figures 2 and 3**. **Appendix B** contains representative photos of the wetlands and berm. The historical and current arsenic concentrations at DWC are listed in the attached **Table 1** and shown on **Figure 3**. Copies of current soil analytical reports are attached as **Appendix C**.

Conclusion and Recommendation

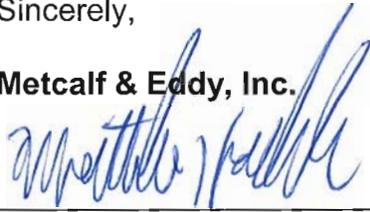
Metcalf & Eddy staff advanced five soil borings at the Dade Work camp in July through November 2006 to delineate the extent of arsenic contamination in the soil. These borings (SB034 through SB038) were advanced to assess soil arsenic sampling results previously collected in areas of concern #2, 3, 5, and #7. The current soil analytical results indicated that total arsenic concentrations of 3.68, 4.35, and 3.16 milligrams per Kilogram (mg/Kg) were detected in SB035, SB036, and SB037, respectively. These concentrations exceeded the current Chapter 62-777 FAC soil residential direct-exposure criteria of 2.1 mg/Kg, but were below the current Chapter 62-777 FAC soil industrial direct-exposure criteria of 12 mg/Kg. The total arsenic concentrations in SB034 and SB038 were below the Chapter 62-777 FAC soil residential direct-exposure criteria. The current soil sampling results indicate that soil contaminated with arsenic is primarily limited to the AOCs #2, 3, 5, and #7.

Based upon the soil analytical results, M&E recommends that no further action (NFA) with institutional controls be approved with respect to the soil in the vicinity of the firing range and the maintenance building.

If you have any questions or require additional information, please contact Steve Starke at (954) 745 7216.

Sincerely,

Metcalf & Eddy, Inc.

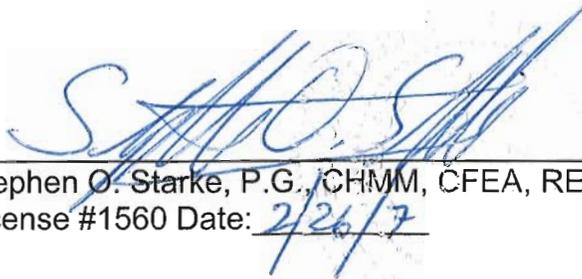


Matthew Holbrook, P.G.
Project Manager

Site Investigation Report Addendum
Dade Work Camp

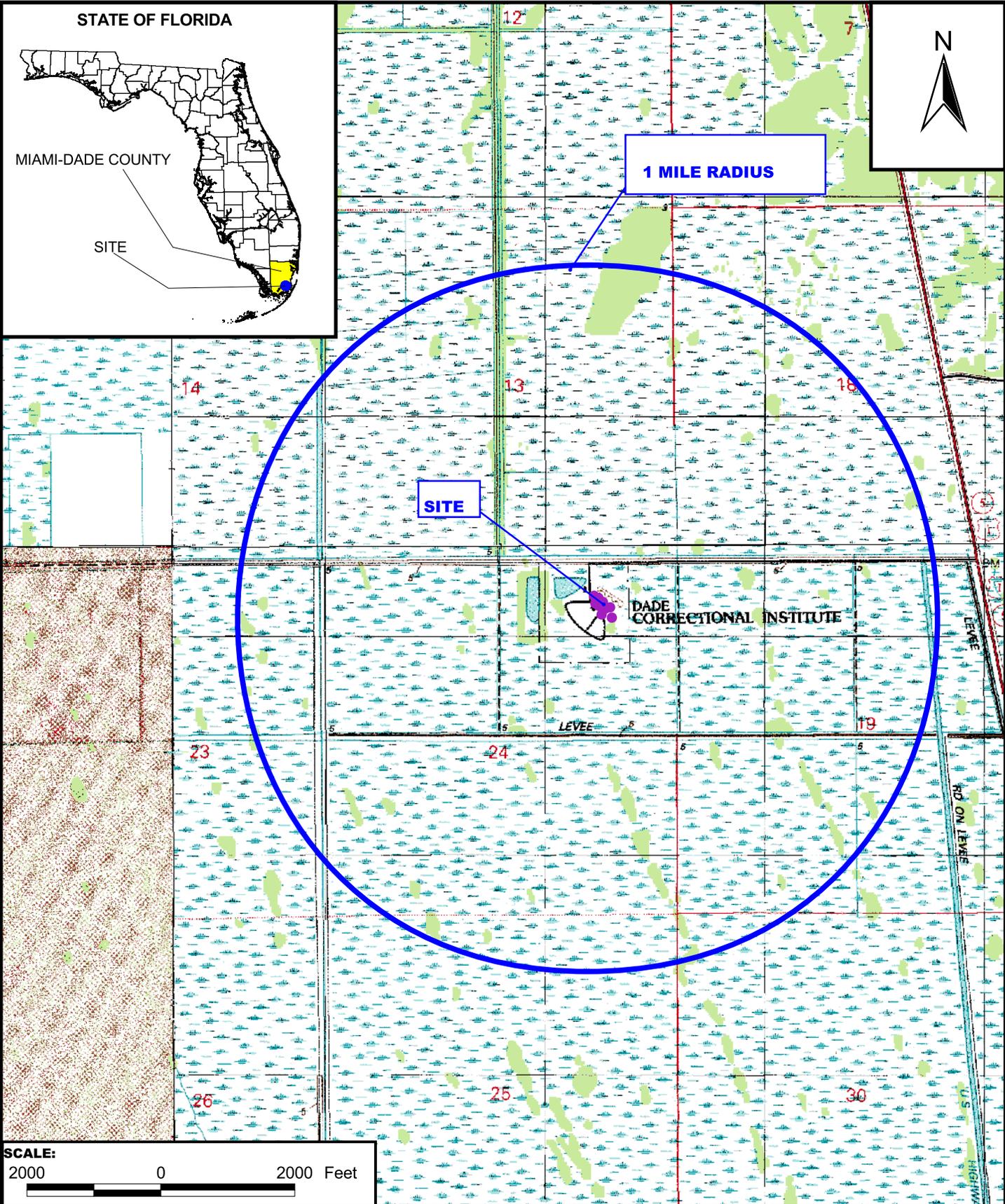
Certification

I, Stephen Starke, P.G. #1560, certify that I hold an active license in the State of Florida and am competent through education or experience to provide the geological services contained in this report. I further certify that in my professional judgment this report meets the requirements of Chapter 62-770/777 Florida Administrative Code (FAC) and was prepared by me or under my responsible charge. Moreover, I certify that Metcalf & Eddy, Inc., holds an active license #GB187 authorizing the firm to provide geological consulting services.



Stephen O. Starke, P.G., CHMM, CFEA, REPA
License #1560 Date: 2/26/7

FIGURES



SCALE:
 2000 0 2000 Feet



NOTES:
 USGS QUAD NAME: GLADES, NW
 USGS QUAD #: 1104
 SCALE: 1:24000
 SITE LOCATION
 LATITUDE: N 25 22 22.4
 LONGITUDE: W 80 28 49.0

DADE WORK CAMP
 DEPARTMENT OF CORRECTIONS
 18500 SW 424TH STREET
 FLORIDA CITY, MIAMI-DADE COUNTY, FLORIDA
 SITE NUMBER: 29SL
USGS SITE LOCATION MAP



FIGURE 1



DADE WORK CAMP

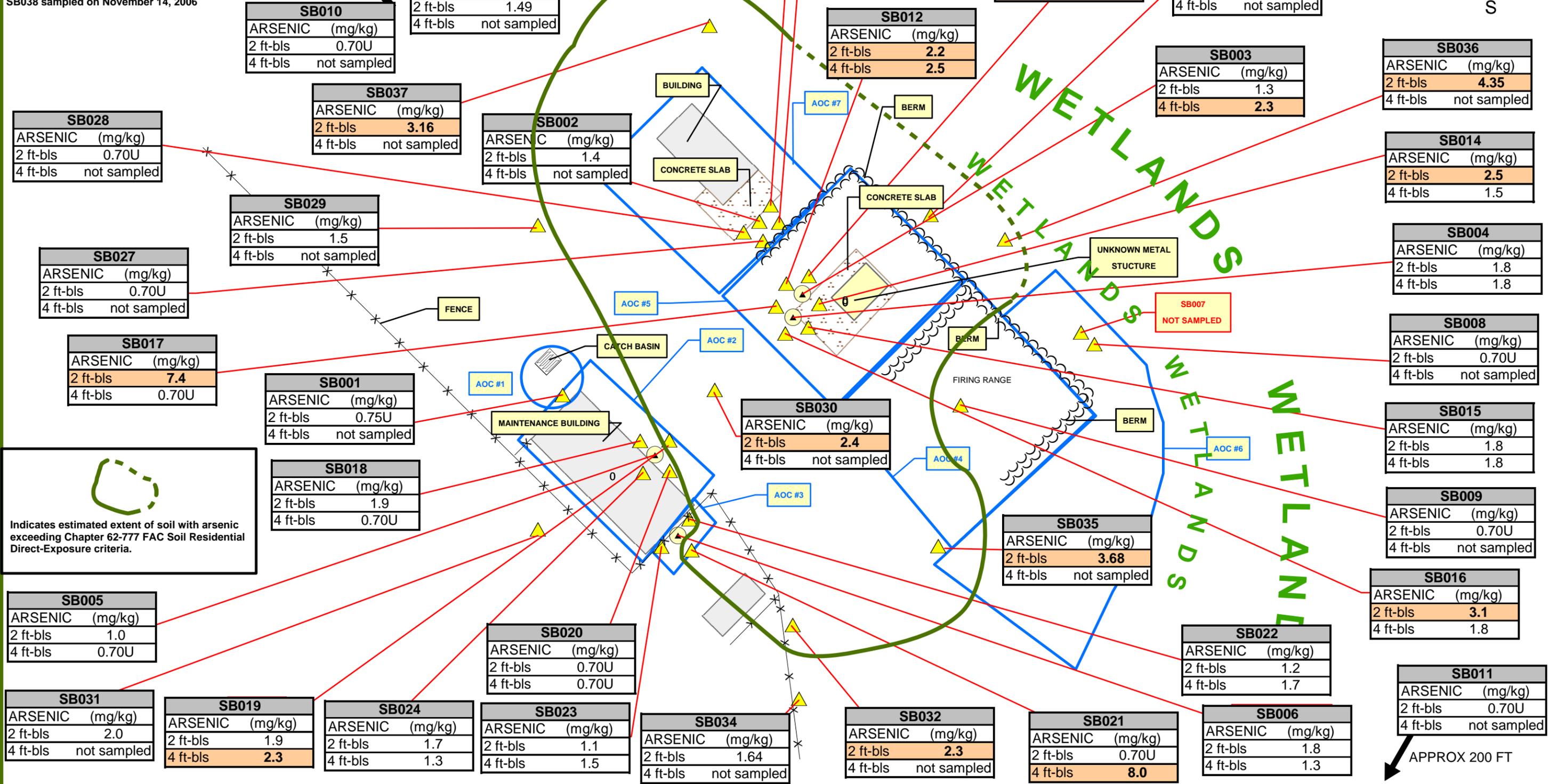
NOT TO SCALE

Notes:
 Blue shaded cells indicate concentration exceeds Ch. 62-777
 FAC soil residential direct-exposure criteria.
 U - indicates concentration was below laboratory detection limit.
 SB001 through SB033 sampled Feb 2003 - Jan 2004
 SB034 and SB035 sampled on July 17, 2006
 SB036 and SB037 sampled on August 16, 2006
 SB038 sampled on November 14, 2006



APPROX 350 FT

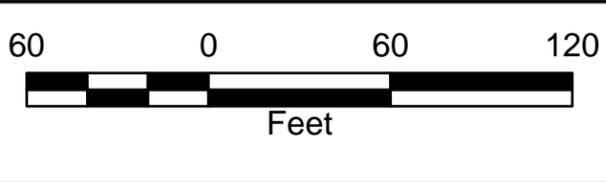
APPROX 200 FT



Indicates estimated extent of soil with arsenic exceeding Chapter 62-777 FAC Soil Residential Direct-Exposure criteria.



LEGEND: AREA OF CONCERN (AOC) ▲ SOIL BORING
▲ DIRECT PUSH GROUNDWATER SAMPLE/SOIL BORING
 mg/Kg - milligrams per Kilogram BUILDING CONCRETE PAD
 Note: bold text in shaded cells indicates the concentration exceeded the Chapter 62-777 FAC soil residential direct-exposure criteria.



DADE WORK CAMP
 18500 SOUTHWEST 424TH STREET
 MIAMI-DADE COUNTY
 FLORIDA CITY, FLORIDA 33034
ARSENIC CONCENTRATIONS IN SOIL



FIGURE 3

TABLE

**Table 1
SOIL ANALYTICAL RESULTS FOR TOTAL ARSENIC**

AOC	AOC #1	AOC #7	AOC #5				AOC #2		AOC #3		AOC #6	Risk Based Soil Guidance Concentrations		
Point ID	SB001	SB002	SB003	SB003	SB004	SB004	SB005	SB005	SB006	SB006	SB007	Leachability Groundwater	Direct Exposure Residential	Direct Exposure Industrial
Sample ID	S001	S007	S004	S007	S005	S008	S002	S002	S003	S009	S006	mg/kg	mg/kg	mg/kg
Sample Depth	2 ft bls	2 ft bls	2 ft bls	4 ft bls	2 ft bls	4 ft bls	2 ft bls	2 ft bls	2 ft bls	4 ft bls	2 ft bls			
Sample Date	18-Feb-03	18-Feb-03	18-Feb-03	5-Nov-03	18-Feb-03	5-Nov-03	18-Feb-03	18-Feb-03	18-Feb-03	5-Nov-03	18-Feb-03			
Arsenic mg/kg	0.75U	1.4	1.3	2.3	1.8	1.8	1.0	0.70U	1.8	1.3	NS	****	2.1	12

AOC	AOC #6	AOC #4	BACKGROUND		AOC #5						Risk Based Soil Guidance Concentrations		
Point ID	SB008	SB009	SB010	SB011	SB012	SB012	SB013	SB013	SB014	SB014	Leachability Groundwater	Direct Exposure Residential	Direct Exposure Industrial
Sample ID	S009	S010	S011	S012	S013	S014	S015	S016	S017	S018	mg/kg	mg/kg	mg/kg
Sample Depth	2 ft bls	2 ft bls	2 ft bls	2 ft bls	2 ft bls	4 ft bls	2 ft bls	4 ft bls	2 ft bls	4 ft bls			
Sample Date	17-Sep-03	17-Sep-03	17-Sep-03	17-Sep-03	5-Nov-03	5-Nov-03	5-Nov-03	5-Nov-03	5-Nov-03	5-Nov-03			
Arsenic mg/kg	0.75U	0.70U	0.70U	0.70U	2.2	2.5	4.2	2.3	2.5	1.5	****	2.1	12

AOC	AOC #5						AOC #2				Risk Based Soil Guidance Concentrations		
Point ID	SB015	SB015	SB016	SB016	SB017	SB017	SB018	SB018	SB019	SB019	Leachability Groundwater	Direct Exposure Residential	Direct Exposure Industrial
Sample ID	S019	S020	S021	S022	S023	S024	S025	S026	S027	S028	mg/kg	mg/kg	mg/kg
Sample Depth	2 ft bls	4 ft bls	2 ft bls	4 ft bls	2 ft bls	4 ft bls	2 ft bls	4 ft bls	2 ft bls	4 ft bls			
Sample Date	5-Nov-03	5-Nov-03	5-Nov-03	5-Nov-03	5-Nov-03	5-Nov-03	5-Nov-03	5-Nov-03	5-Nov-03	5-Nov-03			
Arsenic mg/kg	1.8	1.8	3.1	1.8	7.4	0.70U	1.9	0.70U	1.9	2.3	****	2.1	12

AOC	AOC #2		AOC #3				AOC #2				Risk Based Soil Guidance Concentrations		
Point ID	SB020	SB020	SB021	SB021	SB022	SB022	SB023	SB023	SB024	SB024	Leachability Groundwater	Direct Exposure Residential	Direct Exposure Industrial
Sample ID	S029	S030	S031	S032	S033	S034	S035	S036	S037	S038	mg/kg	mg/kg	mg/kg
Sample Depth	2 ft bls	4 ft bls	2 ft bls	4 ft bls	2 ft bls	4 ft bls	2 ft bls	4 ft bls	2 ft bls	4 ft bls			
Sample Date	5-Nov-03	5-Nov-03	5-Nov-03	5-Nov-03	5-Nov-03	5-Nov-03	5-Nov-03	5-Nov-03	5-Nov-03	5-Nov-03			
Arsenic mg/kg	0.70U	0.70U	0.07U	8.0	1.2	1.7	1.1	1.5	1.7	1.3	****	2.1	12

AOC	AOC #7				NOT WITHIN ANY AOC					Risk Based Soil Guidance Concentrations		
Point ID	SB025	SB026	SB027	SB028	SB029	SB030	SB031	SB032	SB033	Leachability Groundwater	Direct Exposure	
Sample ID	S039	S040	S041	S042	S043	S044	S045	S046	S047	mg/kg	Residential	Industrial
Sample Depth	2 ft bls	2 ft bls	2 ft bls	2 ft bls	2 ft bls	2 ft bls	2 ft bls	2 ft bls	2 ft bls		mg/kg	mg/kg
Sample Date	5-Nov-03	5-Nov-03	5-Nov-03	5-Nov-03	9-Jan-04	9-Jan-04	9-Jan-04	9-Jan-04	9-Jan-04			
Arsenic mg/kg	3.4	2.4	0.70U	0.70U	1.5	2.4	2.0	2.3	2.5	****	2.1	12

AOC	NOT WITHIN ANY AOC					Risk Based Soil Guidance Concentrations		
Point ID	SB034	SB035	SB036	SB037	SB038	Leachability Groundwater	Direct Exposure	
Sample ID	S048	S049	S050	S051	S052	mg/kg	Residential	Industrial
Sample Depth	2 ft bls	2 ft bls	2 ft bls	2 ft bls	2 ft bls		mg/kg	mg/kg
Sample Date	17-Jul-06	17-Jul-06	16-Aug-06	16-Aug-06	14-Nov-06			
Arsenic mg/kg	1.64	3.68	4.35	3.16	1.49	****	2.1	12

Notes:
 **** - Leachability values may be derived using SPLP to calculate site specific risk-based soil guidance concentrations
 U - indicates analyte not detected at specified detection limit
 bls - below land surface
 mg/kg - milligrams per kilogram
 NS - Not Sampled
 Bold text indicates concentration exceeds Residential Direct-Exposure Soil Criteria.

APPENDIX A

TASK ASSIGNMENT

Task Assignment Notification Form

DEP Contract Number: HW 510 Task Assignment #: SL09D Module #: Multiple
 Contractor Name: Metcalf & Eddy
 Contractor Representative: Dan Phillips/Bruce Koenig
 DEP Contract Manager: David Phillips Phone #: (850) 245-8952
 DEP Site #: 29SL
 Site Name: Dade Work Camp (Hawk Missile) (aka Everglades Youth Development Academy)
 Address(Street, City, County): 18500 Southwest 424th Street, Florida City, Miami-Dade
 Phase: 4

Task Description [use additional pages if necessary]:
Conduct limited assessment as outlined in 2/14/05 cost proposal. Collect soil samples for arsenic analysis.

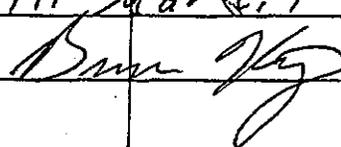
Final Deliverable: Site Investigation Report addendum Final Deliverable Due Date: 28-Jul-06

Period of Performance: Execution of Task Assignment through 7/28/2006

TASK ASSIGNMENT TYPE AND NOT TO EXCEED AMOUNTS:

FIXED PRICE	FEE SCHEDULE	COST PLUS FIXED FEE
Fixed Price: <u>\$4,718.91</u>	<u>\$0.00</u>	Cost Reimbursement: <u>\$0.00</u>
		Fixed Fee: <u>\$0.00</u>

Total Task Assignment Value: \$4,718.91

DEP Project Manager:		Date: <u>5/5/06</u>
DEP Contract Manager:		Date: <u>5/5/06</u>
Cost Center Administrator:	<u>Bill Martin</u>	Date: <u>05 May 06</u>
Contractor Representative:		Date: <u>5/10/06</u>

CC: Gwenn Godfrey, Contracts Office (MS 93)
 Bureau of Finance & Accounting (MS 78) - 2 Copies
 HWCS Representative _____

APPENDIX B

SITE PHOTOS



Typical dense vegetation located in areas immediately northeast of firing range berms.



View to northeast of berm at outside edge of firing range. Dense vegetation and wetlands are located on opposite side of berm.

APPENDIX C

SOIL ANALYTICAL REPORTS

Analytical Report 268714

for

Metcalf & Eddy

Project Manager: Matthew Holbrook

DWC

26-JUL-06



5757 NW 158-th St, Miami Lakes, FL 33014 Ph:(305) 823-8500 Fax:(305) 823-8555

NELAC certification numbers:

Houston, TX E87603 - Miami, FL E86678 - Tampa, FL E86675

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America



26-JUL-06

Project Manager: **Matthew Holbrook**
Metcalf & Eddy
13450 West Sunrise Blvd.
Suite 200

Ft. Lauderdale, FL 33323

Reference: XENCO Report No: **268714**
DWC
Project Address:

Matthew Holbrook:

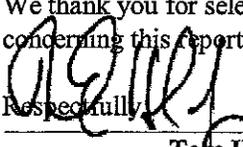
We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Chain of Custody Numbered 268714. All results being reported under this Chain of Custody apply to the samples analyzed and properly identified with a Laboratory ID number.

The results for the quality control samples were reviewed. All parameters for data reduction and validation were reviewed. Estimation of Data uncertainty for this report is found in the quality control section of this report unless otherwise noted. In view of this, we are able to release the analytical data for this report within acceptance criteria for accuracy, precision, completeness or properly flagged. Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in COC No. 268714 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,



Tom Helton

Laboratory Manager

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Certificate of Analytical Results 268714



Metcalf & Eddy, Ft. Lauderdale, FL

DWC

Sample Id: SB-34	Matrix: SOLID	% Moisture: 10.24
Lab Sample Id: 268714-001	Date Collected: Jul-17-06 10:58	Date Received: Jul-17-06 15:18
Sample Depth:		

Analytical Method: Metals per ICP-MS by SW 6020A	Prep Method: SW3050B
Date Analyzed: Jul-19-06 19:26	Analyst: PHP
Seq Number: 681884	Date Prep: Jul-19-06 08:00
	Tech: PHP

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Arsenic	7440-38-2	1.64	0.056	0.100	mg/kg		1

* Florida Standard List of Methods

Tom Helton
Laboratory Manager



Certificate of Analytical Results 268714



Metcalf & Eddy, Ft. Lauderdale, FL

DWC

Sample Id: SB-34	Matrix: SOLID	% Moisture:
Lab Sample Id: 268714-001	Date Collected: Jul-17-06 10:58	Date Received: Jul-17-06 15:18
Sample Depth:		

Analytical Method: Percent Moisture	Prep Method:		
Date Analyzed: Jul-19-06 09:59	Analyst: TST	Date Prep:	Tech: TST
	Seq Number: 681785		

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Percent Moisture		10.2	1.00	0.001	%		1

* Florida Standard List of Methods

Tom Helton
Laboratory Manager



Certificate of Analytical Results 268714



Metcalf & Eddy, Ft. Lauderdale, FL
DWC

Sample Id: SB-35	Matrix: SOLID	% Moisture: 11.8
Lab Sample Id: 268714-002	Date Collected: Jul-17-06 11:51	Date Received: Jul-17-06 15:18
Sample Depth:		

Analytical Method: Metals per ICP-MS by SW 6020A	Prep Method: SW3050B
Date Analyzed: Jul-19-06 19:32	Analyst: PHP
Seq Number: 681884	Date Prep: Jul-19-06 08:00
	Tech: PHP

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Arsenic	7440-38-2	3.68	0.057	0.102	mg/kg		1

* Florida Standard List of Methods

Tom Helton
Laboratory Manager



Certificate of Analytical Results 268714



Metcalf & Eddy, Ft. Lauderdale, FL
DWC

Sample Id: SB-35	Matrix: SOLID	% Moisture:
Lab Sample Id: 268714-002	Date Collected: Jul-17-06 11:51	Date Received: Jul-17-06 15:18
Sample Depth:		

Analytical Method: Percent Moisture	Prep Method:		
Date Analyzed: Jul-19-06 09:59	Analyst: TST	Date Prep:	Tech: TST
	Seq Number: 681785		

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Percent Moisture		11.8	1.00	0.001	%		1

* Florida Standard List of Methods

Tom Helton
Laboratory Manager

FLORIDA flagging criteria

Data were reviewed by the
Department Supervisor and QA Director

- A Value reported is the mean (average) of two or more determinations.
- B Results based upon colony counts outside the acceptable range.
- J Estimated value; value not accurate. All results with a "J" qualifier require comment.
 - J1: Surrogate Recoveries exceed established QA/QC Limits
 - J2: No known QA/QC exists.
 - J3: Reported value failed to meet established QA/QC limits or the sample matrix interfered with the ability to make an accurate determination
 - J4: The data is questionable due to improper laboratory or field protocols
- Q Sample held beyond the accepted holding time
- T Value reported is less than the laboratory method detection limit. The value is reported for informational purposes, only and shall not be used in statistical analysis.
- U Compound was analyzed for but not detected at the MDL Level.
- V Analyte was detected in both the sample and the associated method blank.
- Y Laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- I The reported value is between the laboratory MDL and the laboratory PQL.
- * Not analyzed due to interference.
- R Significant rain in the past 48 hours.
- ! Data deviates from historically established concentration ranges.

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5309 Wurzbach, Ste 104 San Antonio TX 78238
2618 South Falkenburg, Riverview, FL 33569
5757 NW 158th St, Miami Lakes, FL 33014

Phone	Fax
(281) 589-0692	(281) 589-0695
(972) 481-9999	(972) 481-9998
(210) 509-3334	(201) 509-3335
(813) 620-2000	(813) 620-2033
(305) 823-8500	(305) 823-8555

Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

- F** RPD exceeded lab control limits.

- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

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2618 South Falkenburg, Riverview, FL 33569
5757 NW 158th St, Miami Lakes, FL 33014

Phone	Fax
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Blank Spike Recovery



Project Name: DWC

Work Order #: 268714

Project ID:

Lab Batch #: 681884

Sample: 486580-1-BKS

Matrix: Solid

Date Analyzed: 07/19/2006

Date Prepared: 07/19/2006

Analyst: PHP

Reporting Units: mg/kg

Batch #: 1

BLANK /BLANK SPIKE RECOVERY STUDY

Metals per ICP-MS by SW 6020A	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Analytes						
Arsenic	<0.500	5.00	4.69	94	70-125	

Blank Spike Recovery [D] = 100*[C]/[B]

All results are based on MDL and validated for QC purposes.



Form 3 - MS / MSD Recoveries



Project Name: **DWC**

Work Order # 268714

Project ID:

Lab Batch ID: 681884

QC-Sample ID: 268579-013 S Batch #: 1 Matrix: Solid

Date Analyzed: 07/19/2006

Date Prepared: 07/19/2006 Analyst: PHP

Reporting Units: mg/kg

Metals per ICP-MS by SW 6020A

Analytes

Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
0.251	5.01	4.40	83	5.01	4.37	82	1	70-125	30	
Arsenic										

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

Matrix Spike Percent Recovery [D] = 100*(C-A)/B

Relative Percent Difference RPD = 200*(D-G)/(D+G)

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable



Sample Duplicate Recovery



Project Name: DWC

Work Order # 268714

Lab Batch #: 681884

Date Analyzed: 07/19/2006

QC- Sample ID: 268579-013 D

Reporting Units: mg/kg

Project ID:

Analyst: PHP

Matrix: Solid

Date Prepared: 07/19/2006

Batch #: 1

SAMPLE / SAMPLE DUPLICATE RECOVERY

Metals per ICP-MS by SW 6020A	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Arsenic	0.251	0.213	16	30	

Lab Batch #: 681785

Date Analyzed: 07/19/2006

QC- Sample ID: 268683-006 D

Reporting Units: %

Date Prepared: 07/19/2006

Analyst: TST

Matrix: Solid

Batch #: 1

SAMPLE / SAMPLE DUPLICATE RECOVERY

Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	28.9	31.9	10	20	

Lab Batch #: 681785

Date Analyzed: 07/19/2006

QC- Sample ID: 268756-005 D

Reporting Units: %

Date Prepared: 07/19/2006

Analyst: TST

Matrix: Solid

Batch #: 1

SAMPLE / SAMPLE DUPLICATE RECOVERY

Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	10.1	10.7	6	20	

Spike Relative Difference RPD $200 * |(B-A)/(B+A)|$
All Results are based on MDL and validated for QC purposes.

Analytical Report 269957

for

Metcalf & Eddy

Project Manager: Matthew Holbrook

DWC

22-AUG-06



5757 NW 158-th St, Miami Lakes, FL 33014 Ph:(305) 823-8500 Fax:(305) 823-8555

NELAC certification numbers:

Houston, TX E87603 - Miami, FL E86678 - Tampa, FL E86675

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America



22-AUG-06

Project Manager: **Matthew Holbrook**
Metcalf & Eddy
13450 West Sunrise Blvd.
Suite 200

Ft. Lauderdale, FL 33323

Reference: XENCO Report No: **269957**

DWC

Project Address: 18500 Southwest 429th Street, Florida city

Matthew Holbrook:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 269957. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 269957 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully

Tom Helton

Laboratory Manager

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Certificate of Analytical Results 269957



Metcalf & Eddy, Ft. Lauderdale, FL

DWC

Sample Id: SB36	Matrix: SOLID	% Moisture: 21.64
Lab Sample Id: 269957-001	Date Collected: Aug-16-06 00:00	Date Received: Aug-16-06 15:54
Sample Depth: 2 ft		

Analytical Method: Metals per ICP-MS by SW 6020A		Prep Method: SW3050B	
Date Analyzed: Aug-21-06 17:00	Analyst: PHP	Date Prep: Aug-18-06 09:34	Tech: PHP
	Seq Number: 683378		

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Arsenic	7440-38-2	4.35	0.638	0.115	mg/kg		1

Florida Standard List of Methods

Version: 1.001

Tom Helton
Laboratory Manager



Certificate of Analytical Results 269957



Metcalf & Eddy, Ft. Lauderdale, FL

DWC

Sample Id: SB36	Matrix: SOLID	% Moisture:
Lab Sample Id: 269957-001	Date Collected: Aug-16-06 00:00	Date Received: Aug-16-06 15:54
Sample Depth: 2 ft		

Analytical Method: Percent Moisture		Prep Method:	
Date Analyzed: Aug-18-06 15:15	Analyst: ANC	Date Prep:	Tech: ANC
	Seq Number: 683259		

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Percent Moisture		21.6	1.00	0.001	%		1

Florida Standard List of Methods

Version: 1.001

Tom Helton
Laboratory Manager



Certificate of Analytical Results 269957



Metcalf & Eddy, Ft. Lauderdale, FL
DWC

Sample Id: SB37	Matrix: SOLID	% Moisture: 12.42
Lab Sample Id: 269957-002	Date Collected: Aug-16-06 00:00	Date Received: Aug-16-06 15:54
Sample Depth: 2 ft		

Analytical Method: Metals per ICP-MS by SW 6020A		Prep Method: SW3050B	
Date Analyzed: Aug-21-06 17:06	Analyst: PHP	Date Prep: Aug-18-06 09:34	Tech: PHP
	Seq Number: 683378		

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Arsenic	7440-38-2	3.16	0.571	0.103	mg/kg		1

Florida Standard List of Methods

Version: 1.001

Tom Helton
Laboratory Manager



Certificate of Analytical Results 269957



Metcalf & Eddy, Ft. Lauderdale, FL
DWC

Sample Id: SB37	Matrix: SOLID	% Moisture:
Lab Sample Id: 269957-002	Date Collected: Aug-16-06 00:00	Date Received: Aug-16-06 15:54
Sample Depth: 2 ft		

Analytical Method: Percent Moisture				Prep Method:
Date Analyzed: Aug-18-06 15:15	Analyst: ANC	Date Prep:	Tech: ANC	
	Seq Number: 683259			

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Percent Moisture		12.4	1.00	0.001	%		1

Florida Standard List of Methods

Version: 1.001

Tom Helton
Laboratory Manager

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the MQL and above the SQL.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.

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Blank Spike Recovery



Project Name: DWC

Work Order #: 269957

Project ID:

Lab Batch #: 683378

Sample: 487421-1-BKS

Matrix: Solid

Date Analyzed: 08/21/2006

Date Prepared: 08/18/2006

Analyst: PHP

Reporting Units: mg/kg

Batch #: 1

BLANK /BLANK SPIKE RECOVERY STUDY

Metals per ICP-MS by SW 6020A Analytes	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Arsenic	<0.500	5.00	4.24	85	70-125	

Blank Spike Recovery [D] = 100*[C]/[B]

All results are based on MDL and validated for QC purposes.



Project Name: **DWC**

Work Order #: 269957

Project ID:

Lab Batch ID: 683378

QC-Sample ID: 269951-003 S Batch #: 1 Matrix: Solid

Date Analyzed: 08/21/2006

Date Prepared: 08/18/2006 Analyst: PHP

Reporting Units: mg/kg

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY												
Metals per ICP-MS by SW 6020A		Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
Analytes												
Arsenic		<0.664	6.64	6.03	91	6.64	6.23	94	3	70-125	30	

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*(D-G)/(D+G)

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable, N = See Narrative, EQ = Estimated Quantitation Limit



Sample Duplicate Recovery



Project Name: DWC

Work Order #: 269957

Lab Batch #: 683378

Date Analyzed: 08/21/2006

QC- Sample ID: 269951-003 D

Reporting Units: mg/kg

Project ID:

Date Prepared: 08/18/2006

Analyst: PHP

Batch #: 1

Matrix: Solid

SAMPLE / SAMPLE DUPLICATE RECOVERY

Metals per ICP-MS by SW 6020A	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Arsenic	<0.664	0.743	NC	30	

Lab Batch #: 683259

Date Analyzed: 08/18/2006

QC- Sample ID: 269995-001 D

Reporting Units: %

Date Prepared: 08/18/2006

Analyst: ANC

Batch #: 1

Matrix: Solid

SAMPLE / SAMPLE DUPLICATE RECOVERY

Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	8.50	8.23	3	20	

Spike Relative Difference RPD $200 * |(B-A)/(B+A)|$
All Results are based on MDL and validated for QC purposes.

Analytical Report 273646

for

Metcalf & Eddy

Project Manager: Matthew Holbrook

Dade Work Camp

17-NOV-06



5757 NW 158-th St, Miami Lakes, FL 33014 Ph:(305) 823-8500 Fax:(305) 823-8555

NELAC certification numbers:

Houston, TX E87603 - Miami, FL E86678 - Tampa, FL E86675

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America



17-NOV-06

Project Manager: **Matthew Holbrook**
Metcalf & Eddy
13450 West Sunrise Blvd.
Suite 200

Ft. Lauderdale, FL 33323

Reference: XENCO Report No: **273646**
Dade Work Camp
Project Address: Florida City

Matthew Holbrook:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 273646. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 273646 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Tom Helton

Laboratory Manager

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Certificate of Analytical Results 273646



Metcalf & Eddy, Ft. Lauderdale, FL

Dade Work Camp

Sample Id: SB-38	Matrix: SOIL	% Moisture: 9.59
Lab Sample Id: 273646-001	Date Collected: Nov-14-06 13:40	Date Received: Nov-14-06 14:58
Sample Depth: 2 ft		

Analytical Method: Metals per ICP-MS by SW 6020A	Prep Method: SW3050B
Date Analyzed: Nov-16-06 17:48	Analyst: PHP
Seq Number: 687657	Date Prep: Nov-16-06 08:11
	Tech: PHP

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Arsenic	7440-38-2	1.49	0.553	0.100	mg/kg		1

Florida Standard List of Methods

Version: 1.001

Tom Helton
Laboratory Manager



Certificate of Analytical Results 273646



Metcalf & Eddy, Ft. Lauderdale, FL
Dade Work Camp

Sample Id: SB-38	Matrix: SOIL	% Moisture:
Lab Sample Id: 273646-001	Date Collected: Nov-14-06 13:40	Date Received: Nov-14-06 14:58
Sample Depth: 2 ft		

Analytical Method: Percent Moisture	Prep Method:	
Date Analyzed: Nov-16-06 06:47	Analyst: ANC	Date Prep:
	Seq Number: 687600	Tech: ANC

Parameter	Cas Number	Result	PQL	MDL	Units	Flag	Dil
Percent Moisture	MOIST	9.59	1.00	0.001	%		1

Florida Standard List of Methods

Version: 1.001

Tom Helton
Laboratory Manager



Flagging Criteria



FLORIDA flagging criteria

Data were reviewed by the
Department Supervisor and QA Director

- A Value reported is the mean (average) of two or more determinations.
- B Results based upon colony counts outside the acceptable range.
- J Estimated value; value not accurate. All results with a "J" qualifier require comment.
 - J1: Surrogate Recoveries exceed established QA/QC Limits
 - J2: No known QA/QC exists.
 - J3: Reported value failed to meet established QA/QC limits or the sample matrix interfered with the ability to make an accurate determination
 - J4: The data is questionable due to improper laboratory or field protocols
- Q Sample held beyond the accepted holding time
- T Value reported is less than the laboratory method detection limit. The value is reported for informational purposes, only and shall not be used in statistical analysis.
- U Compound was analyzed for but not detected at the MDL Level.
- V Analyte was detected in both the sample and the associated method blank.
- Y Laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- I The reported value is between the laboratory MDL and the laboratory PQL.
- * Not analyzed due to interference.
- + (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation
- R Significant rain in the past 48 hours.
- ! Data deviates from historically established concentration ranges.

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(813) 620-2000	(813) 620-2033
(305) 823-8500	(305) 823-8555

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.

- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.

- F** RPD exceeded lab control limits.

- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.

- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.

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(305) 823-8500	(305) 823-8555



Blank Spike Recovery



Project Name: Dade Work Camp

Work Order #: 273646

Project ID:

Lab Batch #: 687657

Sample: 490088-1-BKS

Matrix: Solid

Date Analyzed: 11/16/2006

Date Prepared: 11/16/2006

Analyst: PHP

Reporting Units: mg/kg

Batch #: 1

BLANK /BLANK SPIKE RECOVERY STUDY

Metals per ICP-MS by SW 6020A	Blank Result [A]	Spike Added [B]	Blank Spike Result [C]	Blank Spike %R [D]	Control Limits %R	Flags
Analytes						
Arsenic	<0.500	5.00	4.36	87	70-125	

Blank Spike Recovery [D] = 100*[C]/[B]

All results are based on MDL and validated for QC purposes.



Form 3 - MS / MSD Recoveries



Project Name: Dade Work Camp

Work Order # 273646

Lab Batch ID: 687657

Date Analyzed: 11/16/2006

Reporting Units: mg/kg

Project ID:

QC- Sample ID: 273610-001 S

Batch #: 1 Matrix: Soil

Date Prepared: 11/16/2006 Analyst: PHP

MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY STUDY											
Metals per ICP-MS by SW 6020A Analytes	Parent Sample Result [A]	Spike Added [B]	Spiked Sample Result [C]	Spiked Sample %R [D]	Spike Added [E]	Duplicate Spiked Sample Result [F]	Spiked Dup. %R [G]	RPD %	Control Limits %R	Control Limits %RPD	Flag
	Arsenic	<0.525	5.25	4.24	81	5.25	4.37	83	2	70-125	30

Matrix Spike Percent Recovery [D] = 100*(C-A)/B
Relative Percent Difference RPD = 200*(D-G)/(D+G)

ND = Not Detected, J = Present Below Reporting Limit, B = Present in Blank, NR = Not Requested, I = Interference, NA = Not Applicable, N = See Narrative, EQL = Estimated Quantitation Limit

Matrix Spike Duplicate Percent Recovery [G] = 100*(F-A)/E



Sample Duplicate Recovery



Project Name: Dade Work Camp

Work Order # 273646

Lab Batch #: 687657

Date Analyzed: 11/16/2006

QC- Sample ID: 273610-001 D

Reporting Units: mg/kg

Date Prepared: 11/16/2006

Batch #: 1

Project ID:

Analyst: PHP

Matrix: Soil

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Metals per ICP-MS by SW 6020A	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Arsenic	<0.525	0.231	NC	30	

Lab Batch #: 687600

Date Analyzed: 11/16/2006

QC- Sample ID: 273647-006 D

Reporting Units: %

Date Prepared: 11/16/2006

Batch #: 1

Analyst: ANC

Matrix: Soil

SAMPLE / SAMPLE DUPLICATE RECOVERY					
Percent Moisture	Parent Sample Result [A]	Sample Duplicate Result [B]	RPD	Control Limits %RPD	Flag
Analyte					
Percent Moisture	7.19	8.78	20	20	

Spike Relative Difference RPD 200 * | (B-A)/(B+A) |
All Results are based on MDL and validated for QC purposes.

