# Final

# Permittee-Initiated Interim Measures Report
# Parcel 4A, Area of Concern 29

Fort Wingate Depot Activity
McKinley County, New Mexico

April 15, 2014

Contract No. W9126G-11-D-0040
Task Order No. 0002

Prepared for:

**US Army Corps**
**of Engineers ®**

United States Army Corps of Engineers
Fort Worth District
P.O. Box 17300
Fort Worth, Texas 76102

Prepared by:

AMEC Environment & Infrastructure, Inc.
4600 E. Washington Street, Ste. 600
Phoenix, Arizona 85034

[THIS PAGE INTENTIONALLY LEFT BLANK]

## REPORT DOCUMENTATION PAGE

*Form Approved*
*OMB No. 0704-0188*



**PLEASE DO NOT RETURN YOUR FORM TO THE ABOVE ADDRESS.**

| 1. REPORT DATE *(DD-MM-YYYY)* | 2. REPORT TYPE | 3. DATES COVERED *(From – To)* |
|---|---|---|
| 04/15/2014 | Permittee-Initiated Interim Measure Report | August 2013-January 2014 |

**4. TITLE AND SUBTITLE**
Final
Permittee-Initiated Interim Measures Report
Parcel 4A, Area of Concern 29
Fort Wingate Depot Activity
McKinley County, New Mexico

**5a. CONTRACT NUMBER**
W9126G-11-D-0040

**5b. GRANT NUMBER**
N/A

**5c. PROGRAM ELEMENT NUMBER**

**6. AUTHOR(S)**
Julie Hamilton/AMEC
Tim Ostapuk/AMEC

**5d. PROJECT NUMBER**

**5e. TASK NUMBER**

**5d. WORK UNIT NUMBER**

**7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)**
AMEC Environment & Infrastructure, Inc.
4600 E. Washington Street, Ste 600
Phoenix, Arizona 85034

**8. PERFORMING ORGANIZATION REPORT NUMBER**
AMEC912640002.0012.03

**9. SPONSORING/MONITORING AGENCY NAME(S) AND ADCDDRESS(ES)**
U.S. Army Corps of Engineers, Fort Worth District
CESWF-PER-D
819 Taylor Street
Fort Worth, TX 76102
Project Manager: Mr. Steven Smith

**10. SPONSOR/MONITOR'S ACRONYM(S) USACE**

**11. SPONSOR/MONITOR'S REPORT NUMBER(S)**

**12. DISTRIBUTION/AVAILABILITY STATEMENT**
Unlimited.

**13. SUPPLEMENTARY NOTES**

**14. ABSTRACT**
This Report summarizes the Permittee-Initiated Interim Measures completed in October 2013 for Area of Concern (AOC) Block C of Parcel 4A, as outlined in the Notification of Permittee-Initiated Interim Measures dated September 10, 2013 and notice-to-proceed by the New Mexico Environment Department on September 24, 2013 via email correspondence.

**15. SUBJECT TERMS**
Fort Wingate Depot Activity, Permittee-Initiated Interim Measures Report, Parcel 4A, Area of Concern 29

| 16. SECURITY CLASSIFICATION OF: | | | 17. LIMITATION OF ABSTRACT | 18. NUMBER OF PAGES | 19a. NAME OF RESPONSIBLE PERSON |
|---|---|---|---|---|---|
| a. REPORT | b. ABSTRACT | c. THIS PAGE | | | Mark Patterson |
| U | U | U | SAR | 120 | 19b. TELEPHONE NUMBER (*Include area code*) 330/358-7312 |

**Standard Form 298** (Rev. 8/98)
Prescribed by ANSI Std. Z39. 18

1
2
3

[THIS PAGE INTENTIONALLY LEFT BLANK]

**NMED APPROVAL**

**(WILL BE INSERTED)**

[THIS PAGE INTENTIONALLY LEFT BLANK]

# Final

# Permittee-Initiated Interim Measures Report
# Parcel 4A, Area of Concern 29

Fort Wingate Depot Activity
McKinley County, New Mexico

April 15, 2014

Contract No. W9126G-11-D-0040
Task Order No. 0002

Prepared for:

United States Army Corps of Engineers
Fort Worth District
P.O. Box 17300
Fort Worth, Texas 76102

Prepared by:

AMEC Environment & Infrastructure, Inc.
4600 E. Washington Street, Ste. 600
Phoenix, Arizona 85034

[THIS PAGE INTENTIONALLY LEFT BLANK]

## DOCUMENT CERTIFICATION

**40 CFR 270.11**
**APRIL 2014**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____

Mr. Steven W. Smith, P.E.

Fort Wingate Program Manager

[THIS PAGE INTENTIONALLY LEFT BLANK]

## PREFACE

This Permittee-Initiated Interim Measures Report summarizes the Permittee-Initiated Interim Measures completed in October 2013 for Area of Concern (AOC) Block C of Parcel 4A, as outlined in the Notification of Permittee-Initiated Interim Measures dated September 10, 2013 and approved by the New Mexico Environment Department on September 24, 2013 via email correspondence. This report addresses the requirements of the U.S. Army Corps of Engineers Statement of Work dated August 11, 2011.

This Report was prepared by AMEC Environment & Infrastructure, Inc. in January 2014. Mr. Mark Patterson served as the FWDA Base Realignment and Closure (BRAC) Environmental Coordinator and Mr. Steve Smith served as the USACE Project Manager.

_____

Julie Hamilton, PG
Program Manager

[THIS PAGE INTENTIONALLY LEFT BLANK]

## DOCUMENT DISTRIBUTION LIST

| Organization (Name) | Number of Printed Copies | Number of Electronic Copies |
|---|---|---|
| John Kieling (NMED) | 2 | 2 |
| Chuck Hendrickson (USEPA 6) | 1 | 1 |
| Mark Patterson (FWDA BEC) | 1 | 1 |
| Micki Gonzales (FWDA) | 2 | 2 |
| Bill O'Donnell (BRACD) | 0 | 1 |
| Ft. Worth District POC (USACE SWF) | 1 | 2 |
| Mike Kipp (USAEC) | 0 | 1 |
| Jarvis Williams (NN) | 1 | 7 |
| Darrell Tsabetsaye (POZ) | 1 | 8 |
| Clayton Seoutewa (BIA Zuni) | 1 | 1 |
| Ben Burshia (BIA) | 0 | 1 |
| Eldine Stevens (BIA) | 0 | 1 |
| Judith Wilson (BIA) | 0 | 1 |
| Rose Duwyenie (BIA-NR) | 1 | 2 |
| Angela Kelsey (BIA) | 0 | 1 |
| Pat Ryan (Web manager) | 0 | 1 |
| **Totals** | **11** | **33** |

BEC = Base Realignment and Closure Environmental Coordinator
BIA-NR = Bureau of Indian Affairs – Navajo Representative
BRACD = U. S. Army Base Realignment and Closure Division
FWDA = Fort Wingate Depot Activity
NMED = New Mexico Environmental Department
NN = Navajo Nation
POZ = Pueblo of Zuni
USACE SWF = U. S. Army Corps of Engineers – Fort Worth District
USAEC = U. S. Army Environmental Command
USEPA = U. S. Environmental Protection Agency

[THIS PAGE INTENTIONALLY LEFT BLANK]

# TABLE OF CONTENTS

**Section** **Page**
NMED APPROVAL ..... iii
DOCUMENT CERTIFICATION ..... i
PREFACE ..... iii
DOCUMENT DISTRIBUTION LIST ..... v
LIST OF ACRONYMS AND ABBREVIATIONS ..... ix
SECTION 1.0 INTRODUCTION ..... 1-1
SECTION 2.0 PARCEL 4A INTERIM MEASURES ..... 2-1
2.1 Drain Pipe Removal ..... 2-1
2.2 Soil Removal ..... 2-1
2.3 Confirmation Sampling ..... 2-1
2.4 Waste Profile and Disposal ..... 2-2
SECTION 3.0 PARCEL 2 TRANSFORMER I-25 SAMPLING AND RESULTS ..... 3-1
SECTION 4.0 SUMMARY AND CONCLUSIONS ..... 4-1

## LIST OF TABLES

Table 1 Post Excavation Confirmation: C-1105, C-1109, C-1124, C-1128
Table 2 Soil Sampling Results
Table 3 Polychlorinated Biphenols Analytical Soil Results

## LIST OF FIGURES

Figure 1 Sample Locations, AOC 29 – Block C Igloo and Revetment

## PHOTOGRAPHIC LOG

## LIST OF APPENDICIES

Appendix A Permittee Initiated Interim Measures Notification and NMED Notice-to-Proceed
Appendix B Analytical Laboratory Report Summaries
Appendix C Waste Disposal Documentation
Appendix D Transformer I-25 Analytical Report Summary

[THIS PAGE INTENTIONALLY LEFT BLANK]

## LIST OF ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| AOC | Area of Concern |
| BRACD | U.S. Army Base Realignment and Closure Division |
| FWDA | Fort Wingate Depot Activity |
| mg/kg | milligrams per kilogram |
| NMED | New Mexico Environment Department |
| PCB | polychlorinated biphenols |
| RCRA | Resource Conservation and Recovery Act |
| SSL | Soil Screening Levels |
| USACE | U.S. Army Corps of Engineers |

[THIS PAGE INTENTIONALLY LEFT BLANK]

# SECTION 1.0 INTRODUCTION

The Department of the Army, Fort Wingate Depot Activity (FWDA) has completed the Permittee-Initiated Interim Measures per the Resource Conservation and Recovery Act (RCRA) Permit NM6213820974 Section VII.G.3 for Area of Concern (AOC) 29, Block C of Parcel 4A. The interim measures were outlined in the Notification of Permittee-Initiated Interim Measures dated September 10, 2013 and approved by the New Mexico Environment Department (NMED) on September 24, 2013 via email correspondence. The notification and corresponding approval is included in Appendix A.

The Permittee-Initiated Interim Measures included the following:

- Removal of igloo drain pipes on Block C igloos.
- Excavation of soil where previous investigations indicated the presence of lead in the soil above the NMED Soil Screening Level (SSL). This included both the left and right drain pipes at Igloos C-1105, C-1109, and C-1128, and right drain pipe of Igloo C-1124. Confirmation sampling was completed following the removal activities.
- Drain pipes and associated subsurface concrete from Igloos C-1551 and C-1552 were removed. Soil sampling was conducted immediately below the former drain pipes to evaluate whether there was any potential impact to the underlying soil.

Included with this letter report are the results of soil sampling conducted near former transformer I-25 located in Parcel 2. This transformer is part of AOC 75 and was included in this report due to its proximity to Parcel 4A.

Figure 1 depicts the location of the Block C igloos, sampling locations, and former transformer I-25. A Photographic Log of the various site activities is included with this report.

# SECTION 2.0 PARCEL 4A INTERIM MEASURES

The following sections describe the interim measures procedures and results for activities performed at Parcel 4A.

## 2.1 Drain Pipe Removal

In preparation for drain pipe removal, plastic sheeting was placed below each pipe and the piping was wrapped in tape to prevent any paint coating from being disturbed. The drain pipes at each igloo were then cut at the wall with a Sawzall. Following the piping removal, the holes were backfilled with a non-shrink grout. The drain pipe removal activities occurred during the period of October 14 through 17, 2013.

The same procedure was generally performed for the drain pipes at C-1551 and C-1552. However, since these drain pipes extended into the ground through a concrete pad, the concrete was broken up and removed.

## 2.2 Soil Removal

Soil removal was performed below both the former left and right drain pipes at Igloos C-1105, C-1109, and C-1128, and former right drain pipe of Igloo C-1124. The removal activities included the removal of several inches of soil immediately surrounding each of the former igloo drain outfalls. The excavated soil, totaling approximately 2 cubic yards, was placed into 55-gallon drums and stored on the site pending waste characterization.

## 2.3 Confirmation Sampling

Following removal of soil beneath C-1105, C-1109, C-1124 and C-1128, a confirmation soil sample was collected and submitted for analysis of total lead.

The results indicate that the Pb concentrations ranged from 11.9 milligrams per kilogram (mg/kg) at 04A29-C-1128R to 157 mg/kg at 04A29-C-1109R. None of the confirmation samples had concentrations that exceed the NMED SSL of 400 mg/kg for lead. The analytical results are summarized on Table 1 and the laboratory report summary is included in Appendix B.

Samples were also collected beneath each drain at C-1551 and C-1552 to evaluate whether soil was impacted. Soil below all igloo drain outfalls was sampled in June 2008 for lead (SW846 6010C/7471B) and Explosives (8330B) with the exception of Igloos C-1551 and C-1552, which were not sampled during the original sampling event because the drain pipes were encased in concrete. Therefore, upon removal of drains and concrete, igloos C-1551 and C-1552 were sampled for explosives as well as metals to address the intent of the original sampling plan.

The results of the analyses are presented on Table 2. No metals were detected at concentrations exceeding the NMED SSLs. Explosives were not detected. The laboratory report summary is included in Appendix B.

All confirmation soil sampling activities were performed on November 16, 2013.

## 2.4 Waste Profile and Disposal

Waste characterization included the collection of one composite sample of the excavated soil. Upon receipt of the results, a waste profile form was completed and submitted for approval to the Waste Management San Juan County Landfill. Upon approval, the waste was shipped under proper manifest for disposal as a nonhazardous solid waste. Waste characterization results and disposal documentation is included as Appendix C.

The steel igloo drain pipes were removed and transported to American Metal Recycling in Gallup, New Mexico for recycling.

# SECTION 3.0 PARCEL 2 TRANSFORMER I-25 SAMPLING AND RESULTS

AOC 75 includes several former transformers at FWDA. Former transformer I-25 is located in Parcel 2, adjacent to Parcel 4A. Due to its proximity to Parcel 4A, the results have been included as part of this Permittee-Initiated Interim Measures Report. A soil sample was collected directly below the former pole–mounted transformer. This sample was collected on August 15, 2013 and submitted for analysis of polychlorinated biphenols (PCBs). No PCBs were detected at or above the analytical reporting limit. The results are summarized on Table 3 and the laboratory report summary is included in Appendix D.

# SECTION 4.0 SUMMARY AND CONCLUSIONS

Permittee-Initiated Interim Measures were completed for Parcel 4A, AOC 29. Activities included drain pipe removal and plugging, limited soil excavation, confirmation sampling, and waste profile and disposal. Based upon the analytical results of the confirmation sampling, this concludes the interim measures for Parcel 4A. No further investigation or corrective measures are warranted in Parcel 4A, AOC 29 with the potential exception of the igloo interiors. The status of the igloo interiors in AOC 29 remains under discussion between the Army and NMED. The Army is recommending no further investigation or corrective action for the soils within C-Block (AOC 29).

Based upon the results of the PCB testing beneath Transformer I-25 and a visual inspection, it does not appear that the transformer has leaked and/or impacted the underlying soil. As such, no further investigation is warranted for this portion of AOC 75.

[THIS PAGE INTENTIONALLY LEFT BLANK]

# TABLES

[THIS PAGE INTENTIONALLY LEFT BLANK]

**TABLE 1**
**Confirmation Soil Sample Results**
**Igloos C-1105, C-1109, C-1124, C-1128**
**Parcel 4A, Area of Concern 29**
**Fort Wingate Depot Activity**

| Sample ID | Sample Date | Depth (feet) | Lead[1] (mg/kg) |
|---|---|---|---|
| 04A29-C-1105L-EC-0.0-0.5-D-SO | 11/16/2013 | 0 - 0.5 | 15.9 |
| 04A29-C-1105R-EC-0.0-0.5-D-SO | 11/16/2013 | 0 - 0.5 | 38.1 |
| 04A29-C-1109L-EC-0.0-0.5-D-SO | 11/16/2013 | 0 - 0.5 | 157 |
| 04A29-C-1109R-EC-0.0-0.5-D-SO | 11/16/2013 | 0 - 0.5 | 13 |
| 04A29-C-1109R-EC-0.0-0.5-D-SO-DUP | 11/16/2013 | 0 - 0.5 | 13.3 |
| 04A29-C-1124R-EC-0.0-0.5-D-SO | 11/16/2013 | 0 - 0.5 | 20.1 |
| 04A29-C-1128L-EC-0.0-0.5-D-SO | 11/16/2013 | 0 - 0.5 | 126 |
| 04A29-C-1128R-EC-0.0-0.5-D-SO | 11/16/2013 | 0 - 0.5 | 11.9 |

**Notes:**

[1] New Mexico Environmental Department Soil Screening Level for lead is 400 (Feb 2012).
Lead by USEPA Method 6010.
Nondetected results are reported as the Limit of Detection.
mg/kg = milligrams per kilogram

**Sample ID Nomenclature:**

**Example:** 04A29-C-1551L-EC-0.0-0.5-D-SO
**Parcel:** 4A
**AOC:** 29
**Site Identifier:** C-1551 (in this case it's igloo block C number 1551)
**Source of Sample:** L (left side of igloo)
**Purpose of Sample:** EC (excavation confirmation)
**Sample Depth:** 0.X-0.X (in this case it's 0.0-0.5 feet)
**Sample Type:** D (discrete)
**Sample Matrix:** SO (soil)

**TABLE 2**
**Soil Sample Results**
**Igloos C1551 and C1552**
**Parcel 4A, Area of Concern 29**
**Fort Wingate Depot Activity**

## EXPLOSIVES

| | | | 1,3,5-Trinitrobenzene | 1,3-Dinitrobenzene | 2,4,6-Trinitrotoluene (TNT) | 2,4-Dinitrotoluene | 2,6-Dinitrotoluene | 2-Amino-4,6-Dinitrotoluene | 2-Nitrotoluene | 3-Nitrotoluene | 4-Amino-2,6-Dinitrotoluene | 4-Nitrotoluene | Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) | Methyl-2,4,6-trinitrophenylnitramine (Tetryl) | Nitrobenzene | Nitroglycerin | Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX) | Pentaerythritol Tetranitrate (PETN) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | **NMED SSLs** | - | - | 39.1 | 15.7 | 61.1 | - | 29.1 | 7.82 | - | 244 | 58.2 | 244 | 53.5 | 6.11 | 3,910 | - |
| | | **EPA RSLs** | 2,200 | 6.1 | - | - | - | 150 | - | - | 150 | - | - | - | - | - | - | 120 |
| **Sample ID** | **Sample Date** | **Depth (feet)** | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| 04A29-C-1551L-EC-0.0-0.5-D-SO | 11/16/2013 | 0 - 0.5 | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.50 U | 0.20 U | 0.50 U |
| 04A29-C-1551R-EC-0.0-0.5-D-SO | 11/16/2013 | 0 - 0.5 | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.50 U | 0.20 U | 0.50 U |
| 04A29-C-1552L-EC-0.0-0.5-D-SO | 11/16/2013 | 0 - 0.5 | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.50 U | 0.20 U | 0.50 U |
| 04A29-C-1552R-EC-0.0-0.5-D-SO | 11/16/2013 | 0 - 0.5 | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.20 U | 0.50 U | 0.20 U | 0.50 U |

## METALS

| | | | Arsenic | Barium | Cadmium | Total Chromium | Lead | Mercury | Selenium | Silver |
|---|---|---|---|---|---|---|---|---|---|---|
| | | **NMED SSLs** | 5.61 | 15,600 | 70.3 | - | 400 | 15.6 | 391 | 391 |
| | | **EPA RSLs** | - | - | - | - | - | - | - | - |
| **Sample ID** | **Sample Date** | **Depth (feet)** | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| 04A29-C-1551L-EC-0.0-0.5-D-SO | 11/16/2013 | 0 - 0.5 | 1.74 | 520 | 0.200 U | 10.9 | 20.0 | 0.0131 J | 0.499 U | 0.299 U |
| 04A29-C-1551R-EC-0.0-0.5-D-SO | 11/16/2013 | 0 - 0.5 | 2.25 | 414 | 0.211 U | 14.6 | 42.7 | 0.0197 U | 0.527 U | 0.316 U |
| 04A29-C-1552L-EC-0.0-0.5-D-SO | 11/16/2013 | 0 - 0.5 | 2.42 | 419 | 0.337 J | 9.53 | 22.9 | 0.0110 J | 0.548 U | 0.329 U |
| 04A29-C-1552R-EC-0.0-0.5-D-SO | 11/16/2013 | 0 - 0.5 | 3.54 | 1,140 | 0.373 J | 12.1 | 92.6 | 0.0203 U | 0.562 U | 0.337 U |

**Notes:**

[1] Site Specific Background Level as approved by NMED
Explosives by USEPA Method 8330A, Metals by USEPA Method 6010/7471.
Nondetected results are reported as the Limit of Detection.
J=estimated
U=not detected at or above the laboratory detection limit
mg/kg=milligrams per kilogram
NMED SSLs = New Mexico Environmental Department Soil Screening Levels (Feb 2012).
EPA RSL = US Environmental Protection Agency Regional Screening Level;
EPA RSLs are only present in the table when there is no NMED Soil Screening Level.

**Sample ID Nomenclature:**

**Example:** 04A29-C-1551L-EC-0.0-0.5-D-SO
**Parcel:** 4A
**AOC:** 29
**Site Identifier:** C-1551 (in this case it's igloo block C number 1551)
**Source of Sample:** L (left side of igloo)
**Purpose of Sample:** EC (excavation confirmation)
**Sample Depth:** 0.X-0.X (in this case it's 0.0-0.5 feet)
**Sample Type:** D (discrete)
**Sample Matrix:** SO (soil)

**TABLE 3**
**Soil Sample Results**
**Former Transformer I-25**
**Parcel 4A, Area of Concern 29**
**Fort Wingate Depot Activity**

| | | | PCB-1016 | PCB-1221 | PCB-1232 | PCB-1242 | PCB-1248 | PCB-1254 | PCB-1260 |
|---|---|---|---|---|---|---|---|---|---|
| | | **NMED SSLs** | 3.93 | 1.49 | 1.49 | 2.22 | 2.22 | 1.12 | 2.22 |
| | | **EPA RSLs** | - | - | - | - | - | - | - |
| **Sample ID** | **Sample Date** | **Depth (feet)** | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg | mg/kg |
| 0275TRI25SS001DSO | 8/15/2013 | 0 - 0.5 | 0.019 U | 0.019 U | 0.019 U | 0.019 U | 0.019 U | 0.019 U | 0.019 U |

**Notes:**
Polychlorinated Biphenols (PCB) by USEPA Method 6270SIM.
Nondetected results are reported as the Limit of Detection.
J=estimated
U=not detected at or above the laboratory detection limit
mg/kg=milligrams per kilogram
NMED SSLs = New Mexico Environmental Department Soil Screening Levels (Feb 2012).
EPA RSLs = US Environmental Protection Agency Regional Screening Levels;
EPA RSLs are only present in the table when there is no NMED screening level.

**Sample ID Nomenclature:**
**Example:** 0275TRI25SS001DSO
**Parcel:** 2
**AOC:** 75
**Site Identifier:** TRI25 (in this case it's Transformer I-25)
**Source of Sample:** SS (surface sample)
**Increment Number:** 001
**Sample Type:** D (discrete)
**Sample Matrix:** SO (soil)

# FIGURE

[THIS PAGE INTENTIONALLY LEFT BLANK]

Sample ID:
04A29-C-1552L-EC-0.0-0.5-D-SO
04A29-C-1552R-EC-0.0-0.5-D-SO

Sample ID:
04A29-C-1551L-EC-0.0-0.5-D-SO
04A29-C-1551R-EC-0.0-0.5-D-SO

Sample ID:
04A29-C-1124R-EC-0.0-0.5-D-SO

Sample ID:
04A29-C-1109L-EC-0.0-0.5-D-SO
04A29-C-1109R-EC-0.0-0.5-D-SO

Transformer I-25

Sample ID:
0275TRI25SS001DSO

Sample ID:
04A29-C-1128L-EC-0.0-0.5-D-SO
04A29-C-1128R-EC-0.0-0.5-D-SO

Sample ID:
04A29-C-1105L-EC-0.0-0.5-D-SO
04A29-C-1105R-EC-0.0-0.5-D-SO

C-1152
C-1151
Y-C1551
C-1106
C-1130
C-1121
Y-C1130
C-1107
Y-C1121
C-1131
Y-C1107
C-1122
C-1108
C-1132
Y-C1122
Y-C1108
C-1123
C-1109
Y-C1123
C-1133
Y-C1104
C-1124
C-1110
Y-C1133
Y-C1124
Y-C1110
C-1134
C-1125
Y-C1103
C-1111
Y-C1125
C-1103
Y-C1134
Y-C1111
C-1126
C-1112
C-1104
Y-C1112
C-1127
C-1113
C-1105
Y-C1113
C-1128
C-1114
Y-C1114
C-1115
Y-C51
Y-C1115
C-1129
Y-C1101
C-1116
C-1101
Y-C1116
Y-C42
Y-C1102
C-1117
Y-C50
C-1102
Y-C47
C-1118
Y-C41
Y-C46
C-1119
Y-C49
Y-C40
C-1120
Y-C48
Y-C45
Y-C39

5A
5B
4A
4B
6
8
23
22
19
2

N

1 inch = 600 feet

## Legend

- Transformer I-25 Soil Sample Location
- Igloo Soil Sample Location
- Igloo Location
- Revetment Location
- Parcel Boundary with Parcel ID
- Arroyo Location
- Road Location
- Railroad Location

Aerial Image Source: 2009, CIR

**U.S. ARMY CORPS OF ENGINEERS**
**FORT WORTH DISTRICT**

**AMEC**
**Environment & Infrastructure, Inc.**

| | |
|---|---|
| DWN BY: | EAC |
| CHK'D BY: | TO |
| DATUM: | NAD 1983 |
| PROJECTION: | STATE PLANE NM WEST |
| SCALE: | 1:7,200 |

FORT WINGATE DEPOT ACTIVITY
PARCEL 4A PERMITTEE-INITIATED
INTERIM MEASURES REPORT

SAMPLE LOCATIONS
AOC 29 - BLOCK C IGLOO AND REVETMENT

DATE: February 2014
PROJECT NO.: 912640002.0012.02
FIGURE NO.: 1

Path: X:\Projects\2011 Projects\912640002 Fort Wingate Depot Activity\MXD\Parcel 4A\FWDA_P4A_Release_Assesment_SampleLocations.mxd

# PHOTOGRAPHIC LOG

[THIS PAGE INTENTIONALLY LEFT BLANK]

**PHOTOGRAPHIC LOG**


**Photograph No. 1**
A view of Igloo C-1105.

**Photograph No. 2**
A view of a drain pipe at Igloo C-1105.

**PHOTOGRAPHIC LOG**

**Photograph No. 3**
A view of excavated soil beneath the removed drain pipe at Igloo C-1105.


**Photograph No. 4**
A view of Igloo C-1124.

**PHOTOGRAPHIC LOG**

**Photograph No. 5**
A view of excavated soil beneath a drain pipe at Igloo C-1124.


**Photograph No. 6**
A view of Igloo C-1116.

**PHOTOGRAPHIC LOG**

**Photograph No. 7**
A view of the removed drain pipe at Igloo C-1116.


**Photograph No. 8**
A view of Igloo C-1551.

**PHOTOGRAPHIC LOG**

**Photograph No. 9**
A view of a drain pipe and excavated soil around the drain pipe at Igloo C-1551.

**Photograph No. 10**
A view of the removed drain pipe and concrete at Igloo C-1551.

**PHOTOGRAPHIC LOG**

**Photograph No. 11**
A view of excavated soil beneath a drain pipe at Igloo C-1551.

**Photograph No. 12**
A view of a plugged drain pipe at Igloo C-1551.

**PHOTOGRAPHIC LOG**

**Photograph No. 13**
A view of Igloo C-1552.

**Photograph No. 14**
A view of excavated soil beneath a drain pipe at Igloo C-1552.

**PHOTOGRAPHIC LOG**

**Photograph No. 15**
A view of a plugged drain pipe at Igloo C-1552.

**Photograph No. 16**
A view of the base of the pole for Transformer I25 with Igloo C-1103 in the background.

# APPENDIX A

# PERMITTEE INITIATED INTERIM MEASURES NOTIFICATION AND NMED NOTICE-TO-PROCEED

[THIS PAGE INTENTIONALLY LEFT BLANK]

**DEPARTMENT OF THE ARMY**
FORT WINGATE DEPOT ACTIVITY
P.O BOX 268
FORT WINGATE, NM 87316

REPLY TO
ATTENTION OF

September 10, 2013

Mr. John Kieling
Chief, Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303

RE: Parcel 4A
Notification of Permittee-Initiated Interim Measures
Fort Wingate Army Depot, New Mexico
EPA ID #NM62138209074

Dear Mr. Kieling:

The Department of the Army respectfully submits this notification to implement Permittee-Initiated Interim Measures per the Resource Conservation and Recovery Act (RCRA) permit section VII.G.3 for the removal of soil below igloo drain outfalls and igloo drain pipes that contain lead-based paint in Block C of Parcel 4A. It is our intention to perform the measures in the September/October time frame while our contractor is onsite performing other RCRA Facility Investigation activities at several other parcels.

As documented in the Final Release Assessment Report (RAR), Parcel 4A (Revision 2), dated October 11, 2012, the Army recommended soil removal from under both drains at C-1105, C-1109, and C-1128 based on initial June 2008 data and September 2010 X-ray fluorescence (XRF) readings over the New Mexico Environment Department (NMED) soil screening criteria for lead or arsenic. Due to the inconsistencies found in data comparison between the lab data and XRF data, the Army has elected to remove soil from both drains on the three igloos. In addition, based on a September 2010 XRF reading for lead over the NMED soil screening criteria, soil would be removed on the right side of C-1124.

The Army will remove a few inches of soil from each of these igloo drain outfalls, estimated to be approximately ¼ cubic yard per drain. Soil will be disposed in accordance with applicable local, state, and federal regulations. Confirmation samples will be collected at each location and analyzed for lead to ensure concentrations are below NMED cleanup standards. If standards are exceeded, additional soil will be removed until the standard is met. If a safety hazard exists after soil removal, soil will be replaced with soil from one of the nearby revetment berms which have already been tested for lead and explosives and found to have concentrations below cleanup standards.

During the same time frame as the soil removal, the Army will also remove drain pipes and plug holes from all igloos in block C. The pipes will be recycled. Igloos C-1551 and C-1552 each have two drains that extend down to approximately 2 feet below grade into concrete. The Army will remove and properly dispose the piping and concrete below the surface. Soil samples will be collected at each of the four locations and analyzed for RCRA metals and explosives. Upon receipt of analytical results, the holes will be backfilled if results confirm the samples are below the Soil Screening Levels.

As discussed in the RAR, the Army has decided to include transformer I-25 in the Parcel 4A RAR so that all issues within Area of Concern 29 are addressed in one document and because Parcel 4A is ahead of Parcel 2 in the Permit schedule. The Army will collect one soil sample under the former I-25 transformer location for analysis of polychlorinated biphenyls. All chemical testing for the proposed work will be done by a Corps approved lab. XRF will not be used.

Following completion of the interim measures, a brief letter report documenting our findings will be submitted for your approval.

Sincerely,

Mark Patterson

Mark Patterson
BRAC Environmental Coordinator

CF:
Shannon Duran, NMED HWB
Dave Cobrain, NMED HWB
Laurie King, U.S. EPA Region 6
Chuck Hendrickson, U.S. EPA Region 6
Tony Perry, Navajo Nation
Eugenia Quintana, Navajo Nation
Darrell Tsabetsaye, Zuni Pueblo
Steve Beran, Zuni Pueblo
Clayton Seoutewa, Southwest Region BIA
Rose Duwyenie, Navajo BIA
Judith Wilson, BIA
Eldine Stevens, BIA
Ben Burshia, BIA
Julie Hamilton, AMEC

## Hamilton, Julie

**From:** Smith, Steve W SWF [Steve.W.Smith@usace.army.mil]
**Sent:** Tuesday, September 24, 2013 11:37 AM
**To:** Hamilton, Julie
**Cc:** Scoville, Michael G SWF
**Subject:** FW: Interim Measure at Ft. Wingate (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: NONE

Julie,

We got NMED's ok via this email with the interim measure at 4A. The date matched the 4A letter and this is the only one we've recently sent so this 'ok' has to be for 4A. Keep this and include in your report.

Steve

-----Original Message-----
From: Wear, Benjamin, NMENV [mailto:Benjamin.Wear@state.nm.us]
Sent: Tuesday, September 24, 2013 11:43 AM
To: Smith, Steve W SWF; Patterson, Mark C Mr CIV USA OSA
Cc: Cobrain, Dave, NMENV
Subject: [EXTERNAL] Interim Measure at Ft. Wingate

Steve and Mark,

The NMED Hazardous Waste Bureau has received and reviewed your letter titled, "Notification of Permittee-Initiated Interim Measure at Fort Wingate Depot Activity, McKinley County, New Mexico", dated September 10, 2013.

Please proceed with the activities as described in the letter.

Thank you,

Ben Wear

Environmental Scientist

Hazardous Waste Bureau

New Mexico Environment Department

2905 Rodeo Park Dr. East, Bldg. 1

Santa Fe, NM 87505

# APPENDIX B

# ANALYTICAL LABORATORY REPORT SUMMARIES
# (Full Lab Report on CD)

[THIS PAGE INTENTIONALLY LEFT BLANK]

## TABLE OF CONTENTS

**CLIENT:** **AMEC**

**PROJECT:** **FORT WINGATE DEPOT ACTIVITY**

**SDG:** **13K132**


| SECTION | | PAGE |
|---|---|---|
| Cover Letter, COC/Sample Receipt Form | | 1000 – 1007 |
| GC/MS-VOA | ** | 2000 – |
| GC/MS-SVOA | ** | 3000 – |
| GC-VOA | ** | 4000 – |
| GC-SVOA | ** | 5000 – |
| HPLC | METHOD 8330A<br>METHOD 8332 | 6000 – 6047<br>6048 – 6100 |
| METALS | METHOD SW3050B/6010B<br>METHOD SW7471A | 7000 – 7193<br>7194 – 7215 |
| WET | ** | 8000 – |
| OTHERS | ** | 9000 – |


** - Not Requested

**LABORATORIES, INC.**
1835 W. 205th Street
Torrance, CA 90501
Tel: (310) 618-8889
Fax: (310) 618-0818

Date: 12-04-2013
EMAX Batch No.: 13K132

Attn: Marie Bevier

AMEC
7376 SW Durham Road
Portland OR 97224

Subject: Laboratory Report
Project: Fort Wingate Depot Activity

---

Enclosed is the Laboratory report for samples received on 11/19/13.
The data reported relate only to samples listed below :

| Sample ID | Control # | Col Date | Matrix | Analysis |
|---|---|---|---|---|
| 04A29-C-1551L-EC-0.0-0.5-D-SO | K132-01 | 11/16/13 | SOIL | METALS RCRA<br>MERCURY<br>NITROAROMATICS & NITRAMINES<br>NITROGLYCERINE AND PETN |
| 04A29-C-1551R-EC-0.0-0.5-D-SO | K132-02 | 11/16/13 | SOIL | METALS RCRA<br>MERCURY<br>NITROAROMATICS & NITRAMINES<br>NITROGLYCERINE AND PETN |
| 04A29-C-1552L-EC-0.0-0.5-D-SO | K132-03 | 11/16/13 | SOIL | METALS RCRA<br>MERCURY<br>NITROAROMATICS & NITRAMINES<br>NITROGLYCERINE AND PETN |
| 04A29-C-1552R-EC-0.0-0.5-D-SO | K132-04 | 11/16/13 | SOIL | METALS RCRA<br>MERCURY<br>NITROAROMATICS & NITRAMINES<br>NITROGLYCERINE AND PETN |
| 04A29-C-1105R-EC-0.0-0.5-D-SO | K132-05 | 11/16/13 | SOIL | LEAD |
| 04A29-C-1105L-EC-0.0-0.5-D-SO | K132-06 | 11/16/13 | SOIL | LEAD |
| 04A29-C-1109R-EC-0.0-0.5-D-SO | K132-07 | 11/16/13 | SOIL | LEAD |

| Sample ID | Control # | Col Date | Matrix | Analysis |
|---|---|---|---|---|
| 04A29-C-1109R-EC-0.0-0.5-D-SO-DUP | | | | |
| | K132-08 | 11/16/13 | SOIL | LEAD |
| 04A29-C-1109L-EC-0.0-0.5-D-SO | | | | |
| | K132-09 | 11/16/13 | SOIL | LEAD |
| 04A29-C-1128R-EC-0.0-0.5-D-SO | | | | |
| | K132-10 | 11/16/13 | SOIL | LEAD |
| 04A29-C-1128L-EC-0.0-0.5-D-SO | | | | |
| | K132-11 | 11/16/13 | SOIL | LEAD |
| 04A29-C-1124R-EC-0.0-0.5-D-SO | | | | |
| | K132-12 | 11/16/13 | SOIL | LEAD |
| 04A29-C-1552R-EC-0.0-0.5-D-SOMS | | | | |
| | K132-04M | 11/16/13 | SOIL | METALS RCRA |
| | | | | MERCURY |
| | | | | NITROAROMATICS & NITRAMINES |
| | | | | NITROGLYCERINE AND PETN |
| 04A29-C-1552R-EC-0.0-0.5-D-SOMSD | | | | |
| | K132-04S | 11/16/13 | SOIL | METALS RCRA |
| | | | | MERCURY |
| | | | | NITROAROMATICS & NITRAMINES |
| | | | | NITROGLYCERINE AND PETN |

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

Caspar J. Pang
Laboratory Director



EMAX certifies that results included in this report meets all NELAC & DOD requirements unless noted in the Case Narrative.

NELAC Accredited Certificate Number 02116CA
L-A-B Accredited DoD ELAP and ISO/IEC 17025 Certificate Number L2278 Testing

13K132

# CHAIN OF CUSTODY

DATE: 11-16-13

COC #: EMAX2594,60

PAGE: 1 OF 3

| | |
|---|---|
| AMEC | SHIP TO: EMAX Laboratories |
| 4600 E. Washington St | 1823 W 205th Street |
| Pheonix, AZ 85034 | Torrance, CA 910501 |
| 602-733-6000 | Atten: |
| | Lab Phone# 310-618-8889 |

| No | Sample ID | Date Sampled | Time Sampled | Matrix | Sample Type | MS/MSD | Explosives (8330 A) | VOCs (8260B) | SVOCs (8270C) | PAHs (8270SIM) | PCBs (8082) | Pest (8081A) | Asbestos (600/R-93/16) | RCRA Metals | Perchlorate (6850) | Lead (6010B) | RUSH | TOTAL BOTTLES | HOLD All Analyses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 04A29-C-1551L-EC-0.0-0.5-D-SO | 11/16/13 | 910 | SO | D | N | X | | | | | | | X | | | | | |
| 2 | 04A29-C-1551R-EC-0.0-0.5-D-SO | 11/16/13 | 840 | SO | D | N | X | | | | | | | X | | | | | |
| 3 | 04A29-C-1552L-EC-0.0-0.5-D-SO | 11/16/13 | 600 | SO | D | N | X | | | | | | | X | | | | | |
| 4 | 04A29-C-1552R-EC-0.0-0.5-D-SO | 11/16/13 | 806 | SO | D | Y | X | | | | | | | X | | | | | |
| 5 | 04A29-C-1105R-EC-0.0-0.5-D-SO | 11/16/13 | 1020 | SO | D | N | | | | | | | | | | X | | | |
| 6 | 04A29-C-1105L-EC-0.0-0.5-D-SO | 11/16/13 | 1016 | SO | D | N | | | | | | | | | | X | | | |
| 7 | 04A29-C-1109R-EC-0.0-0.5-D-SO | 11/16/13 | 943 | SO | D | N | | | | | | | | | | X | | | |
| 8 | 04A29-C-1109R-EC-0.0-0.5-D-SO-DUP | 11/16/13 | 945 | SO | D | N | | | | | | | | | | X | | | |
| 9 | 04A29-C-1109L-EC-0.0-0.5-D-SO | 11/16/13 | 947 | SO | D | N | | | | | | | | | | X | | | |
| 10 | 04A29-C-1128R-EC-0.0-0.5-D-SO | 11/16/13 | 928 | SO | D | N | | | | | | | | | | X | | | |
| 11 | 04A29-C-1128L-EC-0.0-0.5-D-SO | 11/16/13 | 935 | SO | D | N | | | | | | | | | | X | | | |
| 12 | 04A29-C-1124R-EC-0.0-0.5-D-SO | 11/16/13 | 916 | SO | D | N | | | | | | | | | | X | | | |

| | | |
|---|---|---|
| Sampler's Signature: Mary Kawczynska | Date: 11-16-13 | Time: 1620 |
| Relinquished By/Affiliation: Mary Kawczynska | Date: 11-16-13 | Time: 1625 |
| Received By: Kenneth Hale | Date: 11-16-13 | Time: 1625 |
| Relinquished By/Affiliation: | Date: | Time: |
| Received By: | Date: | Time: |
| Relinquished By/Affiliation: | Date: | Time: |
| Received By (LAB): | Date: 11/19/13 | Time: 0930 |

cooler #1 T=4.5°C

**For Lab Use**

| | |
|---|---|
| Does COC match samples: | (Y) or N |
| Broken Container: | Y or (N) |
| COC seal intact: | Y or (N) |
| Other problems: | (Y) or N |
| AMEC contacted: | Y or N |
| Date contacted: | |
| Cooler Temperature at receipt: | 4.5° C / 4.9 |

Comments:

H=Hold Analysis Request X=Analyze

Original

NUMBER OF COOLERS SENT: 2

1552

EMAX LABORATORIES, INC.

# SAMPLE RECEIPT FORM 1

| Type of Delivery | Airbill / Tracking Number | ECN 13K132 |
|---|---|---|
| ☑ Fedex ☐ UPS ☐ GSO ☐ Others (1) | (1) 8026 3805 1635 (2) -1624 | Recipient I. LATEZ |
| ☐ EMAX Courier ☐ Client Delivery | | Date 11/19/13 Time 0930 |

## COC Inspection

| | | | | | |
|---|---|---|---|---|---|
| ☒ Client Name | ☒ Client PM/FC | ☒ Sampler Name | ☐ Sampling Date/Time/Location | ☒ Sample ID | ☐ Matrix |
| ☒ Address | ☑ Tel # / Fax # | ☐ Courier Signature | ☒ Analysis Required | ☐ Preservative (if any) | ☒ TAT |
| Safety Issues (if any) | ☐ High concentrations expected | | ☐ Superfund Site samples | ☐ Rad screening required | |

Comments:

## Packaging Inspection

| | | | | | |
|---|---|---|---|---|---|
| Container | ☐ Cooler | ☐ Box | ☐ Other | | |
| Condition | ☒ Custody Seal * | ☒ Intact | ☐ Damaged | * 1 cooler/seal broken (untaped) | |
| Packaging | ☒ Bubble Pack | ☐ Styrofoam | ☐ Popcorn | ☒ Sufficient | ☐ plastic Bag |
| Temperatures (Cool, ≤6 °C but not frozen) | C ☒ Cooler 1 4.5 °C | C ☒ Cooler 2 4.9 °C | ☐ Cooler 3_____ °C | ☐ Cooler 4_____ °C | ☐ Cooler 5_____ °C |
| | ☐ Cooler 6_____ °C | ☐ Cooler 7_____ °C | ☐ Cooler 8_____ °C | ☐ Cooler 9_____ °C | ☐ Cooler 10_____ °C |
| *Thermometer:* | *A - S/N 101541371* | *B - S/N 101541382* | (C) *C - S/N 122091701* | *D - S/N 122091758* | |

Comments: ☐ **Temperature is out of range. PM was informed IMMEDIATELY.**

Note: **pH holding time requirement for water samples is 15 mins. Water samples for pH analysis are received beyond 15 minutes from sampling time.**

## DISCREPANCIES

| LSID | LSCID | Description Code | Sample Label ID / Information | Corrective Action Code |
|---|---|---|---|---|
| 1-4 | | A3 | Label requests Metals only-1 | R2 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

11/19/13

☐ **Continue to next page.**

REVIEWS

Sample Labeling [signature] Date 11-19-13 [signature] 11/19/13

SRF [signature] Date 11/19/13

PM [signature] Date 11/19/13

LEGEND:

| Code | Description- Sample Management |
|---|---|
| A1 | Analysis is not indicated in COC. |
| A2 | Analysis is not indicated in label. |
| A3 | Analysis is inconsistent in COC vis-à-vis label. |
| B1 | Sample ID is not indicated in COC. |
| B2 | Sample ID is not indicated in label. |
| B3 | Sample ID is inconsistent in COC vis-à-vis label. |
| C1 | Improper container |
| C2 | Broken container |
| C3 | Leaking container |
| D1 | Date and/or time is not indicated in COC. |
| D2 | Date and/or time is not indicated in label. |
| D3 | Date and/or time is inconsistent in COC vis-à-vis label. |
| F1 | Improper preservation |
| F2 | Insufficient Sample |
| F3 | Bubble is > 6mm. Use vial with smallest bubble first. |
| F4 | Bubble is > 6mm in all vials. |
| F5 | >20 % solid particle |
| F6 | Out of Holding Time |

| Code | Description-Sample Management |
|---|---|
| G1 | Sample indicated in COC is not received. |
| G2 | MS/MSD is not indicated in COC. |
| G3 | No identified trip blank, proceed as indicated in COC. |
| G4 | Trip Blank is designated in SDG _____ |
| G5 | Trip Blank has no sampling date & time. Log-in with latest sampling date and 1 minute past the time of the last sample collected on the same date. |
| H1 | _____ |

| Code | Description-Project Management |
|---|---|
| R1 | Hold sample(s), wait for further instructions |
| R2 | Proceed as indicated in COC and inform client. |
| R3 | Refer to attached instruction |
| R4 | Cancel the analysis |
| R5 | Inform client. |
| R6 | Proceed as indicated in COC |

METHOD SW8330A
EXPLOSIVES

| | |
|---|---|
| Client : AMEC E & I | Date Collected: 11/16/13 |
| Project : FORT WINGATE DEPOT ACTIVITY | Date Received: 11/19/13 |
| Batch No. : 13K132 | Date Extracted: 11/26/13 20:52 |
| Sample ID: 04A29-C-1551L-EC-0.0-0.5-D-SO | Date Analyzed: 12/02/13 20:07 |
| Lab Samp ID: K132-01 | Dilution Factor: 1 |
| Lab File ID: XL02014A | Matrix : SOIL |
| Ext Btch ID: EXK026S | % Moisture : NA |
| Calib. Ref.: XL02010A | Instrument ID : T-081 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| HMX | ND | 0.40 | 0.050 | 0.20 |
| RDX | ND | 0.40 | 0.050 | 0.20 |
| 1,3,5-TNB | ND | 0.40 | 0.050 | 0.20 |
| 1,3-DNB | ND | 0.40 | 0.050 | 0.20 |
| TETRYL | ND | 0.40 | 0.057 | 0.20 |
| NITROBENZENE | ND | 0.40 | 0.050 | 0.20 |
| 2,4,6-TNT | ND | 0.40 | 0.050 | 0.20 |
| 4-AM-2,6-DNT | ND | 0.40 | 0.050 | 0.20 |
| 2-AM-4,6-DNT | ND | 0.40 | 0.050 | 0.20 |
| 2,6-DNT | ND | 0.40 | 0.056 | 0.20 |
| 2,4-DNT | ND | 0.40 | 0.055 | 0.20 |
| 2-NITROTOLUENE | ND | 0.40 | 0.076 | 0.20 |
| 3-NITROTOLUENE | ND | 0.40 | 0.095 | 0.20 |
| 4-NITROTOLUENE | ND | 0.40 | 0.099 | 0.20 |

| SURROGATE PARAMETERS | RESULTS | SPK_AMT | % RECOVERY | QC LIMIT |
|---|---|---|---|---|
| 1,2-DINITROBENZENE | 1.94 | 2.000 | 97.0 | 70-140 |

Note: All positive results are confirmed by Phenyl-Hexyl column

METHOD SW8330A
EXPLOSIVES

| | |
|---|---|
| Client : AMEC E & I | Date Collected: 11/16/13 |
| Project : FORT WINGATE DEPOT ACTIVITY | Date Received: 11/19/13 |
| Batch No. : 13K132 | Date Extracted: 11/26/13 20:52 |
| Sample ID: 04A29-C-1551R-EC-0.0-0.5-D-SO | Date Analyzed: 12/02/13 20:43 |
| Lab Samp ID: K132-02 | Dilution Factor: 1 |
| Lab File ID: XL02015A | Matrix : SOIL |
| Ext Btch ID: EXK026S | % Moisture : NA |
| Calib. Ref.: XL02010A | Instrument ID : T-081 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| HMX | ND | 0.40 | 0.050 | 0.20 |
| RDX | ND | 0.40 | 0.050 | 0.20 |
| 1,3,5-TNB | ND | 0.40 | 0.050 | 0.20 |
| 1,3-DNB | ND | 0.40 | 0.050 | 0.20 |
| TETRYL | ND | 0.40 | 0.057 | 0.20 |
| NITROBENZENE | ND | 0.40 | 0.050 | 0.20 |
| 2,4,6-TNT | ND | 0.40 | 0.050 | 0.20 |
| 4-AM-2,6-DNT | ND | 0.40 | 0.050 | 0.20 |
| 2-AM-4,6-DNT | ND | 0.40 | 0.050 | 0.20 |
| 2,6-DNT | ND | 0.40 | 0.056 | 0.20 |
| 2,4-DNT | ND | 0.40 | 0.055 | 0.20 |
| 2-NITROTOLUENE | ND | 0.40 | 0.076 | 0.20 |
| 3-NITROTOLUENE | ND | 0.40 | 0.095 | 0.20 |
| 4-NITROTOLUENE | ND | 0.40 | 0.099 | 0.20 |

| SURROGATE PARAMETERS | RESULTS | SPK_AMT | % RECOVERY | QC LIMIT |
|---|---|---|---|---|
| 1,2-DINITROBENZENE | 1.91 | 2.000 | 95.7 | 70-140 |

Note: All positive results are confirmed by Phenyl-Hexyl column

METHOD SW8330A
EXPLOSIVES

| | | | |
|---|---|---|---|
| Client | : AMEC E & I | Date Collected | : 11/16/13 |
| Project | : FORT WINGATE DEPOT ACTIVITY | Date Received | : 11/19/13 |
| Batch No. | : 13K132 | Date Extracted | : 11/26/13 20:52 |
| Sample ID | : 04A29-C-1552L-EC-0.0-0.5-D-SO | Date Analyzed | : 12/02/13 21:19 |
| Lab Samp ID | : K132-03 | Dilution Factor | : 1 |
| Lab File ID | : XL02016A | Matrix | : SOIL |
| Ext Btch ID | : EXK026S | % Moisture | : NA |
| Calib. Ref. | : XL02010A | Instrument ID | : T-081 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| HMX | ND | 0.40 | 0.050 | 0.20 |
| RDX | ND | 0.40 | 0.050 | 0.20 |
| 1,3,5-TNB | ND | 0.40 | 0.050 | 0.20 |
| 1,3-DNB | ND | 0.40 | 0.050 | 0.20 |
| TETRYL | ND | 0.40 | 0.057 | 0.20 |
| NITROBENZENE | ND | 0.40 | 0.050 | 0.20 |
| 2,4,6-TNT | ND | 0.40 | 0.050 | 0.20 |
| 4-AM-2,6-DNT | ND | 0.40 | 0.050 | 0.20 |
| 2-AM-4,6-DNT | ND | 0.40 | 0.050 | 0.20 |
| 2,6-DNT | ND | 0.40 | 0.056 | 0.20 |
| 2,4-DNT | ND | 0.40 | 0.055 | 0.20 |
| 2-NITROTOLUENE | ND | 0.40 | 0.076 | 0.20 |
| 3-NITROTOLUENE | ND | 0.40 | 0.095 | 0.20 |
| 4-NITROTOLUENE | ND | 0.40 | 0.099 | 0.20 |

| SURROGATE PARAMETERS | RESULTS | SPK_AMT | % RECOVERY | QC LIMIT |
|---|---|---|---|---|
| 1,2-DINITROBENZENE | 1.93 | 2.000 | 96.4 | 70-140 |

Note: All positive results are confirmed by Phenyl-Hexyl column

METHOD SW8330A
EXPLOSIVES

| | |
|---|---|
| Client : AMEC E & I | Date Collected: 11/16/13 |
| Project : FORT WINGATE DEPOT ACTIVITY | Date Received: 11/19/13 |
| Batch No. : 13K132 | Date Extracted: 11/26/13 20:52 |
| Sample ID: 04A29-C-1552R-EC-0.0-0.5-D-SO | Date Analyzed: 12/02/13 21:55 |
| Lab Samp ID: K132-04 | Dilution Factor: 1 |
| Lab File ID: XL02017A | Matrix : SOIL |
| Ext Btch ID: EXK026S | % Moisture : NA |
| Calib. Ref.: XL02010A | Instrument ID : T-081 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| HMX | ND | 0.40 | 0.050 | 0.20 |
| RDX | ND | 0.40 | 0.050 | 0.20 |
| 1,3,5-TNB | ND | 0.40 | 0.050 | 0.20 |
| 1,3-DNB | ND | 0.40 | 0.050 | 0.20 |
| TETRYL | ND | 0.40 | 0.057 | 0.20 |
| NITROBENZENE | ND | 0.40 | 0.050 | 0.20 |
| 2,4,6-TNT | ND | 0.40 | 0.050 | 0.20 |
| 4-AM-2,6-DNT | ND | 0.40 | 0.050 | 0.20 |
| 2-AM-4,6-DNT | ND | 0.40 | 0.050 | 0.20 |
| 2,6-DNT | ND | 0.40 | 0.056 | 0.20 |
| 2,4-DNT | ND | 0.40 | 0.055 | 0.20 |
| 2-NITROTOLUENE | ND | 0.40 | 0.076 | 0.20 |
| 3-NITROTOLUENE | ND | 0.40 | 0.095 | 0.20 |
| 4-NITROTOLUENE | ND | 0.40 | 0.099 | 0.20 |

| SURROGATE PARAMETERS | RESULTS | SPK_AMT | % RECOVERY | QC LIMIT |
|---|---|---|---|---|
| 1,2-DINITROBENZENE | 1.97 | 2.000 | 98.7 | 70-140 |

Note: All positive results are confirmed by Phenyl-Hexyl column

METHOD SW8330A
EXPLOSIVES

| | |
|---|---|
| Client : AMEC E & I | Date Collected: NA |
| Project : FORT WINGATE DEPOT ACTIVITY | Date Received: 11/26/13 |
| Batch No. : 13K132 | Date Extracted: 11/26/13 20:52 |
| Sample ID: MBLK1S | Date Analyzed: 12/02/13 18:19 |
| Lab Samp ID: EXK026SB | Dilution Factor: 1 |
| Lab File ID: XL02011A | Matrix : SOIL |
| Ext Btch ID: EXK026S | % Moisture : NA |
| Calib. Ref.: XL02010A | Instrument ID : T-081 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| HMX | ND | 0.40 | 0.050 | 0.20 |
| RDX | ND | 0.40 | 0.050 | 0.20 |
| 1,3,5-TNB | ND | 0.40 | 0.050 | 0.20 |
| 1,3-DNB | ND | 0.40 | 0.050 | 0.20 |
| TETRYL | ND | 0.40 | 0.057 | 0.20 |
| NITROBENZENE | ND | 0.40 | 0.050 | 0.20 |
| 2,4,6-TNT | ND | 0.40 | 0.050 | 0.20 |
| 4-AM-2,6-DNT | ND | 0.40 | 0.050 | 0.20 |
| 2-AM-4,6-DNT | ND | 0.40 | 0.050 | 0.20 |
| 2,6-DNT | ND | 0.40 | 0.056 | 0.20 |
| 2,4-DNT | ND | 0.40 | 0.055 | 0.20 |
| 2-NITROTOLUENE | ND | 0.40 | 0.076 | 0.20 |
| 3-NITROTOLUENE | ND | 0.40 | 0.095 | 0.20 |
| 4-NITROTOLUENE | ND | 0.40 | 0.099 | 0.20 |

| SURROGATE PARAMETERS | RESULTS | SPK_AMT | % RECOVERY | QC LIMIT |
|---|---|---|---|---|
| 1,2-DINITROBENZENE | 1.94 | 2.000 | 97.0 | 70-140 |

Note: All positive results are confirmed by Phenyl-Hexyl column

CLIENT: AMEC E & I
PROJECT: FORT WINGATE DEPOT ACTIVITY
BATCH NO. : 13K132
METHOD: SW8330A

MATRIX: SOIL % MOISTURE: NA

| | | | | | |
|---|---|---|---|---|---|
| DILUTION FACTOR: | 1 | 1 | 1 | | |
| SAMPLE ID: | MBLK1S | | | | |
| LAB SAMP ID: | EXK026SB | EXK026SL | EXK026SC | | |
| LAB FILE ID: | XL02011A | XL02012A | XL02013A | | |
| DATE EXTRACTED: | 11/26/1320:52 | 11/26/1320:52 | 11/26/1320:52 | DATE COLLECTED: | NA |
| DATE ANALYZED: | 12/02/1318:19 | 12/02/1318:55 | 12/02/1319:31 | DATE RECEIVED: | 11/26/13 |
| PREP. BATCH: | EXK026S | EXK026S | EXK026S | | |
| CALIB. REF: | XL02010A | XL02010A | XL02010A | | |

ACCESSION:

HMX QUALITY CONTROL DATA

LCS/LCD ANALYSIS

BLNK RSLT

| PARAMETER | (mg/kg) | SPIKE AMT (mg/kg) | BS RSLT (mg/kg) | BS % REC | SPIKE AMT (mg/kg) | BSD RSLT (mg/kg) | BSD % REC | RPD ( % ) | QC LIMIT ( % ) | MAX RPD ( % ) |
|---|---|---|---|---|---|---|---|---|---|---|
| HMX | ND | 2.00 | 2.04 | 102 | 2.00 | 2.01 | 100 | 1 | 75-125 | 30 |
| RDX | ND | 2.00 | 1.91 | 96 | 2.00 | 1.92 | 96 | 0 | 70-135 | 30 |
| 1,3,5-TNB | ND | 2.00 | 2.13 | 107 | 2.00 | 2.17 | 109 | 2 | 75-125 | 30 |
| 1,3-DNB | ND | 2.00 | 2.12 | 106 | 2.00 | 2.16 | 108 | 2 | 80-125 | 30 |
| Tetryl | ND | 2.00 | 1.82 | 91 | 2.00 | 1.84 | 92 | 1 | 60-140 | 30 |
| Nitrobenzene | ND | 2.00 | 2.12 | 106 | 2.00 | 2.18 | 109 | 3 | 75-125 | 30 |
| 2,4,6-TNT | ND | 2.00 | 1.95 | 97 | 2.00 | 1.96 | 98 | 0 | 55-140 | 30 |
| 4-AM-2,6-DNT | ND | 2.00 | 2.30 | 115 | 2.00 | 2.36 | 118 | 3 | 80-125 | 30 |
| 2-AM-4,6-DNT | ND | 2.00 | 2.15 | 108 | 2.00 | 2.15 | 108 | 0 | 80-125 | 30 |
| 2,6-DNT | ND | 2.00 | 2.20 | 110 | 2.00 | 2.19 | 109 | 1 | 80-120 | 30 |
| 2,4-DNT | ND | 2.00 | 2.20 | 110 | 2.00 | 2.29 | 114 | 4 | 80-125 | 30 |
| 2-Nitrotoluene | ND | 2.00 | 2.08 | 104 | 2.00 | 2.06 | 103 | 1 | 80-125 | 30 |
| 3-Nitrotoluene | ND | 2.00 | 2.17 | 109 | 2.00 | 2.00 | 100 | 8 | 75-120 | 30 |
| 4-Nitrotoluene | ND | 2.00 | 1.81 | 90 | 2.00 | 2.02 | 101 | 11 | 75-125 | 30 |

| SURROGATE PARAMETER | (mg/kg) | BS RSLT (mg/kg) | BS % REC | SPIKE AMT (mg/kg) | BSD RSLT (mg/kg) | BSD % REC | QC LIMIT ( % ) |
|---|---|---|---|---|---|---|---|
| 1,2-Dinitrobenzene | 2.00 | 2.26 | 113 | 2.00 | 2.13 | 106 | 70-140 |

SPIKE AMT

CLIENT: AMEC E & I
PROJECT: FORT WINGATE DEPOT ACTIVITY
BATCH NO. : 13K132
METHOD: SW8330A

| | | | | | |
|---|---|---|---|---|---|
| MATRIX: | SOIL | | | % MOISTURE: | NA |
| DILUTION FACTOR: | 1 | 1 | 1 | | |
| SAMPLE ID: | 04A29-C-1552R-EC-0.0-0.5-D-SO | | | | |
| LAB SAMP ID: | K132-04 | K132-04M | K132-04S | | |
| LAB FILE ID: | XL02017A | XL02018A | XL02019A | | |
| DATE EXTRACTED: | 11/26/1320:52 | 11/26/1320:52 | 11/26/1320:52 | DATE COLLECTED: | 11/16/13 |
| DATE ANALYZED: | 12/02/1321:55 | 12/02/1322:31 | 12/02/1323:07 | DATE RECEIVED: | 11/19/13 |
| PREP. BATCH: | EXK026S | EXK026S | EXK026S | | |
| CALIB. REF: | XL02010A | XL02010A | XL02010A | | |

ACCESSION:

HMX QUALITY CONTROL DATA

MS/MSD ANALYSIS

| PARAMETER | SMPL RSLT (mg/kg) | SPIKE AMT (mg/kg) | MS RSLT (mg/kg) | MS % REC | SPIKE AMT (mg/kg) | MSD RSLT (mg/kg) | MSD % REC | RPD ( % ) | QC LIMIT ( % ) | MAX RPD ( % ) |
|---|---|---|---|---|---|---|---|---|---|---|
| HMX | ND | 2.00 | 1.92 | 96 | 2.00 | 1.91 | 96 | 0 | 75-125 | 30 |
| RDX | ND | 2.00 | 1.82 | 91 | 2.00 | 1.82 | 91 | 0 | 70-135 | 30 |
| 1,3,5-TNB | ND | 2.00 | 2.01 | 101 | 2.00 | 2.11 | 105 | 4 | 75-125 | 30 |
| 1,3-DNB | ND | 2.00 | 2.10 | 105 | 2.00 | 2.12 | 106 | 1 | 80-125 | 30 |
| Tetryl | ND | 2.00 | 1.58 | 79 | 2.00 | 1.56 | 78 | 1 | 60-140 | 30 |
| Nitrobenzene | ND | 2.00 | 2.09 | 105 | 2.00 | 2.06 | 103 | 2 | 75-125 | 30 |
| 2,4,6-TNT | ND | 2.00 | 1.97 | 99 | 2.00 | 1.99 | 100 | 1 | 55-140 | 30 |
| 4-AM-2,6-DNT | ND | 2.00 | 2.34 | 117 | 2.00 | 2.36 | 118 | 1 | 80-125 | 30 |
| 2-AM-4,6-DNT | ND | 2.00 | 2.13 | 107 | 2.00 | 2.15 | 107 | 1 | 80-125 | 30 |
| 2,6-DNT | ND | 2.00 | 2.14 | 107 | 2.00 | 2.17 | 108 | 1 | 80-120 | 30 |
| 2,4-DNT | ND | 2.00 | 2.20 | 110 | 2.00 | 2.20 | 110 | 0 | 80-125 | 30 |
| 2-Nitrotoluene | ND | 2.00 | 2.08 | 104 | 2.00 | 1.98 | 99 | 5 | 80-125 | 30 |
| 3-Nitrotoluene | ND | 2.00 | 2.02 | 101 | 2.00 | 1.99 | 99 | 2 | 75-120 | 30 |
| 4-Nitrotoluene | ND | 2.00 | 2.00 | 100 | 2.00 | 1.92 | 96 | 4 | 75-125 | 30 |

| SURROGATE PARAMETER | MS RSLT (mg/kg) | MS % REC | SPIKE AMT (mg/kg) | MSD RSLT (mg/kg) | MSD % REC | QC LIMIT ( % ) |
|---|---|---|---|---|---|---|
| 1,2-Dinitrobenzene | 2.00 | 109 | 2.00 | 2.16 | 108 | 70-140 |

SPIKE AMT

METHOD 8332
Nitroglycerin and PETN

| | | | |
|---|---|---|---|
| Client | : AMEC E & I | Date Collected | : 11/16/13 |
| Project | : FORT WINGATE DEPOT ACTIVITY | Date Received | : 11/19/13 |
| Batch No. | : 13K132 | Date Extracted | : 11/26/13 20:52 |
| Sample ID | : 04A29-C-1551L-EC-0.0-0.5-D-SO | Date Analyzed | : 12/02/13 19:27 |
| Lab Samp ID | : K132-01 | Dilution Factor | : 1 |
| Lab File ID | : PL02040A | Matrix | : SOIL |
| Ext Btch ID | : EXK026S | % Moisture | : NA |
| Calib. Ref. | : PL02035A | Instrument ID | : T-017 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| NITROGLYCERINE | ND | 1.0 | 0.25 | 0.50 |
| PETN | ND | 1.0 | 0.25 | 0.50 |

| SURROGATE PARAMETERS | RESULTS | SPK_AMT | % RECOVERY | QC LIMIT |
|---|---|---|---|---|
| 1,2-DINITROBENZENE | 2.17 | 2.000 | 109 | 70-140 |

RL: Reporting Limit

Note: All positive results are confirmed by Phenyl-Hexyl column

METHOD 8332
Nitroglycerin and PETN

| | | | |
|---|---|---|---|
| Client | : AMEC E & I | Date Collected | : 11/16/13 |
| Project | : FORT WINGATE DEPOT ACTIVITY | Date Received | : 11/19/13 |
| Batch No. | : 13K132 | Date Extracted | : 11/26/13 20:52 |
| Sample ID | : 04A29-C-1551R-EC-0.0-0.5-D-SO | Date Analyzed | : 12/02/13 19:41 |
| Lab Samp ID | : K132-02 | Dilution Factor | : 1 |
| Lab File ID | : PL02041A | Matrix | : SOIL |
| Ext Btch ID | : EXK026S | % Moisture | : NA |
| Calib. Ref. | : PL02035A | Instrument ID | : T-017 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| NITROGLYCERINE | ND | 1.0 | 0.25 | 0.50 |
| PETN | ND | 1.0 | 0.25 | 0.50 |

| SURROGATE PARAMETERS | RESULTS | SPK_AMT | % RECOVERY | QC LIMIT |
|---|---|---|---|---|
| 1,2-DINITROBENZENE | 2.13 | 2.000 | 106 | 70-140 |

RL: Reporting Limit

Note: All positive results are confirmed by Phenyl-Hexyl column

METHOD 8332
Nitroglycerin and PETN

| | | | |
|---|---|---|---|
| Client | : AMEC E & I | Date Collected | : 11/16/13 |
| Project | : FORT WINGATE DEPOT ACTIVITY | Date Received | : 11/19/13 |
| Batch No. | : 13K132 | Date Extracted | : 11/26/13 20:52 |
| Sample ID | : 04A29-C-1552L-EC-0.0-0.5-D-SO | Date Analyzed | : 12/02/13 19:54 |
| Lab Samp ID | : K132-03 | Dilution Factor | : 1 |
| Lab File ID | : PL02042A | Matrix | : SOIL |
| Ext Btch ID | : EXK026S | % Moisture | : NA |
| Calib. Ref. | : PL02035A | Instrument ID | : T-017 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| NITROGLYCERINE | ND | 1.0 | 0.25 | 0.50 |
| PETN | ND | 1.0 | 0.25 | 0.50 |

| SURROGATE PARAMETERS | RESULTS | SPK_AMT | % RECOVERY | QC LIMIT |
|---|---|---|---|---|
| 1,2-DINITROBENZENE | 2.16 | 2.000 | 108 | 70-140 |

RL: Reporting Limit

Note: All positive results are confirmed by Phenyl-Hexyl column

METHOD 8332
Nitroglycerin and PETN

| | | | |
|---|---|---|---|
| Client | : AMEC E & I | Date Collected | : 11/16/13 |
| Project | : FORT WINGATE DEPOT ACTIVITY | Date Received | : 11/19/13 |
| Batch No. | : 13K132 | Date Extracted | : 11/26/13 20:52 |
| Sample ID | : 04A29-C-1552R-EC-0.0-0.5-D-SO | Date Analyzed | : 12/02/13 20:08 |
| Lab Samp ID | : K132-04 | Dilution Factor | : 1 |
| Lab File ID | : PL02043A | Matrix | : SOIL |
| Ext Btch ID | : EXK026S | % Moisture | : NA |
| Calib. Ref. | : PL02035A | Instrument ID | : T-017 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| NITROGLYCERINE | ND | 1.0 | 0.25 | 0.50 |
| PETN | ND | 1.0 | 0.25 | 0.50 |

| SURROGATE PARAMETERS | RESULTS | SPK_AMT | % RECOVERY | QC LIMIT |
|---|---|---|---|---|
| 1,2-DINITROBENZENE | 2.16 | 2.000 | 108 | 70-140 |

RL: Reporting Limit

Note: All positive results are confirmed by Phenyl-Hexyl column

METHOD 8332
Nitroglycerin and PETN

| | | | |
|---|---|---|---|
| Client | : AMEC E & I | Date Collected | : NA |
| Project | : FORT WINGATE DEPOT ACTIVITY | Date Received | : 11/26/13 |
| Batch No. | : 13K132 | Date Extracted | : 11/26/13 20:52 |
| Sample ID | : MBLK1S | Date Analyzed | : 12/02/13 16:41 |
| Lab Samp ID | : EXK026SB | Dilution Factor | : 1 |
| Lab File ID | : PL02028A | Matrix | : SOIL |
| Ext Btch ID | : EXK026S | % Moisture | : NA |
| Calib. Ref. | : PL02024A | Instrument ID | : T-017 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| NITROGLYCERINE | ND | 1.0 | 0.25 | 0.50 |
| PETN | ND | 1.0 | 0.25 | 0.50 |

| SURROGATE PARAMETERS | RESULTS | SPK_AMT | % RECOVERY | QC LIMIT |
|---|---|---|---|---|
| 1,2-DINITROBENZENE | 2.20 | 2.000 | 110 | 70-140 |

RL: Reporting Limit

Note: All positive results are confirmed by Phenyl-Hexyl column

CLIENT: AMEC E & I
PROJECT: FORT WINGATE DEPOT ACTIVITY
BATCH NO.: 13K132
METHOD: Method 8332

| | | | | | |
|---|---|---|---|---|---|
| MATRIX: | SOIL | | | % MOISTURE: | NA |
| DILUTION FACTOR: | 1 | 1 | 1 | | |
| SAMPLE ID: | MBLK1S | | | | |
| LAB SAMP ID: | EXK026SB | EXK026SX | EXK026SY | | |
| LAB FILE ID: | PL02028A | PL02029A | PL02030A | | |
| DATE EXTRACTED: | 11/26/1320:52 | 11/26/1320:52 | 11/26/1320:52 | DATE COLLECTED: | NA |
| DATE ANALYZED: | 12/02/1316:41 | 12/02/1316:55 | 12/02/1317:09 | DATE RECEIVED: | 11/26/13 |
| PREP. BATCH: | EXK026S | EXK026S | EXK026S | | |
| CALIB. REF: | PL02024A | PL02024A | PL02024A | | |

ACCESSION:

| PARAMETER | BLNK RSLT (mg/kg) | SPIKE AMT (mg/kg) | BS RSLT (mg/kg) | BS % REC | SPIKE AMT (mg/kg) | BSD RSLT (mg/kg) | BSD % REC | RPD ( % ) | QC LIMIT ( % ) | MAX RPD ( % ) |
|---|---|---|---|---|---|---|---|---|---|---|
| Nitroglycerine | ND | 7.50 | 6.21 | 83 | 7.50 | 6.39 | 85 | 3 | 70-130 | 50 |
| PETN | ND | 7.50 | 6.17 | 82 | 7.50 | 6.25 | 83 | 1 | 30-160 | 50 |

EPAN QUALITY CONTROL DATA

LCS/LCD ANALYSIS

| SURROGATE PARAMETER | BLNK RSLT (mg/kg) | BS RSLT (mg/kg) | BS % REC | SPIKE AMT (mg/kg) | BSD RSLT (mg/kg) | BSD % REC | QC LIMIT ( % ) |
|---|---|---|---|---|---|---|---|
| 1,2-Dinitrobenzene | 2.00 | 2.20 | 110 | 2.00 | 2.22 | 111 | 70-140 |

BLNK RSLT

SPIKE AMT

CLIENT: AMEC E & I
PROJECT: FORT WINGATE DEPOT ACTIVITY
BATCH NO.: 13K132
METHOD: Method 8332

| | | | | | |
|---|---|---|---|---|---|
| MATRIX: | SOIL | | | % MOISTURE: | NA |
| DILUTION FACTOR: | 1 | 1 | 1 | | |
| SAMPLE ID: | 04A29-C-1552R-EC-0.0-0.5-D-SO | | | | |
| LAB SAMP ID: | K132-04 | K132-04M | K132-04S | | |
| LAB FILE ID: | PL02043A | PL02044A | PL02045A | | |
| DATE EXTRACTED: | 11/26/1320:52 | 11/26/1320:52 | 11/26/1320:52 | DATE COLLECTED: | 11/16/13 |
| DATE ANALYZED: | 12/02/1320:08 | 12/02/1320:22 | 12/02/1320:36 | DATE RECEIVED: | 11/19/13 |
| PREP. BATCH: | EXK026S | EXK026S | EXK026S | | |
| CALIB. REF: | PL02035A | PL02035A | PL02035A | | |

ACCESSION:

| PARAMETER | (mg/kg) | SPIKE AMT (mg/kg) | MS RSLT (mg/kg) | MS % REC | SPIKE AMT (mg/kg) | MSD RSLT (mg/kg) | MSD % REC | RPD ( % ) | QC LIMIT ( % ) | MAX RPD ( % ) |
|---|---|---|---|---|---|---|---|---|---|---|
| Nitroglycerine | ND | 7.50 | 6.44 | 86 | 7.50 | 6.41 | 85 | 0 | 70-130 | 50 |
| PETN | ND | 7.50 | 6.41 | 85 | 7.50 | 6.37 | 85 | 1 | 30-160 | 50 |

EPAN QUALITY CONTROL DATA

MS/MSD ANALYSIS

| SURROGATE PARAMETER | (mg/kg) | MS RSLT (mg/kg) | MS % REC | SPIKE AMT (mg/kg) | MSD RSLT (mg/kg) | MSD % REC | QC LIMIT ( % ) |
|---|---|---|---|---|---|---|---|
| 1,2-Dinitrobenzene | 2.00 | 2.14 | 107 | 2.00 | 2.12 | 106 | 70-140 |

SMPL RSLT

SPIKE AMT

METHOD SW3050B/6010B
RCRA METALS BY TRACE ICP

| | |
|---|---|
| Client : AMEC E & I | Date Collected: 11/16/13 09:10 |
| Project : FORT WINGATE DEPOT ACTIVITY | Date Received: 11/19/13 |
| SDG NO. : 13K132 | Date Extracted: 11/21/13 16:45 |
| Sample ID: 04A29-C-1551L-EC-0.0-0.5-D-SO | Date Analyzed: 11/22/13 22:28 |
| Lab Samp ID: K132-01 | Dilution Factor: 0.943 |
| Lab File ID: ID8K030150 | Matrix : SOIL |
| Ext Btch ID: IPK030S | % Moisture : 5.5 |
| Calib. Ref.: ID8K030140 | Instrument ID : EMAXTID8 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| Arsenic | 1.74 | 0.998 | 0.200 | 0.399 |
| Barium | 520 | 0.998 | 0.0998 | 0.200 |
| Cadmium | ND | 0.998 | 0.0998 | 0.200 |
| Chromium | 10.9 | 0.998 | 0.150 | 0.299 |
| Lead | 20.0 | 0.998 | 0.150 | 0.299 |
| Selenium | ND | 0.998 | 0.269 | 0.499 |
| Silver | ND | 0.998 | 0.150 | 0.299 |

METHOD SW3050B/6010B
RCRA METALS BY TRACE ICP

| | | | |
|---|---|---|---|
| Client | : AMEC E & I | Date Collected: | 11/16/13 08:40 |
| Project | : FORT WINGATE DEPOT ACTIVITY | Date Received: | 11/19/13 |
| SDG NO. | : 13K132 | Date Extracted: | 11/21/13 16:45 |
| Sample ID: | 04A29-C-1551R-EC-0.0-0.5-D-SO | Date Analyzed: | 11/22/13 22:31 |
| Lab Samp ID: | K132-02 | Dilution Factor: | 0.980 |
| Lab File ID: | ID8K030151 | Matrix : | SOIL |
| Ext Btch ID: | IPK030S | % Moisture : | 7.1 |
| Calib. Ref.: | ID8K030140 | Instrument ID : | EMAXTID8 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| Arsenic | 2.25 | 1.05 | 0.211 | 0.422 |
| Barium | 414 | 1.05 | 0.105 | 0.211 |
| Cadmium | ND | 1.05 | 0.105 | 0.211 |
| Chromium | 14.6 | 1.05 | 0.158 | 0.316 |
| Lead | 42.7 | 1.05 | 0.158 | 0.316 |
| Selenium | ND | 1.05 | 0.285 | 0.527 |
| Silver | ND | 1.05 | 0.158 | 0.316 |

METHOD SW3050B/6010B
RCRA METALS BY TRACE ICP

| | | | |
|---|---|---|---|
| Client | : AMEC E & I | Date Collected: | 11/16/13 08:00 |
| Project | : FORT WINGATE DEPOT ACTIVITY | Date Received: | 11/19/13 |
| SDG NO. | : 13K132 | Date Extracted: | 11/21/13 16:45 |
| Sample ID: | 04A29-C-1552L-EC-0.0-0.5-D-SO | Date Analyzed: | 11/25/13 14:19 |
| Lab Samp ID: | K132-03N | Dilution Factor: | 1.00 |
| Lab File ID: | ID8K031022 | Matrix : | SOIL |
| Ext Btch ID: | IPK030S | % Moisture : | 8.8 |
| Calib. Ref.: | ID8K031020 | Instrument ID : | EMAXTID8 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| Arsenic | 2.42 | 1.10 | 0.219 | 0.439 |
| Barium | 419 | 1.10 | 0.110 | 0.219 |
| Cadmium | 0.337J | 1.10 | 0.110 | 0.219 |
| Chromium | 9.53 | 1.10 | 0.164 | 0.329 |
| Lead | 22.9 | 1.10 | 0.164 | 0.329 |
| Selenium | ND | 1.10 | 0.296 | 0.548 |
| Silver | ND | 1.10 | 0.164 | 0.329 |

METHOD SW3050B/6010B
RCRA METALS BY TRACE ICP

| | | | |
|---|---|---|---|
| Client | : AMEC E & I | Date Collected: | 11/16/13 08:06 |
| Project | : FORT WINGATE DEPOT ACTIVITY | Date Received: | 11/19/13 |
| SDG NO. | : 13K132 | Date Extracted: | 11/21/13 16:45 |
| Sample ID: | 04A29-C-1552R-EC-0.0-0.5-D-SO | Date Analyzed: | 11/22/13 22:15 |
| Lab Samp ID: | K132-04 | Dilution Factor: | 1.00 |
| Lab File ID: | ID8K030146 | Matrix : | SOIL |
| Ext Btch ID: | IPK030S | % Moisture : | 11.0 |
| Calib. Ref.: | ID8K030140 | Instrument ID : | EMAXTID8 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| Arsenic | 3.54 | 1.12 | 0.225 | 0.449 |
| Barium | 1140 | 1.12 | 0.112 | 0.225 |
| Cadmium | 0.373J | 1.12 | 0.112 | 0.225 |
| Chromium | 12.1 | 1.12 | 0.169 | 0.337 |
| Lead | 92.6 | 1.12 | 0.169 | 0.337 |
| Selenium | ND | 1.12 | 0.303 | 0.562 |
| Silver | ND | 1.12 | 0.169 | 0.337 |

METHOD SW3050B/6010B
RCRA METALS BY TRACE ICP

| | |
|---|---|
| Client : AMEC E & I | Date Collected: NA |
| Project : FORT WINGATE DEPOT ACTIVITY | Date Received: 11/21/13 |
| SDG NO. : 13K132 | Date Extracted: 11/21/13 16:45 |
| Sample ID: MBLK1S | Date Analyzed: 11/22/13 22:03 |
| Lab Samp ID: IPK030SB | Dilution Factor: 1 |
| Lab File ID: ID8K030142 | Matrix : SOIL |
| Ext Btch ID: IPK030S | % Moisture : NA |
| Calib. Ref.: ID8K030140 | Instrument ID : EMAXTID8 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| Arsenic | ND | 1.00 | 0.200 | 0.400 |
| Barium | ND | 1.00 | 0.100 | 0.200 |
| Cadmium | ND | 1.00 | 0.100 | 0.200 |
| Chromium | ND | 1.00 | 0.150 | 0.300 |
| Lead | ND | 1.00 | 0.150 | 0.300 |
| Selenium | ND | 1.00 | 0.270 | 0.500 |
| Silver | ND | 1.00 | 0.150 | 0.300 |

CLIENT: AMEC E & I
PROJECT: FORT WINGATE DEPOT ACTIVITY
SDG NO.: 13K132
METHOD: SW3050B/6010B

EMAX QUALITY CONTROL DATA

LCS/LCD ANALYSIS

BLNK RSLT

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| MATRIX: | SOIL | | | | | % MOISTURE: | NA | | | | |
| DILTN FACTR: | 1 | 1 | 1 | | | | | | | | |
| SAMPLE ID: | MBLK1S | | | | | | | | | | |
| CONTROL NO.: | IPK030SB | IPK030SL | IPK030SC | | | | | | | | |
| LAB FILE ID: | ID8K030142 | ID8K030143 | ID8K030144 | | | | | | | | |
| DATIME EXTRCTD: | 11/21/1316:45 | 11/21/1316:45 | 11/21/1316:45 | | | DATE COLLECTED: | NA | | | | |
| DATIME ANALYZD: | 11/22/1322:03 | 11/22/1322:06 | 11/22/1322:09 | | | DATE RECEIVED: | 11/21/13 | | | | |
| PREP. BATCH: | IPK030S | IPK030S | IPK030S | | | | | | | | |
| CALIB. REF: | ID8K030140 | ID8K030140 | ID8K030140 | | | | | | | | |

ACCESSION:

| PARAMETER | mg/kg | SPIKE AMT mg/kg | BS RSLT mg/kg | BS % REC | SPIKE AMT mg/kg | BSD RSLT mg/kg | BSD % REC | RPD % | QC LIMIT % | MAX RPD % |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | 50 | 49.7 | 99 | 50 | 48.9 | 98 | 2 | 80-120 | 20 |
| Barium | ND | 50 | 51.3 | 103 | 50 | 49.9 | 100 | 3 | 80-120 | 20 |
| Cadmium | ND | 50 | 50.2 | 100 | 50 | 49.3 | 99 | 2 | 80-120 | 20 |
| Chromium | ND | 50 | 50.5 | 101 | 50 | 49.3 | 99 | 2 | 80-120 | 20 |
| Lead | ND | 50 | 51.1 | 102 | 50 | 50.1 | 100 | 2 | 80-120 | 20 |
| Selenium | ND | 50 | 50.7 | 101 | 50 | 49.7 | 99 | 2 | 80-120 | 20 |
| Silver | ND | 50 | 48.9 | 98 | 50 | 47.7 | 95 | 2 | 75-125 | 20 |

CLIENT: AMEC E & I
PROJECT: FORT WINGATE DEPOT ACTIVITY
SDG NO.: 13K132
METHOD: SW3050B/6010B

| | | | | | |
|---|---|---|---|---|---|
| MATRIX: | SOIL | | | % MOISTURE: | 11.0 |
| DILTN FACTR: | 1.00 | 0.971 | 0.952 | | |
| SAMPLE ID: | 04A29-C-1552R-EC-0.0-0.5-D-SO | | | | |
| CONTROL NO.: | K132-04 | K132-04M | K132-04S | | |
| LAB FILE ID: | ID8K030146 | ID8K030148 | ID8K030149 | | |
| DATIME EXTRCTD: | 11/21/1316:45 | 11/21/1316:45 | 11/21/1316:45 | DATE COLLECTED: | 11/16/13 08:06 |
| DATIME ANALYZD: | 11/22/1322:15 | 11/22/1322:22 | 11/22/1322:25 | DATE RECEIVED: | 11/19/13 |
| PREP. BATCH: | IPK030S | IPK030S | IPK030S | | |
| CALIB. REF: | ID8K030140 | ID8K030140 | ID8K030140 | | |

ACCESSION:

EMAX QUALITY CONTROL DATA

MS/MSD ANALYSIS

| PARAMETER | SMPL RSLT mg/kg | SPIKE AMT mg/kg | MS RSLT mg/kg | MS % REC | SPIKE AMT mg/kg | MSD RSLT mg/kg | MSD % REC | RPD % | QC LIMIT % | MAX RPD % |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | 3.54 | 54.6 | 58.6 | 101 | 53.5 | 56.8 | 100 | 3 | 80-120 | 20 |
| Barium | 1140 | 54.6 | 361 | -1428* | 53.5 | 325 | -1524* | 10 | 80-120 | 20 |
| Cadmium | .373J | 54.6 | 52.8 | 96 | 53.5 | 50.8 | 94 | 4 | 80-120 | 20 |
| Chromium | 12.1 | 54.6 | 69.6 | 105 | 53.5 | 65.1 | 99 | 7 | 80-120 | 20 |
| Lead | 92.6 | 54.6 | 162 | 127* | 53.5 | 140 | 89 | 15 | 80-120 | 20 |
| Selenium | ND | 54.6 | 57 | 104 | 53.5 | 54.7 | 102 | 4 | 80-120 | 20 |
| Silver | ND | 54.6 | 56.8 | 104 | 53.5 | 54.8 | 102 | 4 | 75-125 | 20 |

METHOD SW3050B/6010B
LEAD BY TRACE ICP

| | | | |
|---|---|---|---|
| Client | : AMEC E & I | Date Collected: | 11/16/13 10:20 |
| Project | : FORT WINGATE DEPOT ACTIVITY | Date Received: | 11/19/13 |
| SDG NO. | : 13K132 | Date Extracted: | 11/22/13 15:45 |
| Sample ID: | 04A29-C-1105R-EC-0.0-0.5-D-SO | Date Analyzed: | 11/25/13 15:12 |
| Lab Samp ID: | K132-05 | Dilution Factor: | 0.943 |
| Lab File ID: | ID8K031039 | Matrix : | SOIL |
| Ext Btch ID: | IPK031S | % Moisture : | 6.4 |
| Calib. Ref.: | ID8K031029 | Instrument ID : | EMAXTID8 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| Lead | 38.1 | 1.01 | 0.151 | 0.302 |

METHOD SW3050B/6010B
LEAD BY TRACE ICP

| | | | |
|---|---|---|---|
| Client | : AMEC E & I | Date Collected: | 11/16/13 10:16 |
| Project | : FORT WINGATE DEPOT ACTIVITY | Date Received: | 11/19/13 |
| SDG NO. | : 13K132 | Date Extracted: | 11/22/13 15:45 |
| Sample ID: | 04A29-C-1105L-EC-0.0-0.5-D-SO | Date Analyzed: | 11/25/13 15:15 |
| Lab Samp ID: | K132-06 | Dilution Factor: | 0.990 |
| Lab File ID: | ID8K031040 | Matrix : | SOIL |
| Ext Btch ID: | IPK031S | % Moisture : | 9.4 |
| Calib. Ref.: | ID8K031029 | Instrument ID : | EMAXTID8 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| Lead | 15.9 | 1.09 | 0.164 | 0.328 |

METHOD SW3050B/6010B
LEAD BY TRACE ICP

| | | | |
|---|---|---|---|
| Client | : AMEC E & I | Date Collected: | 11/16/13 09:43 |
| Project | : FORT WINGATE DEPOT ACTIVITY | Date Received: | 11/19/13 |
| SDG NO. | : 13K132 | Date Extracted: | 11/22/13 15:45 |
| Sample ID: | 04A29-C-1109R-EC-0.0-0.5-D-SO | Date Analyzed: | 11/25/13 15:24 |
| Lab Samp ID: | K132-07 | Dilution Factor: | 0.990 |
| Lab File ID: | ID8K031043 | Matrix : | SOIL |
| Ext Btch ID: | IPK031S | % Moisture : | 3.2 |
| Calib. Ref.: | ID8K031041 | Instrument ID : | EMAXTID8 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| Lead | 13.0 | 1.02 | 0.153 | 0.307 |

METHOD SW3050B/6010B
LEAD BY TRACE ICP

| | | | |
|---|---|---|---|
| Client | : AMEC E & I | Date Collected: | 11/16/13 09:45 |
| Project | : FORT WINGATE DEPOT ACTIVITY | Date Received: | 11/19/13 |
| SDG NO. | : 13K132 | Date Extracted: | 11/22/13 15:45 |
| Sample ID: | 04A29-C-1109R-EC-0.0-0.5-D-SO-DUP | Date Analyzed: | 11/25/13 15:27 |
| Lab Samp ID: | K132-08 | Dilution Factor: | 0.990 |
| Lab File ID: | ID8K031044 | Matrix : | SOIL |
| Ext Btch ID: | IPK031S | % Moisture : | 3.3 |
| Calib. Ref.: | ID8K031041 | Instrument ID : | EMAXTID8 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| Lead | 13.3 | 1.02 | 0.154 | 0.307 |

METHOD SW3050B/6010B
LEAD BY TRACE ICP

| | | | |
|---|---|---|---|
| Client | : AMEC E & I | Date Collected: | 11/16/13 09:47 |
| Project | : FORT WINGATE DEPOT ACTIVITY | Date Received: | 11/19/13 |
| SDG NO. | : 13K132 | Date Extracted: | 11/22/13 15:45 |
| Sample ID: | 04A29-C-1109L-EC-0.0-0.5-D-SO | Date Analyzed: | 11/25/13 15:30 |
| Lab Samp ID: | K132-09 | Dilution Factor: | 0.962 |
| Lab File ID: | ID8K031045 | Matrix : | SOIL |
| Ext Btch ID: | IPK031S | % Moisture : | 3.1 |
| Calib. Ref.: | ID8K031041 | Instrument ID : | EMAXTID8 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| Lead | 157 | 0.993 | 0.149 | 0.298 |

METHOD SW3050B/6010B
LEAD BY TRACE ICP

| | | | |
|---|---|---|---|
| Client | : AMEC E & I | Date Collected: | 11/16/13 09:28 |
| Project | : FORT WINGATE DEPOT ACTIVITY | Date Received: | 11/19/13 |
| SDG NO. | : 13K132 | Date Extracted: | 11/22/13 15:45 |
| Sample ID: | 04A29-C-1128R-EC-0.0-0.5-D-SO | Date Analyzed: | 11/25/13 15:33 |
| Lab Samp ID: | K132-10 | Dilution Factor: | 0.962 |
| Lab File ID: | ID8K031046 | Matrix : | SOIL |
| Ext Btch ID: | IPK031S | % Moisture : | 12.8 |
| Calib. Ref.: | ID8K031041 | Instrument ID : | EMAXTID8 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| Lead | 11.9 | 1.10 | 0.165 | 0.331 |

METHOD SW3050B/6010B
LEAD BY TRACE ICP

| | | | |
|---|---|---|---|
| Client | : AMEC E & I | Date Collected: | 11/16/13 09:35 |
| Project | : FORT WINGATE DEPOT ACTIVITY | Date Received: | 11/19/13 |
| SDG NO. | : 13K132 | Date Extracted: | 11/22/13 15:45 |
| Sample ID: | 04A29-C-1128L-EC-0.0-0.5-D-SO | Date Analyzed: | 11/25/13 15:36 |
| Lab Samp ID: | K132-11 | Dilution Factor: | 0.990 |
| Lab File ID: | ID8K031047 | Matrix : | SOIL |
| Ext Btch ID: | IPK031S | % Moisture : | 12.1 |
| Calib. Ref.: | ID8K031041 | Instrument ID : | EMAXTID8 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| Lead | 126 | 1.13 | 0.169 | 0.338 |

METHOD SW3050B/6010B
LEAD BY TRACE ICP

| | | | |
|---|---|---|---|
| Client | : AMEC E & I | Date Collected: | 11/16/13 09:18 |
| Project | : FORT WINGATE DEPOT ACTIVITY | Date Received: | 11/19/13 |
| SDG NO. | : 13K132 | Date Extracted: | 11/22/13 15:45 |
| Sample ID: | 04A29-C-1124R-EC-0.0-0.5-D-SO | Date Analyzed: | 11/25/13 15:00 |
| Lab Samp ID: | K132-12 | Dilution Factor: | 0.943 |
| Lab File ID: | ID8K031035 | Matrix : | SOIL |
| Ext Btch ID: | IPK031S | % Moisture : | 8.2 |
| Calib. Ref.: | ID8K031029 | Instrument ID : | EMAXTID8 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| Lead | 20.1 | 1.03 | 0.154 | 0.308 |

METHOD SW3050B/6010B
LEAD BY TRACE ICP

| | | | |
|---|---|---|---|
| Client | : AMEC E & I | Date Collected | : NA |
| Project | : FORT WINGATE DEPOT ACTIVITY | Date Received | : 11/22/13 |
| SDG NO. | : 13K132 | Date Extracted | : 11/22/13 15:45 |
| Sample ID | : MBLK1S | Date Analyzed | : 11/25/13 14:48 |
| Lab Samp ID | : IPK031SB | Dilution Factor | : 1 |
| Lab File ID | : ID8K031031 | Matrix | : SOIL |
| Ext Btch ID | : IPK031S | % Moisture | : NA |
| Calib. Ref. | : ID8K031029 | Instrument ID | : EMAXTID8 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| Lead | ND | 1.00 | 0.150 | 0.300 |

CLIENT: AMEC E & I
PROJECT: FORT WINGATE DEPOT ACTIVITY
SDG NO.: 13K132
METHOD: SW3050B/6010B

| | | | | | |
|---|---|---|---|---|---|
| MATRIX: | SOIL | | | % MOISTURE: | NA |
| DILTN FACTR: | 1 | 1 | 1 | | |
| SAMPLE ID: | MBLK1S | | | | |
| CONTROL NO.: | IPK031SB | IPK031SL | IPK031SC | | |
| LAB FILE ID: | ID8K031031 | ID8K031032 | ID8K031033 | | |
| DATIME EXTRCTD: | 11/22/1315:45 | 11/22/1315:45 | 11/22/1315:45 | DATE COLLECTED: | NA |
| DATIME ANALYZD: | 11/25/1314:48 | 11/25/1314:51 | 11/25/1314:54 | DATE RECEIVED: | 11/22/13 |
| PREP. BATCH: | IPK031S | IPK031S | IPK031S | | |
| CALIB. REF: | ID8K031029 | ID8K031029 | ID8K031029 | | |

ACCESSION:

| PARAMETER | mg/kg | SPIKE AMT mg/kg | BS RSLT mg/kg | BS % REC | SPIKE AMT mg/kg | BSD RSLT mg/kg | BSD % REC | RPD % | QC LIMIT % | MAX RPD % |
|---|---|---|---|---|---|---|---|---|---|---|
| Lead | ND | 50 | 52.4 | 105 | 50 | 51.9 | 104 | 1 | 80-120 | 20 |

EMAX QUALITY CONTROL DATA

LCS/LCD ANALYSIS

BLNK RSLT

| | | | | | |
|---|---|---|---|---|---|
| CLIENT: | AMEC E & I | | | | |
| PROJECT: | FORT WINGATE DEPOT ACTIVITY | | | | |
| SDG NO.: | 13K132 | | | | |
| METHOD: | SW3050B/6010B | | | | |
| MATRIX: | SOIL | | | % MOISTURE: | 8.2 |
| DILTN FACTR: | 0.943 | 0.935 | 1.00 | | |
| SAMPLE ID: | 04A29-C-1124R-EC-0.0-0.5-D-SO | | | | |
| CONTROL NO.: | K132-12 | K132-12M | K132-12S | | |
| LAB FILE ID: | ID8K031035 | ID8K031037 | ID8K031038 | | |
| DATIME EXTRCTD: | 11/22/1315:45 | 11/22/1315:45 | 11/22/1315:45 | DATE COLLECTED: | 11/16/13 09:18 |
| DATIME ANALYZD: | 11/25/1315:00 | 11/25/1315:06 | 11/25/1315:09 | DATE RECEIVED: | 11/19/13 |
| PREP. BATCH: | IPK031S | IPK031S | IPK031S | | |
| CALIB. REF: | ID8K031029 | ID8K031029 | ID8K031029 | | |

ACCESSION:

| PARAMETER | mg/kg | SPIKE AMT mg/kg | MS RSLT mg/kg | MS % REC | SPIKE AMT mg/kg | MSD RSLT mg/kg | MSD % REC | RPD % | QC LIMIT % | MAX RPD % |
|---|---|---|---|---|---|---|---|---|---|---|
| Lead | 20.1 | 50.9 | 72 | 102 | 54.5 | 81.7 | 113 | 13 | 80-120 | 20 |

EMAX QUALITY CONTROL DATA

MS/MSD ANALYSIS

SMPL RSLT

: AMEC E & I : SOIL
: FORT WINGATE DEPOT ACTIVITY : 47
Client : 13K132
Project
Batch No.

| CLIENT SAMPLE ID | EMAX SAMPLE ID | RESULTS (mg/Kg) | DIL'N FACTOR | MOIST (%) | LOQ (mg/Kg) | DL (mg/Kg) | LOD (mg/Kg) | ANALYSIS DATETIME | PREPARATION DATETIME | DATA FILE ID | CAL REF | PREP BATCH | COLLECTION DATETIME | RECEIVED DATETIME |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| --------- | HGK016SB | ND | 1 | NA | 0.1 | 0.01 | 0.02 | 11/21/1317:28 | 11/21/1314:10 | M47K010043 | M47K010 | HGK016S | NA | NA |
| MBLK1S | HGK016SL | 0.438 | 1 | NA | 0.1 | 0.01 | 0.02 | 11/21/1317:30 | 11/21/1314:10 | M47K010044 | M47K010 | HGK016S | NA | NA |
| LCS1S | HGK016SC | 0.437 | 1 | NA | 0.1 | 0.01 | 0.02 | 11/21/1317:33 | 11/21/1314:10 | M47K010045 | M47K010 | HGK016S | NA | NA |
| LCD1S | K132-01 | 0.0131J | 1 | NA | 0.0984 | 0.00984 | 0.0197 | 11/21/1318:16 | 11/21/1314:10 | M47K010064 | M47K010 | HGK016S | 11/16/1309:10 | 11/19/13 |
| 04A29-C-1551L-EC-0.0-0.5-D-SO | K132-02 | ND | 1 | NA | 0.0984 | 0.00984 | 0.0197 | 11/21/1318:19 | 11/21/1314:10 | M47K010065 | M47K010 | HGK016S | 11/16/1308:40 | 11/19/13 |
| 04A29-C-1551R-EC-0.0-0.5-D-SO | K132-03 | 0.0110J | 1 | NA | 0.1 | 0.01 | 0.02 | 11/21/1318:21 | 11/21/1314:10 | M47K010066 | M47K010 | HGK016S | 11/16/1308:00 | 11/19/13 |
| 04A29-C-1552L-EC-0.0-0.5-D-SO | K132-04 | ND | 1 | NA | 0.102 | 0.0102 | 0.0203 | 11/21/1318:25 | 11/21/1314:10 | M47K010068 | M47K010 | HGK016S | 11/16/1308:06 | 11/19/13 |
| 04A29-C-1552R-EC-0.0-0.5-D-SO | K132-04M | 0.477 | 1 | NA | 0.1 | 0.01 | 0.02 | 11/21/1318:34 | 11/21/1314:10 | M47K010072 | M47K010 | HGK016S | 11/16/1308:06 | 11/19/13 |
| 04A29-C-1552R-EC-0.0-0.5-D-SOMS | K132-04S | 0.460 | 1 | NA | 0.1 | 0.01 | 0.02 | 11/21/1318:36 | 11/21/1314:10 | M47K010073 | M47K010 | HGK016S | 11/16/1308:06 | 11/19/13 |
| 04A29-C-1552R-EC-0.0-0.5-D-SOMSD | | | | | | | | | | | | | | |

Matrix
InstrumentID

METHOD SW7471A

MERCURY

: AMEC E & I
: FORT WINGATE DEPOT ACTIVITY
CLIENT : 13K132
PROJECT : SW7471A
BATCH NO.
METHOD
: SOIL % MOISTURE: N/A

| | | 1 | 1 |
|---|---|---|---|
| MATRIX | : MBLK1S | LCS1S | LCD1S |
| DILUTION FACTOR: 1 | : HGK016SB | HGK016SL | HGK016SC |
| SAMPLE ID | : M47K010043 | M47K010044 | M47K010045 |
| LAB SAMPLE ID | : 11/21/1314:10 | 11/21/1314:10 | 11/21/1314:10 |
| LAB FILE ID | : 11/21/1317:28 | 11/21/1317:30 | 11/21/1317:33 |
| DATE PREPARED | : HGK016S | HGK016S | HGK016S |
| DATE ANALYZED | | M47K010 | M47K010 |
| PREP BATCH | | | |

CALIBRATION REF: M47K010

ACCESSION:

| PARAMETER | (mg/Kg) | (mg/Kg) | (mg/Kg) | BS REC (%) | SPIKE AMT (mg/Kg) | BSD RESULT (mg/Kg) | BSD REC (%) | RPD (%) | QC LIMIT (%) | MAX RPD (%) |
|---|---|---|---|---|---|---|---|---|---|---|
| | ND | 0.417 | 0.438 | 105 | 0.417 | 0.437 | 105 | 0 | 80-120 | 20 |

LAB QUALITY CONTROL DATA
MAX CONTROL SAMPLE ANALYSIS
Mercury

MB RESULT SPIKE AMT BS RESULT

| | | | |
|---|---|---|---|
| | : AMEC E & I | | |
| | : FORT WINGATE DEPOT ACTIVITY | | |
| CLIENT | : 13K132 | | |
| PROJECT | : SW7471A | | |
| BATCH NO. | | | |
| METHOD | | | |
| | : SOIL | | % MOISTURE: NA |
| | | 1 | 1 |
| MATRIX | : 04A29-C-1552R-EC-0.0-0.5-D-SO | 04A29-C-1552R-EC-0.0-0.5-D-SOMS | 04A29-C-1552R-EC-0.0-0.5-D-SOMSD |
| DILUTION FACTOR: 1 | : K132-04 | K132-04M | K132-04S |
| SAMPLE ID | : M47K010068 | M47K010072 | M47K010073 |
| LAB SAMPLE ID | : 11/21/1314:10 | 11/21/1314:10 | 11/21/1314:10 |
| LAB FILE ID | : 11/21/1318:25 | 11/21/1318:34 | 11/21/1318:36 |
| DATE PREPARED | : HGK016S | HGK016S | HGK016S |
| DATE ANALYZED | | M47K010 | M47K010 |
| PREP BATCH | | | |

CALIBRATION REF: M47K010

ACCESSION:

| PARAMETER | (mg/Kg) | SPIKE AMT (mg/Kg) | MS RESULT (mg/Kg) | MS REC (%) | SPIKE AMT (mg/Kg) | MSD RESULT (mg/Kg) | MSD REC (%) | RPD (%) | QC LIMIT (%) | MAX RPD (%) |
|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | 0.417 | 0.477 | 114 | 0.417 | 0.460 | 110 | 4 | 80-120 | 20 |

EMAX-QUALITY CONTROL DATA

MS/MSD ANALYSIS

PARENT RESULT

# APPENDIX C

# WASTE DISPOSAL DOCUMENTATION

[THIS PAGE INTENTIONALLY LEFT BLANK]

## TABLE OF CONTENTS

**CLIENT:** **AMEC E & I**

**PROJECT:** **FORT WINGATE DEPOT ACTIVITY**

**SDG:** **13J174**


| SECTION | | PAGE |
|---|---|---|
| Cover Letter, COC/Sample Receipt Form | | 1000 – 1006 |
| GC/MS-VOA | METHOD 5035A/8260B | 2000 – 2101 |
| GC/MS-SVOA | METHOD 3550B/8270C | 3000 – 3215 |
| | METHOD 3550B/8270C SIM | 3216 – 3314 |
| GC-VOA | METHOD 5035A/8015B | 4000 – 4043 |
| GC-SVOA | METHOD 3550B/8015B | 5000 – 5055 |
| | METHOD 3550B/8081A | 5056 – 5163 |
| | METHDO 3550B/8082A | 5164 – 5230 |
| HPLC | METHOD 8330A | 6000 – 6036 |
| | METHOD 8332 | 6037 – 6073 |
| METALS | METHOD 3050B/6010B | 7000 – 7098 |
| | METHOD 1311/3010A/6010B | 7099 – 7184 |
| | METHOD 7471A | 7185 – 7200 |
| WET | ** | 8000 – |
| OTHERS | ** | 9000 – |


** - Not Requested

EMAX
LABORATORIES, INC.
1835 W. 205th Street
Torrance, CA 90501
Tel: (310) 618-8889
Fax: (310) 618-0818

Date: 11-06-2013
EMAX Batch No.: 13J174

Attn: Marie Bevier

AMEC E & I
7376 SW Durham Road
Portland OR 97224

Subject: Laboratory Report
Project: Fort Wingate Depot Activity

---

Enclosed is the Laboratory report for samples received on 10/22/13.
The data reported relate only to samples listed below :

| Sample ID | Control # | Col Date | Matrix | Analysis |
|---|---|---|---|---|
| 0700-BERM-SS01-0000-C-SO | J174-01 | 10/21/13 | SOIL | PESTICIDES ORGANOCHLORINE |
| | | | | METALS RCRA |
| | | | | MERCURY |
| | | | | GASOLINE RANGE ORGANICS |
| | | | | DIESEL RANGE ORGANICS |
| | | | | POLYCHLORINATED BIPHENYLS (PCBS) |
| | | | | SEMIVOLATILE ORGANICS BY GCMS |
| | | | | VOLATILE ORGANICS BY GC/MS |
| | | | | PAH BY 8270C SIM |
| 0700-BERM-SS02-0000-C-SO | J174-02 | 10/21/13 | SOIL | PESTICIDES ORGANOCHLORINE |
| | | | | METALS RCRA |
| | | | | MERCURY |
| | | | | GASOLINE RANGE ORGANICS |
| | | | | DIESEL RANGE ORGANICS |
| | | | | POLYCHLORINATED BIPHENYLS (PCBS) |
| | | | | SEMIVOLATILE ORGANICS BY GCMS |
| | | | | VOLATILE ORGANICS BY GC/MS |
| | | | | PAH BY 8270C SIM |
| 04A29-00-WP01-0000-C-SO | J174-03 | 10/21/13 | SOIL | METALS RCRA |

| Sample ID | Control # | Col Date | Matrix | Analysis |
|---|---|---|---|---|
| | | | | MERCURY |
| | | | | NITROAROMATICS & NITRAMINES |
| | | | | NITROGLYCERINE AND PETN |
| | | | | LEAD TCLP |

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

Caspar J. Pang
Laboratory Director



EMAX certifies that results included in this report meets all NELAC & DOD requirements unless noted in the Case Narrative.

NELAC Accredited Certificate Number 02116CA
L-A-B Accredited DoD ELAP and ISO/IEC 17025 Certificate Number L2278 Testing

amec

SHIP TO: **EMAX Laboratories, Inc.**
**1835 W. 205th Street**
**Torrance, CA 90501**
**Attn: Sample Receiving**
**(310) 618-8889**

# CHAIN OF CUSTODY

13J174

DATE: 10/21/13

COC #: 1

PAGE: 1 OF 1

| | | | |
|---|---|---|---|
| **Project Name: Fort Wingate Depot Activity** | Project Contact: Marie Bevier | Bill To: | Disposal Instructions: LAB |
| Project Number: 912640002.0013.01 | Phone Number: 503-639-3400 | | Shipment Method: COURIER |
| Project Manager: Julie Hamilton | Project Phase: Parcel 18 | | Waybill Number: N/A |

| Sample Information | | | | | Methods for Analysis | | | | | | | | | | | | | | | | | | RUSH | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | Sample ID | Date Sampled | Time Sampled | Matrix | VOCs (8260B) | SVOCs (8270D) | PAHs (8310) | PCBs (8082A) | TPH (8015B) | DRO (8015B) | GRO (8260B) | ORO | RCRA 8 Metals | Pesicides (8081) | Explosives (8330B) | TCLP Lead | | | | | | MS/MSD | 24 Hour | 48 Hour | 72 Hour | 5 Days | QC (MS/MSD) | TOTAL BOTTLES | HOLD All Analyses |
| 1 | (1) 0700BermSS010000CSO | 10/21/13 | 1105 | SOIL | / | / | / | / | / | / | / | / | / | / | | | | | | | | | | | | | | 1 | |
| 2 | (2) 0700BermSS020000CSO | 10/21/13 | 1105 | SOIL | / | / | / | / | / | / | / | / | / | / | | | | | | | | | | | | | | 1 | |
| 3 | (3) 04A2900WP010000CSO | 10/21/13 | 1215 | SOIL | | | | | | | | | / | | / | / | | | | | | | | | | | | 1 | |
| 4 | 04A2900WP020000CSO | 10/21/13 | 1215 | SOIL | | | | | | | | | / | | / | / | | | | | | | | | | | | 1 | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | | |
|---|---|---|
| **Sampler's Signature:** | **Date:** 10/21/13 | **Time:** 12:30 Pm |
| **Relinquished By/Affiliation:** | **Date:** | **Time:** |
| **Received By:** | **Date:** | **Time:** |
| **Relinquished By/Affiliation:** | **Date:** | **Time:** |
| **Received By:** | **Date:** | **Time:** |
| **Relinquished By/Affiliation:** | **Date:** | **Time:** |
| **Received By (LAB):** | **Date:** 10/22/13 | **Time:** 0945 |

**For Lab Use**

| | |
|---|---|
| Does COC match samples: | Y or N |
| Broken Container: | Y or N |
| COC seal intact: | Y or N |
| Other problems: | Y or N |
| AMEC contacted: | Y or N |
| Date contacted: | |
| Cooler Temperature at receipt: | 2.7 C |

**Comments:** **H=Hold Analysis Request X=Analyze**

**NUMBER OF COOLERS SENT:**

EMAX LABORATORIES, INC.

# SAMPLE RECEIPT FORM 1

| Type of Delivery | Airbill / Tracking Number | ECN 13 J174 |
|---|---|---|
| ☑ Fedex ☐ UPS ☐ GSO ☐ Others | 8034 5909 9455 | Recipient I PATEL |
| ☐ EMAX Courier ☐ Client Delivery | | Date 10/22/13 Time 0945 |

## COC Inspection

| | | | | | |
|---|---|---|---|---|---|
| ☑ Client Name | ☑ Client PM/FC | ☑ Sampler Name | ☑ Sampling Date/Time/Location | ☑ Sample ID | ☑ Matrix |
| ☐ Address | ☑ Tel # / Fax # | ☐ Courier Signature | ☑ Analysis Required | ☐ Preservative (if any) | ☐ TAT |

Safety Issues (if any) ☐ High concentrations expected ☐ Superfund Site samples ☐ Rad screening required

Comments:

## Packaging Inspection

| | | | | | |
|---|---|---|---|---|---|
| Container | ☑ Cooler | ☐ Box | ☐ Other | | |
| Condition | ☑ Custody Seal | ☑ Intact | ☐ Damaged | | |
| Packaging | ☑ Bubble Pack | ☐ Styrofoam | ☐ Popcorn | ☑ Sufficient | ☑ Plastic Bags |
| Temperatures (Cool, ≤6 °C but not frozen) | D ☑ Cooler 1 2.7 °C | ☐ Cooler 2_____ °C | ☐ Cooler 3_____ °C | ☐ Cooler 4_____ °C | ☐ Cooler 5_____ °C |
| | ☐ Cooler 6_____ °C | ☐ Cooler 7_____ °C | ☐ Cooler 8_____ °C | ☐ Cooler 9_____ °C | ☐ Cooler 10_____ °C |
| *Thermometer:* | *A - S/N 101541371* | *B - S/N 101541382* | *C - S/N 122091701* | *(D) - S/N 122091758* | |

Comments: ☐ **Temperature is out of range. PM was informed IMMEDIATELY.**

Note: **pH holding time requirement for water samples is 15 mins. Water samples for pH analysis are received beyond 15 minutes from sampling time.**

## DISCREPANCIES

| LSID | LSCID | Description Code | Sample Label ID / Information | Corrective Action Code |
|---|---|---|---|---|
| 1-4 3 9 10/22/13 | 001-004 | A2 | | R2 |
| 3 | 003, 004 | H1 | | R5, R3 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

10/22/13

☐ **Continue to next page.**

REVIEWS

Sample Labeling J Patel Date 10/22/13 10/22/13

SRF Date 10/23/13

PM Date 10/23/13

LEGEND:

| Code | Description- Sample Management |
|---|---|
| A1 | Analysis is not indicated in COC. |
| A2 | Analysis is not indicated in label. |
| A3 | Analysis is inconsistent in COC vis-à-vis label. |
| B1 | Sample ID is not indicated in COC. |
| B2 | Sample ID is not indicated in label. |
| B3 | Sample ID is inconsistent in COC vis-à-vis label. |
| C1 | Improper container |
| C2 | Broken container |
| C3 | Leaking container |
| D1 | Date and/or time is not indicated in COC. |
| D2 | Date and/or time is not indicated in label. |
| D3 | Date and/or time is inconsistent in COC vis-à-vis label. |
| F1 | Improper preservation |
| F2 | Insufficient Sample |
| F3 | Bubble is > 6mm. Use vial with smallest bubble first. |
| F4 | Bubble is > 6mm in all vials. |
| F5 | >20 % solid particle |
| F6 | Out of Holding Time |

| Code | Description-Sample Management |
|---|---|
| G1 | Sample indicated in COC is not received. |
| G2 | MS/MSD is not indicated in COC. |
| G3 | No identified trip blank, proceed as indicated in COC. |
| G4 | Trip Blank is designated in SDG _____ |
| G5 | Trip Blank has no sampling date & time. Log-in with latest sampling date and 1 minute past the time of the last sample collected on the same date. |
| H1 | Sample ID's Different on COC But Same on label; Send Sample per client See Client email. |

| Code | Description-Project Management |
|---|---|
| R1 | Hold sample(s); wait for further instructions |
| R2 | Proceed as indicated in COC and inform client. |
| R3 | Refer to attached instruction |
| R4 | Cancel the analysis |
| R5 | Inform client. |
| R6 | Proceed as indicated in COC |

METHOD SW8330A
EXPLOSIVES

| | |
|---|---|
| Client : AMEC E & I | Date Collected: 10/21/13 |
| Project : FORT WINGATE DEPOT ACTIVITY | Date Received: 10/22/13 |
| Batch No. : 13J174 | Date Extracted: 10/29/13 18:13 |
| Sample ID: 04A29-00-WP01-0000-C-SO | Date Analyzed: 10/31/13 02:01 |
| Lab Samp ID: J174-03 | Dilution Factor: 1 |
| Lab File ID: XJ30031A | Matrix : SOIL |
| Ext Btch ID: EXJ018S | % Moisture : NA |
| Calib. Ref.: XJ30027A | Instrument ID : T-081 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| HMX | ND | 0.40 | 0.050 | 0.20 |
| RDX | ND | 0.40 | 0.050 | 0.20 |
| 1,3,5-TNB | ND | 0.40 | 0.050 | 0.20 |
| 1,3-DNB | ND | 0.40 | 0.050 | 0.20 |
| TETRYL | ND | 0.40 | 0.057 | 0.20 |
| NITROBENZENE | ND | 0.40 | 0.050 | 0.20 |
| 2,4,6-TNT | ND | 0.40 | 0.050 | 0.20 |
| 4-AM-2,6-DNT | ND | 0.40 | 0.050 | 0.20 |
| 2-AM-4,6-DNT | ND | 0.40 | 0.050 | 0.20 |
| 2,6-DNT | ND | 0.40 | 0.056 | 0.20 |
| 2,4-DNT | ND | 0.40 | 0.055 | 0.20 |
| 2-NITROTOLUENE | ND | 0.40 | 0.076 | 0.20 |
| 3-NITROTOLUENE | ND | 0.40 | 0.095 | 0.20 |
| 4-NITROTOLUENE | ND | 0.40 | 0.099 | 0.20 |

| SURROGATE PARAMETERS | RESULTS | SPK_AMT | % RECOVERY | QC LIMIT |
|---|---|---|---|---|
| 1,2-DINITROBENZENE | 1.99 | 2.000 | 99.4 | 70-140 |

Note: All positive results are confirmed by Phenyl-Hexyl column

METHOD SW8330A
EXPLOSIVES

| | |
|---|---|
| Client : AMEC E & I | Date Collected: NA |
| Project : FORT WINGATE DEPOT ACTIVITY | Date Received: 10/29/13 |
| Batch No. : 13J174 | Date Extracted: 10/29/13 18:13 |
| Sample ID: MBLK1S | Date Analyzed: 10/31/13 00:21 |
| Lab Samp ID: EXJ018SB | Dilution Factor: 1 |
| Lab File ID: XJ30028A | Matrix : SOIL |
| Ext Btch ID: EXJ018S | % Moisture : NA |
| Calib. Ref.: XJ30027A | Instrument ID : T-081 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| HMX | ND | 0.40 | 0.050 | 0.20 |
| RDX | ND | 0.40 | 0.050 | 0.20 |
| 1,3,5-TNB | ND | 0.40 | 0.050 | 0.20 |
| 1,3-DNB | ND | 0.40 | 0.050 | 0.20 |
| TETRYL | ND | 0.40 | 0.057 | 0.20 |
| NITROBENZENE | ND | 0.40 | 0.050 | 0.20 |
| 2,4,6-TNT | ND | 0.40 | 0.050 | 0.20 |
| 4-AM-2,6-DNT | ND | 0.40 | 0.050 | 0.20 |
| 2-AM-4,6-DNT | ND | 0.40 | 0.050 | 0.20 |
| 2,6-DNT | ND | 0.40 | 0.056 | 0.20 |
| 2,4-DNT | ND | 0.40 | 0.055 | 0.20 |
| 2-NITROTOLUENE | ND | 0.40 | 0.076 | 0.20 |
| 3-NITROTOLUENE | ND | 0.40 | 0.095 | 0.20 |
| 4-NITROTOLUENE | ND | 0.40 | 0.099 | 0.20 |

| SURROGATE PARAMETERS | RESULTS | SPK_AMT | % RECOVERY | QC LIMIT |
|---|---|---|---|---|
| 1,2-DINITROBENZENE | 1.94 | 2.000 | 97.2 | 70-140 |

Note: All positive results are confirmed by Phenyl-Hexyl column

METHOD 8332
Nitroglycerin and PETN

| | | | |
|---|---|---|---|
| Client | : AMEC E & I | Date Collected | : 10/21/13 |
| Project | : FORT WINGATE DEPOT ACTIVITY | Date Received | : 10/22/13 |
| Batch No. | : 13J174 | Date Extracted | : 10/29/13 18:13 |
| Sample ID | : 04A29-00-WP01-0000-C-SO | Date Analyzed | : 10/31/13 10:33 |
| Lab Samp ID | : J174-03 | Dilution Factor | : 1 |
| Lab File ID | : PJ31006A | Matrix | : SOIL |
| Ext Btch ID | : EXJ018S | % Moisture | : NA |
| Calib. Ref. | : PJ31002A | Instrument ID | : T-017 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| NITROGLYCERINE | ND | 1.0 | 0.25 | 0.50 |
| PETN | ND | 1.0 | 0.25 | 0.50 |

| SURROGATE PARAMETERS | RESULTS | SPK_AMT | % RECOVERY | QC LIMIT |
|---|---|---|---|---|
| 1,2-DINITROBENZENE | 2.29 | 2.000 | 114 | 70-140 |

RL: Reporting Limit

Note: All positive results are confirmed by Phenyl-Hexyl column

METHOD 8332
Nitroglycerin and PETN

| | | | |
|---|---|---|---|
| Client | : AMEC E & I | Date Collected | : NA |
| Project | : FORT WINGATE DEPOT ACTIVITY | Date Received | : 10/29/13 |
| Batch No. | : 13J174 | Date Extracted | : 10/29/13 18:13 |
| Sample ID | : MBLK1S | Date Analyzed | : 10/31/13 09:51 |
| Lab Samp ID | : EXJ018SB | Dilution Factor | : 1 |
| Lab File ID | : PJ31003A | Matrix | : SOIL |
| Ext Btch ID | : EXJ018S | % Moisture | : NA |
| Calib. Ref. | : PJ31002A | Instrument ID | : T-017 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| NITROGLYCERINE | ND | 1.0 | 0.25 | 0.50 |
| PETN | ND | 1.0 | 0.25 | 0.50 |

| SURROGATE PARAMETERS | RESULTS | SPK_AMT | % RECOVERY | QC LIMIT |
|---|---|---|---|---|
| 1,2-DINITROBENZENE | 2.20 | 2.000 | 110 | 70-140 |

RL: Reporting Limit

Note: All positive results are confirmed by Phenyl-Hexyl column

: AMEC E & I : SOIL
: FORT WINGATE DEPOT ACTIVITY : 47
Client : 13J174
Project
Batch No.

| CLIENT SAMPLE ID | EMAX SAMPLE ID | RESULTS (mg/Kg) | DIL'N FACTOR | MOIST (%) | LOQ (mg/Kg) | DL (mg/Kg) | LOD (mg/Kg) | ANALYSIS DATETIME | PREPARATION DATETIME | DATA FILE ID | CAL REF | PREP BATCH | COLLECTION DATETIME | RECEIVED DATETIME |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MBLK1S | HGJ032SB | ND | 1 | NA | 0.1 | 0.01 | 0.02 | 10/31/1318:14 | 10/31/1312:45 | M47J024028 | M47J024 | HGJ032S | NA | NA |
| LCS1S | HGJ032SL | 0.373 | 1 | NA | 0.1 | 0.01 | 0.02 | 10/31/1318:16 | 10/31/1312:45 | M47J024029 | M47J024 | HGJ032S | NA | NA |
| LCD1S | HGJ032SC | 0.368 | 1 | NA | 0.1 | 0.01 | 0.02 | 10/31/1318:18 | 10/31/1312:45 | M47J024030 | M47J024 | HGJ032S | NA | NA |
| 0700-BERM-SS01-0000-C-SO | J174-01A | 0.500 | 1 | 6.7 | 0.107 | 0.0107 | 0.0214 | 10/31/1318:20 | 10/31/1312:45 | M47J024031 | M47J024 | HGJ032S | 10/21/1311:05 | 10/22/13 |
| 0700-BERM-SS01-0000-C-SO | J174-01 | 0.0114J | 1 | 6.7 | 0.107 | 0.0107 | 0.0214 | 10/31/1318:23 | 10/31/1312:45 | M47J024032 | M47J024 | HGJ032S | 10/21/1311:05 | 10/22/13 |
| 0700-BERM-SS01-0000-C-SO | J174-01J | ND | 5 | 6.7 | 0.536 | 0.0536 | 0.107 | 10/31/1318:30 | 10/31/1312:45 | M47J024035 | M47J024 | HGJ032S | 10/21/1311:05 | 10/22/13 |
| 0700-BERM-SS02-0000-C-SO | J174-02 | ND | 1 | 6.8 | 0.106 | 0.0106 | 0.0211 | 10/31/1318:32 | 10/31/1312:45 | M47J024036 | M47J024 | HGJ032S | 10/21/1311:10 | 10/22/13 |
| 04A29-00-WP01-0000-C-SO | J174-03 | ND | 1 | 4.4 | 0.105 | 0.0105 | 0.0209 | 10/31/1318:34 | 10/31/1312:45 | M47J024037 | M47J024 | HGJ032S | 10/21/1312:15 | 10/22/13 |

Matrix
InstrumentID

METHOD SW7471A

MERCURY

METHOD SW3050B/6010B
RCRA METALS BY TRACE ICP

| | |
|---|---|
| Client : AMEC E & I | Date Collected: 10/21/13 12:15 |
| Project : FORT WINGATE DEPOT ACTIVITY | Date Received: 10/22/13 |
| SDG NO. : 13J174 | Date Extracted: 10/25/13 16:00 |
| Sample ID: 04A29-00-WP01-0000-C-SO | Date Analyzed: 10/28/13 21:54 |
| Lab Samp ID: J174-03 | Dilution Factor: 1.00 |
| Lab File ID: ID8J026110 | Matrix : SOIL |
| Ext Btch ID: IPJ064S | % Moisture : 4.4 |
| Calib. Ref.: ID8J026105 | Instrument ID : EMAXTID8 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| Arsenic | 2.35 | 1.05 | 0.209 | 0.418 |
| Barium | 300 | 1.05 | 0.105 | 0.209 |
| Cadmium | ND | 1.05 | 0.105 | 0.209 |
| Chromium | 9.26 | 1.05 | 0.157 | 0.314 |
| Lead | 44.4 | 1.05 | 0.157 | 0.314 |
| Selenium | ND | 1.05 | 0.282 | 0.523 |
| Silver | ND | 1.05 | 0.157 | 0.314 |

METHOD SW3050B/6010B
RCRA METALS BY TRACE ICP

| | |
|---|---|
| Client : AMEC E & I | Date Collected: NA |
| Project : FORT WINGATE DEPOT ACTIVITY | Date Received: 10/25/13 |
| SDG NO. : 13J174 | Date Extracted: 10/25/13 16:00 |
| Sample ID: MBLK1S | Date Analyzed: 10/28/13 20:32 |
| Lab Samp ID: IPJ064SB | Dilution Factor: 1 |
| Lab File ID: ID8J026083 | Matrix : SOIL |
| Ext Btch ID: IPJ064S | % Moisture : NA |
| Calib. Ref.: ID8J026081 | Instrument ID : EMAXTID8 |

| PARAMETERS | RESULTS (mg/kg) | LOQ (mg/kg) | DL (mg/kg) | LOD (mg/kg) |
|---|---|---|---|---|
| Arsenic | ND | 1.00 | 0.200 | 0.400 |
| Barium | ND | 1.00 | 0.100 | 0.200 |
| Cadmium | ND | 1.00 | 0.100 | 0.200 |
| Chromium | ND | 1.00 | 0.150 | 0.300 |
| Lead | ND | 1.00 | 0.150 | 0.300 |
| Selenium | ND | 1.00 | 0.270 | 0.500 |
| Silver | ND | 1.00 | 0.150 | 0.300 |

METHOD SW1311/3010A/6010B
TCLP LEAD BY TRACE ICP

| | | | |
|---|---|---|---|
| Client | : AMEC E & I | Date Collected: | 10/21/13 12:15 |
| Project | : FORT WINGATE DEPOT ACTIVITY | Date Received: | 10/22/13 |
| SDG NO. | : 13J174 | Date Extracted: | 10/31/13 10:15 |
| Sample ID: | 04A29-00-WP01-0000-C-SO | Date Analyzed: | 10/31/13 19:53 |
| Lab Samp ID: | J174-03 | Dilution Factor: | 5 |
| Lab File ID: | ID8J031120 | Matrix : | LEACHATE |
| Ext Btch ID: | IPJ077W | % Moisture : | NA |
| Calib. Ref.: | ID8J031112 | Instrument ID : | EMAXTID8 |

| PARAMETERS | RESULTS (mg/L) | LOQ (mg/L) | DL (mg/L) | LOD (mg/L) |
|---|---|---|---|---|
| Lead | 0.0482J | 0.0500 | 0.00850 | 0.0150 |

TCLP EXTRATION: 10/29/13 18:00

METHOD SW1311/3010A/6010B
TCLP LEAD BY TRACE ICP

| | | | |
|---|---|---|---|
| Client | : AMEC E & I | Date Collected | : NA |
| Project | : FORT WINGATE DEPOT ACTIVITY | Date Received | : 10/31/13 |
| SDG NO. | : 13J174 | Date Extracted | : 10/31/13 10:15 |
| Sample ID | : MBLK1W | Date Analyzed | : 10/31/13 19:20 |
| Lab Samp ID | : IPJ077WB | Dilution Factor | : 1 |
| Lab File ID | : ID8J031109 | Matrix | : WATER |
| Ext Btch ID | : IPJ077W | % Moisture | : NA |
| Calib. Ref. | : ID8J031107 | Instrument ID | : EMAXTID8 |

| PARAMETERS | RESULTS (mg/L) | LOQ (mg/L) | DL (mg/L) | LOD (mg/L) |
|---|---|---|---|---|
| Lead | ND | 0.0100 | 0.00170 | 0.00300 |

METHOD SW1311/3010A/6010B
TCLP LEAD BY TRACE ICP

| | | | |
|---|---|---|---|
| Client | : AMEC E & I | Date Collected: | NA |
| Project | : FORT WINGATE DEPOT ACTIVITY | Date Received: | 10/31/13 |
| SDG NO. | : 13J174 | Date Extracted: | 10/31/13 10:15 |
| Sample ID: | MBLK2W | Date Analyzed: | 10/31/13 19:35 |
| Lab Samp ID: | TXJ006SB | Dilution Factor: | 5 |
| Lab File ID: | ID8J031114 | Matrix : | LEACHATE |
| Ext Btch ID: | IPJ077W | % Moisture : | NA |
| Calib. Ref.: | ID8J031112 | Instrument ID : | EMAXTID8 |

| PARAMETERS | RESULTS (mg/L) | LOQ (mg/L) | DL (mg/L) | LOD (mg/L) |
|---|---|---|---|---|
| Lead | ND | 0.0500 | 0.00850 | 0.0150 |

TCLP EXTRATION: 10/29/13 18:00

# Waste Management Profile

Requested Facility: San Juan County Landfill ☐ Unsure Profile Number: _____

☐ Check if there are multiple generator locations. Attach locations. ☐ Renewal? Original Profile Number: _____

## A. GENERATOR INFORMATION (MATERIAL ORIGIN)

1. Generator Name: Fort Wingate Army Depot
2. Site Address: 7 Miles East of Gallup
   (City, State, ZIP) Fort Wingate, NM 87316
3. County: McKinley County
4. Contact Name: Richard Cruz
5. Email: richard.cruz2@us.army.mil
6. Phone: (505) 862-2416 7. Fax: (505) 905-6110
8. Generator EPA ID: NM6213820974 ☐ N/A
9. State ID: NM6213820974 ☐ N/A

## B. BILLING INFORMATION ☐ SAME AS GENERATOR

1. Billing Name: MP Environmental Services, Inc.
2. Billing Address: 3045 South 51st Avenue
   (City, State, ZIP) Phoenix, AZ 85043
3. Contact Name: Matt Hoffman
4. Email: mhoffman@mpenviro.com
5. Phone: 602-278-6233 6. Fax: 602-278-2884
7. WM Hauled? ☐ Yes ☑ No
8. P.O. Number: n/a

## C. MATERIAL INFORMATION

1. Common Name: Non-Regulated Solid Waste

   Describe Process Generating Material: ☐ See Attached

   Removal of surface soil surrounding 3" floor drain pipes from Igloos C-1105, C-1109, C-1124 & C-1128 at Parcel 4a at Fort Wingate Depot Activity, Gallup, New Mexico. This non-regulated soil was suspected of impact from paint chips on steel drain pipes.

2. Material Composition and Contaminants: ☐ See Attached

| | |
|---|---|
| 1. Soil | 100% |
| 2. Paint Chips | Trace |
| 3. | |
| 4. | |
| | ≥100% |

3. State Waste Codes: _____ ☑ N/A
4. Color: Brown
5. Physical State at 70°F: ☑ Solid ☐ Liquid ☐ Other: _____
6. Free Liquid Range Percentage: _____ to _____ ☑ N/A (Solid)
7. pH: _____ to _____ ☑ N/A (Solid)
8. Strong Odor: ☐ Yes ☑ No Describe: _____
9. Flash Point: ☐ <140°F ☐ 140°–199°F ☐ ≥200° ☑ N/A (Solid)

## D. REGULATORY INFORMATION

1. EPA Hazardous Waste? ☐ Yes* ☑ No
   Code: _____
2. State Hazardous Waste? ☐ Yes ☑ No
   Code: _____
3. Excluded waste under 40 CFR 261.4 (a) or (b)? ☐ Yes* ☑ No
4. Contains Underlying Hazardous Constituents? ☐ Yes* ☑ No
5. Contains benzene **and** subject to Benzene NESHAP? ☐ Yes* ☑ No
6. Facility remediation subject to 40 CFR 63 GGGGG? ☐ Yes* ☑ No
7. CERCLA or State-mandated clean-up? ☐ Yes* ☑ No
8. NRC or State-regulated radioactive or NORM waste? ☐ Yes* ☑ No

***If Yes, see Addendum (page 2) for additional questions and space.**

9. Contains PCBs? → If Yes, answer a, b and c. ☐ Yes ☑ No
   a. Regulated by 40 CFR 761? ☐ Yes ☐ No
   b. Remediation under 40 CFR 761.61 (a)? ☐ Yes ☐ No
   c. Were PCB imported into the US? ☐ Yes ☐ No
10. Regulated and/or Untreated Medical/Infectious Waste? ☐ Yes ☑ No
11. Contains Asbestos? ☐ Yes: Friable ☐ Yes: Non-Friable ☑ No

## E. ANALYTICAL AND OTHER REPRESENTATIVE INFORMATION

1. Analytical attached ☑ Yes

   Please identify applicable samples and/or lab reports:

   EMAX Laboratories, Inc., 4a29-00WP01-0000-C-SO, MBLK1S, Explosives, Total 8 RCRA Metals & TCLP Lead.

2. Other information attached (such as MSDS)? ☐ Yes

## F. SHIPPING AND DOT INFORMATION

1. ☑ One-Time Event ☐ Repeat Event/Ongoing Business
2. Estimated Quantity/Unit of Measure: 2
   ☐ Tons ☑ Yards ☐ Drums ☐ Gallons ☐ Other: _____
3. Container Type and Size: 18-wheel End-dump Truck
4. USDOT Proper Shipping Name: ☐ N/A

   Non-Regulated Solid Waste

## G. GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE)

By signing this Waste Management Profile, I hereby certify that all information submitted in this and all attached documents contain true and accurate descriptions of this material, and that all relevant information necessary for proper material characterization and to identify known and suspected hazards has been provided. Any analytical data attached was derived from a sample that is representative as defined in 40 CFR 261 - Appendix 1 or by using an equivalent method. All changes occurring in the character of the material (i.e., changes in the process or new analytical) will be identified by the Generator and be disclosed to Waste Management prior to providing the material to Waste Management.

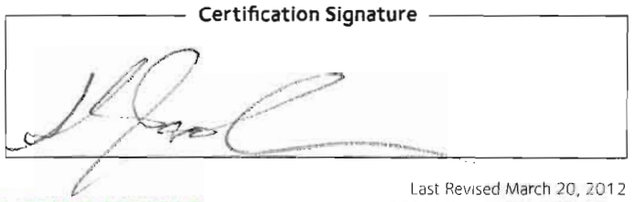
**If I am an agent signing on behalf of the Generator, I have confirmed with the Generator that information contained in this Profile is accurate and complete.**

Name (Print): Shannon Jackson Date: 11-7-13

Title: BRAC Field Representative

Company: Fort Wingate Army Depot

**Certification Signature**



ATTENTION SHIPPERS! FREIGHT CHARGES ARE PREPAID ON THIS BILL OF LADING UNLESS MARKED COLLECT.

**This Memorandum** is an acknowledgment that a Bill of Lading has been issued and is not Original Bill of Lading, nor a copy or duplicate, covering the property named herein, and is intended solely for filing or record.

Shipper No. 12567

Carrier No.

Page 1 of 1

MP ENVIRONMENTAL
(Name of carrier) ( SCAC)

Date 10-17-13

On Collect on Delivery shipments, the letters"COD" must appear before consignee's name or as otherwise provided in Item 430, Sec.1.

**TO:**
Consignee AMERICAN METAL RECYCLING
Street HWY 118
City GALLUP State NM Zip Code

**FROM:**
Shipper MPE - AMEC FT WINGATE PARCEL 4A
Street PARCEL 4A
City FT WINGATE State NM Zip Code
24 hr. Emergency Contact Tel. No. 602-717-2637

Route

Vehicle Number

| No. of Units & Container Type | HM | BASIC DESCRIPTION Proper Shipping Name, Hazard Class UN or NA Number, Packing Group or UN or NA Number, Proper Shipping Name, Hazard Class, Packing Group | TOTAL QUANTITY (Weight, Volume, Gallons, etc.) | WEIGHT (Subject to Correction) | RATE | CHARGES (For Carrier Use Only) |
|---|---|---|---|---|---|---|
| 1 LOAD | | STEEL PIPES (RECYCLE) | 1 TON | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

**PLACARDS TENDERED: YES NO**

Note — (1) Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property, as follows: "The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding _____ per _____."
(2) Where the applicable tariff provisions specify a limitation of the carrier's liability absent a release or a value declaration by the shipper and the shipper does not release the carrier's liability or declare a value, the carrier's liability shall be limited to the extent provided by such provisions. See NMFC Item 172.
(3) Commodities requiring special or additional care or attention in handling or stowing must be so marked and packaged as to ensure safe transportation. See Section 2(e) of item 360, Bills of Lading, Freight Bills and Statements of Charges and Section 1(a) of the Contract Terms and Conditions for a list of such articles.

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name and are classified, packed, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations.

_____ Signature

REMIT C.O.D. TO: ADDRESS

**COD** Amt: $

C.O.D. FEE: PREPAID COLLECT $

Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:
The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

_____ (Signature of Consignor)

TOTAL CHARGES $

FREIGHT CHARGES
FREIGHT PREPAID except when box at right is checked ☐ Check box if charges are to be collect

RECEIVED, subject to the classifications and tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment.
Shipper hereby certifies that he is familiar with all the lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

**SHIPPER** [signature]
**PER** MPE - AMEC FT WINGATE

**CARRIER** RUFINO ORTIZ
**PER** MPE
**DATE** 10-17-13

4

Permanent post-office address of shipper.

WASTE MANAGEMENT

WM of NM - San Juan County
78 County Road 3140
Aztec, NM, 87410
Ph: (505) 334-1121

Original
Ticket# 1584380

Customer Name MPENVIRONMENTAL MP Environmen
Ticket Date 11/13/2013
Payment Type Credit Account
Manual Ticket#
Hauling Ticket#
Route
State Waste Code
Manifest 7044A
Destination
PO
Profile 101573NM (NON REGULATED SOLID WASTE)
Generator 153-FORT WINGATE ARMY DEPOT FORT WINGATE ARMY DEPOT EASTERN LANDFILL

Carrier mpe MP ENVIRONMENTAL
Vehicle# 54
Container
Driver
Check#
Billing # 0000443
Gen EPA ID NM6213820974
Grid

Volume

| | Time | Scale | Operator | Inbound | Gross | 80360 lb* |
|---|---|---|---|---|---|---|
| In | 11/13/2013 10:15:01 | Inbound 301 | njohnson | | Tare | 79860 lb* |
| Out | 11/13/2013 10:15:41 | Outbound 301 | njohnson | | Net | 500 lb |
| | | | * Manual Weight | | Tons | 0.25 |

Comments

| Product | | LD% | Qty | UOM | Rate | Tax | Amount | Origin |
|---|---|---|---|---|---|---|---|---|
| 1 | SpwasteSolidOth-Cu | 100 | 2.00 | Yards | | | | MCKC |

Total Tax
Total Ticket

Driver's Signature

# NON-HAZARDOUS MANIFEST

WASTE MANAGEMENT

| NON-HAZARDOUS MANIFEST | 1. Generator's US EPA ID No. / Manifest Doc No. | 2. Page 1 of | |
|---|---|---|---|
| | NM6213820974 | | 704-4A |

| 3. Generator's Mailing Address: | Generator's Site Address (If different than mailing): | A. Manifest Number | |
|---|---|---|---|
| FORT WINGATE ARMY DEPOT<br>P.O. BOX 268<br>FORT WINGATE, NM 87316-0268<br>4. Generator's Phone (505) 862-2416 | FORT WINGATE ARMY DEPOT<br>~~EASTERN LANDFILL PARCEL 18~~ PARCEL 4A<br>FORT WINGATE, NM 87316 | WMNA | 2144084 |
| | | B. State Generator's ID | NM6213820974 |

| 5. Transporter 1 Company Name | 6. US EPA ID Number | C. State Transporter's ID | N/A |
|---|---|---|---|
| MP ENVIRONMENTAL | CAT000624247 | D. Transporter's Phone | 602-278-6233 |
| 7. Transporter 2 Company Name | 8. US EPA ID Number | E. State Transporter's ID | |
| | | F. Transporter's Phone | |

| 9. Designated Facility Name and Site Address | 10. US EPA ID Number | G. State Facility ID | N/A |
|---|---|---|---|
| SAN JUAN COUNTY REGIONAL LANDFILL<br>P.O. BOX 1402<br>AZTEC, NM 87410 | N/A | H. State Facility Phone | 505-334-1121 |

GENERATOR

| 11. Description of Waste Materials | 12. Containers No. | 12. Containers Type | 13. Total Quantity | 14. Unit Wt./Vol. | I. Misc. Comments |
|---|---|---|---|---|---|
| a. NON-REGULATED SOLID WASTE<br>WM Profile # ~~102882NM~~ 101573NM | 001 | DT | ~~17~~ 2 | Y | |
| b.<br>WM Profile # | | | | | |
| c.<br>WM Profile # | | | | | |
| d.<br>WM Profile # | | | | | |

| J. Additional Descriptions for Materials Listed Above | K. Disposal Location | | | |
|---|---|---|---|---|
| | Cell | | Level | |
| | Grid | | | |

15. Special Handling Instructions and Additional Information

MPE #12235

Purchase Order # N/A  EMERGENCY CONTACT / PHONE NO.: 602-717-2637

16. GENERATOR'S CERTIFICATE:

I hereby certify that the above-described materials are not hazardous wastes as defined by CFR Part 261 or any applicable state law, have been fully and accurately described, classified and packaged and are in proper condition for transportation according to applicable regulations.

| Printed Name | Signature "On behalf of" | Month | Day | Year |
|---|---|---|---|---|
| | | 11 | 12 | 13 |

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

| Printed Name | Signature | Month | Day | Year |
|---|---|---|---|---|
| | | | 13 | |

18. Transporter 2 Acknowledgement of Receipt of Materials

| Printed Name | Signature | Month | Day | Year |
|---|---|---|---|---|
| | | | | |

FACILITY

19. Certificate of Final Treatment/Disposal

I certify, on behalf of the above listed treatment facility, that to the best of my knowledge, the above-described waste was managed in compliance with all applicable laws, regulations, permits and licenses on the dates listed above.

20. Facility Owner or Operator: Certification of receipt of non-hazardous materials covered by this manifest.

| Printed Name | Signature | Month | Day | Year |
|---|---|---|---|---|
| Assistant Nicolette Johnson | | 11 | 13 | 13 |

White- TREATMENT, STORAGE, DISPOSAL FACILITY COPY  Blue- GENERATOR #2 COPY  Yellow- GENERATOR #1 COPY

Pink- FACILITY USE ONLY  Gold- TRANSPORTER #1 COPY

E 0.5554 N 36° 45.847 W 108° 01.505

16) date signed different than date delivered.

# APPENDIX D

# TRANSFORMER I-25 ANALYTICAL REPORT SUMMARY
# (Full Lab Report on CD)

[THIS PAGE INTENTIONALLY LEFT BLANK]

## TABLE OF CONTENTS

**CLIENT:** **AMEC E & I**

**PROJECT:** **FORT WINGATE DEPOT ACTIVITY**

**SDG:** **13H150**


| SECTION | | PAGE |
|---|---|---|
| Cover Letter, COC/Sample Receipt Form | | 1000 – 1006 |
| GC/MS-VOA | ** | 2000 – |
| GC/MS-SVOA | ** | 3000 – |
| GC-VOA | ** | 4000 – |
| GC-SVOA | METHOD 3520C/3550B/8082A | 5000 – 5263 |
| HPLC | ** | 6000 – |
| METALS | METHOD 3050B/6010B (CHROMIUM III)<br>METHOD 3050B/6010B | 7000 – 7015<br>7016 – 7225 |
| WET | METHOD 3060/7196A | 8000 – 8009 |
| OTHERS | ** | 9000 – |


** - Not Requested

**LABORATORIES, INC.**
1835 W. 205th Street
Torrance, CA 90501
Tel: (310) 618-8889
Fax: (310) 618-0818

Date: 09-05-2013
EMAX Batch No.: 13H150

Attn: Marie Bevier

AMEC E & I
7376 SW Durham Road
Portland OR 97224

Subject: Laboratory Report
Project: Fort Wingate Depot Activity

---

Enclosed is the Laboratory report for samples received on 08/16/13.
The data reported relate only to samples listed below :

| Sample ID | Control # | Col Date | Matrix | Analysis |
|---|---|---|---|---|
| 1300ST53SS-087D02-SO | H150-01 | 08/15/13 | SOIL | POLYCHLORINATED BIPHENYLS (PCBS) |
| | | | | LEAD |
| | | | | CHROMIUM III BY CALCULATION |
| | | | | CHROMIUM HEXAVALENT |
| | | | | CADMIUM |
| 1300ST53SS-088D02-SO | H150-02 | 08/15/13 | SOIL | POLYCHLORINATED BIPHENYLS (PCBS) |
| | | | | LEAD |
| | | | | CHROMIUM III BY CALCULATION |
| | | | | CHROMIUM HEXAVALENT |
| | | | | CADMIUM |
| 1300ST53SS-089D02-SO | H150-03 | 08/15/13 | SOIL | POLYCHLORINATED BIPHENYLS (PCBS) |
| | | | | LEAD |
| | | | | CHROMIUM III BY CALCULATION |
| | | | | CHROMIUM HEXAVALENT |
| | | | | CADMIUM |
| 1300ST53SS-090D02-SO | H150-04 | 08/15/13 | SOIL | POLYCHLORINATED BIPHENYLS (PCBS) |
| | | | | LEAD |
| | | | | CHROMIUM III BY CALCULATION |
| | | | | CHROMIUM HEXAVALENT |

| Sample ID | Control # | Col Date | Matrix | Analysis |
|---|---|---|---|---|
| | | | | CADMIUM |
| 1300ST53SS-090D02-SO-DUP | H150-05 | 08/15/13 | SOIL | POLYCHLORINATED BIPHENYLS (PCBS) |
| | | | | LEAD |
| | | | | CHROMIUM III BY CALCULATION |
| | | | | CHROMIUM HEXAVALENT |
| | | | | CADMIUM |
| 1300ST53SS-091D02-SO | H150-06 | 08/15/13 | SOIL | POLYCHLORINATED BIPHENYLS (PCBS) |
| | | | | LEAD |
| | | | | CHROMIUM III BY CALCULATION |
| | | | | CHROMIUM HEXAVALENT |
| | | | | CADMIUM |
| 1300ST53SS-092D02-SO | H150-07 | 08/15/13 | SOIL | POLYCHLORINATED BIPHENYLS (PCBS) |
| | | | | LEAD |
| | | | | CHROMIUM III BY CALCULATION |
| | | | | CHROMIUM HEXAVALENT |
| | | | | CADMIUM |
| 1300ST53SS-093D02-SO | H150-08 | 08/15/13 | SOIL | POLYCHLORINATED BIPHENYLS (PCBS) |
| | | | | LEAD |
| | | | | CHROMIUM III BY CALCULATION |
| | | | | CHROMIUM HEXAVALENT |
| | | | | CADMIUM |
| 1300ST53SS-094D02-SO | H150-09 | 08/15/13 | SOIL | POLYCHLORINATED BIPHENYLS (PCBS) |
| | | | | LEAD |
| | | | | CHROMIUM III BY CALCULATION |
| | | | | CHROMIUM HEXAVALENT |
| | | | | CADMIUM |
| 1300ST53SS-095D02-SO | H150-10 | 08/15/13 | SOIL | POLYCHLORINATED BIPHENYLS (PCBS) |
| | | | | LEAD |
| | | | | CHROMIUM III BY CALCULATION |
| | | | | CHROMIUM HEXAVALENT |
| | | | | CADMIUM |
| 1300ST53SS-096D02-SO | H150-11 | 08/15/13 | SOIL | POLYCHLORINATED BIPHENYLS (PCBS) |
| | | | | LEAD |
| | | | | CHROMIUM III BY CALCULATION |
| | | | | CHROMIUM HEXAVALENT |
| | | | | CADMIUM |
| 1300ST53SS-097D02-SO | H150-12 | 08/15/13 | SOIL | POLYCHLORINATED BIPHENYLS (PCBS) |
| | | | | LEAD |
| | | | | CHROMIUM III BY CALCULATION |
| | | | | CHROMIUM HEXAVALENT |
| | | | | CADMIUM |

| Sample ID | Control # | Col Date | Matrix | Analysis |
|---|---|---|---|---|
| 1375WTASS001DSO | H150-13 | 08/15/13 | SOIL | POLYCHLORINATED BIPHENYLS (PCBS) |
| 1375WTASS002DSO | H150-14 | 08/15/13 | SOIL | POLYCHLORINATED BIPHENYLS (PCBS) |
| 1375WTASS003DSO | H150-15 | 08/15/13 | SOIL | POLYCHLORINATED BIPHENYLS (PCBS) |
| 1375WTASS004DSO | H150-16 | 08/15/13 | SOIL | POLYCHLORINATED BIPHENYLS (PCBS) |
| 1375WTASS005DSO | H150-17 | 08/15/13 | SOIL | POLYCHLORINATED BIPHENYLS (PCBS) |
| 1375WTASS006DSO | H150-18 | 08/15/13 | SOIL | POLYCHLORINATED BIPHENYLS (PCBS) |
| 1375WTASS006DSO-DUP | H150-19 | 08/15/13 | SOIL | POLYCHLORINATED BIPHENYLS (PCBS) |
| 1375WTASS007DSO | H150-20 | 08/15/13 | SOIL | POLYCHLORINATED BIPHENYLS (PCBS) |
| 0275TR125SS001DSO | H150-21 | 08/15/13 | SOIL | POLYCHLORINATED BIPHENYLS (PCBS) |
| 1375-EB01-D | H150-22 | 08/15/13 | WATER | POLYCHLORINATED BIPHENYLS (PCBS) |
| 1300ST53SS-088D02-SOMS | H150-02M | 08/15/13 | SOIL | POLYCHLORINATED BIPHENYLS (PCBS) |
| | | | | LEAD |
| | | | | CHROMIUM III BY CALCULATION |
| | | | | CHROMIUM HEXAVALENT |
| | | | | CADMIUM |
| 1300ST53SS-088D02-SOMSD | H150-02S | 08/15/13 | SOIL | POLYCHLORINATED BIPHENYLS (PCBS) |
| | | | | LEAD |
| | | | | CHROMIUM III BY CALCULATION |
| | | | | CHROMIUM HEXAVALENT |
| | | | | CADMIUM |
| 1375WTASS003DSOMS | H150-15M | 08/15/13 | SOIL | POLYCHLORINATED BIPHENYLS (PCBS) |
| 1375WTASS003DSOMSD | H150-15S | 08/15/13 | SOIL | POLYCHLORINATED BIPHENYLS (PCBS) |

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

Caspar J. Pang
Laboratory Director



EMAX certifies that results included in this report meets all NELAC & DOD requirements unless noted in the Case Narrative.

NELAC Accredited Certificate Number 02116CA
L-A-B Accredited DoD ELAP and ISO/IEC 17025 Certificate Number L2278 Testing

13 H150

SHIP TO: **EMAX Laboratories, Inc.**
**1835 W. 205th Street**
**Torrance, CA 90501**
**Attn: Sample Receiving**
**(310) 618-8889**

# CHAIN OF CUSTODY

**DATE:** 08/15/13

**COC #:** 10

**PAGE:** 7 **OF** 9

| | | | |
|---|---|---|---|
| **Project Name: Fort Wingate Depot Activity** | Project Contact: Marie Bevier | Bill To: AMEC | Disposal Instructions: LAB |
| Project Number: 912640002.0022 | Phone Number: 503-639-3400 | 4600 E Washington St | Shipment Method: COURIER |
| Project Manager: Julie Hamilton | Project Phase: Water Tanks Site | Phoenix, AZ 85034 | Waybill Number: N/A |

| Sample Information | | | | | Methods for Analysis | | | | | | | | | | | | | | | | | | RUSH | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | Sample ID | Date Sampled | Time Sampled | Matrix | Cr III/ Cr VI | Cadmium | Lead (6010B) | PCBs (8082A) | | | | | | | | | | | | | | MS/MSD | 24 Hour | 48 Hour | 72 Hour | 5 Days | QC (MS/MSD) | TOTAL BOTTLES | HOLD All Analyses |
| 1 | 1300ST53SS-087D02-SO | 8/15/2013 | 9:02 | soil | x | x | x | x | | | | | | | | | | | | | | | | | | | | | |
| 2 | 1300ST53SS-088D02-SO | 8/15/2013 | 9:12 | soil | x | x | x | x | | | | | | | | | | | | | | X | | | | | | | |
| 3 | 1300ST53SS-089D02-SO | 8/15/2013 | 7:25 | soil | x | x | x | x | | | | | | | | | | | | | | | | | | | | | |
| 4 | 1300ST53SS-090D02-SO | 8/15/2013 | 7:50 | soil | x | x | x | x | | | | | | | | | | | | | | | | | | | | | |
| 5 | 1300ST53SS-090D02-SO-DUP | 8/15/2013 | 7:52 | soil | x | x | x | x | | | | | | | | | | | | | | | | | | | | | |
| 6 | 1300ST53SS-091D02-SO | 8/15/2013 | 8:16 | soil | x | x | x | x | | | | | | | | | | | | | | | | | | | | | |
| 7 | 1300ST53SS-092D02-SO | 8/15/2013 | 9:04 | soil | x | x | x | x | | | | | | | | | | | | | | | | | | | | | |
| 8 | 1300ST53SS-093D02-SO | 8/15/2013 | 9:10 | soil | x | x | x | x | | | | | | | | | | | | | | | | | | | | | |
| 9 | 1300ST53SS-094D02-SO | 8/15/2013 | 7:40 | soil | x | x | x | x | | | | | | | | | | | | | | | | | | | | | |
| 10 | 1300ST53SS-095D02-SO | 8/15/2013 | 7:48 | soil | x | x | x | x | | | | | | | | | | | | | | | | | | | | | |
| 11 | 1300ST53SS-096D02-SO | 8/15/2013 | 8:20 | soil | x | x | x | x | | | | | | | | | | | | | | | | | | | | | |
| 12 | 1300ST53SS-097D02-SO | 8/15/2013 | 9:06 | soil | x | x | x | x | | | | | | | | | | | | | | | | | | | | | |

| | | |
|---|---|---|
| **Sampler's Signature:** | **Date:** 08/15/13 | **Time:** 1205 |
| **Relinquished By/Affiliation:** AMEC | **Date:** 8/15/13 | **Time:** 1600 |
| **Received By:** FEDEX | **Date:** | **Time:** |
| **Relinquished By/Affiliation:** | **Date:** | **Time:** |
| **Received By:** | **Date:** | **Time:** |
| **Received By (LAB):** | **Date:** 8/16/13 | **Time:** 0915 |

**For Lab Use**

| | |
|---|---|
| Does COC match samples: | Y or N |
| Broken Container: | Y or N |
| COC seal intact: | Y or N |
| Other problems: | Y or N |
| AMEC contacted: | Y or N |
| Date contacted: | |
| Cooler Temperature at receipt: | C |

**Comments:** H=Hold Analysis Request X=Analyze

Cooler #1 T = 2.8°C
Cooler #2 T = 2.3°C
Cooler #3 T = 3.1°C
Cooler #5 T = 3.0°C
Cooler #6 T = 3.2°C

**NUMBER OF COOLERS SENT:**

(6)

13 H150

SHIP TO: **EMAX Laboratories, Inc.**
**1835 W. 205th Street**
**Torrance, CA 90501**
**Attn: Sample Receiving**
**(310) 618-8889**

# CHAIN OF CUSTODY

**DATE:** 08/15/13

**COC #:** 11

**PAGE:** 1 **OF** 1

| | | | |
|---|---|---|---|
| **Project Name: Fort Wingate Depot Activity** | Project Contact: Marie Bevier | Bill To: AMEC | Disposal Instructions: LAB |
| Project Number: 912640002.0022 | Phone Number: 503-639-3400 | 4600 E Washington St | Shipment Method: COURIER |
| Project Manager: Julie Hamilton | Project Phase: Water Tanks Site | Phoenix, AZ 85034 | Waybill Number: N/A |

**Sample Information** / **Methods for Analysis** / **RUSH**

| No. | Sample ID | Date Sampled | Time Sampled | Matrix | Cr III/ Cr VI | Cadmium | Lead (6010B) | PCBs (8082A) | MS/MSD | 24 Hour | 48 Hour | 72 Hour | 5 Days | QC (MS/MSD) | TOTAL BOTTLES | HOLD All Analyses |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 13 1375WTASS001DSO | 8/15/2013 | 1404 | soil | | | | x | | | | | | | | |
| 2 | 14 1375WTASS002DSO | 8/15/2013 | 1407 | soil | | | | x | | | | | | | | |
| 3 | 15 1375WTASS003DSO | 8/15/2013 | 1353 | soil | | | | x | x | | | | | | | |
| 4 | 16 1375WTASS004DSO | 8/15/2013 | 1358 | soil | | | | x | | | | | | | | |
| 5 | 17 1375WTASS005DSO | 8/15/2013 | 1412 | soil | | | | x | | | | | | | | |
| 6 | 18 1375WTASS006DSO | 8/15/2013 | 1420 | soil | | | | x | | | | | | | | |
| 7 | 19 1375WTASS006DSO-DUP | 8/15/2013 | 1422 | soil | | | | x | | | | | | | | |
| 8 | 20 1375WTASS007DSO | 8/15/2013 | 1430 | soil | | | | x | | | | | | | | |
| 9 | 21 0275TRI25SS001DSO | 8/15/2013 | 1325 | soil | | | | x | | | | | | | | |
| 10 | 22 1375-EB01-D | 8/15/2013 | 1440 | water | | | | x | | | | | | | | |
| 11 | 8/16/13 | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | |

| | | |
|---|---|---|
| **Sampler's Signature:** AMEC | **Date:** 08/15/13 | **Time:** 1500 |
| **Relinquished By/Affiliation:** AMEC | **Date:** 8/15/13 | **Time:** 1600 |
| **Received By:** FEDEX | **Date:** | **Time:** |
| **Relinquished By/Affiliation:** | **Date:** | **Time:** |
| **Received By:** | **Date:** | **Time:** |
| **Received By (LAB):** | **Date:** 8/16/13 | **Time:** 0915 |

**For Lab Use**

| | |
|---|---|
| Does COC match samples: | Y or N |
| Broken Container: | Y or N |
| COC seal intact: | Y or N |
| Other problems: | Y or N |
| AMEC contacted: | Y or N |
| Date contacted: | |
| Cooler Temperature at receipt: | C |

**Comments:** H=Hold Analysis Request X=Analyze

**NUMBER OF COOLERS SENT:**

# SAMPLE RECEIPT FORM 1

EMAX LABORATORIES, INC.

| Type of Delivery | Airbill / Tracking Number | ECN 13H150 |
|---|---|---|
| ☒ Fedex ☐ UPS ☐ GSO ☐ Others | | Recipient I LATEL |
| ☐ EMAX Courier ☐ Client Delivery | | Date 8/16/13 Time 0915 |

## COC Inspection

| | | | | | |
|---|---|---|---|---|---|
| ☒ Client Name | ☒ Client PM/FC | ☒ Sampler Name | ☒ Sampling Date/Time/Location | ☐ Sample ID | ☐ Matrix |
| ☒ Address | ☒ Tel # / Fax # | ☐ Courier Signature | ☐ Analysis Required | ☐ Preservative (if any) | ☐ TAT |

Safety Issues (if any) ☐ High concentrations expected ☐ Superfund Site samples ☐ Rad screening required

Comments:

## Packaging Inspection

| | | | | | |
|---|---|---|---|---|---|
| Container | ☒ Cooler | ☐ Box | ☐ Other | | |
| Condition | ☐ Custody Seal | ☒ Intact | ☐ Damaged | | |
| Packaging | ☒ Bubble Pack | ☐ Styrofoam | ☐ Popcorn | ☒ Sufficient | ☒ Plastic Bag |
| Temperatures (Cool, ≤6 °C but not frozen) | ☒ Cooler 1 2.8 °C | ☒ Cooler 2 2.3 °C | ☒ Cooler 3 3.1 °C | ☐ Cooler 4 ____ °C | ☒ Cooler 5 3.0 °C |
| | ☒ Cooler 6 3.2 °C | ☐ Cooler 7 ____ °C | ☐ Cooler 8 ____ °C | ☐ Cooler 9 ____ °C | ☐ Cooler 10 ____ °C |
| *Thermometer:* | *A - S/N 101541371* | *B - S/N 101541382* | *C - S/N 122091701* | *D - S/N 122091758* | |

Comments: ☐ **Temperature is out of range. PM was informed IMMEDIATELY.**

Note: **pH holding time requirement for water samples is 15 mins. Water samples for pH analysis are received beyond 15 minutes from sampling time.**

## DISCREPANCIES

| LSID | LSCID | Description Code | Sample Label ID / Information | Corrective Action Code |
|---|---|---|---|---|
| 7 | | H1 | | R2 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

cs 8/16/13

☐ **Continue to next page.**

REVIEWS

Sample Labeling: [signature] Date 8/16/13 [signature] 8/16/13

SRF: [signature] Date 8/16/13

PM: [signature] Date 8/16/13

LEGEND:

| Code | Description- Sample Management |
|---|---|
| A1 | Analysis is not indicated in COC. |
| A2 | Analysis is not indicated in label. |
| A3 | Analysis is inconsistent in COC vis-à-vis label. |
| B1 | Sample ID is not indicated in COC. |
| B2 | Sample ID is not indicated in label. |
| B3 | Sample ID is inconsistent in COC vis-à-vis label. |
| C1 | Improper container |
| C2 | Broken container |
| C3 | Leaking container |
| D1 | Date and/or time is not indicated in COC. |
| D2 | Date and/or time is not indicated in label. |
| D3 | Date and/or time is inconsistent in COC vis-à-vis label. |
| F1 | Improper preservation |
| F2 | Insufficient Sample |
| F3 | Bubble is > 6mm. Use vial with smallest bubble first. |
| F4 | Bubble is > 6mm in all vials. |
| F5 | >20 % solid particle |
| F6 | Out of Holding Time |

| Code | Description-Sample Management |
|---|---|
| G1 | Sample indicated in COC is not received. |
| G2 | MS/MSD is not indicated in COC. |
| G3 | No identified trip blank, proceed as indicated in COC. |
| G4 | Trip Blank is designated in SDG _____ |
| G5 | Trip Blank has no sampling date & time. Log-in with latest sampling date and 1 minute past the time of the last sample collected on the same date. |
| H1 | has layer of water |

| Code | Description-Project Management |
|---|---|
| R1 | Hold sample(s); wait for further instructions |
| R2 | Proceed as indicated in COC and inform client. |
| R3 | Refer to attached instruction |
| R4 | Cancel the analysis |
| R5 | Inform client. |
| R6 | Proceed as indicated in COC |

METHOD SW3550B/8082A
PCBs

| | |
|---|---|
| Client : AMEC E & I | Date Collected: 08/15/13 |
| Project : FORT WINGATE DEPOT ACTIVITY | Date Received: 08/16/13 |
| Batch No. : 13H150 | Date Extracted: 08/24/13 14:40 |
| Sample ID: 0275TRI25SS001DSO | Date Analyzed: 08/26/13 21:42 |
| Lab Samp ID: H150-21 | Dilution Factor: 1 |
| Lab File ID: KH26028A | Matrix : SOIL |
| Ext Btch ID: CPH032S | % Moisture : 10.0 |
| Calib. Ref.: KH26016A | Instrument ID : GCT071 |

| PARAMETERS | RESULTS (ug/kg) | LOQ (ug/kg) | DL (ug/kg) | LOD (ug/kg) |
|---|---|---|---|---|
| PCB-1016 | (ND) \| ND | 56 | 14 | 19 |
| PCB-1221 | (ND) \| ND | 56 | 9.2 | 19 |
| PCB-1232 | (ND) \| ND | 56 | 10 | 19 |
| PCB-1242 | (ND) \| ND | 56 | 10 | 19 |
| PCB-1248 | (ND) \| ND | 56 | 9.2 | 19 |
| PCB-1254 | (ND) \| ND | 56 | 9.2 | 19 |
| PCB-1260 | (ND) \| ND | 56 | 11 | 19 |

| SURROGATE PARAMETERS | RESULTS | SPK_AMT | % RECOVERY | QC LIMIT |
|---|---|---|---|---|
| TETRACHLORO-M-XYLENE | (18.01) \| 14.08 | 14.81 | (122) \| 95.1 | 50-150 |
| DECACHLOROBIPHENYL | (18.64) \| 17.00 | 14.81 | (126) \| 115 | 50-150 |

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit