

**NM1 - \_\_\_\_\_ 19 \_\_\_\_\_**

**MONITORING  
REPORT**

**YEAR(S):**

**\_\_\_\_\_ 2012 \_\_\_\_\_**

September 12, 2012  
New Mexico Energy, Minerals, & Natural Resources Dept.  
Oil Conservation Division Environmental Bureau  
Attn: Mr. Brad A. Jones  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

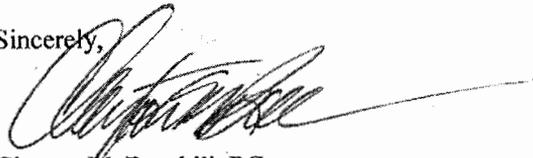
**Re: Submittal of First Quarterly Monitoring Report for Year 2012  
Gandy Marley Inc., Commercial Landfarm  
Gandy Marley Inc., Operator / PRP  
SW/4 of Section 4, SE/4 of Section 5, NE/4 of Section 8, & NW/4 of Section 9,  
T. 11 S., R.31 E., NMPM  
Chaves County, New Mexico  
Commercial Landfarm Permit (NM-01-0019)**

Dear Mr. Jones:

Clayton M. Barnhill, CMB Environmental and Geological Services Inc., on behalf of the owner/operator, Gandy Marley Inc., submit the attached Quarterly Monitoring Report for the above-mentioned site.

If you have any questions about the contents of the report, please do not hesitate to call me.  
Thank you.

Sincerely,



Clayton M. Barnhill, PG  
CMB Environmental & Geological Services, Inc.  
PO Box 2304  
Roswell, NM 88202-2304  
Phone: (575) 622-2012 Phone Fax: (575) 625-0538  
Cellular: (575) 626-1615  
cmbenviro@dfn.com

Cc: Gandy Marley Inc.

## QUARTERLY MONITORING REPORT

Please include the following information:

1. Site Name: **Gandy Marley Landfarm**
2. Responsible party: **Gandy Marley Inc.**
3. Responsible party mailing address (list contact person if different):

**Gandy Marley Inc.**  
**Attn: Mr. Larry Gandy, Vice President, Project Manager**  
**PO Box 1658**  
**Roswell, NM 88202-1658**

4. Commercial Landfarm Permit Number: **NM-01-0019**
5. Address/legal description:

**SW/4 of Section 4, SE/4 of Section 5, NE/4 of Section 8, & NW/4 of Section 9**  
**T. 11 S. R. 31 E., NMPM**  
**Chaves County, NM**

6. Author/consulting company:

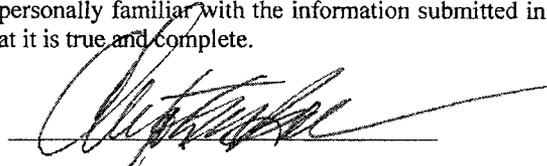
**Clayton M. Barnhill, PG, CMB Environmental & Geological Services, Inc.**

7. Date of report: **September 12, 2012**

**STATEMENT OF FAMILIARITY**

I, the undersigned, am personally familiar with the information submitted in this report and the attached documents and attest that it is true and complete.

Signature:



Name:

Clayton M. Barnhill, PG

Affiliation:

CMB Environmental and Geological Services, Inc.

Title:

Sr. / Principal Geologist

Certified Scientist #:

State of Wyoming Professional Geologist 3042, exp. 12/31/12

Date:

09/12/2012

## **I. INTRODUCTION**

CMB Environmental and Geological Services Inc., on behalf of Gandy Marley Inc., the owner/operator of the Gandy Marley Inc., Landfarm located in the SW/4 of Section 4, SE/4 of Section 5, NE/4 of Section 8, & NW/4 of Section 9, Township 11 South, Range 31 East, Chaves County, New Mexico, has prepared this quarterly monitoring report in accordance with conditions set forth in Commercial Landfarm Permit Number NM-01-0019 (Gandy Marley Inc., approved by the New Mexico Energy, Minerals, & Natural Resources Department Oil Conservation Division (NMOCD) Environmental Bureau on January 17, 2006.

The Gandy Marley Inc, Commercial Landfarm is located approximately 33 miles northwest of Tatum, NM in Sections 4, 5, 8 & 9, T. 11 S. R. 31 E., Chaves County, New Mexico (Figure 1). In January of 2006, the New Mexico Energy, Minerals, & Natural Resources Department Oil Conservation Division (NMOCD) Environmental Bureau approved a Commercial Landfarm Permit NM-01-0019. The Commercial Landfarm is being managed in accordance with the NMOCD approved Commercial Landfarm Permit NM-01-0019. Received soils on the landfarm are deposited in bermed cells in six-inch lifts and disked on a regular basis to enhance aeration. Groundwater below the site is at a depth between 122.62' foot (MW-2) and 130.32' foot (MW-1) below the top of casing of both monitor wells. Groundwater beneath the site has a total dissolved solids concentration of approximately 8970 milligrams per liter.

### **A. Scope of Work**

The approved scope of work for the first quarter of monitoring year 2012 consists of collecting confirmation soil samples beneath all site cells actively landfarmed or previously active, analyzing the subsurface soil samples for total petroleum hydrocarbons (TPH), and BTEX, and compiling and reporting data or analyses that demonstrate the media located in the remediation cell has been remediated to an acceptable level by the NMOCD Commercial Landfarm Permit NM-01-0019.

The soil sampling adequately monitored the vadose zone beneath the facility. Appendix 3 contains the complete analytical results for soils sampled in these Cells.

The sampling protocol for the monitoring activities can be found in Appendix 1. Appendix 2 contains field notes with GPS Coordinates of sample points for this monitoring event. Laboratory analysis reports of soil samples are in Appendix 3.

### **B. Quarter Highlights**

First quarter 2012 soil sampling / monitoring was performed on May 24, 2012. This quarter's monitoring activities include the following:

- Collection of one Remediation Cell Soil samples from all active and previously active landfarm remediation cells for laboratory analysis of the parameters outlined in section (A) above.
- Gauging Leak Detection Monitors of Evaporation Pond # 1 with a Solinst Interface Probe.
- Preparation of this report.

## **ACTIVITIES PERFORMED DURING THIS QUARTER**

### **C. Monitoring Activities**

Landfarm Remediation cell soil samples were collected beneath the remediation cells and submitted to Trace Analysis Laboratory, located in Lubbock Texas and were analyzed for TPH using EPA Method 418.1, BTEX using EPA Method 8021B.

The soil sampling adequately monitored the vadose zone beneath the facility. Laboratory analysis reports and chain of custody forms are in Appendix 3.

A Solinst interface probe was lowered down to total depth of the PVC piping of the leak detection in evaporation pond # 1. No fluids or leaks were detected by the interface probe.

## II. SUMMARY AND CONCLUSIONS

### A. Assessment of Remediation Activities:

Gandy Marley Inc. continues to be highly effective at managing and remediating soils and operating a professional commercial landfarm facility.

Analyses from a soil sample of the remediated soils in all Landfarm Cells show the remediated soils in all cells to contain less than  $<0.0300$  (Mg/Kg) BTEX, and TPH concentrations  $\leq 10.0$  (Mg/Kg) TPH. The contaminated media in the cells has been adequately remediated and meets the requirements of WQCC Regulation 3109. Additional soils can be added to these cells for future remediation.

A Solinst interface probe was lowered down to total depth of the PVC piping of the leak detection in evaporation pond # 1. No fluids or leaks were detected by the interface probe.

Perched groundwater below the site is at a depth of 122' feet to 130' feet below ground surface, and has a total dissolved solids concentration of approximately 8970 milligrams per liter.

The vadose zone beneath the facility has been adequately monitored by the subsurface soil samples collected beneath each cell in compliance with WQCC Regulation 3107. There has been no leaching of contaminated media into the vadose zone beneath the remediation cells. All sampled cells had BTEX soil concentrations below  $< 0.03$  (Mg/Kg), and TPH Concentrations  $\leq 10.0$  (Mg/Kg).

**LIST OF FIGURES**

| <b>Figure</b> |   | <b>Included</b> | <b>N/A</b> |
|---------------|---|-----------------|------------|
| 1             | Site Map                                      | X               |            |
| 2             | Topographic Map with sample locations plotted | X               |            |

**LIST OF TABLES**

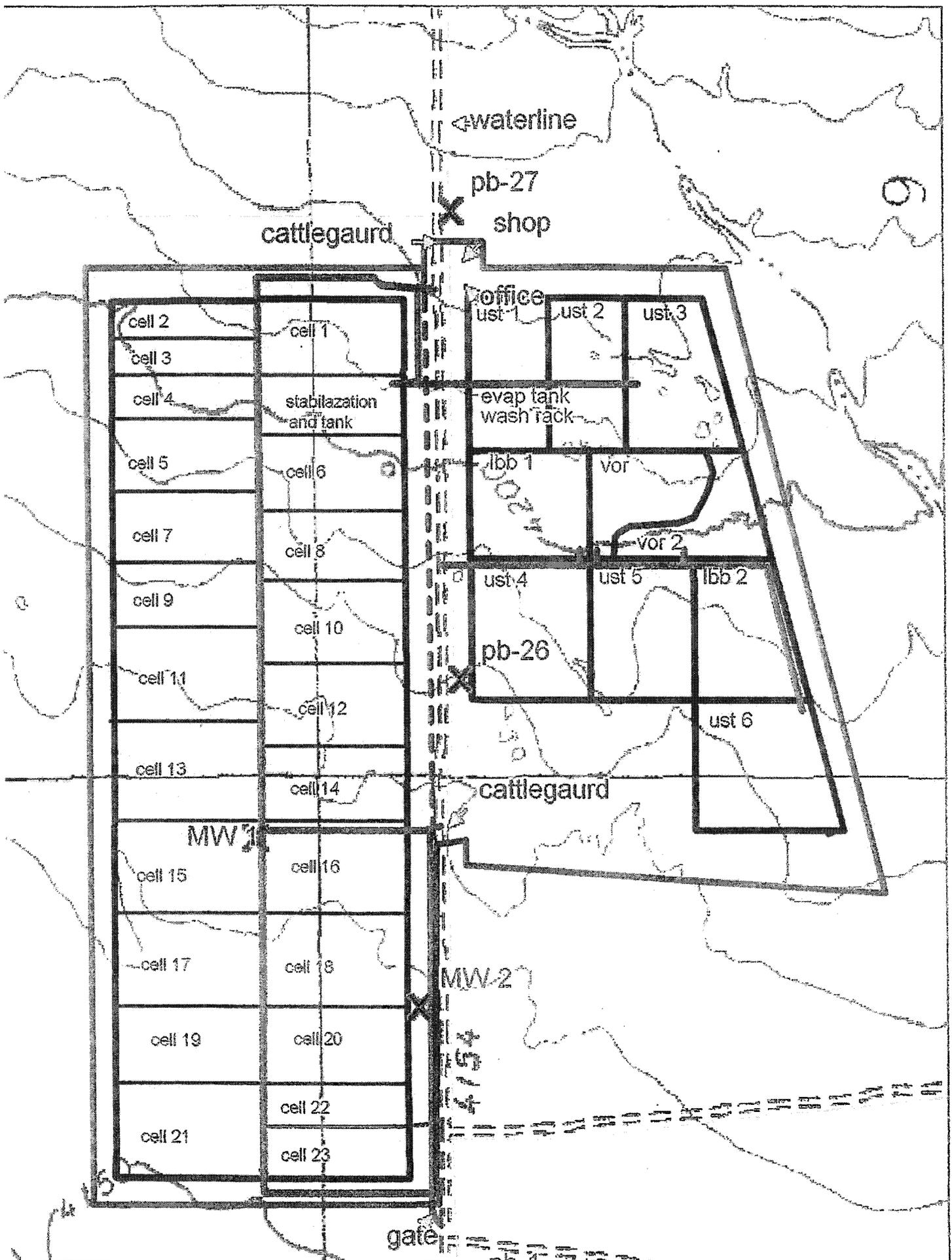
| Table |   | Included | N/A |
|-------|---|----------|-----|
| 1     | Lab Analysis Summary Reports of Cell Soil Samples | X        |     |

**LIST OF APPENDICES**

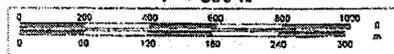
| Appendix |  | Included | N/A |
|----------|--|----------|-----|
| 1        | Sampling Protocol                            | X        |     |
| 2        | Field Notes /with GPS Coordinates of samples | X        |     |
| 3        | Laboratory Reports                           | X        |     |

Site Name: Gandy Marley Landfarm  
Commercial Landfarm Permit NM-01-0019  
Report Date:

## **Figures:**



Scale 1 : 7,200  
1" = 600 ft

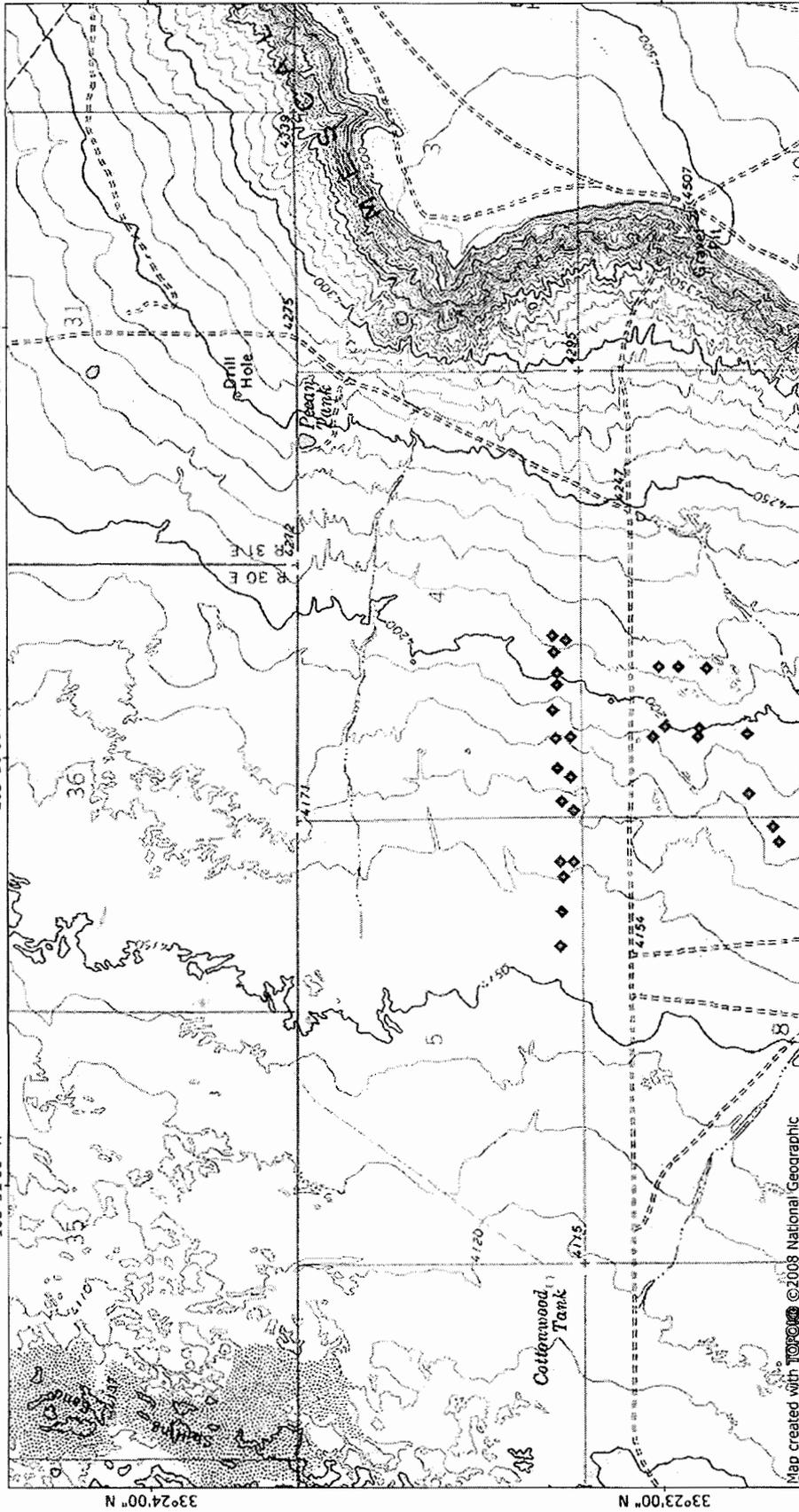


TOPO! map printed on 09/11/12 from TOPO Map of First Quarter or Semi Annual Sample Locations 05/24/2012

WGS84 103°49'00" W

103°50'00" W

103°51'00" W



WGS84 103°49'00" W

103°50'00" W

103°51'00" W

TN MN  
7 1/2°  
09/11/12



**NATIONAL  
GEOGRAPHIC**

Site Name: Gandy Marley Landfarm  
Commercial Landfarm Permit NM-01-0019  
Report Date:

## **Tables:**

## Summary Report

Bret Riley  
Gandy Marley Inc.  
Box 1658  
Roswell, NM 88202

Report Date: May 31, 2012

Work Order: 12052529



Project Location: Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM  
Project Name: GMI Landfarm  
Project Number: ~~1st Semi-Annual~~ Soil Sampling 2012  
Quarter

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|--------|-------------|--------|------------|------------|---------------|
| 299098 | Cell #1     | soil   | 2012-05-24 | 09:45      | 2012-05-25    |
| 299099 | Cell #2     | soil   | 2012-05-24 | 09:55      | 2012-05-25    |
| 299100 | Cell #3     | soil   | 2012-05-24 | 09:58      | 2012-05-25    |
| 299101 | Cell #4     | soil   | 2012-05-24 | 10:02      | 2012-05-25    |
| 299102 | Cell #5     | soil   | 2012-05-24 | 10:06      | 2012-05-25    |
| 299104 | Cell #7     | soil   | 2012-05-24 | 10:10      | 2012-05-25    |
| 299105 | Cell #9     | soil   | 2012-05-24 | 10:16      | 2012-05-25    |
| 299106 | Cell #10    | soil   | 2012-05-24 | 10:21      | 2012-05-25    |
| 299107 | Cell #11    | soil   | 2012-05-24 | 10:26      | 2012-05-25    |
| 299108 | Cell #12    | soil   | 2012-05-24 | 10:30      | 2012-05-25    |
| 299109 | Cell #13    | soil   | 2012-05-24 | 10:35      | 2012-05-25    |
| 299110 | Cell #14    | soil   | 2012-05-24 | 10:38      | 2012-05-25    |
| 299111 | Cell #15    | soil   | 2012-05-24 | 10:43      | 2012-05-25    |
| 299112 | Cell #16    | soil   | 2012-05-24 | 10:45      | 2012-05-25    |
| 299113 | Cell #17    | soil   | 2012-05-24 | 10:49      | 2012-05-25    |
| 299114 | Cell #19    | soil   | 2012-05-24 | 10:55      | 2012-05-25    |
| 299115 | Cell #21    | soil   | 2012-05-24 | 11:00      | 2012-05-25    |

| Sample - Field Code | BTEX               |                    |                         |                   | MTBE            | TPH 418.1        |
|---------------------|--------------------|--------------------|-------------------------|-------------------|-----------------|------------------|
|                     | Benzene<br>(mg/Kg) | Toluene<br>(mg/Kg) | Ethylbenzene<br>(mg/Kg) | Xylene<br>(mg/Kg) | MTBE<br>(mg/Kg) | TRPHC<br>(mg/Kg) |
| 299098 - Cell #1    | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                 | <10.0            |
| 299099 - Cell #2    | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                 | <10.0            |
| 299100 - Cell #3    | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                 | <10.0            |
| 299101 - Cell #4    | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                 | <10.0            |
| 299102 - Cell #5    | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                 | <10.0            |
| 299104 - Cell #7    | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                 | <10.0            |
| 299105 - Cell #9    | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                 | <10.0            |
| 299106 - Cell #10   | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                 | <10.0            |

continued ...

... continued

| Sample - Field Code | BTEX               |                    |                         |                   | MTBE<br>MTBE<br>(mg/Kg) | TPH 418.1<br>TRPHC<br>(mg/Kg) |
|---------------------|--------------------|--------------------|-------------------------|-------------------|-------------------------|-------------------------------|
|                     | Benzene<br>(mg/Kg) | Toluene<br>(mg/Kg) | Ethylbenzene<br>(mg/Kg) | Xylene<br>(mg/Kg) |                         |                               |
| 299107 - Cell #11   | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                         | <10.0                         |
| 299108 - Cell #12   | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                         | <10.0                         |
| 299109 - Cell #13   | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                         | <10.0                         |
| 299110 - Cell #14   | <0.0200            | <0.0200            | <0.0200                 | <b>0.0347</b>     |                         | <10.0                         |
| 299111 - Cell #15   | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                         | <10.0                         |
| 299112 - Cell #16   | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                         | <10.0                         |
| 299113 - Cell #17   | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                         | <10.0                         |
| 299114 - Cell #19   | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                         | <10.0                         |
| 299115 - Cell #21   | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                         | <10.0                         |

**Appendix 1**  
**Sampling Protocol**

## **Appendix 1**

### **Sampling Protocol**

Site Remediation cells were checked for the presence of phase-separated hydrocarbons (PSH).

A Gandy Marley Inc. owned and operated front end loader dug down with the loader bucket 18" inches to 24" inches below the surface of the remediation cell. An 8" inch loader mounted drill auger was then used to create a soil boring below the exposed soil surface to a depth of 36" inches below the original ground surface of the remediation cell. An AMS 3" inch Stainless steel hand auger was then used by Clayton M. Barnhill, PG (CMB Environmental & Geological Services Inc.) to collect the soil samples beneath the remediation cells. The AMS stainless steel auger and the 8" inch drilling auger were de-contaminated between sample points by cleaning with a brush in an Alconox soap solution and then rinsing with potable water. New Nitrile gloves were changed at each sample point to avoid cross contamination. Borings were backfilled with impermeable bentonite pellets and hydrated.

Samples analyzed for TPH 418.1, BTEX 8021. Soil Samples were collected in one 4 ounce glass jar containing no preservative.

Samples were immediately placed on ice in an insulated cooler and were delivered to the Trace Analysis Laboratory, located in Lubbock, Texas, for analysis. Chain of custody documentation accompanied the samples at all times.

**Appendix 2**  
**Field Notes**

GMI Land Farm

Date 05/24/12

1st Semi-Annual Soil Sampling

Date 05/24/12

1st Semi-Annual Soil Sampling

1st Semi-Annual Soil Sampling

2012 By: CMB Environmental & Geological Services, Inc. Page 1 of 2

2012 By: CMB Environmental & Geological Services, Inc. Page 2 of 2

| Cell #   | Time  | GPS Coordinates       | Remarks   |
|----------|-------|-----------------------|---|
| Cell #1  | 0945  | 33.38649<br>103.82877 | Brown-Tan white med gr. sand w/ 10% Caliche                               |
| Cell #2  | 0955  | 33.38694<br>103.82859 | Red clayey sand All above OF STEIN 03.865.                                |
| Cell #3  | 0958  | 33.38688<br>103.82920 | Same as above w/ 10% Caliche  |
| Cell #4  | 10:02 | 33.38680<br>103.83002 | Red clayey sand med. gr. well sorted 10% Caliche approx. stain            |
| Cell #5  | 10:06 | 33.38679<br>103.83048 | Brown clayey sand med. gr. 10% No odor Caliche (Damp) or stain            |
| Cell #7  | 10:10 | 33.38694<br>103.83147 | Same as above Dry not damp.   |
| Cell #9  | 10:16 | 33.38684<br>103.83259 | Tan brown clayey med. gr. Sand well sorted 10% Caliche - No odor or stain |
| Cell #10 | 10:21 | 33.38636<br>103.83257 | Same as above 20% Caliche   |
| Cell #11 | 10:26 | 33.38681<br>103.83379 | Brown clayey med gr. well sorted sand No odor or stain                    |
| Cell #12 | 10:30 | 33.38636<br>103.83411 | Same as above   |
| Cell #13 | 10:35 | 33.38664<br>103.83504 | Brown clayey well sorted sand No odor or stain                            |

| Cell #   | Time  | GPS Coordinates       | Remarks  |
|----------|-------|-----------------------|--|
| Cell #14 | 10:38 | 33.38628<br>103.83538 | Red-Brown Clayey Sand No odor or stain                 |
| Cell #15 | 10:43 | 33.38668<br>103.83736 | Same as above  |
| Cell #16 | 10:45 | 33.38627<br>103.83739 | Tan Brown clayey Sand w/ 20% Caliche No odor or stain  |
| Cell #17 | 10:49 | 33.38659<br>103.83793 | Same as above  |
| Cell #19 | 10:55 | 33.38664<br>103.83926 | Red clayey med gr. well sorted sand No odor or stain   |
| Cell #21 | 11:00 | 33.38670<br>103.84060 | Tan brown clayey Sand med. gr. well sorted 20% Caliche |

TOPO! GPS Data Format DegMinSec NAD83 ElevFeet Local-Time

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WP0005,33,23,12,-103,49,50,4216,05/24/2012,03:07:04,  
WP0006,33,23,13,-103,49,53,4199,05/24/2012,03:11:28,  
WP0007,33,23,13,-103,49,57,4183,05/24/2012,03:16:53,  
WP0008,33,23,11,-103,49,57,4203,05/24/2012,03:21:54,  
WP0009,33,23,13,-103,50,2,4199,05/24/2012,03:26:59,  
WP0010,33,23,11,-103,50,3,4186,05/24/2012,03:30:30,  
WP0011,33,23,12,-103,50,6,4183,05/24/2012,03:36:05,  
WP0012,33,23,11,-103,50,7,4180,05/24/2012,03:39:16,  
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WP0025,33,23,1,-103,49,57,4196,05/24/2012,05:07:02,  
WP0026,33,23,1,-103,49,47,4226,05/24/2012,05:17:22,  
WP0027,33,22,58,-103,49,47,4232,05/24/2012,05:21:02,  
WP0028,33,22,55,-103,49,47,4232,05/24/2012,05:25:13,

## **Appendix 3**



6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800-378-1296 806-794-1296 FAX 806-794-1298  
 200 East Sunset Road, Suite E El Paso, Texas 79922 915-585-3443 FAX 915-585-4944  
 5002 Basin Street, Suite A1 Midland, Texas 79703 432-689-6301 FAX 432-689-6313  
 (BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972-242-7750  
 E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

### Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

## Analytical and Quality Control Report

Bret Riley  
 Gandy Marley Inc.  
 Box 1658  
 Roswell, NM, 88202

Report Date: May 31, 2012

Work Order: 12052529



Project Location: Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM  
 Project Name: GMI Landfarm  
 Project Number: 1st ~~Semi-Annual~~ Soil Sampling 2012  
 Quarter

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|--------|-------------|--------|------------|------------|---------------|
| 299098 | Cell #1     | soil   | 2012-05-24 | 09:45      | 2012-05-25    |
| 299099 | Cell #2     | soil   | 2012-05-24 | 09:55      | 2012-05-25    |
| 299100 | Cell #3     | soil   | 2012-05-24 | 09:58      | 2012-05-25    |
| 299101 | Cell #4     | soil   | 2012-05-24 | 10:02      | 2012-05-25    |
| 299102 | Cell #5     | soil   | 2012-05-24 | 10:06      | 2012-05-25    |
| 299104 | Cell #7     | soil   | 2012-05-24 | 10:10      | 2012-05-25    |
| 299105 | Cell #9     | soil   | 2012-05-24 | 10:16      | 2012-05-25    |
| 299106 | Cell #10    | soil   | 2012-05-24 | 10:21      | 2012-05-25    |
| 299107 | Cell #11    | soil   | 2012-05-24 | 10:26      | 2012-05-25    |
| 299108 | Cell #12    | soil   | 2012-05-24 | 10:30      | 2012-05-25    |
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| 299111 | Cell #15    | soil   | 2012-05-24 | 10:43      | 2012-05-25    |
| 299112 | Cell #16    | soil   | 2012-05-24 | 10:45      | 2012-05-25    |
| 299113 | Cell #17    | soil   | 2012-05-24 | 10:49      | 2012-05-25    |
| 299114 | Cell #19    | soil   | 2012-05-24 | 10:55      | 2012-05-25    |
| 299115 | Cell #21    | soil   | 2012-05-24 | 11:00      | 2012-05-25    |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 28 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.



---

Dr. Blair Leftwich, Director  
Dr. Michael Abel, Project Manager

# Report Contents

|   |           |
|---|-----------|
| <b>Case Narrative</b>                       | <b>5</b>  |
| <b>Analytical Report</b>                    | <b>6</b>  |
| Sample 299098 (Cell #1) . . . . .           | 6         |
| Sample 299099 (Cell #2) . . . . .           | 6         |
| Sample 299100 (Cell #3) . . . . .           | 7         |
| Sample 299101 (Cell #4) . . . . .           | 8         |
| Sample 299102 (Cell #5) . . . . .           | 8         |
| Sample 299104 (Cell #7) . . . . .           | 9         |
| Sample 299105 (Cell #9) . . . . .           | 10        |
| Sample 299106 (Cell #10) . . . . .          | 11        |
| Sample 299107 (Cell #11) . . . . .          | 11        |
| Sample 299108 (Cell #12) . . . . .          | 12        |
| Sample 299109 (Cell #13) . . . . .          | 13        |
| Sample 299110 (Cell #14) . . . . .          | 13        |
| Sample 299111 (Cell #15) . . . . .          | 14        |
| Sample 299112 (Cell #16) . . . . .          | 15        |
| Sample 299113 (Cell #17) . . . . .          | 16        |
| Sample 299114 (Cell #19) . . . . .          | 16        |
| Sample 299115 (Cell #21) . . . . .          | 17        |
| <b>Method Blanks</b>                        | <b>19</b> |
| QC Batch 91580 - Method Blank (1) . . . . . | 19        |
| QC Batch 91583 - Method Blank (1) . . . . . | 19        |
| QC Batch 91663 - Method Blank (1) . . . . . | 19        |
| <b>Laboratory Control Spikes</b>            | <b>21</b> |
| QC Batch 91580 - LCS (1) . . . . .          | 21        |
| QC Batch 91583 - LCS (1) . . . . .          | 21        |
| QC Batch 91663 - LCS (1) . . . . .          | 22        |
| QC Batch 91580 - MS (1) . . . . .           | 22        |
| QC Batch 91583 - MS (1) . . . . .           | 23        |
| QC Batch 91663 - MS (1) . . . . .           | 23        |
| <b>Calibration Standards</b>                | <b>25</b> |
| QC Batch 91580 - CCV (2) . . . . .          | 25        |
| QC Batch 91580 - CCV (3) . . . . .          | 25        |
| QC Batch 91583 - CCV (1) . . . . .          | 25        |
| QC Batch 91583 - CCV (2) . . . . .          | 25        |
| QC Batch 91583 - CCV (3) . . . . .          | 26        |
| QC Batch 91663 - CCV (1) . . . . .          | 26        |
| QC Batch 91663 - CCV (2) . . . . .          | 26        |
| QC Batch 91663 - CCV (3) . . . . .          | 27        |
| QC Batch 91663 - CCV (4) . . . . .          | 27        |
| <b>Appendix</b>                             | <b>28</b> |

|                                     |    |
|-------------------------------------|----|
| Report Definitions . . . . .        | 28 |
| Laboratory Certifications . . . . . | 28 |
| Standard Flags . . . . .            | 28 |
| Attachments . . . . .               | 28 |

# Case Narrative

Samples for project GMI Landfarm were received by TraccAnalysis, Inc. on 2012-05-25 and assigned to work order 12052529. Samples for work order 12052529 were received intact at a temperature of 5.5 C.

Samples were analyzed for the following tests using their respective methods.

| Test      | Method  | Prep Batch | Prep Date           | QC Batch | Analysis Date       |
|-----------|---------|------------|---------------------|----------|---------------------|
| BTEX      | S 8021B | 77694      | 2012-05-25 at 14:43 | 91580    | 2012-05-25 at 14:43 |
| BTEX      | S 8021B | 77697      | 2012-05-25 at 14:36 | 91583    | 2012-05-25 at 14:36 |
| TPH 418.1 | E 418.1 | 77763      | 2012-05-30 at 12:00 | 91663    | 2012-05-30 at 12:06 |

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 12052529 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

## Sample: 299098 - Cell #1

Laboratory: Lubbock  
Analysis: BTEX  
QC Batch: 91580  
Prep Batch: 77694

Analytical Method: S 8021B  
Date Analyzed: 2012-05-25  
Sample Preparation: 2012-05-25

Prep Method: S 5035  
Analyzed By: MT  
Prepared By: MT

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 2.04   | mg/Kg | 1        | 2.00            | 102                 | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.98   | mg/Kg | 1        | 2.00            | 99                  | 70 - 130           |

## Sample: 299098 - Cell #1

Laboratory: Lubbock  
Analysis: TPH 418.1  
QC Batch: 91663  
Prep Batch: 77763

Analytical Method: E 418.1  
Date Analyzed: 2012-05-30  
Sample Preparation: 2012-05-30

Prep Method: N/A  
Analyzed By: DS  
Prepared By: DS

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     | u    |      | <10.0        | mg/Kg | 1        | 10.0 |

## Sample: 299099 - Cell #2

Laboratory: Lubbock  
Analysis: BTEX  
QC Batch: 91583  
Prep Batch: 77697

Analytical Method: S 8021B  
Date Analyzed: 2012-05-25  
Sample Preparation: 2012-05-25

Prep Method: S 5035  
Analyzed By: MT  
Prepared By: MT

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylene       | jb   | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.92   | mg/Kg | 1        | 2.00            | 96                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.87   | mg/Kg | 1        | 2.00            | 94                  | 70 - 130           |

**Sample: 299099 - Cell #2**

Laboratory: Lubbock  
 Analysis: TPH 418.1      Analytical Method: E 418.1      Prep Method: N/A  
 QC Batch: 91663      Date Analyzed: 2012-05-30      Analyzed By: DS  
 Prep Batch: 77763      Sample Preparation: 2012-05-30      Prepared By: DS

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     | u    |      | <10.0        | mg/Kg | 1        | 10.0 |

**Sample: 299100 - Cell #3**

Laboratory: Lubbock  
 Analysis: BTEX      Analytical Method: S 8021B      Prep Method: S 5035  
 QC Batch: 91583      Date Analyzed: 2012-05-25      Analyzed By: MT  
 Prep Batch: 77697      Sample Preparation: 2012-05-25      Prepared By: MT

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylene       | jb   | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.92   | mg/Kg | 1        | 2.00            | 96                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.84   | mg/Kg | 1        | 2.00            | 92                  | 70 - 130           |

Report Date: May 31, 2012  
 1st Semi-Annual Soil Sampling 2012

Work Order: 12052529  
 GMI Landfarm

Page Number: 8 of 28  
 Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Sample: 299100 - Cell #3**

Laboratory: Lubbock  
 Analysis: TPH 418.1  
 QC Batch: 91663  
 Prep Batch: 77763

Analytical Method: E 418.1  
 Date Analyzed: 2012-05-30  
 Sample Preparation: 2012-05-30

Prep Method: N/A  
 Analyzed By: DS  
 Prepared By: DS

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     | u    |      | <10.0        | mg/Kg | 1        | 10.0 |

**Sample: 299101 - Cell #4**

Laboratory: Lubbock  
 Analysis: BTEX  
 QC Batch: 91583  
 Prep Batch: 77697

Analytical Method: S 8021B  
 Date Analyzed: 2012-05-25  
 Sample Preparation: 2012-05-25

Prep Method: S 5035  
 Analyzed By: MT  
 Prepared By: MT

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.94   | mg/Kg | 1        | 2.00            | 97                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.85   | mg/Kg | 1        | 2.00            | 92                  | 70 - 130           |

**Sample: 299101 - Cell #4**

Laboratory: Lubbock  
 Analysis: TPH 418.1  
 QC Batch: 91663  
 Prep Batch: 77763

Analytical Method: E 418.1  
 Date Analyzed: 2012-05-30  
 Sample Preparation: 2012-05-30

Prep Method: N/A  
 Analyzed By: DS  
 Prepared By: DS

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     | u    |      | <10.0        | mg/Kg | 1        | 10.0 |

**Sample: 299102 - Cell #5**

Laboratory: Lubbock  
 Analysis: BTEX  
 QC Batch: 91583  
 Prep Batch: 77697

Analytical Method: S 8021B  
 Date Analyzed: 2012-05-25  
 Sample Preparation: 2012-05-25

Prep Method: S 5035  
 Analyzed By: MT  
 Prepared By: MT

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.94   | mg/Kg | 1        | 2.00            | 97                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.84   | mg/Kg | 1        | 2.00            | 92                  | 70 - 130           |

**Sample: 299102 - Cell #5**

Laboratory: Lubbock  
 Analysis: TPH 418.1  
 QC Batch: 91663  
 Prep Batch: 77763

Analytical Method: E 418.1  
 Date Analyzed: 2012-05-30  
 Sample Preparation: 2012-05-30

Prep Method: N/A  
 Analyzed By: DS  
 Prepared By: DS

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     | u    |      | <10.0        | mg/Kg | 1        | 10.0 |

**Sample: 299104 - Cell #7**

Laboratory: Lubbock  
 Analysis: BTEX  
 QC Batch: 91583  
 Prep Batch: 77697

Analytical Method: S 8021B  
 Date Analyzed: 2012-05-25  
 Sample Preparation: 2012-05-25

Prep Method: S 5035  
 Analyzed By: MT  
 Prepared By: MT

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|------------------------------|------|------|--------|-------|----------|--------------|------------------|-----------------|
| Trifluorotoluene (TFT)       |      |      | 1.92   | mg/Kg | 1        | 2.00         | 96               | 70 - 130        |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.85   | mg/Kg | 1        | 2.00         | 92               | 70 - 130        |

**Sample: 299104 - Cell #7**

Laboratory: Lubbock  
 Analysis: TPH 418.1  
 QC Batch: 91663  
 Prep Batch: 77763

Analytical Method: E 418.1  
 Date Analyzed: 2012-05-30  
 Sample Preparation: 2012-05-30

Prep Method: N/A  
 Analyzed By: DS  
 Prepared By: DS

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL   |
|-----------|------|------|-----------|-------|----------|------|
| TRPHC     | u    |      | <10.0     | mg/Kg | 1        | 10.0 |

**Sample: 299105 - Cell #9**

Laboratory: Lubbock  
 Analysis: BTEX  
 QC Batch: 91583  
 Prep Batch: 77697

Analytical Method: S 8021B  
 Date Analyzed: 2012-05-25  
 Sample Preparation: 2012-05-25

Prep Method: S 5035  
 Analyzed By: MT  
 Prepared By: MT

| Parameter    | Flag | Cert | RL Result | Units | Dilution | RL     |
|--------------|------|------|-----------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200   | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200   | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200   | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <0.0200   | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|------------------------------|------|------|--------|-------|----------|--------------|------------------|-----------------|
| Trifluorotoluene (TFT)       |      |      | 1.92   | mg/Kg | 1        | 2.00         | 96               | 70 - 130        |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.83   | mg/Kg | 1        | 2.00         | 92               | 70 - 130        |

**Sample: 299105 - Cell #9**

Laboratory: Lubbock  
 Analysis: TPH 418.1  
 QC Batch: 91663  
 Prep Batch: 77763

Analytical Method: E 418.1  
 Date Analyzed: 2012-05-30  
 Sample Preparation: 2012-05-30

Prep Method: N/A  
 Analyzed By: DS  
 Prepared By: DS

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     | u    |      | <10.0        | mg/Kg | 1        | 10.0 |

**Sample: 299106 - Cell #10**

Laboratory: Lubbock  
 Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035  
 QC Batch: 91583 Date Analyzed: 2012-05-25 Analyzed By: MT  
 Prep Batch: 77697 Sample Preparation: 2012-05-25 Prepared By: MT

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylenes      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.92   | mg/Kg | 1        | 2.00            | 96                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.86   | mg/Kg | 1        | 2.00            | 93                  | 70 - 130           |

**Sample: 299106 - Cell #10**

Laboratory: Lubbock  
 Analysis: TPH 418.1 Analytical Method: E 418.1 Prep Method: N/A  
 QC Batch: 91663 Date Analyzed: 2012-05-30 Analyzed By: DS  
 Prep Batch: 77763 Sample Preparation: 2012-05-30 Prepared By: DS

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     | u    |      | <10.0        | mg/Kg | 1        | 10.0 |

**Sample: 299107 - Cell #11**

Laboratory: Lubbock  
 Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035  
 QC Batch: 91583 Date Analyzed: 2012-05-25 Analyzed By: MT  
 Prep Batch: 77697 Sample Preparation: 2012-05-25 Prepared By: MT

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.93   | mg/Kg | 1        | 2.00            | 96                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.85   | mg/Kg | 1        | 2.00            | 92                  | 70 - 130           |

**Sample: 299107 - Cell #11**

Laboratory: Lubbock  
 Analysis: TPH 418.1      Analytical Method: E 418.1      Prep Method: N/A  
 QC Batch: 91663      Date Analyzed: 2012-05-30      Analyzed By: DS  
 Prep Batch: 77763      Sample Preparation: 2012-05-30      Prepared By: DS

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     | u    |      | <10.0        | mg/Kg | 1        | 10.0 |

**Sample: 299108 - Cell #12**

Laboratory: Lubbock  
 Analysis: BTEX      Analytical Method: S 8021B      Prep Method: S 5035  
 QC Batch: 91583      Date Analyzed: 2012-05-25      Analyzed By: MT  
 Prep Batch: 77697      Sample Preparation: 2012-05-25      Prepared By: MT

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.94   | mg/Kg | 1        | 2.00            | 97                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.86   | mg/Kg | 1        | 2.00            | 93                  | 70 - 130           |

**Sample: 299108 - Cell #12**

Laboratory: Lubbock  
 Analysis: TPH 418.1  
 QC Batch: 91663  
 Prep Batch: 77763

Analytical Method: E 418.1  
 Date Analyzed: 2012-05-30  
 Sample Preparation: 2012-05-30

Prep Method: N/A  
 Analyzed By: DS  
 Prepared By: DS

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     | u    |      | <10.0        | mg/Kg | 1        | 10.0 |

**Sample: 299109 - Cell #13**

Laboratory: Lubbock  
 Analysis: BTEX  
 QC Batch: 91583  
 Prep Batch: 77697

Analytical Method: S 8021B  
 Date Analyzed: 2012-05-25  
 Sample Preparation: 2012-05-25

Prep Method: S 5035  
 Analyzed By: MT  
 Prepared By: MT

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.93   | mg/Kg | 1        | 2.00            | 96                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.87   | mg/Kg | 1        | 2.00            | 94                  | 70 - 130           |

**Sample: 299109 - Cell #13**

Laboratory: Lubbock  
 Analysis: TPH 418.1  
 QC Batch: 91663  
 Prep Batch: 77763

Analytical Method: E 418.1  
 Date Analyzed: 2012-05-30  
 Sample Preparation: 2012-05-30

Prep Method: N/A  
 Analyzed By: DS  
 Prepared By: DS

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     | u    |      | <10.0        | mg/Kg | 1        | 10.0 |

Report Date: May 31, 2012  
1st Semi-Annual Soil Sampling 2012

Work Order: 12052529  
GMI Landfarm

Page Number: 14 of 28  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Sample: 299110 - Cell #14**

Laboratory: Lubbock  
Analysis: BTEX  
QC Batch: 91583  
Prep Batch: 77697

Analytical Method: S 8021B  
Date Analyzed: 2012-05-25  
Sample Preparation: 2012-05-25

Prep Method: S 5035  
Analyzed By: MT  
Prepared By: MT

| Parameter    | Flag | Cert | Result        | Units | Dilution | RL     |
|--------------|------|------|---------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200       | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200       | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200       | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <b>0.0347</b> | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|------------------------------|------|------|--------|-------|----------|--------------|------------------|-----------------|
| Trifluorotoluene (TFT)       |      |      | 1.95   | mg/Kg | 1        | 2.00         | 98               | 70 - 130        |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.87   | mg/Kg | 1        | 2.00         | 94               | 70 - 130        |

**Sample: 299110 - Cell #14**

Laboratory: Lubbock  
Analysis: TPH 418.1  
QC Batch: 91663  
Prep Batch: 77763

Analytical Method: E 418.1  
Date Analyzed: 2012-05-30  
Sample Preparation: 2012-05-30

Prep Method: N/A  
Analyzed By: DS  
Prepared By: DS

| Parameter | Flag | Cert | Result | Units | Dilution | RL   |
|-----------|------|------|--------|-------|----------|------|
| TRPHC     | u    |      | <10.0  | mg/Kg | 1        | 10.0 |

**Sample: 299111 - Cell #15**

Laboratory: Lubbock  
Analysis: BTEX  
QC Batch: 91583  
Prep Batch: 77697

Analytical Method: S 8021B  
Date Analyzed: 2012-05-25  
Sample Preparation: 2012-05-25

Prep Method: S 5035  
Analyzed By: MT  
Prepared By: MT

| Parameter    | Flag | Cert | Result  | Units | Dilution | RL     |
|--------------|------|------|---------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200 | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200 | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200 | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <0.0200 | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|------------------------------|------|------|--------|-------|----------|--------------|------------------|-----------------|
| Trifluorotoluene (TFT)       |      |      | 1.92   | mg/Kg | 1        | 2.00         | 96               | 70 - 130        |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.88   | mg/Kg | 1        | 2.00         | 94               | 70 - 130        |

**Sample: 299111 - Cell #15**

Laboratory: Lubbock  
 Analysis: TPH 418.1  
 QC Batch: 91663  
 Prep Batch: 77763

Analytical Method: E 418.1  
 Date Analyzed: 2012-05-30  
 Sample Preparation: 2012-05-30

Prep Method: N/A  
 Analyzed By: DS  
 Prepared By: DS

| Parameter | Flag | Cert | RL Result | Units | Dilution | RL   |
|-----------|------|------|-----------|-------|----------|------|
| TRPHC     | u    |      | <10.0     | mg/Kg | 1        | 10.0 |

**Sample: 299112 - Cell #16**

Laboratory: Lubbock  
 Analysis: BTEX  
 QC Batch: 91583  
 Prep Batch: 77697

Analytical Method: S 8021B  
 Date Analyzed: 2012-05-25  
 Sample Preparation: 2012-05-25

Prep Method: S 5035  
 Analyzed By: MT  
 Prepared By: MT

| Parameter    | Flag | Cert | RL Result | Units | Dilution | RL     |
|--------------|------|------|-----------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200   | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200   | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200   | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <0.0200   | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike Amount | Percent Recovery | Recovery Limits |
|------------------------------|------|------|--------|-------|----------|--------------|------------------|-----------------|
| Trifluorotoluene (TFT)       |      |      | 1.93   | mg/Kg | 1        | 2.00         | 96               | 70 - 130        |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.86   | mg/Kg | 1        | 2.00         | 93               | 70 - 130        |

**Sample: 299112 - Cell #16**

Laboratory: Lubbock  
 Analysis: TPH 418.1  
 QC Batch: 91663  
 Prep Batch: 77763

Analytical Method: E 418.1  
 Date Analyzed: 2012-05-30  
 Sample Preparation: 2012-05-30

Prep Method: N/A  
 Analyzed By: DS  
 Prepared By: DS

Report Date: May 31, 2012  
1st Semi-Annual Soil Sampling 2012

Work Order: 12052529  
GMI Landfarm

Page Number: 16 of 28  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     | u    |      | <10.0        | mg/Kg | 1        | 10.0 |

**Sample: 299113 - Cell #17**

Laboratory: Lubbock  
Analysis: BTEX  
QC Batch: 91583  
Prep Batch: 77697

Analytical Method: S 8021B  
Date Analyzed: 2012-05-25  
Sample Preparation: 2012-05-25

Prep Method: S 5035  
Analyzed By: MT  
Prepared By: MT

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.96   | mg/Kg | 1        | 2.00            | 98                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.85   | mg/Kg | 1        | 2.00            | 92                  | 70 - 130           |

**Sample: 299113 - Cell #17**

Laboratory: Lubbock  
Analysis: TPH 418.1  
QC Batch: 91663  
Prep Batch: 77763

Analytical Method: E 418.1  
Date Analyzed: 2012-05-30  
Sample Preparation: 2012-05-30

Prep Method: N/A  
Analyzed By: DS  
Prepared By: DS

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     | u    |      | <10.0        | mg/Kg | 1        | 10.0 |

**Sample: 299114 - Cell #19**

Laboratory: Lubbock  
Analysis: BTEX  
QC Batch: 91583  
Prep Batch: 77697

Analytical Method: S 8021B  
Date Analyzed: 2012-05-25  
Sample Preparation: 2012-05-25

Prep Method: S 5035  
Analyzed By: MT  
Prepared By: MT

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.95   | mg/Kg | 1        | 2.00            | 98                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.87   | mg/Kg | 1        | 2.00            | 94                  | 70 - 130           |

**Sample: 299114 - Cell #19**

Laboratory: Lubbock  
 Analysis: TPH 418.1      Analytical Method: E 418.1      Prep Method: N/A  
 QC Batch: 91663      Date Analyzed: 2012-05-30      Analyzed By: DS  
 Prep Batch: 77763      Sample Preparation: 2012-05-30      Prepared By: DS

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     | u    |      | <10.0        | mg/Kg | 1        | 10.0 |

**Sample: 299115 - Cell #21**

Laboratory: Lubbock  
 Analysis: BTEX      Analytical Method: S 8021B      Prep Method: S 5035  
 QC Batch: 91583      Date Analyzed: 2012-05-25      Analyzed By: MT  
 Prep Batch: 77697      Sample Preparation: 2012-05-25      Prepared By: MT

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.94   | mg/Kg | 1        | 2.00            | 97                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.87   | mg/Kg | 1        | 2.00            | 94                  | 70 - 130           |

Report Date: May 31, 2012  
1st Semi-Annual Soil Sampling 2012

Work Order: 12052529  
GMI Landfarm

Page Number: 18 of 28  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

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**Sample: 299115 - Cell #21**

Laboratory: Lubbock  
Analysis: TPH 418.1  
QC Batch: 91663  
Prep Batch: 77763

Analytical Method: E 418.1  
Date Analyzed: 2012-05-30  
Sample Preparation: 2012-05-30

Prep Method: N/A  
Analyzed By: DS  
Prepared By: DS

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     | u    |      | <10.0        | mg/Kg | 1        | 10.0 |

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## Method Blanks

Method Blank (1)      QC Batch: 91580

QC Batch: 91580  
 Prep Batch: 77694

Date Analyzed: 2012-05-25  
 QC Preparation: 2012-05-25

Analyzed By: MT  
 Prepared By: MT

| Parameter    | Flag | Cert | MDL<br>Result | Units | RL   |
|--------------|------|------|---------------|-------|------|
| Benzene      |      | 1    | <0.00332      | mg/Kg | 0.02 |
| Toluene      |      | 1    | <0.00318      | mg/Kg | 0.02 |
| Ethylbenzene |      | 1    | <0.00385      | mg/Kg | 0.02 |
| Xylene       |      | 1    | 0.00360       | mg/Kg | 0.02 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 2.02   | mg/Kg | 1        | 2.00            | 101                 | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 2.04   | mg/Kg | 1        | 2.00            | 102                 | 70 - 130           |

Method Blank (1)      QC Batch: 91583

QC Batch: 91583  
 Prep Batch: 77697

Date Analyzed: 2012-05-25  
 QC Preparation: 2012-05-25

Analyzed By: MT  
 Prepared By: MT

| Parameter    | Flag | Cert | MDL<br>Result | Units | RL   |
|--------------|------|------|---------------|-------|------|
| Benzene      |      | 1    | <0.00365      | mg/Kg | 0.02 |
| Toluene      |      | 1    | <0.00816      | mg/Kg | 0.02 |
| Ethylbenzene |      | 1    | 0.00880       | mg/Kg | 0.02 |
| Xylene       |      | 1    | 0.0273        | mg/Kg | 0.02 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.90   | mg/Kg | 1        | 2.00            | 95                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.89   | mg/Kg | 1        | 2.00            | 94                  | 70 - 130           |

Report Date: May 31, 2012  
1st Semi-Annual Soil Sampling 2012

Work Order: 12052529  
GMI Landfarm

Page Number: 20 of 28  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

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**Method Blank (1)**      QC Batch: 91663

QC Batch: 91663  
Prep Batch: 77763

Date Analyzed: 2012-05-30  
QC Preparation: 2012-05-30

Analyzed By: DS  
Prepared By: DS

| Parameter | Flag | Cert | MDL<br>Result | Units | RL |
|-----------|------|------|---------------|-------|----|
| TRPHC     |      |      | <6.29         | mg/Kg | 10 |

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## Laboratory Control Spikes

### Laboratory Control Spike (LCS-1)

QC Batch: 91580  
Prep Batch: 77694

Date Analyzed: 2012-05-25  
QC Preparation: 2012-05-25

Analyzed By: MT  
Prepared By: MT

| Param        | F | C | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|--------------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|
| Benzene      |   | 1 | 1.92          | mg/Kg | 1    | 2.00            | <0.00332         | 96   | 70 - 130      |
| Toluene      |   | 1 | 1.93          | mg/Kg | 1    | 2.00            | <0.00318         | 96   | 70 - 130      |
| Ethylbenzene |   | 1 | 1.93          | mg/Kg | 1    | 2.00            | <0.00385         | 96   | 70 - 130      |
| Xylene       |   | 1 | 5.71          | mg/Kg | 1    | 6.00            | 0.0036           | 95   | 70 - 130      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param        | F | C | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|--------------|---|---|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Benzene      |   | 1 | 1.94           | mg/Kg | 1    | 2.00            | <0.00332         | 97   | 70 - 130      | 1   | 20           |
| Toluene      |   | 1 | 1.93           | mg/Kg | 1    | 2.00            | <0.00318         | 96   | 70 - 130      | 0   | 20           |
| Ethylbenzene |   | 1 | 1.96           | mg/Kg | 1    | 2.00            | <0.00385         | 98   | 70 - 130      | 2   | 20           |
| Xylene       |   | 1 | 5.81           | mg/Kg | 1    | 6.00            | 0.0036           | 97   | 70 - 130      | 2   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate                    | LCS<br>Result | LCSD<br>Result | Units | Dil. | Spike<br>Amount | LCS<br>Rec. | LCSD<br>Rec. | Rec.<br>Limit |
|------------------------------|---------------|----------------|-------|------|-----------------|-------------|--------------|---------------|
| Trifluorotoluene (TFT)       | 1.91          | 1.88           | mg/Kg | 1    | 2.00            | 95          | 94           | 70 - 130      |
| 4-Bromofluorobenzene (4-BFB) | 1.89          | 1.92           | mg/Kg | 1    | 2.00            | 95          | 96           | 70 - 130      |

### Laboratory Control Spike (LCS-1)

QC Batch: 91583  
Prep Batch: 77697

Date Analyzed: 2012-05-25  
QC Preparation: 2012-05-25

Analyzed By: MT  
Prepared By: MT

| Param        | F | C | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|--------------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|
| Benzene      |   | 1 | 2.00          | mg/Kg | 1    | 2.00            | <0.00365         | 100  | 75.4 - 120    |
| Toluene      |   | 1 | 2.04          | mg/Kg | 1    | 2.00            | <0.00816         | 102  | 74.9 - 120    |
| Ethylbenzene |   | 1 | 1.97          | mg/Kg | 1    | 2.00            | 0.0088           | 98   | 78.1 - 120    |
| Xylene       |   | 1 | 5.98          | mg/Kg | 1    | 6.00            | 0.0273           | 100  | 77.3 - 120    |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param        | F | C | LCSD   |       | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|--------------|---|---|--------|-------|------|--------------|---------------|------|------------|-----|-----------|
|              |   |   | Result | Units |      |              |               |      |            |     |           |
| Benzene      |   | 1 | 2.03   | mg/Kg | 1    | 2.00         | <0.00365      | 102  | 75.4 - 120 | 2   | 20        |
| Toluene      |   | 1 | 2.08   | mg/Kg | 1    | 2.00         | <0.00816      | 104  | 74.9 - 120 | 2   | 20        |
| Ethylbenzene |   | 1 | 2.00   | mg/Kg | 1    | 2.00         | 0.0088        | 100  | 78.1 - 120 | 2   | 20        |
| Xylene       |   | 1 | 6.05   | mg/Kg | 1    | 6.00         | 0.0273        | 101  | 77.3 - 120 | 1   | 20        |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate                    | LCS Result | LCSD Result | Units | Dil. | Spike Amount | LCS Rec. | LCSD Rec. | Rec. Limit |
|------------------------------|------------|-------------|-------|------|--------------|----------|-----------|------------|
|                              |            |             |       |      |              |          |           |            |
| 4-Bromofluorobenzene (4-BFB) | 1.94       | 1.95        | mg/Kg | 1    | 2.00         | 97       | 98        | 70 - 130   |

#### Laboratory Control Spike (LCS-1)

QC Batch: 91663  
Prep Batch: 77763

Date Analyzed: 2012-05-30  
QC Preparation: 2012-05-30

Analyzed By: DS  
Prepared By: DS

| Param | F | C | LCS    |       | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|-------|---|---|--------|-------|------|--------------|---------------|------|------------|
|       |   |   | Result | Units |      |              |               |      |            |
| TRPHC |   |   | 257    | mg/Kg | 1    | 250          | <6.29         | 103  | 80 - 120   |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | LCSD   |       | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|-------|---|---|--------|-------|------|--------------|---------------|------|------------|-----|-----------|
|       |   |   | Result | Units |      |              |               |      |            |     |           |
| TRPHC |   |   | 284    | mg/Kg | 1    | 250          | <6.29         | 114  | 80 - 120   | 10  | 20        |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Matrix Spike (MS-1) Spiked Sample: 298920

QC Batch: 91580  
Prep Batch: 77694

Date Analyzed: 2012-05-25  
QC Preparation: 2012-05-25

Analyzed By: MT  
Prepared By: MT

| Param        | F | C | MS     |       | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|--------------|---|---|--------|-------|------|--------------|---------------|------|------------|
|              |   |   | Result | Units |      |              |               |      |            |
| Benzene      |   | 1 | 1.92   | mg/Kg | 1    | 2.00         | <0.00332      | 96   | 70 - 130   |
| Toluene      |   | 1 | 1.93   | mg/Kg | 1    | 2.00         | <0.00318      | 96   | 70 - 130   |
| Ethylbenzene |   | 1 | 1.98   | mg/Kg | 1    | 2.00         | <0.00385      | 99   | 70 - 130   |
| Xylene       |   | 1 | 5.80   | mg/Kg | 1    | 6.00         | 0.0046        | 96   | 70 - 130   |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param        | F | C | MSD    |       | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|--------------|---|---|--------|-------|------|--------------|---------------|------|------------|-----|-----------|
|              |   |   | Result | Units |      |              |               |      |            |     |           |
| Benzene      |   | 1 | 1.88   | mg/Kg | 1    | 2.00         | <0.00332      | 94   | 70 - 130   | 2   | 20        |
| Toluene      |   | 1 | 1.92   | mg/Kg | 1    | 2.00         | <0.00318      | 96   | 70 - 130   | 0   | 20        |
| Ethylbenzene |   | 1 | 1.96   | mg/Kg | 1    | 2.00         | <0.00385      | 98   | 70 - 130   | 1   | 20        |
| Xylene       |   | 1 | 5.75   | mg/Kg | 1    | 6.00         | 0.0046        | 96   | 70 - 130   | 1   | 20        |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate                    | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|------------------------------|-----------|------------|-------|------|--------------|---------|----------|------------|
|                              |           |            |       |      |              |         |          |            |
| 4-Bromofluorobenzene (4-BFB) | 1.75      | 1.74       | mg/Kg | 1    | 2            | 88      | 87       | 70 - 130   |

**Matrix Spike (MS-1)** Spiked Sample: 299109

QC Batch: 91583  
Prep Batch: 77697

Date Analyzed: 2012-05-25  
QC Preparation: 2012-05-25

Analyzed By: MT  
Prepared By: MT

| Param        | F | C | MS     |       | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|--------------|---|---|--------|-------|------|--------------|---------------|------|------------|
|              |   |   | Result | Units |      |              |               |      |            |
| Benzene      |   | 1 | 1.86   | mg/Kg | 1    | 2.00         | <0.00365      | 93   | 37.6 - 142 |
| Toluene      |   | 1 | 1.96   | mg/Kg | 1    | 2.00         | <0.00816      | 98   | 38.6 - 153 |
| Ethylbenzene |   | 1 | 1.97   | mg/Kg | 1    | 2.00         | <0.00560      | 98   | 36.7 - 172 |
| Xylene       |   | 1 | 6.03   | mg/Kg | 1    | 6.00         | <0.00460      | 100  | 36.7 - 173 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param        | F | C | MSD    |       | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|--------------|---|---|--------|-------|------|--------------|---------------|------|------------|-----|-----------|
|              |   |   | Result | Units |      |              |               |      |            |     |           |
| Benzene      |   | 1 | 1.79   | mg/Kg | 1    | 2.00         | <0.00365      | 90   | 37.6 - 142 | 4   | 20        |
| Toluene      |   | 1 | 1.90   | mg/Kg | 1    | 2.00         | <0.00816      | 95   | 38.6 - 153 | 3   | 20        |
| Ethylbenzene |   | 1 | 1.91   | mg/Kg | 1    | 2.00         | <0.00560      | 96   | 36.7 - 172 | 3   | 20        |
| Xylene       |   | 1 | 5.86   | mg/Kg | 1    | 6.00         | <0.00460      | 98   | 36.7 - 173 | 3   | 20        |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate                    | MS Result | MSD Result | Units | Dil. | Spike Amount | MS Rec. | MSD Rec. | Rec. Limit |
|------------------------------|-----------|------------|-------|------|--------------|---------|----------|------------|
|                              |           |            |       |      |              |         |          |            |
| 4-Bromofluorobenzene (4-BFB) | 1.89      | 1.89       | mg/Kg | 1    | 2            | 94      | 94       | 70 - 130   |

Report Date: May 31, 2012  
1st Semi-Annual Soil Sampling 2012

Work Order: 12052529  
GMI Landfarm

Page Number: 24 of 28  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Matrix Spike (MS-1)** Spiked Sample: 299098

QC Batch: 91663  
Prep Batch: 77763

Date Analyzed: 2012-05-30  
QC Preparation: 2012-05-30

Analyzed By: DS  
Prepared By: DS

| Param | F | C | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|-------|---|---|--------------|-------|------|-----------------|------------------|------|---------------|
| TRPHC |   |   | 259          | mg/Kg | 1    | 250             | <6.29            | 104  | 80 - 120      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec.<br>Limit | RPD      | RPD<br>Limit |    |
|-------|---|---|---------------|-------|------|-----------------|------------------|---------------|----------|--------------|----|
| TRPHC |   |   | 262           | mg/Kg | 1    | 250             | <6.29            | 105           | 80 - 120 | 1            | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Calibration Standards

### Standard (CCV-2)

QC Batch: 91580

Date Analyzed: 2012-05-25

Analyzed By: MT

| Param        | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|--------------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Benzene      |      | 1    | mg/kg | 0.100                 | 0.0974                 | 97                          | 80 - 120                      | 2012-05-25       |
| Toluene      |      | 1    | mg/kg | 0.100                 | 0.0982                 | 98                          | 80 - 120                      | 2012-05-25       |
| Ethylbenzene |      | 1    | mg/kg | 0.100                 | 0.0982                 | 98                          | 80 - 120                      | 2012-05-25       |
| Xylene       |      | 1    | mg/kg | 0.300                 | 0.290                  | 97                          | 80 - 120                      | 2012-05-25       |

### Standard (CCV-3)

QC Batch: 91580

Date Analyzed: 2012-05-25

Analyzed By: MT

| Param        | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|--------------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Benzene      |      | 1    | mg/kg | 0.100                 | 0.0995                 | 100                         | 80 - 120                      | 2012-05-25       |
| Toluene      |      | 1    | mg/kg | 0.100                 | 0.0987                 | 99                          | 80 - 120                      | 2012-05-25       |
| Ethylbenzene |      | 1    | mg/kg | 0.100                 | 0.0978                 | 98                          | 80 - 120                      | 2012-05-25       |
| Xylene       |      | 1    | mg/kg | 0.300                 | 0.289                  | 96                          | 80 - 120                      | 2012-05-25       |

### Standard (CCV-1)

QC Batch: 91583

Date Analyzed: 2012-05-25

Analyzed By: MT

| Param        | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|--------------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Benzene      |      | 1    | mg/kg | 0.100                 | 0.102                  | 102                         | 80 - 120                      | 2012-05-25       |
| Toluene      |      | 1    | mg/kg | 0.100                 | 0.103                  | 103                         | 80 - 120                      | 2012-05-25       |
| Ethylbenzene |      | 1    | mg/kg | 0.100                 | 0.100                  | 100                         | 80 - 120                      | 2012-05-25       |
| Xylene       |      | 1    | mg/kg | 0.300                 | 0.304                  | 101                         | 80 - 120                      | 2012-05-25       |

**Standard (CCV-2)**

QC Batch: 91583

Date Analyzed: 2012-05-25

Analyzed By: MT

| Param        | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|--------------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Benzene      |      | 1    | mg/kg | 0.100                 | 0.102                  | 102                         | 80 - 120                      | 2012-05-25       |
| Toluene      |      | 1    | mg/kg | 0.100                 | 0.104                  | 104                         | 80 - 120                      | 2012-05-25       |
| Ethylbenzene |      | 1    | mg/kg | 0.100                 | 0.0992                 | 99                          | 80 - 120                      | 2012-05-25       |
| Xylene       |      | 1    | mg/kg | 0.300                 | 0.302                  | 101                         | 80 - 120                      | 2012-05-25       |

**Standard (CCV-3)**

QC Batch: 91583

Date Analyzed: 2012-05-25

Analyzed By: MT

| Param        | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|--------------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Benzene      |      | 1    | mg/kg | 0.100                 | 0.0999                 | 100                         | 80 - 120                      | 2012-05-25       |
| Toluene      |      | 1    | mg/kg | 0.100                 | 0.102                  | 102                         | 80 - 120                      | 2012-05-25       |
| Ethylbenzene |      | 1    | mg/kg | 0.100                 | 0.0972                 | 97                          | 80 - 120                      | 2012-05-25       |
| Xylene       |      | 1    | mg/kg | 0.300                 | 0.296                  | 99                          | 80 - 120                      | 2012-05-25       |

**Standard (CCV-1)**

QC Batch: 91663

Date Analyzed: 2012-05-30

Analyzed By: DS

| Param | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| TRPHC |      |      | mg/Kg | 100                   | 107                    | 107                         | 80 - 120                      | 2012-05-30       |

**Standard (CCV-2)**

QC Batch: 91663

Date Analyzed: 2012-05-30

Analyzed By: DS

| Param | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| TRPHC |      |      | mg/Kg | 100                   | 109                    | 109                         | 80 - 120                      | 2012-05-30       |

Report Date: May 31, 2012  
1st Semi-Annual Soil Sampling 2012

Work Order: 12052529  
GMI Landfarm

Page Number: 27 of 28  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Standard (CCV-3)**

QC Batch: 91663

Date Analyzed: 2012-05-30

Analyzed By: DS

| Param | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| TRPHC |      |      | mg/Kg | 100                   | 104                    | 104                         | 80 - 120                      | 2012-05-30       |

**Standard (CCV-4)**

QC Batch: 91663

Date Analyzed: 2012-05-30

Analyzed By: DS

| Param | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| TRPHC |      |      | mg/Kg | 100                   | 105                    | 105                         | 80 - 120                      | 2012-05-30       |

## Appendix

### Report Definitions

| Name | Definition                 |
|------|----------------------------|
| MDL  | Method Detection Limit     |
| MQL  | Minimum Quantitation Limit |
| SDL  | Sample Detection Limit     |

### Laboratory Certifications

| C | Certifying Authority | Certification Number | Laboratory Location |
|---|----------------------|----------------------|---------------------|
| - | NCTRCA               | WFWB384444Y0909      | TraceAnalysis       |
| - | DBE                  | VN 20657             | TraceAnalysis       |
| - | HUB                  | 1752439743100-86536  | TraceAnalysis       |
| - | WBE                  | 237019               | TraceAnalysis       |
| 1 | NELAP                | T104704219-12-8      | Lubbock             |

### Standard Flags

| F   | Description   |
|-----|---|
| B   | Analyte detected in the corresponding method blank above the method detection limit   |
| H   | Analyzed out of hold time   |
| J   | Estimated concentration   |
| Jb  | The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less than ten times the concentration found in the method blank. The result should be considered non-detect to the SDL. |
| Je  | Estimated concentration exceeding calibration range.  |
| Qc  | Calibration check outside of laboratory limits.   |
| Qr  | RPD outside of laboratory limits  |
| Qs  | Spike recovery outside of laboratory limits.  |
| Qsr | Surrogate recovery outside of laboratory limits.  |
| U   | The analyte is not detected above the SDL   |

### Attachments

The scanned attachments will follow this page.  
Please note, each attachment may consist of more than one page.

12052529

6701 Aberdeen Avenue, Ste. 9  
Lubbock, Texas 79424  
Tel (806) 794-1296  
Fax (806) 794-1298  
1 (800) 378-1296  
email: lab@traceanalysis.com

# TraceAnalysis, Inc.

Company Name: Candy Morley Inc. Phone #: 575-347-0434  
Address: P.O. Box 1628 Roswell NM 88202 Fax #: 575-347-0435  
Contact Person: Drew Riley e-mail: SMIP@trn.com  
Invoice to: Drew Riley e-mail: driley@trn.com

Project #: 1st Semi-Annual Soil Sampling 201 Project Name: GM I Landfarm  
Project Location: Sec. 4, 5, 8, 29 T. 11S. R. 31E. New Mexico Sampler Signature: [Signature]

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 12052529

### ANALYSIS REQUEST

(Circle or Specify Method No.)

|  |  |
|--|--|
| TX 1005 Extended (C95)                           |  |
| PAH 8270C  |  |
| Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 |  |
| TCLP Metals Ag As Ba Cd Cr Pb Se Hg              |  |
| TCLP Volatiles                                   |  |
| TCLP Semi Volatiles                              |  |
| TCLP Pesticides                                  |  |
| FCI  |  |
| GC/MS Vol 8260B/624                              |  |
| GC/MS Semi Vol 8270C/625                         |  |
| PCBs 9082/608                                    |  |
| Pesticides 9081A/608                             |  |
| BOD, TSS, pH                                     |  |
| Moisture Content                                 |  |
| Turn Around Time if different from standard      |  |

REMARKS: Please send copy of Resu 1/3 ASAP to CMBENVI@epa.ca.gov

LAB USE ONLY

Intact  Y  N  
Headspace  Y  N  
Temp 56/55  
Log-in Review [Signature]

Dry Weight Basis Required  
 TRRP Report Required  
 Check if Special Reporting Limits Are Needed

| LAB #<br>(LAB USE ONLY) | FIELD CODE | # CONTAINERS | MATRIX |     |        | PRESERVATIVE METHOD |                  |                                |      |     | SAMPLING DATE | TIME     |      |
|-------------------------|------------|--------------|--------|-----|--------|---------------------|------------------|--------------------------------|------|-----|---------------|----------|------|
|                         |            |              | WATER  | AIR | SLUDGE | HCl                 | HNO <sub>3</sub> | H <sub>2</sub> SO <sub>4</sub> | NaOH | ICE |               |          | NONE |
| 299098                  | Cell #1    | 1            | X      |     |        |                     |                  |                                |      | XX  |               | 05/24/09 |      |
| 099                     | Cell #2    |              |        |     |        |                     |                  |                                |      |     |               | 0955     |      |
| 100                     | Cell #3    |              |        |     |        |                     |                  |                                |      |     |               | 0958     |      |
| 101                     | Cell #4    |              |        |     |        |                     |                  |                                |      |     |               | 1002     |      |
| 102                     | Cell #5    |              |        |     |        |                     |                  |                                |      |     |               | 1006     |      |
| 103                     | Cell #6    |              |        |     |        |                     |                  |                                |      |     |               |          |      |
| 104                     | Cell #7    |              |        |     |        |                     |                  |                                |      |     |               | 1010     |      |
| 105                     | Cell #9    |              |        |     |        |                     |                  |                                |      |     |               | 1016     |      |
| 106                     | Cell #10   |              |        |     |        |                     |                  |                                |      |     |               | 1021     |      |
| 107                     | Cell #11   |              |        |     |        |                     |                  |                                |      |     |               | 1026     |      |
| 108                     | Cell #12   |              |        |     |        |                     |                  |                                |      |     |               | 1030     |      |

Relinquished by: [Signature] Date: 05/24/12 Time: 1500  
Received by: [Signature] Date: 5/25/12 Time: 11:30  
Relinquished by: [Signature] Date: 5/25/12 Time: 5:4  
Received by: [Signature] Date: 5/25/12 Time: 5:5

Carrier # 50d 7936 0640 9878

Submission of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

# Trace Analysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9  
Lubbock, Texas 79424  
Tel (806) 794-1296  
Fax (806) 794-1298  
1 (800) 378-1296

200 East Sunset Rd., Suite E  
El Paso, Texas 79522  
Tel (915) 585-3443  
Fax (915) 585-4944  
1 (888) 588-3443

8808 Camp Bowie Blvd. West, Suite 180  
Ft. Worth, Texas 76116  
Tel (817) 201-5260  
Fax (817) 560-4336

| <b>Company Name:</b><br>Sandy Morley Inc<br>20 Box 1658 Roswell NM 88202-575-347-0435<br>Contact Person: Bret Riley e 505-330-246 / Riley.bret@yamail.com<br>Invoice to: (If different from above)<br>Project #: |            | <b>Phone #:</b> 575-347-0434<br><b>Fax #:</b> 575-347-0435<br><b>E-mail:</b> GWT@dth.com<br>Riley.bret@yamail.com |                 | <b>Project Name:</b><br>SMI Landfill<br>Sampler Signature: <i>[Signature]</i><br>Sec. 445, 849 T.H.S. A.S.I.E. |      |     |                     |     |                  |                                |      |          |      |          |      |
|--|------------|---|-----------------|--|------|-----|---------------------|-----|------------------|--------------------------------|------|----------|------|----------|------|
| LAB #<br>(LAB USE ONLY)  | FIELD CODE | # CONTAINERS  | Volume / Amount | MATRIX   |      |     | PRESERVATIVE METHOD |     |                  |                                |      | SAMPLING |      |          |      |
|  |            |   |                 | WATER  | SOIL | AIR | SLUDGE              | HCl | HNO <sub>3</sub> | H <sub>2</sub> SO <sub>4</sub> | NaOH | ICE      | NONE | DATE     | TIME |
| 099109   | Cell # 13  | 1   | 4oz             | X  |      |     |                     |     |                  |                                |      |          |      | 05/24/12 | 1035 |
| 110  | Cell # 14  |   |                 |  |      |     |                     |     |                  |                                |      |          |      |          | 1058 |
| 111  | Cell # 15  |   |                 |  |      |     |                     |     |                  |                                |      |          |      |          | 1043 |
| 112  | Cell # 16  |   |                 |  |      |     |                     |     |                  |                                |      |          |      |          | 1045 |
| 113  | Cell # 17  |   |                 |  |      |     |                     |     |                  |                                |      |          |      |          | 1049 |
| 114  | Cell # 19  |   |                 |  |      |     |                     |     |                  |                                |      |          |      |          | 1055 |
| 115  | Cell # 21  |   |                 |  |      |     |                     |     |                  |                                |      |          |      |          | 1100 |

## ANALYSIS REQUEST (Circle or Specify Method No.)

|                          |  |
|--------------------------|--|
| <input type="checkbox"/> | TPH 8015 GRO / DPO / TVHC                        |
| <input type="checkbox"/> | PAH 8270C / 625                                  |
| <input type="checkbox"/> | Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7 |
| <input type="checkbox"/> | TCLP Metals Ag As Ba Cd Cr Pb Se Hg              |
| <input type="checkbox"/> | TCLP Volatiles                                   |
| <input type="checkbox"/> | TCLP Semi Volatiles                              |
| <input type="checkbox"/> | TCLP Pesticides                                  |
| <input type="checkbox"/> | RCI  |
| <input type="checkbox"/> | GC/MS Vol. 8260B / 624                           |
| <input type="checkbox"/> | GC/MS Semi. Vol. 8270C / 625                     |
| <input type="checkbox"/> | PCB's 8082 / 608                                 |
| <input type="checkbox"/> | Pesticides 8081A / 608                           |
| <input type="checkbox"/> | BOD, TSS, pH                                     |
| <input type="checkbox"/> | Moisture Content                                 |
| <input type="checkbox"/> | Turn Around Time if different from standard      |

**LAB USE ONLY**

Intact  / N

Headspace  / N  / NA  / O

Log-in-Review  / N

**REMARKS:**  
 Please Send Copy of Results ASAP to Camberkine cube one. Dry Weight Basis Required TRRP Report Required Check If Special Reporting Limits Are Needed

Relinquished by: *[Signature]* Company: **EMP** Date: 05/24/12 Time: 15:00

Received by: *[Signature]* Company: **Trace** Date: 5/24/12 Time: 11:30

Temp °C: 5.6

Temp °C: 5.5

February 23, 2012  
New Mexico Energy, Minerals, & Natural Resources Dept.  
Oil Conservation Division Environmental Bureau  
Attn: Mr. Brad A. Jones  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

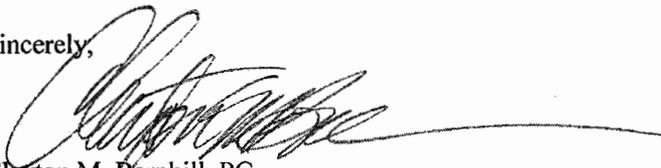
**Re: Submittal of Annual Monitoring Report for Year 2011  
Gandy Marley Inc., Commercial Landfarm  
Gandy Marley Inc., Operator / PRP  
SW/4 of Section 4, SE/4 of Section 5, NE/4 of Section 8, & NW/4 of Section 9,  
T. 11 S., R.31 E., NMPM  
Chaves County, New Mexico  
Commercial Landfarm Permit (NM-01-0019)**

Dear Mr. Jones:

Clayton M. Barnhill, CMB Environmental and Geological Services Inc., on behalf of the owner/operator, Gandy Marley Inc., submit the attached Annual Monitoring Report for the above-mentioned site.

If you have any questions about the contents of the report, please do not hesitate to call me. Thank you.

Sincerely,



Clayton M. Barnhill, PG  
CMB Environmental & Geological Services, Inc.  
PO Box 2304  
Roswell, NM 88202-2304  
Phone: (575) 622-2012 Phone Fax: (575) 625-0538  
Cellular: (575) 626-1615  
[cmbenviro@dfn.com](mailto:cmbenviro@dfn.com) or [cmbenviro@cableone.net](mailto:cmbenviro@cableone.net)

Cc: Gandy Marley Inc.

**COVER PAGE**

**ANNUAL YEAR END MONITORING REPORT**

Please include the following information:

1. Site Name: **Gandy Marley Landfarm**
2. Responsible party: **Gandy Marley Inc.**
3. Responsible party mailing address (list contact person if different):

**Gandy Marley Inc.  
Attn: Larry Gandy, Vice President  
PO Box 1658  
Roswell, NM 88202-1658**

4. Commercial Landfarm Permit Number: **NM-01-0019**
5. Address/legal description:

**SW/4 of Section 4, SE/4 of Section 5, NE/4 of Section 8, & NW/4 of Section 9  
T. 11 S. R. 31 E., NMPM  
Chaves County, NM**

6. Author/consulting company:

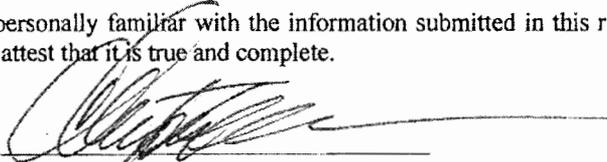
**Clayton M. Barnhill, PG, CMB Environmental & Geological Services, Inc.**

7. Date of report: **February 23, 2012**

**STATEMENT OF FAMILIARITY**

I, the undersigned, am personally familiar with the information submitted in this report and the attached documents and attest that it is true and complete.

Signature:



Name:

Clayton M. Barnhill, PG

Affiliation:

CMB Environmental and Geological Services, Inc.

Title:

Sr. / Principal Geologist

Certified Scientist #:

0246, State of Wyoming Professional Geologist 3072, exp. 12/31/12

Date:

02/23/2012

## **I. INTRODUCTION**

CMB Environmental and Geological Services Inc., on behalf of Gandy Marley Inc., the owner/operator of the Gandy Marley Inc., Landfarm located in the SW/4 of Section 4, SE/4 of Section 5, NE/4 of Section 8, & NW/4 of Section 9, Township 11 South, Range 31 East, Chaves County, New Mexico, has prepared this annual monitoring report in accordance with conditions set forth in Commercial Landfarm Permit Number NM-01-0019 (Gandy Marley Inc.), approved by the New Mexico Energy, Minerals, & Natural Resources Department Oil Conservation Division (NMOCD) Environmental Bureau on January 17, 2006.

The Gandy Marley Inc, Commercial Landfarm is located approximately 33 miles northwest of Tatum, NM in Sections 4, 5, 8 & 9, T. 11 S. R. 31 E., Chaves County, New Mexico (Figure 1). In August of 2000, the New Mexico Energy, Minerals, & Natural Resources Department Oil Conservation Division (NMOCD) Environmental Bureau approved a Commercial Landfarm Permit NM-01-0019. A new permit was submitted and approved on January 17, 2006 NM-01-0019. The commercial landfarm is being managed in accordance with the NMOCD approved Commercial Landfarm Permit NM-01-0019. Received soils on the landfarm are deposited in bermed cells in six-inch lifts and disked on a regular basis to enhance aeration. Groundwater below the site is at a depth between 122.62' foot (MW-2) and 130.32' foot (MW-1) below the top of casing of both monitor wells. Groundwater beneath the site has a total dissolved solids concentration of approximately 8970 milligrams per liter.

### **A. Scope of Work**

The approved scope of work for the annual report for yearend monitoring of the year 2011 consists of collecting confirmation soil samples beneath all site cells actively landfarmed or previously active, analyzing the subsurface soil samples for total petroleum hydrocarbons (TPH), BTEX, Hydroxide Alkalinity, Carbonate Alkalinity, Bicarbonate Alkalinity, Chloride, Specific Conductance, pH, Total Calcium, Total Magnesium, Total Potassium, Total Sodium, Sulfate, and TCLP 8 Metals, and then produce a map showing the sample locations, and compiling and reporting data or analyses that demonstrate the media located in the remediation cell has been remediated to an acceptable level by the NMOCD Commercial Landfarm Permit NM-01-0019.

The soil sampling adequately monitored the vadose zone beneath the facility. Table 1 contains Trace Analysis Lab Sample Summary Reports of cell soil samples taken beneath all landfarm cells. Appendix 3 contains the complete analytical results for soils sampled in these Cells. A site facility map is plotted in figure 1. Soil sample locations, as per GPS Coordinates, are plotted in figure 2

The sampling protocol for the monitoring activities can be found in Appendix 1. Appendix 2 contains field notes with GPS Coordinates of sample points for this monitoring event. Laboratory analysis reports of soil samples are in Appendix 3.

### **B. Annual Highlights**

Annual Year End Soil Sampling for Year 2011 was performed on January 31, 2012. This Year End 2011 monitoring activities include the following:

- Collection of one Remediation Cell Soil samples from all active and previously active landfarm remediation cells for laboratory analysis of the parameters outlined in section (A) above.
- Gauging Leak Detection Monitors of Evaporation Pond # 1 with a Heron Interface Probe.
- Preparation of this report.

## **ACTIVITIES PERFORMED DURING THIS YEAR END SAMPLING EVENT**

### **C. Monitoring Activities**

Landfarm Remediation cell soil samples were collected beneath the remediation cells and submitted to Trace Analysis Laboratory, located in Lubbock Texas and were analyzed for TPH using EPA Method 418.1, BTEX using EPA Method 8021B, Hydroxide Alkalinity, Carbonate Alkalinity, Bicarbonate Alkalinity, Chloride, Specific Conductance, pH, Total Calcium, Total Magnesium, Total Potassium, Total Sodium, Sulfate, and TCLP 8 Metals.

The soil sampling adequately monitored the vadose zone beneath the facility. Field parameters included a lithologic description of the soil samples, and GPS location coordinates of the soil samples. Field Notes containing this information are found in Appendix 2. Soil Sample laboratory summary results are located in Table 1. Laboratory analysis reports and chain of custody forms are in Appendix 3.

## **II. SUMMARY AND CONCLUSIONS**

### **A. Assessment of Remediation Activities:**

Gandy Marley Inc. has demonstrated in the year 2011 that they are highly effective at managing and remediating soils and operating a professional commercial landfarm facility.

Analyses from a soil sample of the remediated soils in all Landfarm Cells show the remediated soils in all cells to contain less than <0.02 mg/Kg BTEX, and acceptable TPH concentrations of  $\leq$  52.3 mg/Kg TPH, Chloride concentrations are below 250 mg/Kg in all cells with the exception of Cell #'s 1,2,3,4,5,7,9,13,14,15,16, & 17. Cells with elevated chloride concentrations are cells which previously accepted salt contaminated soils and drilling mud produced from oil and gas activities in northern Lea and Chaves counties, New Mexico. Drilling mud is a RCRA Exempt waste, but is normally high in chloride concentrations.

Gandy-Marley Inc has engineered and lined certain cells to allow for the acceptance and disposal of soils with high chloride concentrations.

Perched groundwater below the site is at a depth of 122' feet to 130' feet below ground surface, and has a total dissolved solids concentration of approximately 8970 milligrams per liter.

The vadose zone beneath the facility has been adequately monitored by the subsurface soil samples collected beneath each cell in compliance with WQCC Regulation 3107. There has been no leaching of contaminated media into the vadose zone beneath the remediation cells.

A Solinst interface probe was lowered down to total depth of the PVC piping of the leak detection in evaporation pond # 1. No fluids or leaks were detected by the interface probe.

**LIST OF FIGURES**

| <b>Figure</b> |   | <b>Included</b> | <b>N/A</b> |
|---------------|---|-----------------|------------|
| 1             | Site Map / Topographic Map with cell locations plotted      | X               |            |
| 2             | Topographic Map with sample locations , as per GPS, plotted | X               |            |

**LIST OF TABLES**

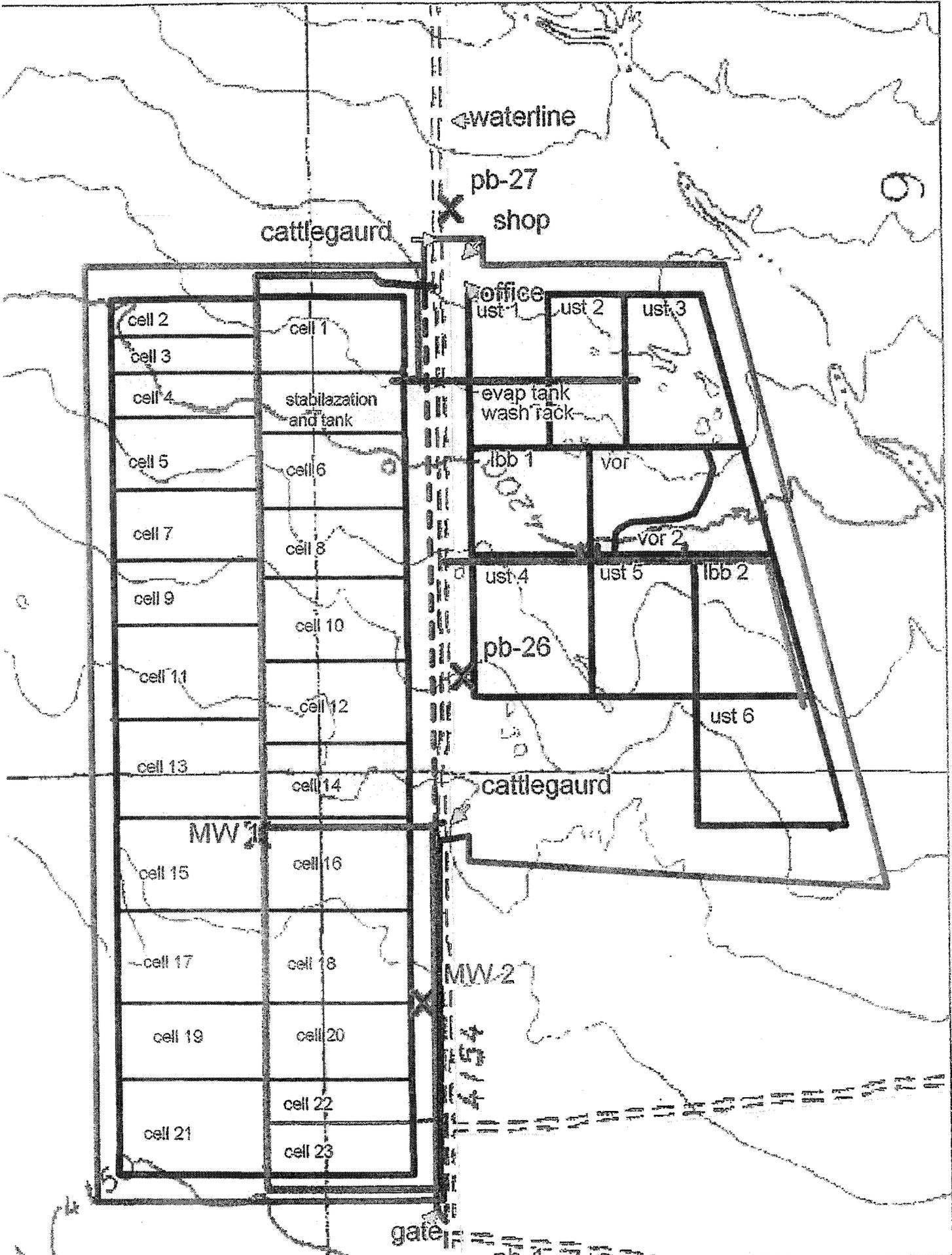
| Table   | Included | N/A |
|---|----------|-----|
| 1 Lab Analysis Summary Reports of Cell Soil Samples | X        |     |

**LIST OF APPENDICES**

| Appendix                                       | Included | N/A |
|--|----------|-----|
| 1 Sampling Protocol                            | X        |     |
| 2 Field Notes /with GPS Coordinates of samples | X        |     |
| 3 Laboratory Reports                           | X        |     |

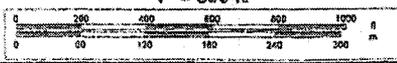
Site Name: Gandy Marley Landfarm  
Commercial Landfarm Permit NM-01-0019  
Report Date: February 23, 2012

## **Figures:**



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Scale 1 : 7,200  
1" = 600 ft



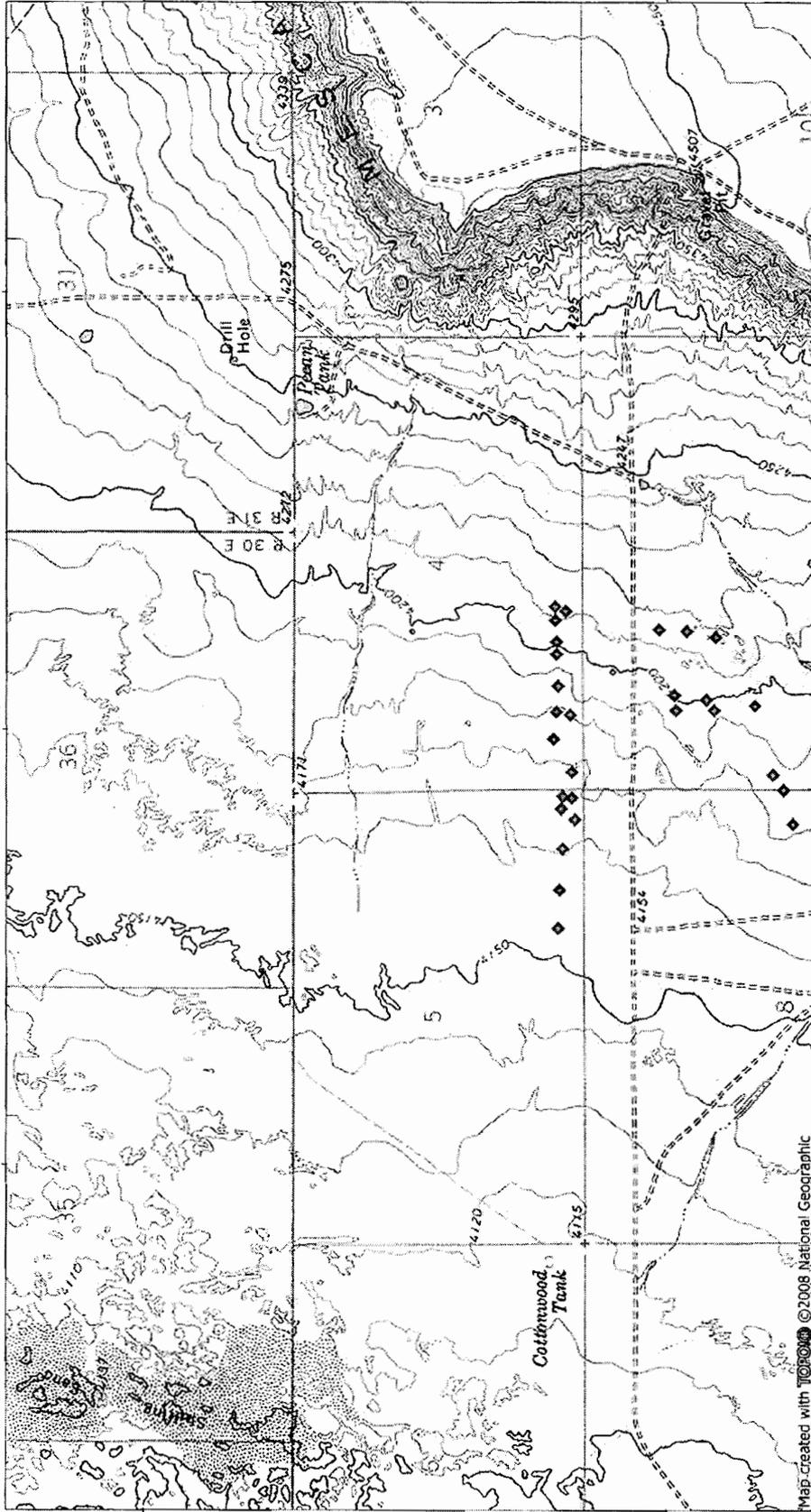
TR 041 8.0"E

TOPO! map printed on 02/23/12 from TOPO Map of Fourth Quarter Sample Locations 01/31/2012

WGS84 103°49'00" W

103°50'00" W

103°51'00" W



33°24'00" N

33°23'00" N

33°24'00" N

33°23'00" N

Map created with  ©2008 National Geographic

103°51'00" W

103°50'00" W

WGS84 103°49'00" W

TN 7 1/2" MN

7 1/2°

09/11/12



**NATIONAL  
GEOGRAPHIC**

Site Name: Gandy Marley Landfarm  
Commercial Landfarm Permit NM-01-0019  
Report Date: February 23, 2012

## **Tables:**

## Summary Report

Bret Riley  
Gandy Marley Inc.  
Box 1658  
Roswell, NM 88202

Report Date: February 22, 2012

Work Order: 12020326



Project Location: Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM  
Project Name: GMI Landfarm  
Project Number: 4th Qtr. 2011/Year End Soil Sampling

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|--------|-------------|--------|------------|------------|---------------|
| 288284 | Cell 1      | soil   | 2012-01-31 | 14:35      | 2012-02-03    |
| 288285 | Cell 2      | soil   | 2012-01-31 | 14:40      | 2012-02-03    |
| 288286 | Cell 3      | soil   | 2012-01-31 | 14:45      | 2012-02-03    |
| 288287 | Cell 4      | soil   | 2012-01-31 | 14:50      | 2012-02-03    |
| 288288 | Cell 5      | soil   | 2012-01-31 | 14:58      | 2012-02-03    |
| 288289 | Cell 7      | soil   | 2012-01-31 | 15:04      | 2012-02-03    |
| 288290 | Cell 9      | soil   | 2012-01-31 | 15:09      | 2012-02-03    |
| 288291 | Cell 10     | soil   | 2012-01-31 | 15:13      | 2012-02-03    |
| 288292 | Cell 11     | soil   | 2012-01-31 | 15:20      | 2012-02-03    |
| 288293 | Cell 12     | soil   | 2012-01-31 | 15:27      | 2012-02-03    |
| 288294 | Cell 13     | soil   | 2012-01-31 | 15:32      | 2012-02-03    |
| 288295 | Cell 14     | soil   | 2012-01-31 | 15:37      | 2012-02-03    |
| 288296 | Cell 15     | soil   | 2012-01-31 | 15:43      | 2012-02-03    |
| 288297 | Cell 16     | soil   | 2012-01-31 | 15:48      | 2012-02-03    |
| 288298 | Cell 17     | soil   | 2012-01-31 | 15:54      | 2012-02-03    |
| 288299 | Cell 19     | soil   | 2012-01-31 | 16:00      | 2012-02-03    |
| 288300 | Cell 21     | soil   | 2012-01-31 | 16:05      | 2012-02-03    |

| Sample - Field Code | BTEX               |                    |                         |                   | MTBE            | TPH 418.1        |
|---------------------|--------------------|--------------------|-------------------------|-------------------|-----------------|------------------|
|                     | Benzene<br>(mg/Kg) | Toluene<br>(mg/Kg) | Ethylbenzene<br>(mg/Kg) | Xylene<br>(mg/Kg) | MTBE<br>(mg/Kg) | TRPHC<br>(mg/Kg) |
| 288284 - Cell 1     | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                 | <10.0            |
| 288285 - Cell 2     | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                 | <10.0            |
| 288286 - Cell 3     | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                 | <10.0            |
| 288287 - Cell 4     | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                 | <b>12.4</b>      |
| 288288 - Cell 5     | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                 | <b>13.6</b>      |
| 288289 - Cell 7     | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                 | <10.0            |
| 288290 - Cell 9     | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                 | <10.0            |
| 288291 - Cell 10    | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                 | <10.0            |

continued ...

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| Sample - Field Code | Benzene<br>(mg/Kg) | Toluene<br>(mg/Kg) | BTEX                    |                   | MTBE<br>MTBE<br>(mg/Kg) | TPH 418.1<br>TRPHC<br>(mg/Kg) |
|---------------------|--------------------|--------------------|-------------------------|-------------------|-------------------------|-------------------------------|
|                     |                    |                    | Ethylbenzene<br>(mg/Kg) | Xylene<br>(mg/Kg) |                         |                               |
| 288292 - Cell 11    | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                         | <10.0                         |
| 288293 - Cell 12    | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                         | <10.0                         |
| 288294 - Cell 13    | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                         | <10.0                         |
| 288295 - Cell 14    | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                         | <10.0                         |
| 288296 - Cell 15    | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                         | <10.0                         |
| 288297 - Cell 16    | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                         | <10.0                         |
| 288298 - Cell 17    | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                         | <10.0                         |
| 288299 - Cell 19    | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                         | <b>52.3</b>                   |
| 288300 - Cell 21    | <0.0200            | <0.0200            | <0.0200                 | <0.0200           |                         | <b>24.0</b>                   |

**Sample: 288284 - Cell 1**

| Param                  | Flag | Result        | Units          | RL    |
|------------------------|------|---------------|----------------|-------|
| Hydroxide Alkalinity   |      | <1.00         | mg/Kg as CaCo3 | 1     |
| Carbonate Alkalinity   |      | <b>10.0</b>   | mg/Kg as CaCo3 | 1     |
| Bicarbonate Alkalinity |      | <b>2050</b>   | mg/Kg as CaCo3 | 4     |
| Total Alkalinity       |      | <b>2060</b>   | mg/Kg as CaCo3 | 4     |
| Chloride               | Qs   | <b>437</b>    | mg/Kg          | 2     |
| Specific Conductance   |      | <b>1260</b>   | uMHOS/cm       |       |
| pH                     |      | <b>8.35</b>   | s.u.           | 2     |
| Total Calcium          |      | <b>130000</b> | mg/Kg          | 100   |
| Total Magnesium        |      | <b>2160</b>   | mg/Kg          | 100   |
| Total Potassium        |      | <b>694</b>    | mg/Kg          | 100   |
| Total Sodium           |      | <b>128</b>    | mg/Kg          | 100   |
| Sulfate                |      | <b>187</b>    | mg/Kg          | 2     |
| TCLP Silver            |      | <0.0500       | mg/L           | 0.05  |
| TCLP Arsenic           |      | <0.100        | mg/L           | 0.1   |
| TCLP Barium            |      | <b>0.221</b>  | mg/L           | 0.1   |
| TCLP Cadmium           |      | <0.0500       | mg/L           | 0.05  |
| TCLP Chromium          |      | <0.100        | mg/L           | 0.1   |
| TCLP Mercury           |      | <0.00500      | mg/L           | 0.005 |
| TCLP Lead              |      | <0.0500       | mg/L           | 0.05  |
| TCLP Selenium          |      | <0.200        | mg/L           | 0.2   |

**Sample: 288285 - Cell 2**

| Param                  | Flag | Result      | Units          | RL |
|------------------------|------|-------------|----------------|----|
| Hydroxide Alkalinity   |      | <1.00       | mg/Kg as CaCo3 | 1  |
| Carbonate Alkalinity   |      | <1.00       | mg/Kg as CaCo3 | 1  |
| Bicarbonate Alkalinity |      | <b>50.0</b> | mg/Kg as CaCo3 | 4  |
| Total Alkalinity       |      | <b>50.0</b> | mg/Kg as CaCo3 | 4  |
| Chloride               |      | <b>449</b>  | mg/Kg          | 2  |
| Specific Conductance   |      | <b>1410</b> | uMHOS/cm       |    |
| pH                     |      | <b>7.82</b> | s.u.           | 2  |

continued ...

*sample 288285 continued ...*

| Param           | Flag | Result   | Units | RL    |
|-----------------|------|----------|-------|-------|
| Total Calcium   |      | 8570     | mg/Kg | 100   |
| Total Magnesium |      | 2700     | mg/Kg | 100   |
| Total Potassium |      | 2140     | mg/Kg | 100   |
| Total Sodium    |      | 144      | mg/Kg | 100   |
| Sulfate         |      | 296      | mg/Kg | 2     |
| TCLP Silver     |      | <0.0500  | mg/L  | 0.05  |
| TCLP Arsenic    |      | <0.100   | mg/L  | 0.1   |
| TCLP Barium     |      | <0.100   | mg/L  | 0.1   |
| TCLP Cadmium    |      | <0.0500  | mg/L  | 0.05  |
| TCLP Chromium   |      | <0.100   | mg/L  | 0.1   |
| TCLP Mercury    |      | <0.00500 | mg/L  | 0.005 |
| TCLP Lead       |      | <0.0500  | mg/L  | 0.05  |
| TCLP Selenium   |      | <0.200   | mg/L  | 0.2   |

**Sample: 288286 - Cell 3**

| Param                  | Flag | Result   | Units          | RL    |
|------------------------|------|----------|----------------|-------|
| Hydroxide Alkalinity   |      | <1.00    | mg/Kg as CaCo3 | 1     |
| Carbonate Alkalinity   |      | <1.00    | mg/Kg as CaCo3 | 1     |
| Bicarbonate Alkalinity |      | 80.0     | mg/Kg as CaCo3 | 4     |
| Total Alkalinity       |      | 80.0     | mg/Kg as CaCo3 | 4     |
| Chloride               | Qs   | 587      | mg/Kg          | 2     |
| Specific Conductance   |      | 2110     | uMHOS/cm       |       |
| pH                     |      | 7.81     | s.u.           | 2     |
| Total Calcium          |      | 6260     | mg/Kg          | 100   |
| Total Magnesium        |      | 2440     | mg/Kg          | 100   |
| Total Potassium        |      | 1430     | mg/Kg          | 100   |
| Total Sodium           |      | 537      | mg/Kg          | 100   |
| Sulfate                |      | 236      | mg/Kg          | 2     |
| TCLP Silver            |      | <0.0500  | mg/L           | 0.05  |
| TCLP Arsenic           |      | <0.100   | mg/L           | 0.1   |
| TCLP Barium            |      | <0.100   | mg/L           | 0.1   |
| TCLP Cadmium           |      | <0.0500  | mg/L           | 0.05  |
| TCLP Chromium          |      | <0.100   | mg/L           | 0.1   |
| TCLP Mercury           |      | <0.00500 | mg/L           | 0.005 |
| TCLP Lead              |      | <0.0500  | mg/L           | 0.05  |
| TCLP Selenium          |      | <0.200   | mg/L           | 0.2   |

**Sample: 288287 - Cell 4**

| Param                  | Flag | Result | Units          | RL |
|------------------------|------|--------|----------------|----|
| Hydroxide Alkalinity   |      | <1.00  | mg/Kg as CaCo3 | 1  |
| Carbonate Alkalinity   |      | 20.0   | mg/Kg as CaCo3 | 1  |
| Bicarbonate Alkalinity |      | 740    | mg/Kg as CaCo3 | 4  |

*continued ...*

*sample 288287 continued ...*

| Param                | Flag | Result        | Units          | RL    |
|----------------------|------|---------------|----------------|-------|
| Total Alkalinity     |      | <b>760</b>    | mg/Kg as CaCo3 | 4     |
| Chloride             |      | <b>259</b>    | mg/Kg          | 2     |
| Specific Conductance |      | <b>1430</b>   | uMHOS/cm       |       |
| pH                   |      | <b>8.56</b>   | s.u.           | 2     |
| Total Calcium        |      | <b>202000</b> | mg/Kg          | 100   |
| Total Magnesium      |      | <b>2540</b>   | mg/Kg          | 100   |
| Total Potassium      |      | <b>300</b>    | mg/Kg          | 100   |
| Total Sodium         |      | <b>496</b>    | mg/Kg          | 100   |
| Sulfate              |      | <b>618</b>    | mg/Kg          | 2     |
| TCLP Silver          |      | <0.0500       | mg/L           | 0.05  |
| TCLP Arsenic         |      | <0.100        | mg/L           | 0.1   |
| TCLP Barium          |      | <0.100        | mg/L           | 0.1   |
| TCLP Cadmium         |      | <0.0500       | mg/L           | 0.05  |
| TCLP Chromium        |      | <0.100        | mg/L           | 0.1   |
| TCLP Mercury         |      | <0.00500      | mg/L           | 0.005 |
| TCLP Lead            |      | <0.0500       | mg/L           | 0.05  |
| TCLP Selenium        |      | <0.200        | mg/L           | 0.2   |

**Sample: 288288 - Cell 5**

| Param                  | Flag | Result       | Units          | RL    |
|------------------------|------|--------------|----------------|-------|
| Hydroxide Alkalinity   |      | <1.00        | mg/Kg as CaCo3 | 1     |
| Carbonate Alkalinity   |      | <1.00        | mg/Kg as CaCo3 | 1     |
| Bicarbonate Alkalinity |      | <b>110</b>   | mg/Kg as CaCo3 | 4     |
| Total Alkalinity       |      | <b>110</b>   | mg/Kg as CaCo3 | 4     |
| Chloride               | Qs   | <b>2100</b>  | mg/Kg          | 2     |
| Specific Conductance   |      | <b>3390</b>  | uMHOS/cm       |       |
| pH                     |      | <b>7.71</b>  | s.u.           | 2     |
| Total Calcium          |      | <b>96400</b> | mg/Kg          | 100   |
| Total Magnesium        |      | <b>2960</b>  | mg/Kg          | 100   |
| Total Potassium        |      | <b>1110</b>  | mg/Kg          | 100   |
| Total Sodium           |      | <b>920</b>   | mg/Kg          | 100   |
| Sulfate                |      | <b>392</b>   | mg/Kg          | 2     |
| TCLP Silver            |      | <0.0500      | mg/L           | 0.05  |
| TCLP Arsenic           |      | <0.100       | mg/L           | 0.1   |
| TCLP Barium            |      | <b>0.125</b> | mg/L           | 0.1   |
| TCLP Cadmium           |      | <0.0500      | mg/L           | 0.05  |
| TCLP Chromium          |      | <0.100       | mg/L           | 0.1   |
| TCLP Mercury           |      | <0.00500     | mg/L           | 0.005 |
| TCLP Lead              |      | <0.0500      | mg/L           | 0.05  |
| TCLP Selenium          |      | <0.200       | mg/L           | 0.2   |

**Sample: 288289 - Cell 7**

| Param                  | Flag | Result       | Units          | RL    |
|------------------------|------|--------------|----------------|-------|
| Hydroxide Alkalinity   |      | <1.00        | mg/Kg as CaCo3 | 1     |
| Carbonate Alkalinity   |      | <1.00        | mg/Kg as CaCo3 | 1     |
| Bicarbonate Alkalinity |      | <b>60.0</b>  | mg/Kg as CaCo3 | 4     |
| Total Alkalinity       |      | <b>60.0</b>  | mg/Kg as CaCo3 | 4     |
| Chloride               |      | <b>320</b>   | mg/Kg          | 2     |
| Specific Conductance   |      | <b>1120</b>  | uMHOS/cm       |       |
| pH                     |      | <b>7.76</b>  | s.u.           | 2     |
| Total Calcium          |      | <b>38600</b> | mg/Kg          | 100   |
| Total Magnesium        |      | <b>3710</b>  | mg/Kg          | 100   |
| Total Potassium        |      | <b>2340</b>  | mg/Kg          | 100   |
| Total Sodium           |      | <b>260</b>   | mg/Kg          | 100   |
| Sulfate                |      | <b>144</b>   | mg/Kg          | 2     |
| TCLP Silver            |      | <0.0500      | mg/L           | 0.05  |
| TCLP Arsenic           |      | <0.100       | mg/L           | 0.1   |
| TCLP Barium            |      | <b>0.316</b> | mg/L           | 0.1   |
| TCLP Cadmium           |      | <0.0500      | mg/L           | 0.05  |
| TCLP Chromium          |      | <0.100       | mg/L           | 0.1   |
| TCLP Mercury           |      | <0.00500     | mg/L           | 0.005 |
| TCLP Lead              |      | <0.0500      | mg/L           | 0.05  |
| TCLP Selenium          |      | <0.200       | mg/L           | 0.2   |

**Sample: 288290 - Cell 9**

| Param                  | Flag | Result       | Units          | RL    |
|------------------------|------|--------------|----------------|-------|
| Hydroxide Alkalinity   |      | <1.00        | mg/Kg as CaCo3 | 1     |
| Carbonate Alkalinity   |      | <1.00        | mg/Kg as CaCo3 | 1     |
| Bicarbonate Alkalinity |      | <b>100</b>   | mg/Kg as CaCo3 | 4     |
| Total Alkalinity       |      | <b>100</b>   | mg/Kg as CaCo3 | 4     |
| Chloride               |      | <b>31.3</b>  | mg/Kg          | 2     |
| Specific Conductance   |      | <b>435</b>   | uMHOS/cm       |       |
| pH                     |      | <b>8.16</b>  | s.u.           | 2     |
| Total Calcium          |      | <b>39400</b> | mg/Kg          | 100   |
| Total Magnesium        |      | <b>1830</b>  | mg/Kg          | 100   |
| Total Potassium        |      | <b>760</b>   | mg/Kg          | 100   |
| Total Sodium           |      | <100         | mg/Kg          | 100   |
| Sulfate                |      | <b>172</b>   | mg/Kg          | 2     |
| TCLP Silver            |      | <0.0500      | mg/L           | 0.05  |
| TCLP Arsenic           |      | <0.100       | mg/L           | 0.1   |
| TCLP Barium            |      | <b>0.316</b> | mg/L           | 0.1   |
| TCLP Cadmium           |      | <0.0500      | mg/L           | 0.05  |
| TCLP Chromium          |      | <0.100       | mg/L           | 0.1   |
| TCLP Mercury           |      | <0.00500     | mg/L           | 0.005 |
| TCLP Lead              |      | <0.0500      | mg/L           | 0.05  |
| TCLP Selenium          |      | <0.200       | mg/L           | 0.2   |

**Sample: 288291 - Cell 10**

| Param                  | Flag | Result   | Units          | RL    |
|------------------------|------|----------|----------------|-------|
| Hydroxide Alkalinity   |      | <1.00    | mg/Kg as CaCo3 | 1     |
| Carbonate Alkalinity   |      | 10.0     | mg/Kg as CaCo3 | 1     |
| Bicarbonate Alkalinity |      | 110      | mg/Kg as CaCo3 | 4     |
| Total Alkalinity       |      | 120      | mg/Kg as CaCo3 | 4     |
| Chloride               |      | 132      | mg/Kg          | 2     |
| Specific Conductance   |      | 590      | uMHOS/cm       |       |
| pH                     |      | 8.34     | s.u.           | 2     |
| Total Calcium          |      | 63200    | mg/Kg          | 100   |
| Total Magnesium        |      | 3670     | mg/Kg          | 100   |
| Total Potassium        |      | 977      | mg/Kg          | 100   |
| Total Sodium           |      | 302      | mg/Kg          | 100   |
| Sulfate                |      | 80.7     | mg/Kg          | 2     |
| TCLP Silver            |      | <0.0500  | mg/L           | 0.05  |
| TCLP Arsenic           |      | <0.100   | mg/L           | 0.1   |
| TCLP Barium            |      | 0.845    | mg/L           | 0.1   |
| TCLP Cadmium           |      | <0.0500  | mg/L           | 0.05  |
| TCLP Chromium          |      | <0.100   | mg/L           | 0.1   |
| TCLP Mercury           |      | <0.00500 | mg/L           | 0.005 |
| TCLP Lead              |      | <0.0500  | mg/L           | 0.05  |
| TCLP Selenium          |      | <0.200   | mg/L           | 0.2   |

**Sample: 288292 - Cell 11**

| Param                  | Flag | Result   | Units          | RL    |
|------------------------|------|----------|----------------|-------|
| Hydroxide Alkalinity   |      | <1.00    | mg/Kg as CaCo3 | 1     |
| Carbonate Alkalinity   |      | <1.00    | mg/Kg as CaCo3 | 1     |
| Bicarbonate Alkalinity |      | 120      | mg/Kg as CaCo3 | 4     |
| Total Alkalinity       |      | 120      | mg/Kg as CaCo3 | 4     |
| Chloride               |      | 120      | mg/Kg          | 2     |
| Specific Conductance   |      | 722      | uMHOS/cm       |       |
| pH                     |      | 8.09     | s.u.           | 2     |
| Total Calcium          |      | 165000   | mg/Kg          | 100   |
| Total Magnesium        |      | 2270     | mg/Kg          | 100   |
| Total Potassium        |      | 569      | mg/Kg          | 100   |
| Total Sodium           |      | 245      | mg/Kg          | 100   |
| Sulfate                |      | 432      | mg/Kg          | 2     |
| TCLP Silver            |      | <0.0500  | mg/L           | 0.05  |
| TCLP Arsenic           |      | <0.100   | mg/L           | 0.1   |
| TCLP Barium            |      | 1.35     | mg/L           | 0.1   |
| TCLP Cadmium           |      | <0.0500  | mg/L           | 0.05  |
| TCLP Chromium          |      | <0.100   | mg/L           | 0.1   |
| TCLP Mercury           |      | <0.00500 | mg/L           | 0.005 |
| TCLP Lead              |      | <0.0500  | mg/L           | 0.05  |
| TCLP Selenium          |      | <0.200   | mg/L           | 0.2   |

**Sample: 288293 - Cell 12**

| Param                  | Flag | Result       | Units          | RL    |
|------------------------|------|--------------|----------------|-------|
| Hydroxide Alkalinity   |      | <1.00        | mg/Kg as CaCo3 | 1     |
| Carbonate Alkalinity   |      | <b>20.0</b>  | mg/Kg as CaCo3 | 1     |
| Bicarbonate Alkalinity |      | <b>260</b>   | mg/Kg as CaCo3 | 4     |
| Total Alkalinity       |      | <b>280</b>   | mg/Kg as CaCo3 | 4     |
| Chloride               |      | <b>144</b>   | mg/Kg          | 2     |
| Specific Conductance   |      | <b>779</b>   | uMHOS/cm       |       |
| pH                     |      | <b>8.93</b>  | s.u.           | 2     |
| Total Calcium          |      | <b>2420</b>  | mg/Kg          | 100   |
| Total Magnesium        |      | <b>1160</b>  | mg/Kg          | 100   |
| Total Potassium        |      | <b>1310</b>  | mg/Kg          | 100   |
| Total Sodium           |      | <b>466</b>   | mg/Kg          | 100   |
| Sulfate                |      | <b>149</b>   | mg/Kg          | 2     |
| TCLP Silver            |      | <0.0500      | mg/L           | 0.05  |
| TCLP Arsenic           |      | <0.100       | mg/L           | 0.1   |
| TCLP Barium            |      | <b>0.561</b> | mg/L           | 0.1   |
| TCLP Cadmium           |      | <0.0500      | mg/L           | 0.05  |
| TCLP Chromium          |      | <0.100       | mg/L           | 0.1   |
| TCLP Mercury           |      | <0.00500     | mg/L           | 0.005 |
| TCLP Lead              |      | <0.0500      | mg/L           | 0.05  |
| TCLP Selenium          |      | <0.200       | mg/L           | 0.2   |

**Sample: 288294 - Cell 13**

| Param                  | Flag | Result       | Units          | RL    |
|------------------------|------|--------------|----------------|-------|
| Hydroxide Alkalinity   |      | <1.00        | mg/Kg as CaCo3 | 1     |
| Carbonate Alkalinity   |      | <b>10.0</b>  | mg/Kg as CaCo3 | 1     |
| Bicarbonate Alkalinity |      | <b>70.0</b>  | mg/Kg as CaCo3 | 4     |
| Total Alkalinity       |      | <b>80.0</b>  | mg/Kg as CaCo3 | 4     |
| Chloride               | Qs   | <b>575</b>   | mg/Kg          | 2     |
| Specific Conductance   |      | <b>1920</b>  | uMHOS/cm       |       |
| pH                     |      | <b>8.33</b>  | s.u.           | 2     |
| Total Calcium          |      | <b>4220</b>  | mg/Kg          | 0.5   |
| Total Magnesium        |      | <b>2030</b>  | mg/Kg          | 0.5   |
| Total Potassium        |      | <b>1920</b>  | mg/Kg          | 50    |
| Total Sodium           |      | <b>1290</b>  | mg/Kg          | 50    |
| Sulfate                |      | <b>249</b>   | mg/Kg          | 2     |
| TCLP Silver            |      | <0.0500      | mg/L           | 0.05  |
| TCLP Arsenic           |      | <0.100       | mg/L           | 0.1   |
| TCLP Barium            |      | <b>0.736</b> | mg/L           | 0.1   |
| TCLP Cadmium           |      | <0.0500      | mg/L           | 0.05  |
| TCLP Chromium          |      | <0.100       | mg/L           | 0.1   |
| TCLP Mercury           |      | <0.00500     | mg/L           | 0.005 |
| TCLP Lead              |      | <0.0500      | mg/L           | 0.05  |
| TCLP Selenium          |      | <0.200       | mg/L           | 0.2   |

**Sample: 288295 - Cell 14**

| Param                  | Flag | Result   | Units          | RL    |
|------------------------|------|----------|----------------|-------|
| Hydroxide Alkalinity   |      | <1.00    | mg/Kg as CaCo3 | 1     |
| Carbonate Alkalinity   |      | 20.0     | mg/Kg as CaCo3 | 1     |
| Bicarbonate Alkalinity |      | 500      | mg/Kg as CaCo3 | 4     |
| Total Alkalinity       |      | 520      | mg/Kg as CaCo3 | 4     |
| Chloride               |      | 323      | mg/Kg          | 2     |
| Specific Conductance   |      | 1380     | uMHOS/cm       |       |
| pH                     |      | 8.96     | s.u.           | 2     |
| Total Calcium          |      | 118000   | mg/Kg          | 0.5   |
| Total Magnesium        |      | 2020     | mg/Kg          | 0.5   |
| Total Potassium        |      | 530      | mg/Kg          | 50    |
| Total Sodium           |      | 7320     | mg/Kg          | 50    |
| Sulfate                |      | 106      | mg/Kg          | 2     |
| TCLP Silver            |      | <0.0500  | mg/L           | 0.05  |
| TCLP Arsenic           |      | <0.100   | mg/L           | 0.1   |
| TCLP Barium            |      | 1.29     | mg/L           | 0.1   |
| TCLP Cadmium           |      | <0.0500  | mg/L           | 0.05  |
| TCLP Chromium          |      | <0.100   | mg/L           | 0.1   |
| TCLP Mercury           |      | <0.00500 | mg/L           | 0.005 |
| TCLP Lead              |      | <0.0500  | mg/L           | 0.05  |
| TCLP Selenium          |      | <0.200   | mg/L           | 0.2   |

**Sample: 288296 - Cell 15**

| Param                  | Flag | Result   | Units          | RL    |
|------------------------|------|----------|----------------|-------|
| Hydroxide Alkalinity   |      | <1.00    | mg/Kg as CaCo3 | 1     |
| Carbonate Alkalinity   |      | <1.00    | mg/Kg as CaCo3 | 1     |
| Bicarbonate Alkalinity |      | 90.0     | mg/Kg as CaCo3 | 4     |
| Total Alkalinity       |      | 90.0     | mg/Kg as CaCo3 | 4     |
| Chloride               | Qs   | 878      | mg/Kg          | 2     |
| Specific Conductance   |      | 2150     | uMHOS/cm       |       |
| pH                     |      | 7.27     | s.u.           | 2     |
| Total Calcium          |      | 3460     | mg/Kg          | 0.5   |
| Total Magnesium        |      | 1400     | mg/Kg          | 0.5   |
| Total Potassium        |      | 1190     | mg/Kg          | 50    |
| Total Sodium           |      | 190      | mg/Kg          | 50    |
| Sulfate                |      | 103      | mg/Kg          | 2     |
| TCLP Silver            |      | <0.0500  | mg/L           | 0.05  |
| TCLP Arsenic           |      | <0.100   | mg/L           | 0.1   |
| TCLP Barium            |      | 1.04     | mg/L           | 0.1   |
| TCLP Cadmium           |      | <0.0500  | mg/L           | 0.05  |
| TCLP Chromium          |      | <0.100   | mg/L           | 0.1   |
| TCLP Mercury           |      | <0.00500 | mg/L           | 0.005 |
| TCLP Lead              |      | <0.0500  | mg/L           | 0.05  |
| TCLP Selenium          |      | <0.200   | mg/L           | 0.2   |

**Sample: 288297 - Cell 16**

| Param                  | Flag | Result       | Units          | RL    |
|------------------------|------|--------------|----------------|-------|
| Hydroxide Alkalinity   |      | <1.00        | mg/Kg as CaCo3 | 1     |
| Carbonate Alkalinity   |      | <1.00        | mg/Kg as CaCo3 | 1     |
| Bicarbonate Alkalinity |      | <b>50.0</b>  | mg/Kg as CaCo3 | 4     |
| Total Alkalinity       |      | <b>50.0</b>  | mg/Kg as CaCo3 | 4     |
| Chloride               | Qs   | <b>712</b>   | mg/Kg          | 2     |
| Specific Conductance   |      | <b>1330</b>  | uMHOS/cm       |       |
| pH                     |      | <b>7.82</b>  | s.u.           | 2     |
| Total Calcium          |      | <b>10400</b> | mg/Kg          | 0.5   |
| Total Magnesium        |      | <b>1150</b>  | mg/Kg          | 0.5   |
| Total Potassium        |      | <b>760</b>   | mg/Kg          | 50    |
| Total Sodium           |      | <b>270</b>   | mg/Kg          | 50    |
| Sulfate                |      | <b>245</b>   | mg/Kg          | 2     |
| TCLP Silver            |      | <0.0500      | mg/L           | 0.05  |
| TCLP Arsenic           |      | <0.100       | mg/L           | 0.1   |
| TCLP Barium            |      | <b>0.580</b> | mg/L           | 0.1   |
| TCLP Cadmium           |      | <0.0500      | mg/L           | 0.05  |
| TCLP Chromium          |      | <0.100       | mg/L           | 0.1   |
| TCLP Mercury           |      | <0.00500     | mg/L           | 0.005 |
| TCLP Lead              |      | <0.0500      | mg/L           | 0.05  |
| TCLP Selenium          |      | <0.200       | mg/L           | 0.2   |

**Sample: 288298 - Cell 17**

| Param                  | Flag | Result        | Units          | RL    |
|------------------------|------|---------------|----------------|-------|
| Hydroxide Alkalinity   |      | <1.00         | mg/Kg as CaCo3 | 1     |
| Carbonate Alkalinity   |      | <1.00         | mg/Kg as CaCo3 | 1     |
| Bicarbonate Alkalinity |      | <b>100</b>    | mg/Kg as CaCo3 | 4     |
| Total Alkalinity       |      | <b>100</b>    | mg/Kg as CaCo3 | 4     |
| Chloride               | Qs   | <b>880</b>    | mg/Kg          | 2     |
| Specific Conductance   |      | <b>2490</b>   | uMHOS/cm       |       |
| pH                     |      | <b>7.89</b>   | s.u.           | 2     |
| Total Calcium          |      | <b>136000</b> | mg/Kg          | 0.5   |
| Total Magnesium        |      | <b>3890</b>   | mg/Kg          | 0.5   |
| Total Potassium        |      | <b>1040</b>   | mg/Kg          | 50    |
| Total Sodium           |      | <b>596</b>    | mg/Kg          | 50    |
| Sulfate                |      | <b>217</b>    | mg/Kg          | 2     |
| TCLP Silver            |      | <0.0500       | mg/L           | 0.05  |
| TCLP Arsenic           |      | <0.100        | mg/L           | 0.1   |
| TCLP Barium            |      | <b>1.10</b>   | mg/L           | 0.1   |
| TCLP Cadmium           |      | <0.0500       | mg/L           | 0.05  |
| TCLP Chromium          |      | <0.100        | mg/L           | 0.1   |
| TCLP Mercury           |      | <0.00500      | mg/L           | 0.005 |
| TCLP Lead              |      | <0.0500       | mg/L           | 0.05  |
| TCLP Selenium          |      | <0.200        | mg/L           | 0.2   |

**Sample: 288299 - Cell 19**

| Param                  | Flag | Result   | Units          | RL    |
|------------------------|------|----------|----------------|-------|
| Hydroxide Alkalinity   |      | <1.00    | mg/Kg as CaCo3 | 1     |
| Carbonate Alkalinity   |      | <1.00    | mg/Kg as CaCo3 | 1     |
| Bicarbonate Alkalinity |      | 40.0     | mg/Kg as CaCo3 | 4     |
| Total Alkalinity       |      | 40.0     | mg/Kg as CaCo3 | 4     |
| Chloride               | Q*   | 2420     | mg/Kg          | 2     |
| Specific Conductance   |      | 3630     | uMHOS/cm       |       |
| pH                     |      | 7.56     | s.u.           | 2     |
| Total Calcium          |      | 5540     | mg/Kg          | 0.5   |
| Total Magnesium        |      | 1990     | mg/Kg          | 0.5   |
| Total Potassium        |      | 1470     | mg/Kg          | 50    |
| Total Sodium           |      | 1030     | mg/Kg          | 50    |
| Sulfate                |      | 219      | mg/Kg          | 2     |
| TCLP Silver            |      | <0.0500  | mg/L           | 0.05  |
| TCLP Arsenic           |      | <0.100   | mg/L           | 0.1   |
| TCLP Barium            |      | 0.525    | mg/L           | 0.1   |
| TCLP Cadmium           |      | <0.0500  | mg/L           | 0.05  |
| TCLP Chromium          |      | <0.100   | mg/L           | 0.1   |
| TCLP Mercury           |      | <0.00500 | mg/L           | 0.005 |
| TCLP Lead              |      | <0.0500  | mg/L           | 0.05  |
| TCLP Selenium          |      | <0.200   | mg/L           | 0.2   |

**Sample: 288300 - Cell 21**

| Param                  | Flag | Result   | Units          | RL    |
|------------------------|------|----------|----------------|-------|
| Hydroxide Alkalinity   |      | <1.00    | mg/Kg as CaCo3 | 1     |
| Carbonate Alkalinity   |      | <1.00    | mg/Kg as CaCo3 | 1     |
| Bicarbonate Alkalinity |      | 150      | mg/Kg as CaCo3 | 4     |
| Total Alkalinity       |      | 150      | mg/Kg as CaCo3 | 4     |
| Chloride               |      | 95.3     | mg/Kg          | 2     |
| Specific Conductance   |      | 204      | uMHOS/cm       |       |
| pH                     |      | 8.34     | s.u.           | 2     |
| Total Calcium          |      | 69700    | mg/Kg          | 0.5   |
| Total Magnesium        |      | 2080     | mg/Kg          | 0.5   |
| Total Potassium        |      | 654      | mg/Kg          | 50    |
| Total Sodium           |      | 50.3     | mg/Kg          | 50    |
| Sulfate                |      | 32.2     | mg/Kg          | 2     |
| TCLP Silver            |      | <0.0500  | mg/L           | 0.05  |
| TCLP Arsenic           |      | <0.100   | mg/L           | 0.1   |
| TCLP Barium            |      | 1.54     | mg/L           | 0.1   |
| TCLP Cadmium           |      | <0.0500  | mg/L           | 0.05  |
| TCLP Chromium          |      | <0.100   | mg/L           | 0.1   |
| TCLP Mercury           |      | <0.00500 | mg/L           | 0.005 |
| TCLP Lead              |      | <0.0500  | mg/L           | 0.05  |
| TCLP Selenium          |      | <0.200   | mg/L           | 0.2   |

Site Name: Gandy Marley Landfarm  
Commercial Landfarm Permit NM-01-0019  
Report Date: February 23, 2012

# **Appendix 1**

## **Sampling Protocol**

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## Appendix 1 Sampling Protocol

Site Remediation cells were checked for the presence of phase-separated hydrocarbons (PSH).

A Gandy Marley Inc. owned and operated front end loader dug down with the loader bucket 18" inches to 24" inches below the surface of the remediation cell. An 8" inch loader mounted drill auger was then used to create a soil boring below the exposed soil surface to a depth of 36" inches below the original ground surface of the remediation cell. An AMS 3" inch Stainless steel hand auger was then used by Clayton M. Barnhill, PG (CMB Environmental & Geological Services Inc.) to collect the soil samples beneath the remediation cells. The AMS stainless steel auger and the 8" inch drilling auger were de-contaminated between sample points by cleaning with a brush in an Alconox soap solution and then rinsing with potable water. New Nitrile gloves were changed at each sample point to avoid cross contamination. Borings were backfilled with impermeable bentonite pellets and hydrated.

Samples analyzed for TPH 418.1, BTEX 8021, Hydroxide Alkalinity, Carbonate Alkalinity, Bicarbonate Alkalinity, Chloride, Specific Conductance, pH, Total Calcium, Total Magnesium, Total Potassium, Total Sodium, Sulfate, and TCLP 8 Metals. Soil Samples were collected in two 4 ounce glass jars containing no preservative.

Samples were immediately placed on ice in an insulated cooler and were delivered to the Trace Analysis Laboratory, located in Lubbock, Texas, for analysis. Chain of custody documentation accompanied the samples at all times.

## **Appendix 1 Sampling Protocol**

Site Remediation cells were checked for the presence of phase-separated hydrocarbons (PSH).

A Gandy Marley Inc. owned and operated front end loader dug down with the loader bucket 18" inches to 24" inches below the surface of the remediation cell. An 8" inch loader mounted drill auger was then used to create a soil boring below the exposed soil surface to a depth of 36" inches below the original ground surface of the remediation cell. An AMS 3" inch Stainless steel hand auger was then used by Clayton M. Barnhill, PG (CMB Environmental & Geological Services Inc.) to collect the soil samples beneath the remediation cells. The AMS stainless steel auger and the 8" inch drilling auger were de-contaminated between sample points by cleaning with a brush in an Alconox soap solution and then rinsing with potable water. New Nitrile gloves were changed at each sample point to avoid cross contamination. Borings were backfilled with impermeable bentonite pellets and hydrated.

Samples analyzed for TPH 418.1, BTEX 8021. Soil Samples were collected in one 4 ounce glass jar containing no preservative.

Samples were immediately placed on ice in an insulated cooler and were delivered to the Trace Analysis Laboratory, located in Lubbock, Texas, for analysis. Chain of custody documentation accompanied the samples at all times.

Site Name: Gandy Marley Landfarm  
Commercial Landfarm Permit NM-01-0019  
Report Date: February 23, 2012

## **Appendix 2**

### **Field Notes**

112  
 Location: GMI Landform  
 Date: 01/31/2011  
 Project / Client: Year End Soil Sampling 2011  
 GMI Landform By: CMB Environmental & Geologica Services Inc. Page 1 of 2

| Cell #  | Time  | GPS Coordinates       | Remarks   |
|---------|-------|-----------------------|---|
| Cell 1  | 14:35 | 33.38656<br>103.82880 | Tan brown clayey sand<br>No odor or stain<br>0 3' BGS |
| Cell 2  | 14:40 | 33.38687<br>103.82867 | Red clayey sand<br>No odor or stain<br>0 3' BGS       |
| Cell 3  | 14:45 | 33.38688<br>103.82919 | Tan brown clayey sand<br>No odor or stain<br>0 3' BGS |
| Cell 4  | 14:50 | 33.38685<br>103.82995 | Tan brown clayey sand<br>No odor or stain<br>0 3' BGS |
| Cell 5  | 14:58 | 33.38686<br>103.83047 | Tan brown clayey sand<br>No odor or stain<br>0 3' BGS |
| Cell 7  | 15:04 | 33.38681<br>103.83167 | Brown clayey sand<br>Damp. Disturbed<br>0 3' BGS      |
| Cell 9  | 15:09 | 33.38683<br>103.83265 | Tan brown clayey sand<br>No odor or stain<br>0 3' BGS |
| Cell 10 | 15:13 | 33.38642<br>103.83274 | Same as above<br>No odor or stain<br>0 3' BGS         |

113  
 Location: GMI Landform  
 Date: 01/31/2011  
 Project / Client: Year End Soil Sampling 2011  
 GMI Landform By: CMB Environmental & Geologica Services Inc. Page 2 of 2

| Cell #  | Time  | GPS Coordinates       | Remarks   |
|---------|-------|-----------------------|---|
| Cell 11 | 15:20 | 33.38696<br>103.83371 | Tan brown clayey sand<br>No odor or stain<br>0 3' BGS     |
| Cell 12 | 15:27 | 33.38638<br>103.83496 | Red clayey sand<br>No odor or stain<br>0 3' BGS           |
| Cell 13 | 15:32 | 33.38663<br>103.83589 | Same as above   |
| Cell 14 | 15:37 | 33.38633<br>103.83598 | Gray brown clayey sand<br>Decaying hydrocarbon<br>No odor |
| Cell 15 | 15:43 | 33.38671<br>103.83640 | Red clayey sand<br>No odor or stain<br>0 3' BGS           |
| Cell 16 | 15:48 | 33.38625<br>103.83678 | Same as above   |
| Cell 17 | 15:54 | 33.38664<br>103.83791 | Tan brown clayey sand<br>White carbonate<br>Moist Red     |
| Cell 19 | 16:00 | 33.38672<br>103.83949 | Clayey sand<br>No odor or stain<br>0 3' BGS               |
| Cell 21 | 16:05 | 33.38680<br>103.84093 | Tan brown clayey sand                                     |

TOPO! GPS Data Format DegMinSec NAD83 ElevFeet Local-Time

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WP0003,33,23,13,-103,49,45,4232,01/31/2012,07:47:47,  
WP0004,33,23,13,-103,49,48,4186,01/31/2012,07:53:09,  
WP0005,33,23,13,-103,49,50,4203,01/31/2012,07:58:42,  
WP0006,33,23,13,-103,49,54,4193,01/31/2012,08:04:35,  
WP0007,33,23,13,-103,49,58,4170,01/31/2012,08:10:30,  
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WP0017,33,23,12,-103,50,27,4180,01/31/2012,09:10:44,  
WP0018,33,23,1,-103,49,46,4242,01/31/2012,09:21:53,  
WP0019,33,22,58,-103,49,46,4213,01/31/2012,09:25:50,  
WP0020,33,22,54,-103,49,47,4229,01/31/2012,09:29:50,  
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WP0022,33,22,59,-103,49,55,4180,01/31/2012,09:40:13,  
WP0023,33,22,55,-103,49,56,4213,01/31/2012,09:44:49,  
WP0024,33,22,55,-103,49,57,4180,01/31/2012,09:49:23,

WP0025,33,22,50,-103,49,57,4190,01/31/2012,09:55:01,

WP0026,33,22,48,-103,50,6,4183,01/31/2012,10:03:19,

WP0027,33,22,46,-103,50,9,4177,01/31/2012,10:06:57,

WP0028,33,22,45,-103,50,13,4173,01/31/2012,10:10:46,

Site Name: Gandy Marley Landfarm  
Commercial Landfarm Permit NM-01-0019  
Report Date: February 23, 2012

## **Appendix 3**



6701 Aberdeen Avenue, Suite 9      Lubbock, Texas 79424      800-378-1296      806-794-1296      FAX 806-794-1298  
200 East Sunset Road, Suite E      El Paso, Texas 79922      915-585-3443      FAX 915-585-4944  
5002 Basin Street, Suite A1      Midland, Texas 79703      432-689-6301      FAX 432-689-6313  
(BioAquatic) 2501 Mayes Rd., Suite 100      Carrollton, Texas 75006      972-242-7750  
E-Mail: lab@traceanalysis.com      WEB: www.traceanalysis.com

## Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

## Analytical and Quality Control Report

Bret Riley  
Gandy Marley Inc.  
Box 1658  
Roswell, NM, 88202

Report Date: February 22, 2012

Work Order: 12020326



Project Location: Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM  
Project Name: GMI Landfarm  
Project Number: 4th Qtr. 2011/Year End Soil Sampling

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

| Sample | Description | Matrix | Date Taken | Time Taken | Date Received |
|--------|-------------|--------|------------|------------|---------------|
| 288284 | Cell 1      | soil   | 2012-01-31 | 14:35      | 2012-02-03    |
| 288285 | Cell 2      | soil   | 2012-01-31 | 14:40      | 2012-02-03    |
| 288286 | Cell 3      | soil   | 2012-01-31 | 14:45      | 2012-02-03    |
| 288287 | Cell 4      | soil   | 2012-01-31 | 14:50      | 2012-02-03    |
| 288288 | Cell 5      | soil   | 2012-01-31 | 14:58      | 2012-02-03    |
| 288289 | Cell 7      | soil   | 2012-01-31 | 15:04      | 2012-02-03    |
| 288290 | Cell 9      | soil   | 2012-01-31 | 15:09      | 2012-02-03    |
| 288291 | Cell 10     | soil   | 2012-01-31 | 15:13      | 2012-02-03    |
| 288292 | Cell 11     | soil   | 2012-01-31 | 15:20      | 2012-02-03    |
| 288293 | Cell 12     | soil   | 2012-01-31 | 15:27      | 2012-02-03    |
| 288294 | Cell 13     | soil   | 2012-01-31 | 15:32      | 2012-02-03    |
| 288295 | Cell 14     | soil   | 2012-01-31 | 15:37      | 2012-02-03    |
| 288296 | Cell 15     | soil   | 2012-01-31 | 15:43      | 2012-02-03    |
| 288297 | Cell 16     | soil   | 2012-01-31 | 15:48      | 2012-02-03    |
| 288298 | Cell 17     | soil   | 2012-01-31 | 15:54      | 2012-02-03    |
| 288299 | Cell 19     | soil   | 2012-01-31 | 16:00      | 2012-02-03    |
| 288300 | Cell 21     | soil   | 2012-01-31 | 16:05      | 2012-02-03    |

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 95 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

A handwritten signature in black ink that reads "Michael Abel". The signature is written in a cursive, slightly slanted style.

---

Dr. Blair Leftwich, Director  
Dr. Michael Abel, Project Manager

# Report Contents

|   |           |
|---|-----------|
| <b>Case Narrative</b>                       | <b>6</b>  |
| <b>Analytical Report</b>                    | <b>8</b>  |
| Sample 288284 (Cell 1) . . . . .            | 8         |
| Sample 288285 (Cell 2) . . . . .            | 11        |
| Sample 288286 (Cell 3) . . . . .            | 13        |
| Sample 288287 (Cell 4) . . . . .            | 16        |
| Sample 288288 (Cell 5) . . . . .            | 19        |
| Sample 288289 (Cell 7) . . . . .            | 22        |
| Sample 288290 (Cell 9) . . . . .            | 25        |
| Sample 288291 (Cell 10) . . . . .           | 28        |
| Sample 288292 (Cell 11) . . . . .           | 31        |
| Sample 288293 (Cell 12) . . . . .           | 34        |
| Sample 288294 (Cell 13) . . . . .           | 37        |
| Sample 288295 (Cell 14) . . . . .           | 40        |
| Sample 288296 (Cell 15) . . . . .           | 43        |
| Sample 288297 (Cell 16) . . . . .           | 46        |
| Sample 288298 (Cell 17) . . . . .           | 49        |
| Sample 288299 (Cell 19) . . . . .           | 52        |
| Sample 288300 (Cell 21) . . . . .           | 55        |
| <b>Method Blanks</b>                        | <b>59</b> |
| QC Batch 88302 - Method Blank (1) . . . . . | 59        |
| QC Batch 88349 - Method Blank (1) . . . . . | 59        |
| QC Batch 88350 - Method Blank (1) . . . . . | 59        |
| QC Batch 88394 - Method Blank (1) . . . . . | 60        |
| QC Batch 88395 - Method Blank (1) . . . . . | 60        |
| QC Batch 88427 - Method Blank (1) . . . . . | 60        |
| QC Batch 88429 - Method Blank (1) . . . . . | 61        |
| QC Batch 88454 - Method Blank (1) . . . . . | 61        |
| QC Batch 88504 - Method Blank (1) . . . . . | 61        |
| QC Batch 88528 - Method Blank (1) . . . . . | 62        |
| QC Batch 88529 - Method Blank (1) . . . . . | 62        |
| QC Batch 88553 - Method Blank (1) . . . . . | 62        |
| QC Batch 88553 - Method Blank (1) . . . . . | 62        |
| QC Batch 88554 - Method Blank (1) . . . . . | 63        |
| QC Batch 88554 - Method Blank (1) . . . . . | 63        |
| QC Batch 88591 - Method Blank (1) . . . . . | 63        |
| QC Batch 88601 - Method Blank (1) . . . . . | 63        |
| QC Batch 88601 - Method Blank (1) . . . . . | 64        |
| QC Batch 88776 - Method Blank (1) . . . . . | 64        |
| QC Batch 88349 - Duplicate (1) . . . . .    | 64        |
| QC Batch 88350 - Duplicate (1) . . . . .    | 65        |
| QC Batch 88351 - Duplicate (1) . . . . .    | 65        |
| QC Batch 88352 - Duplicate (1) . . . . .    | 65        |
| QC Batch 88504 - Duplicate (1) . . . . .    | 65        |

|  |           |
|--|-----------|
| QC Batch 88776 - Duplicate (1) . . . . . | 66        |
| <b>Laboratory Control Spikes</b>         | <b>67</b> |
| QC Batch 88302 - LCS (1) . . . . .       | 67        |
| QC Batch 88394 - LCS (1) . . . . .       | 67        |
| QC Batch 88395 - LCS (1) . . . . .       | 68        |
| QC Batch 88427 - LCS (1) . . . . .       | 68        |
| QC Batch 88429 - LCS (1) . . . . .       | 69        |
| QC Batch 88454 - LCS (1) . . . . .       | 70        |
| QC Batch 88528 - LCS (1) . . . . .       | 70        |
| QC Batch 88529 - LCS (1) . . . . .       | 70        |
| QC Batch 88553 - LCS (1) . . . . .       | 71        |
| QC Batch 88553 - LCS (1) . . . . .       | 71        |
| QC Batch 88554 - LCS (1) . . . . .       | 71        |
| QC Batch 88554 - LCS (1) . . . . .       | 72        |
| QC Batch 88591 - LCS (1) . . . . .       | 72        |
| QC Batch 88601 - LCS (1) . . . . .       | 73        |
| QC Batch 88601 - LCS (1) . . . . .       | 73        |
| QC Batch 88394 - MS (1) . . . . .        | 74        |
| QC Batch 88395 - MS (1) . . . . .        | 74        |
| QC Batch 88427 - MS (1) . . . . .        | 74        |
| QC Batch 88429 - MS (1) . . . . .        | 75        |
| QC Batch 88454 - MS (1) . . . . .        | 76        |
| QC Batch 88528 - MS (1) . . . . .        | 76        |
| QC Batch 88529 - MS (1) . . . . .        | 77        |
| QC Batch 88553 - MS (1) . . . . .        | 77        |
| QC Batch 88553 - MS (1) . . . . .        | 77        |
| QC Batch 88554 - MS (1) . . . . .        | 78        |
| QC Batch 88554 - MS (1) . . . . .        | 78        |
| QC Batch 88591 - MS (1) . . . . .        | 78        |
| QC Batch 88601 - MS (1) . . . . .        | 79        |
| QC Batch 88601 - MS (1) . . . . .        | 79        |
| <b>Calibration Standards</b>             | <b>81</b> |
| QC Batch 88302 - CCV (1) . . . . .       | 81        |
| QC Batch 88302 - CCV (2) . . . . .       | 81        |
| QC Batch 88302 - CCV (3) . . . . .       | 81        |
| QC Batch 88349 - ICV (1) . . . . .       | 81        |
| QC Batch 88349 - CCV (1) . . . . .       | 82        |
| QC Batch 88350 - ICV (1) . . . . .       | 82        |
| QC Batch 88350 - CCV (1) . . . . .       | 82        |
| QC Batch 88351 - ICV (1) . . . . .       | 83        |
| QC Batch 88351 - CCV (1) . . . . .       | 83        |
| QC Batch 88352 - ICV (1) . . . . .       | 83        |
| QC Batch 88352 - CCV (1) . . . . .       | 83        |
| QC Batch 88394 - ICV (1) . . . . .       | 84        |
| QC Batch 88394 - CCV (1) . . . . .       | 84        |
| QC Batch 88395 - ICV (1) . . . . .       | 84        |

|                                    |    |
|------------------------------------|----|
| QC Batch 88395 - CCV (1) . . . . . | 85 |
| QC Batch 88427 - ICV (1) . . . . . | 85 |
| QC Batch 88427 - CCV (1) . . . . . | 85 |
| QC Batch 88429 - ICV (1) . . . . . | 85 |
| QC Batch 88429 - CCV (1) . . . . . | 86 |
| QC Batch 88454 - CCV (1) . . . . . | 86 |
| QC Batch 88454 - CCV (2) . . . . . | 86 |
| QC Batch 88454 - CCV (3) . . . . . | 87 |
| QC Batch 88454 - CCV (4) . . . . . | 87 |
| QC Batch 88504 - ICV (1) . . . . . | 87 |
| QC Batch 88504 - CCV (1) . . . . . | 87 |
| QC Batch 88528 - CCV (1) . . . . . | 88 |
| QC Batch 88528 - CCV (2) . . . . . | 88 |
| QC Batch 88529 - CCV (1) . . . . . | 88 |
| QC Batch 88529 - CCV (2) . . . . . | 88 |
| QC Batch 88553 - CCV (1) . . . . . | 89 |
| QC Batch 88553 - CCV (1) . . . . . | 89 |
| QC Batch 88553 - CCV (2) . . . . . | 89 |
| QC Batch 88553 - CCV (2) . . . . . | 89 |
| QC Batch 88554 - CCV (1) . . . . . | 90 |
| QC Batch 88554 - CCV (1) . . . . . | 90 |
| QC Batch 88554 - CCV (2) . . . . . | 90 |
| QC Batch 88554 - CCV (2) . . . . . | 90 |
| QC Batch 88591 - ICV (1) . . . . . | 91 |
| QC Batch 88591 - CCV (1) . . . . . | 91 |
| QC Batch 88601 - CCV (1) . . . . . | 91 |
| QC Batch 88601 - CCV (1) . . . . . | 92 |
| QC Batch 88601 - CCV (2) . . . . . | 92 |
| QC Batch 88601 - CCV (2) . . . . . | 92 |
| QC Batch 88776 - ICV (1) . . . . . | 92 |
| QC Batch 88776 - CCV (1) . . . . . | 93 |

|                                     |           |
|-------------------------------------|-----------|
| <b>Appendix</b> . . . . .           | <b>94</b> |
| Report Definitions . . . . .        | 94        |
| Laboratory Certifications . . . . . | 94        |
| Standard Flags . . . . .            | 94        |
| Result Comments . . . . .           | 94        |
| Attachments . . . . .               | 94        |

## Case Narrative

Samples for project GMI Landfarm were received by TracceAnalysis, Inc. on 2012-02-03 and assigned to work order 12020326. Samples for work order 12020326 were received intact at a temperature of 4.4 C.

Samples were analyzed for the following tests using their respective methods.

| Test          | Method     | Prep Batch | Prep Date           | QC Batch | Analysis Date       |
|---------------|------------|------------|---------------------|----------|---------------------|
| Alkalinity    | SM 2320B   | 75005      | 2012-02-06 at 14:30 | 88349    | 2012-02-06 at 16:09 |
| Alkalinity    | SM 2320B   | 75006      | 2012-02-06 at 14:30 | 88350    | 2012-02-06 at 16:11 |
| BTEX          | S 8021B    | 74977      | 2012-02-03 at 15:39 | 88302    | 2012-02-03 at 15:39 |
| Ca, Total     | S 6010C    | 75036      | 2012-02-08 at 09:45 | 88394    | 2012-02-08 at 11:10 |
| Ca, Total     | S 6010C    | 75037      | 2012-02-08 at 09:52 | 88395    | 2012-02-08 at 11:13 |
| Chloride (IC) | E 300.0    | 75178      | 2012-02-11 at 12:49 | 88553    | 2012-02-13 at 12:52 |
| Chloride (IC) | E 300.0    | 75178      | 2012-02-11 at 12:49 | 88554    | 2012-02-13 at 12:55 |
| Chloride (IC) | E 300.0    | 75208      | 2012-02-14 at 11:54 | 88601    | 2012-02-15 at 11:58 |
| Conductivity  | SM 2510B   | 75134      | 2012-02-13 at 12:29 | 88504    | 2012-02-13 at 12:30 |
| Conductivity  | SM 2510B   | 75361      | 2012-02-21 at 17:29 | 88776    | 2012-02-21 at 17:30 |
| K, Total      | S 6010C    | 75036      | 2012-02-08 at 09:45 | 88394    | 2012-02-08 at 11:10 |
| K, Total      | S 6010C    | 75037      | 2012-02-08 at 09:52 | 88395    | 2012-02-08 at 11:13 |
| Mg, Total     | S 6010C    | 75036      | 2012-02-08 at 09:45 | 88394    | 2012-02-08 at 11:10 |
| Mg, Total     | S 6010C    | 75037      | 2012-02-08 at 09:52 | 88395    | 2012-02-08 at 11:13 |
| Na, Total     | S 6010C    | 75036      | 2012-02-08 at 09:45 | 88394    | 2012-02-08 at 11:10 |
| Na, Total     | S 6010C    | 75037      | 2012-02-08 at 09:52 | 88395    | 2012-02-08 at 11:13 |
| pH            | SM 4500-H+ | 75007      | 2012-02-06 at 10:00 | 88351    | 2012-02-06 at 16:12 |
| pH            | SM 4500-H+ | 75008      | 2012-02-06 at 14:00 | 88352    | 2012-02-06 at 16:14 |
| SO4 (IC)      | E 300.0    | 75178      | 2012-02-11 at 12:49 | 88553    | 2012-02-13 at 12:52 |
| SO4 (IC)      | E 300.0    | 75178      | 2012-02-11 at 12:49 | 88554    | 2012-02-13 at 12:55 |
| SO4 (IC)      | E 300.0    | 75208      | 2012-02-14 at 11:54 | 88601    | 2012-02-15 at 11:58 |
| TCLP Ag       | S 6010C    | 75069      | 2012-02-09 at 09:46 | 88427    | 2012-02-09 at 11:13 |
| TCLP Ag       | S 6010C    | 75069      | 2012-02-09 at 09:46 | 88429    | 2012-02-09 at 11:17 |
| TCLP Ag       | S 6010C    | 75196      | 2012-02-15 at 09:26 | 88591    | 2012-02-15 at 11:00 |
| TCLP As       | S 6010C    | 75069      | 2012-02-09 at 09:46 | 88427    | 2012-02-09 at 11:13 |
| TCLP As       | S 6010C    | 75069      | 2012-02-09 at 09:46 | 88429    | 2012-02-09 at 11:17 |
| TCLP As       | S 6010C    | 75196      | 2012-02-15 at 09:26 | 88591    | 2012-02-15 at 11:00 |
| TCLP Ba       | S 6010C    | 75069      | 2012-02-09 at 09:46 | 88427    | 2012-02-09 at 11:13 |
| TCLP Ba       | S 6010C    | 75069      | 2012-02-09 at 09:46 | 88429    | 2012-02-09 at 11:17 |
| TCLP Ba       | S 6010C    | 75196      | 2012-02-15 at 09:26 | 88591    | 2012-02-15 at 11:00 |
| TCLP Cd       | S 6010C    | 75069      | 2012-02-09 at 09:46 | 88427    | 2012-02-09 at 11:13 |
| TCLP Cd       | S 6010C    | 75069      | 2012-02-09 at 09:46 | 88429    | 2012-02-09 at 11:17 |
| TCLP Cd       | S 6010C    | 75196      | 2012-02-15 at 09:26 | 88591    | 2012-02-15 at 11:00 |
| TCLP Cr       | S 6010C    | 75069      | 2012-02-09 at 09:46 | 88427    | 2012-02-09 at 11:13 |
| TCLP Cr       | S 6010C    | 75069      | 2012-02-09 at 09:46 | 88429    | 2012-02-09 at 11:17 |
| TCLP Cr       | S 6010C    | 75196      | 2012-02-15 at 09:26 | 88591    | 2012-02-15 at 11:00 |
| TCLP Hg       | S 7470A    | 75149      | 2012-02-13 at 15:01 | 88528    | 2012-02-13 at 16:36 |
| TCLP Hg       | S 7470A    | 75149      | 2012-02-13 at 15:01 | 88529    | 2012-02-13 at 16:54 |

| Test      | Method  | Prep<br>Batch | Prep<br>Date        | QC<br>Batch | Analysis<br>Date    |
|-----------|---------|---------------|---------------------|-------------|---------------------|
| TCLP Pb   | S 6010C | 75069         | 2012-02-09 at 09:46 | 88427       | 2012-02-09 at 11:13 |
| TCLP Pb   | S 6010C | 75069         | 2012-02-09 at 09:46 | 88429       | 2012-02-09 at 11:17 |
| TCLP Pb   | S 6010C | 75196         | 2012-02-15 at 09:26 | 88591       | 2012-02-15 at 11:00 |
| TCLP Sc   | S 6010C | 75069         | 2012-02-09 at 09:46 | 88427       | 2012-02-09 at 11:13 |
| TCLP Se   | S 6010C | 75069         | 2012-02-09 at 09:46 | 88429       | 2012-02-09 at 11:17 |
| TCLP Se   | S 6010C | 75196         | 2012-02-15 at 09:26 | 88591       | 2012-02-15 at 11:00 |
| TPH 418.1 | E 418.1 | 75096         | 2012-02-09 at 17:00 | 88454       | 2012-02-09 at 17:38 |

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 12020326 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

## Sample: 288284 - Cell 1

|                      |                                |                  |
|----------------------|--------------------------------|------------------|
| Laboratory: Lubbock  | Analytical Method: SM 2320B    | Prep Method: N/A |
| Analysis: Alkalinity | Date Analyzed: 2012-02-06      | Analyzed By: AM  |
| QC Batch: 88349      | Sample Preparation: 2012-02-06 | Prepared By: AM  |
| Prep Batch: 75005    |                                |                  |

| Parameter              | Flag | Cert | RL<br>Result | Units          | Dilution | RL   |
|------------------------|------|------|--------------|----------------|----------|------|
| Hydroxide Alkalinity   | u    |      | <1.00        | mg/Kg as CaCo3 | 1        | 1.00 |
| Carbonate Alkalinity   |      |      | 10.0         | mg/Kg as CaCo3 | 1        | 1.00 |
| Bicarbonate Alkalinity |      |      | 2050         | mg/Kg as CaCo3 | 1        | 4.00 |
| Total Alkalinity       |      |      | 2060         | mg/Kg as CaCo3 | 1        | 4.00 |

## Sample: 288284 - Cell 1

|                     |                                |                     |
|---------------------|--------------------------------|---------------------|
| Laboratory: Lubbock | Analytical Method: S 8021B     | Prep Method: S 5035 |
| Analysis: BTEX      | Date Analyzed: 2012-02-03      | Analyzed By: ZLM    |
| QC Batch: 88302     | Sample Preparation: 2012-02-03 | Prepared By: ZLM    |
| Prep Batch: 74977   |                                |                     |

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.84   | mg/Kg | 1        | 2.00            | 92                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.75   | mg/Kg | 1        | 2.00            | 88                  | 70 - 130           |

## Sample: 288284 - Cell 1

|                         |                                |                  |
|-------------------------|--------------------------------|------------------|
| Laboratory: Lubbock     | Analytical Method: E 300.0     | Prep Method: N/A |
| Analysis: Chloride (IC) | Date Analyzed: 2012-02-15      | Analyzed By: RL  |
| QC Batch: 88601         | Sample Preparation: 2012-02-14 | Prepared By: RL  |
| Prep Batch: 75208       |                                |                  |

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 9 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Chloride  | Qs   | 1    | <b>437</b>   | mg/Kg | 5        | 2.00 |

**Sample: 288284 - Cell 1**

Laboratory: Lubbock  
Analysis: Conductivity      Analytical Method: SM 2510B      Prep Method: N/A  
QC Batch: 88504      Date Analyzed: 2012-02-13      Analyzed By: RL  
Prep Batch: 75134      Sample Preparation: 2012-02-13      Prepared By: RL

| Parameter            | Flag | Cert | RL<br>Result | Units    | Dilution | RL   |
|----------------------|------|------|--------------|----------|----------|------|
| Specific Conductance |      | 1    | <b>1260</b>  | uMHOS/cm | 1        | 0.00 |

**Sample: 288284 - Cell 1**

Laboratory: Lubbock  
Analysis: pH      Analytical Method: SM 4500-H+      Prep Method: N/A  
QC Batch: 88351      Date Analyzed: 2012-02-06      Analyzed By: AM  
Prep Batch: 75007      Sample Preparation: 2012-02-06      Prepared By: AM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| pH        |      |      | <b>8.35</b>  | s.u.  | 1        | 2.00 |

**Sample: 288284 - Cell 1**

Laboratory: Lubbock  
Analysis: Salts, Total      Analytical Method: S 6010C      Prep Method: S 3050B  
QC Batch: 88394      Date Analyzed: 2012-02-08      Analyzed By: RR  
Prep Batch: 75036      Sample Preparation: 2012-02-08      Prepared By: KV

| Parameter       | Flag | Cert | RL<br>Result  | Units | Dilution | RL  |
|-----------------|------|------|---------------|-------|----------|-----|
| Total Calcium   |      | 1    | <b>130000</b> | mg/Kg | 100      | 100 |
| Total Magnesium |      | 1    | <b>2160</b>   | mg/Kg | 1        | 100 |
| Total Potassium |      | 1    | <b>694</b>    | mg/Kg | 1        | 100 |
| Total Sodium    |      | 1    | <b>128</b>    | mg/Kg | 1        | 100 |

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 10 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Sample: 288284 - Cell 1**

Laboratory: Lubbock  
Analysis: SO4 (IC) Analytical Method: E 300.0 Prep Method: N/A  
QC Batch: 88553 Date Analyzed: 2012-02-13 Analyzed By: RL  
Prep Batch: 75178 Sample Preparation: 2012-02-11 Prepared By: RL

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Sulfate   |      | 1    | 187          | mg/Kg | 1        | 2.00 |

**Sample: 288284 - Cell 1**

Laboratory: Lubbock  
Analysis: TCLP Total 8 Metals Analytical Method: S 6010C Prep Method: TCLP 1311  
QC Batch: 88427 Date Analyzed: 2012-02-09 Analyzed By: RR  
Prep Batch: 75069 TCLP Extraction: 2012-02-09 Prepared By: KV  
Sample Preparation: 2012-02-09 Prepared By: KV

Laboratory: Lubbock  
Analysis: TCLP Total 8 Metals Analytical Method: S 7470A Prep Method: TCLP 1311  
QC Batch: 88528 Date Analyzed: 2012-02-13 Analyzed By: TP  
Prep Batch: 75149 TCLP Extraction: 2012-02-13 Prepared By: TP  
Sample Preparation: 2012-02-13 Prepared By: TP

| Parameter     | Flag | Cert | RL<br>Result | Units | Dilution | RL      |
|---------------|------|------|--------------|-------|----------|---------|
| TCLP Silver   | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Arsenic  | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Barium   |      | 1    | 0.221        | mg/L  | 1        | 0.100   |
| TCLP Cadmium  | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Chromium | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Mercury  | u    | 1    | <0.00500     | mg/L  | 1        | 0.00500 |
| TCLP Lead     | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Selenium | u    |      | <0.200       | mg/L  | 1        | 0.200   |

**Sample: 288284 - Cell 1**

Laboratory: Lubbock  
Analysis: TPH 418.1 Analytical Method: E 418.1 Prep Method: N/A  
QC Batch: 88454 Date Analyzed: 2012-02-09 Analyzed By: DS  
Prep Batch: 75096 Sample Preparation: 2012-02-09 Prepared By: DS

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     |      |      | <10.0        | mg/Kg | 1        | 10.0 |

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 11 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Sample: 288285 - Cell 2**

Laboratory: Lubbock  
Analysis: Alkalinity Analytical Method: SM 2320B Prep Method: N/A  
QC Batch: 88349 Date Analyzed: 2012-02-06 Analyzed By: AM  
Prep Batch: 75005 Sample Preparation: 2012-02-06 Prepared By: AM

| Parameter              | Flag | Cert | RL<br>Result | Units          | Dilution | RL   |
|------------------------|------|------|--------------|----------------|----------|------|
| Hydroxide Alkalinity   | u    |      | <1.00        | mg/Kg as CaCo3 | 1        | 1.00 |
| Carbonate Alkalinity   | u    |      | <1.00        | mg/Kg as CaCo3 | 1        | 1.00 |
| Bicarbonate Alkalinity |      |      | 50.0         | mg/Kg as CaCo3 | 1        | 4.00 |
| Total Alkalinity       |      |      | 50.0         | mg/Kg as CaCo3 | 1        | 4.00 |

**Sample: 288285 - Cell 2**

Laboratory: Lubbock  
Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035  
QC Batch: 88302 Date Analyzed: 2012-02-03 Analyzed By: ZLM  
Prep Batch: 74977 Sample Preparation: 2012-02-03 Prepared By: ZLM

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.92   | mg/Kg | 1        | 2.00            | 96                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.90   | mg/Kg | 1        | 2.00            | 95                  | 70 - 130           |

**Sample: 288285 - Cell 2**

Laboratory: Lubbock  
Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
QC Batch: 88553 Date Analyzed: 2012-02-13 Analyzed By: RL  
Prep Batch: 75178 Sample Preparation: 2012-02-11 Prepared By: RL

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Chloride  |      | 1    | 449          | mg/Kg | 1        | 2.00 |

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 12 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Sample: 288285 - Cell 2**

Laboratory: Lubbock  
Analysis: Conductivity      Analytical Method: SM 2510B      Prep Method: N/A  
QC Batch: 88504      Date Analyzed: 2012-02-13      Analyzed By: RL  
Prep Batch: 75134      Sample Preparation: 2012-02-13      Prepared By: RL

| Parameter            | Flag | Cert | RL<br>Result | Units    | Dilution | RL   |
|----------------------|------|------|--------------|----------|----------|------|
| Specific Conductance |      | 1    | <b>1410</b>  | uMHOS/cm | 1        | 0.00 |

**Sample: 288285 - Cell 2**

Laboratory: Lubbock  
Analysis: pH      Analytical Method: SM 4500-H+      Prep Method: N/A  
QC Batch: 88351      Date Analyzed: 2012-02-06      Analyzed By: AM  
Prep Batch: 75007      Sample Preparation: 2012-02-06      Prepared By: AM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| pH        |      |      | <b>7.82</b>  | s.u.  | 1        | 2.00 |

**Sample: 288285 - Cell 2**

Laboratory: Lubbock  
Analysis: Salts, Total      Analytical Method: S 6010C      Prep Method: S 3050B  
QC Batch: 88394      Date Analyzed: 2012-02-08      Analyzed By: RR  
Prep Batch: 75036      Sample Preparation: 2012-02-08      Prepared By: KV

| Parameter       | Flag | Cert | RL<br>Result | Units | Dilution | RL  |
|-----------------|------|------|--------------|-------|----------|-----|
| Total Calcium   |      | 1    | <b>8570</b>  | mg/Kg | 1        | 100 |
| Total Magnesium |      | 1    | <b>2700</b>  | mg/Kg | 1        | 100 |
| Total Potassium |      | 1    | <b>2140</b>  | mg/Kg | 1        | 100 |
| Total Sodium    |      | 1    | <b>144</b>   | mg/Kg | 1        | 100 |

**Sample: 288285 - Cell 2**

Laboratory: Lubbock  
Analysis: SO4 (IC)      Analytical Method: E 300.0      Prep Method: N/A  
QC Batch: 88553      Date Analyzed: 2012-02-13      Analyzed By: RL  
Prep Batch: 75178      Sample Preparation: 2012-02-11      Prepared By: RL

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 13 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Sulfate   |      | 1    | 296          | mg/Kg | 1        | 2.00 |

**Sample: 288285 - Cell 2**

|                               |                                |                        |
|-------------------------------|--------------------------------|------------------------|
| Laboratory: Lubbock           | Analytical Method: S 6010C     | Prep Method: TCLP 1311 |
| Analysis: TCLP Total 8 Metals | Date Analyzed: 2012-02-09      | Analyzed By: RR        |
| QC Batch: 88427               | TCLP Extraction: 2012-02-09    | Prepared By: KV        |
| Prep Batch: 75069             | Sample Preparation: 2012-02-09 | Prepared By: KV        |

|                               |                                |                        |
|-------------------------------|--------------------------------|------------------------|
| Laboratory: Lubbock           | Analytical Method: S 7470A     | Prep Method: TCLP 1311 |
| Analysis: TCLP Total 8 Metals | Date Analyzed: 2012-02-13      | Analyzed By: TP        |
| QC Batch: 88528               | TCLP Extraction: 2012-02-13    | Prepared By: TP        |
| Prep Batch: 75149             | Sample Preparation: 2012-02-13 | Prepared By: TP        |

| Parameter     | Flag | Cert | RL<br>Result | Units | Dilution | RL      |
|---------------|------|------|--------------|-------|----------|---------|
| TCLP Silver   | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Arsenic  | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Barium   |      | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Cadmium  | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Chromium | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Mercury  | u    | 1    | <0.00500     | mg/L  | 1        | 0.00500 |
| TCLP Lead     | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Sclenium | u    |      | <0.200       | mg/L  | 1        | 0.200   |

**Sample: 288285 - Cell 2**

|                     |                                |                  |
|---------------------|--------------------------------|------------------|
| Laboratory: Lubbock | Analytical Method: E 418.1     | Prep Method: N/A |
| Analysis: TPH 418.1 | Date Analyzed: 2012-02-09      | Analyzed By: DS  |
| QC Batch: 88454     | Sample Preparation: 2012-02-09 | Prepared By: DS  |
| Prep Batch: 75096   |                                |                  |

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     | u    |      | <10.0        | mg/Kg | 1        | 10.0 |

Report Date: February 22, 2012  
 4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
 GMI Landfarm

Page Number: 14 of 95  
 Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Sample: 288286 - Cell 3**

Laboratory: Lubbock  
 Analysis: Alkalinity Analytical Method: SM 2320B Prep Method: N/A  
 QC Batch: 88349 Date Analyzed: 2012-02-06 Analyzed By: AM  
 Prep Batch: 75005 Sample Preparation: 2012-02-06 Prepared By: AM

| Parameter              | Flag | Cert | RL<br>Result | Units          | Dilution | RL   |
|------------------------|------|------|--------------|----------------|----------|------|
| Hydroxide Alkalinity   | u    |      | <1.00        | mg/Kg as CaCo3 | 1        | 1.00 |
| Carbonate Alkalinity   | u    |      | <1.00        | mg/Kg as CaCo3 | 1        | 1.00 |
| Bicarbonate Alkalinity |      |      | <b>80.0</b>  | mg/Kg as CaCo3 | 1        | 4.00 |
| Total Alkalinity       |      |      | <b>80.0</b>  | mg/Kg as CaCo3 | 1        | 4.00 |

**Sample: 288286 - Cell 3**

Laboratory: Lubbock  
 Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035  
 QC Batch: 88302 Date Analyzed: 2012-02-03 Analyzed By: ZLM  
 Prep Batch: 74977 Sample Preparation: 2012-02-03 Prepared By: ZLM

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylenes      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.85   | mg/Kg | 1        | 2.00            | 92                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.92   | mg/Kg | 1        | 2.00            | 96                  | 70 - 130           |

**Sample: 288286 - Cell 3**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 88601 Date Analyzed: 2012-02-15 Analyzed By: RL  
 Prep Batch: 75208 Sample Preparation: 2012-02-14 Prepared By: RL

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Chloride  | Qs   | 1    | <b>587</b>   | mg/Kg | 5        | 2.00 |

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 15 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Sample: 288286 - Cell 3**

Laboratory: Lubbock  
Analysis: Conductivity                      Analytical Method: SM 2510B                      Prep Method: N/A  
QC Batch: 88504                              Date Analyzed: 2012-02-13                      Analyzed By: RL  
Prep Batch: 75134                              Sample Preparation: 2012-02-13                      Prepared By: RL

| Parameter            | Flag | Cert | RL<br>Result | Units    | Dilution | RL   |
|----------------------|------|------|--------------|----------|----------|------|
| Specific Conductance |      | 1    | 2110         | uMHOS/cm | 1        | 0.00 |

**Sample: 288286 - Cell 3**

Laboratory: Lubbock  
Analysis: pH                                      Analytical Method: SM 4500-H+                      Prep Method: N/A  
QC Batch: 88351                              Date Analyzed: 2012-02-06                      Analyzed By: AM  
Prep Batch: 75007                              Sample Preparation: 2012-02-06                      Prepared By: AM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| pH        |      |      | 7.81         | s.u.  | 1        | 2.00 |

**Sample: 288286 - Cell 3**

Laboratory: Lubbock  
Analysis: Salts, Total                      Analytical Method: S 6010C                      Prep Method: S 3050B  
QC Batch: 88394                              Date Analyzed: 2012-02-08                      Analyzed By: RR  
Prep Batch: 75036                              Sample Preparation: 2012-02-08                      Prepared By: KV

| Parameter       | Flag | Cert | RL<br>Result | Units | Dilution | RL  |
|-----------------|------|------|--------------|-------|----------|-----|
| Total Calcium   |      | 1    | 6260         | mg/Kg | 1        | 100 |
| Total Magnesium |      | 1    | 2440         | mg/Kg | 1        | 100 |
| Total Potassium |      | 1    | 1430         | mg/Kg | 1        | 100 |
| Total Sodium    |      | 1    | 537          | mg/Kg | 1        | 100 |

**Sample: 288286 - Cell 3**

Laboratory: Lubbock  
Analysis: SO4 (IC)                              Analytical Method: E 300.0                      Prep Method: N/A  
QC Batch: 88553                              Date Analyzed: 2012-02-13                      Analyzed By: RL  
Prep Batch: 75178                              Sample Preparation: 2012-02-11                      Prepared By: RL

Report Date: February 22, 2012  
 4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
 GMI Landfarm

Page Number: 16 of 95  
 Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Sulfate   |      | 1    | 236          | mg/Kg | 1        | 2.00 |

**Sample: 288286 - Cell 3**

|                               |                                |                        |
|-------------------------------|--------------------------------|------------------------|
| Laboratory: Lubbock           | Analytical Method: S 6010C     | Prep Method: TCLP 1311 |
| Analysis: TCLP Total 8 Metals | Date Analyzed: 2012-02-09      | Analyzed By: RR        |
| QC Batch: 88427               | TCLP Extraction: 2012-02-09    | Prepared By: KV        |
| Prep Batch: 75069             | Sample Preparation: 2012-02-09 | Prepared By: KV        |

|                               |                                |                        |
|-------------------------------|--------------------------------|------------------------|
| Laboratory: Lubbock           | Analytical Method: S 7470A     | Prep Method: TCLP 1311 |
| Analysis: TCLP Total 8 Metals | Date Analyzed: 2012-02-13      | Analyzed By: TP        |
| QC Batch: 88528               | TCLP Extraction: 2012-02-13    | Prepared By: TP        |
| Prep Batch: 75149             | Sample Preparation: 2012-02-13 | Prepared By: TP        |

| Parameter     | Flag | Cert | RL<br>Result | Units | Dilution | RL      |
|---------------|------|------|--------------|-------|----------|---------|
| TCLP Silver   | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Arsenic  | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Barium   |      | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Cadmium  | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Chromium | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Mercury  | u    | 1    | <0.00500     | mg/L  | 1        | 0.00500 |
| TCLP Lead     | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Selenium | u    |      | <0.200       | mg/L  | 1        | 0.200   |

**Sample: 288286 - Cell 3**

|                     |                                |                  |
|---------------------|--------------------------------|------------------|
| Laboratory: Lubbock | Analytical Method: E 418.1     | Prep Method: N/A |
| Analysis: TPH 418.1 | Date Analyzed: 2012-02-09      | Analyzed By: DS  |
| QC Batch: 88454     | Sample Preparation: 2012-02-09 | Prepared By: DS  |
| Prep Batch: 75096   |                                |                  |

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     | u    |      | <10.0        | mg/Kg | 1        | 10.0 |

**Sample: 288287 - Cell 4**

Laboratory: Lubbock  
 Analysis: Alkalinity Analytical Method: SM 2320B Prep Method: N/A  
 QC Batch: 88349 Date Analyzed: 2012-02-06 Analyzed By: AM  
 Prep Batch: 75005 Sample Preparation: 2012-02-06 Prepared By: AM

| Parameter              | Flag | Cert | RL<br>Result | Units          | Dilution | RL   |
|------------------------|------|------|--------------|----------------|----------|------|
| Hydroxide Alkalinity   | u    |      | <1.00        | mg/Kg as CaCo3 | 1        | 1.00 |
| Carbonate Alkalinity   |      |      | <b>20.0</b>  | mg/Kg as CaCo3 | 1        | 1.00 |
| Bicarbonate Alkalinity |      |      | <b>740</b>   | mg/Kg as CaCo3 | 1        | 4.00 |
| Total Alkalinity       |      |      | <b>760</b>   | mg/Kg as CaCo3 | 1        | 4.00 |

**Sample: 288287 - Cell 4**

Laboratory: Lubbock  
 Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035  
 QC Batch: 88302 Date Analyzed: 2012-02-03 Analyzed By: ZLM  
 Prep Batch: 74977 Sample Preparation: 2012-02-03 Prepared By: ZLM

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.89   | mg/Kg | 1        | 2.00            | 94                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.82   | mg/Kg | 1        | 2.00            | 91                  | 70 - 130           |

**Sample: 288287 - Cell 4**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 88553 Date Analyzed: 2012-02-13 Analyzed By: RL  
 Prep Batch: 75178 Sample Preparation: 2012-02-11 Prepared By: RL

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Chloride  |      | 1    | <b>259</b>   | mg/Kg | 1        | 2.00 |

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 18 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Sample: 288287 - Cell 4**

Laboratory: Lubbock  
Analysis: Conductivity      Analytical Method: SM 2510B      Prep Method: N/A  
QC Batch: 88504      Date Analyzed: 2012-02-13      Analyzed By: RL  
Prep Batch: 75134      Sample Preparation: 2012-02-13      Prepared By: RL

| Parameter            | Flag | Cert | RL<br>Result | Units    | Dilution | RL   |
|----------------------|------|------|--------------|----------|----------|------|
| Specific Conductance |      | 1    | <b>1430</b>  | uMHOS/cm | 1        | 0.00 |

**Sample: 288287 - Cell 4**

Laboratory: Lubbock  
Analysis: pH      Analytical Method: SM 4500-H+      Prep Method: N/A  
QC Batch: 88351      Date Analyzed: 2012-02-06      Analyzed By: AM  
Prep Batch: 75007      Sample Preparation: 2012-02-06      Prepared By: AM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| pH        |      |      | <b>8.56</b>  | s.u.  | 1        | 2.00 |

**Sample: 288287 - Cell 4**

Laboratory: Lubbock  
Analysis: Salts, Total      Analytical Method: S 6010C      Prep Method: S 3050B  
QC Batch: 88394      Date Analyzed: 2012-02-08      Analyzed By: RR  
Prep Batch: 75036      Sample Preparation: 2012-02-08      Prepared By: KV

| Parameter       | Flag | Cert | RL<br>Result  | Units | Dilution | RL  |
|-----------------|------|------|---------------|-------|----------|-----|
| Total Calcium   |      | 1    | <b>202000</b> | mg/Kg | 100      | 100 |
| Total Magnesium |      | 1    | <b>2540</b>   | mg/Kg | 1        | 100 |
| Total Potassium |      | 1    | <b>300</b>    | mg/Kg | 1        | 100 |
| Total Sodium    |      | 1    | <b>496</b>    | mg/Kg | 1        | 100 |

**Sample: 288287 - Cell 4**

Laboratory: Lubbock  
Analysis: SO4 (IC)      Analytical Method: E 300.0      Prep Method: N/A  
QC Batch: 88601      Date Analyzed: 2012-02-15      Analyzed By: RL  
Prep Batch: 75208      Sample Preparation: 2012-02-14      Prepared By: RL

Report Date: February 22, 2012  
 4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
 GMI Landfarm

Page Number: 19 of 95  
 Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Sulfate   |      | 1    | 618          | mg/Kg | 5        | 2.00 |

**Sample: 288287 - Cell 4**

|                               |  |  |                                |  |                        |  |
|-------------------------------|--|--|--------------------------------|--|------------------------|--|
| Laboratory: Lubbock           |  |  |                                |  |                        |  |
| Analysis: TCLP Total 8 Metals |  |  | Analytical Method: S 6010C     |  | Prep Method: TCLP 1311 |  |
| QC Batch: 88427               |  |  | Date Analyzed: 2012-02-09      |  | Analyzed By: RR        |  |
| Prep Batch: 75069             |  |  | TCLP Extraction: 2012-02-09    |  | Prepared By: KV        |  |
|                               |  |  | Sample Preparation: 2012-02-09 |  | Prepared By: KV        |  |

|                               |  |  |                                |  |                        |  |
|-------------------------------|--|--|--------------------------------|--|------------------------|--|
| Laboratory: Lubbock           |  |  |                                |  |                        |  |
| Analysis: TCLP Total 8 Metals |  |  | Analytical Method: S 7470A     |  | Prep Method: TCLP 1311 |  |
| QC Batch: 88528               |  |  | Date Analyzed: 2012-02-13      |  | Analyzed By: TP        |  |
| Prep Batch: 75149             |  |  | TCLP Extraction: 2012-02-13    |  | Prepared By: TP        |  |
|                               |  |  | Sample Preparation: 2012-02-13 |  | Prepared By: TP        |  |

| Parameter     | Flag | Cert | RL<br>Result | Units | Dilution | RL      |
|---------------|------|------|--------------|-------|----------|---------|
| TCLP Silver   | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Arsenic  | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Barium   |      | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Cadmium  | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Chromium | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Mercury  | u    | 1    | <0.00500     | mg/L  | 1        | 0.00500 |
| TCLP Lead     | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Selenium | u    |      | <0.200       | mg/L  | 1        | 0.200   |

**Sample: 288287 - Cell 4**

|                     |  |  |                                |  |                  |  |
|---------------------|--|--|--------------------------------|--|------------------|--|
| Laboratory: Lubbock |  |  |                                |  |                  |  |
| Analysis: TPH 418.1 |  |  | Analytical Method: E 418.1     |  | Prep Method: N/A |  |
| QC Batch: 88454     |  |  | Date Analyzed: 2012-02-09      |  | Analyzed By: DS  |  |
| Prep Batch: 75096   |  |  | Sample Preparation: 2012-02-09 |  | Prepared By: DS  |  |

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     |      |      | 12.4         | mg/Kg | 1        | 10.0 |

**Sample: 288288 - Cell 5**

Laboratory: Lubbock  
 Analysis: Alkalinity Analytical Method: SM 2320B Prep Method: N/A  
 QC Batch: 88349 Date Analyzed: 2012-02-06 Analyzed By: AM  
 Prep Batch: 75005 Sample Preparation: 2012-02-06 Prepared By: AM

| Parameter              | Flag | Cert | RL<br>Result | Units          | Dilution | RL   |
|------------------------|------|------|--------------|----------------|----------|------|
| Hydroxide Alkalinity   | u    |      | <1.00        | mg/Kg as CaCo3 | 1        | 1.00 |
| Carbonate Alkalinity   | u    |      | <1.00        | mg/Kg as CaCo3 | 1        | 1.00 |
| Bicarbonate Alkalinity |      |      | 110          | mg/Kg as CaCo3 | 1        | 4.00 |
| Total Alkalinity       |      |      | 110          | mg/Kg as CaCo3 | 1        | 4.00 |

**Sample: 288288 - Cell 5**

Laboratory: Lubbock  
 Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035  
 QC Batch: 88302 Date Analyzed: 2012-02-03 Analyzed By: ZLM  
 Prep Batch: 74977 Sample Preparation: 2012-02-03 Prepared By: ZLM

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.84   | mg/Kg | 1        | 2.00            | 92                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.94   | mg/Kg | 1        | 2.00            | 97                  | 70 - 130           |

**Sample: 288288 - Cell 5**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 88601 Date Analyzed: 2012-02-15 Analyzed By: RL  
 Prep Batch: 75208 Sample Preparation: 2012-02-14 Prepared By: RL

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Chloride  | qs   | 1    | 2100         | mg/Kg | 5        | 2.00 |

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 21 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Sample: 288288 - Cell 5**

Laboratory: Lubbock  
Analysis: Conductivity      Analytical Method: SM 2510B      Prep Method: N/A  
QC Batch: 88504      Date Analyzed: 2012-02-13      Analyzed By: RL  
Prep Batch: 75134      Sample Preparation: 2012-02-13      Prepared By: RL

| Parameter            | Flag | Cert | RL<br>Result | Units    | Dilution | RL   |
|----------------------|------|------|--------------|----------|----------|------|
| Specific Conductance |      | 1    | <b>3390</b>  | uMHOS/cm | 1        | 0.00 |

**Sample: 288288 - Cell 5**

Laboratory: Lubbock  
Analysis: pH      Analytical Method: SM 4500-H+      Prep Method: N/A  
QC Batch: 88351      Date Analyzed: 2012-02-06      Analyzed By: AM  
Prep Batch: 75007      Sample Preparation: 2012-02-06      Prepared By: AM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| pH        |      |      | <b>7.71</b>  | s.u.  | 1        | 2.00 |

**Sample: 288288 - Cell 5**

Laboratory: Lubbock  
Analysis: Salts, Total      Analytical Method: S 6010C      Prep Method: S 3050B  
QC Batch: 88394      Date Analyzed: 2012-02-08      Analyzed By: RR  
Prep Batch: 75036      Sample Preparation: 2012-02-08      Prepared By: KV

| Parameter       | Flag | Cert | RL<br>Result | Units | Dilution | RL  |
|-----------------|------|------|--------------|-------|----------|-----|
| Total Calcium   |      | 1    | <b>96400</b> | mg/Kg | 10       | 100 |
| Total Magnesium |      | 1    | <b>2960</b>  | mg/Kg | 1        | 100 |
| Total Potassium |      | 1    | <b>1110</b>  | mg/Kg | 1        | 100 |
| Total Sodium    |      | 1    | <b>920</b>   | mg/Kg | 1        | 100 |

**Sample: 288288 - Cell 5**

Laboratory: Lubbock  
Analysis: SO4 (IC)      Analytical Method: E 300.0      Prep Method: N/A  
QC Batch: 88553      Date Analyzed: 2012-02-13      Analyzed By: RL  
Prep Batch: 75178      Sample Preparation: 2012-02-11      Prepared By: RL

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Sulfate   |      | 1    | <b>392</b>   | mg/Kg | 1        | 2.00 |

**Sample: 288288 - Cell 5**

|                               |  |  |                                |  |                        |  |
|-------------------------------|--|--|--------------------------------|--|------------------------|--|
| Laboratory: Lubbock           |  |  |                                |  |                        |  |
| Analysis: TCLP Total 8 Metals |  |  | Analytical Method: S 6010C     |  | Prep Method: TCLP 1311 |  |
| QC Batch: 88427               |  |  | Date Analyzed: 2012-02-09      |  | Analyzed By: RR        |  |
| Prep Batch: 75069             |  |  | TCLP Extraction: 2012-02-09    |  | Prepared By: KV        |  |
|                               |  |  | Sample Preparation: 2012-02-09 |  | Prepared By: KV        |  |

|                               |  |  |                                |  |                        |  |
|-------------------------------|--|--|--------------------------------|--|------------------------|--|
| Laboratory: Lubbock           |  |  |                                |  |                        |  |
| Analysis: TCLP Total 8 Metals |  |  | Analytical Method: S 7470A     |  | Prep Method: TCLP 1311 |  |
| QC Batch: 88528               |  |  | Date Analyzed: 2012-02-13      |  | Analyzed By: TP        |  |
| Prep Batch: 75149             |  |  | TCLP Extraction: 2012-02-13    |  | Prepared By: TP        |  |
|                               |  |  | Sample Preparation: 2012-02-13 |  | Prepared By: TP        |  |

| Parameter     | Flag | Cert | RL<br>Result | Units | Dilution | RL      |
|---------------|------|------|--------------|-------|----------|---------|
| TCLP Silver   | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Arsenic  | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Barium   |      | 1    | <b>0.125</b> | mg/L  | 1        | 0.100   |
| TCLP Cadmium  | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Chromium | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Mercury  | u    | 1    | <0.00500     | mg/L  | 1        | 0.00500 |
| TCLP Lead     | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Selenium | u    |      | <0.200       | mg/L  | 1        | 0.200   |

**Sample: 288288 - Cell 5**

|                     |  |  |                                |  |                  |  |
|---------------------|--|--|--------------------------------|--|------------------|--|
| Laboratory: Lubbock |  |  |                                |  |                  |  |
| Analysis: TPH 418.1 |  |  | Analytical Method: E 418.1     |  | Prep Method: N/A |  |
| QC Batch: 88454     |  |  | Date Analyzed: 2012-02-09      |  | Analyzed By: DS  |  |
| Prep Batch: 75096   |  |  | Sample Preparation: 2012-02-09 |  | Prepared By: DS  |  |

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     |      |      | <b>13.6</b>  | mg/Kg | 1        | 10.0 |

**Sample: 288289 - Cell 7**

Laboratory: Lubbock  
 Analysis: Alkalinity Analytical Method: SM 2320B Prep Method: N/A  
 QC Batch: 88349 Date Analyzed: 2012-02-06 Analyzed By: AM  
 Prep Batch: 75005 Sample Preparation: 2012-02-06 Prepared By: AM

| Parameter              | Flag | Cert | RL<br>Result | Units          | Dilution | RL   |
|------------------------|------|------|--------------|----------------|----------|------|
| Hydroxide Alkalinity   | u    |      | <1.00        | mg/Kg as CaCo3 | 1        | 1.00 |
| Carbonate Alkalinity   | u    |      | <1.00        | mg/Kg as CaCo3 | 1        | 1.00 |
| Bicarbonate Alkalinity |      |      | 60.0         | mg/Kg as CaCo3 | 1        | 4.00 |
| Total Alkalinity       |      |      | 60.0         | mg/Kg as CaCo3 | 1        | 4.00 |

**Sample: 288289 - Cell 7**

Laboratory: Lubbock  
 Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035  
 QC Batch: 88302 Date Analyzed: 2012-02-03 Analyzed By: ZLM  
 Prep Batch: 74977 Sample Preparation: 2012-02-03 Prepared By: ZLM

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.86   | mg/Kg | 1        | 2.00            | 93                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.95   | mg/Kg | 1        | 2.00            | 98                  | 70 - 130           |

**Sample: 288289 - Cell 7**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 88553 Date Analyzed: 2012-02-13 Analyzed By: RL  
 Prep Batch: 75178 Sample Preparation: 2012-02-11 Prepared By: RL

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Chloride  |      | 1    | 320          | mg/Kg | 1        | 2.00 |

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 24 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Sample: 288289 - Cell 7**

Laboratory: Lubbock  
Analysis: Conductivity      Analytical Method: SM 2510B      Prep Method: N/A  
QC Batch: 88504      Date Analyzed: 2012-02-13      Analyzed By: RL  
Prep Batch: 75134      Sample Preparation: 2012-02-13      Prepared By: RL

| Parameter            | Flag | Cert | RL<br>Result | Units    | Dilution | RL   |
|----------------------|------|------|--------------|----------|----------|------|
| Specific Conductance |      | 1    | 1120         | uMHOS/cm | 1        | 0.00 |

**Sample: 288289 - Cell 7**

Laboratory: Lubbock  
Analysis: pH      Analytical Method: SM 4500-H+      Prep Method: N/A  
QC Batch: 88351      Date Analyzed: 2012-02-06      Analyzed By: AM  
Prep Batch: 75007      Sample Preparation: 2012-02-06      Prepared By: AM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| pH        |      |      | 7.76         | s.u.  | 1        | 2.00 |

**Sample: 288289 - Cell 7**

Laboratory: Lubbock  
Analysis: Salts, Total      Analytical Method: S 6010C      Prep Method: S 3050B  
QC Batch: 88394      Date Analyzed: 2012-02-08      Analyzed By: RR  
Prep Batch: 75036      Sample Preparation: 2012-02-08      Prepared By: KV

| Parameter       | Flag | Cert | RL<br>Result | Units | Dilution | RL  |
|-----------------|------|------|--------------|-------|----------|-----|
| Total Calcium   |      | 1    | 38600        | mg/Kg | 10       | 100 |
| Total Magnesium |      | 1    | 3710         | mg/Kg | 1        | 100 |
| Total Potassium |      | 1    | 2340         | mg/Kg | 1        | 100 |
| Total Sodium    |      | 1    | 260          | mg/Kg | 1        | 100 |

**Sample: 288289 - Cell 7**

Laboratory: Lubbock  
Analysis: SO4 (IC)      Analytical Method: E 300.0      Prep Method: N/A  
QC Batch: 88553      Date Analyzed: 2012-02-13      Analyzed By: RL  
Prep Batch: 75178      Sample Preparation: 2012-02-11      Prepared By: RL

Report Date: February 22, 2012  
 4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
 GMI Landfarm

Page Number: 25 of 95  
 Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Sulfate   |      | 1    | 144          | mg/Kg | 1        | 2.00 |

**Sample: 288289 - Cell 7**

|                               |  |                                |  |                        |  |  |
|-------------------------------|--|--------------------------------|--|------------------------|--|--|
| Laboratory: Lubbock           |  |                                |  |                        |  |  |
| Analysis: TCLP Total 8 Metals |  | Analytical Method: S 6010C     |  | Prep Method: TCLP 1311 |  |  |
| QC Batch: 88427               |  | Date Analyzed: 2012-02-09      |  | Analyzed By: RR        |  |  |
| Prep Batch: 75069             |  | TCLP Extraction: 2012-02-09    |  | Prepared By: KV        |  |  |
|                               |  | Sample Preparation: 2012-02-09 |  | Prepared By: KV        |  |  |

|                               |  |                                |  |                        |  |  |
|-------------------------------|--|--------------------------------|--|------------------------|--|--|
| Laboratory: Lubbock           |  |                                |  |                        |  |  |
| Analysis: TCLP Total 8 Metals |  | Analytical Method: S 7470A     |  | Prep Method: TCLP 1311 |  |  |
| QC Batch: 88528               |  | Date Analyzed: 2012-02-13      |  | Analyzed By: TP        |  |  |
| Prep Batch: 75149             |  | TCLP Extraction: 2012-02-13    |  | Prepared By: TP        |  |  |
|                               |  | Sample Preparation: 2012-02-13 |  | Prepared By: TP        |  |  |

| Parameter     | Flag | Cert | RL<br>Result | Units | Dilution | RL      |
|---------------|------|------|--------------|-------|----------|---------|
| TCLP Silver   | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Arsenic  | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Barium   |      | 1    | <b>0.316</b> | mg/L  | 1        | 0.100   |
| TCLP Cadmium  | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Chromium | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Mercury  | u    | 1    | <0.00500     | mg/L  | 1        | 0.00500 |
| TCLP Lead     | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Selenium | u    |      | <0.200       | mg/L  | 1        | 0.200   |

**Sample: 288289 - Cell 7**

|                     |  |                                |  |                  |  |  |
|---------------------|--|--------------------------------|--|------------------|--|--|
| Laboratory: Lubbock |  |                                |  |                  |  |  |
| Analysis: TPH 418.1 |  | Analytical Method: E 418.1     |  | Prep Method: N/A |  |  |
| QC Batch: 88454     |  | Date Analyzed: 2012-02-09      |  | Analyzed By: DS  |  |  |
| Prep Batch: 75096   |  | Sample Preparation: 2012-02-09 |  | Prepared By: DS  |  |  |

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     | u    |      | <10.0        | mg/Kg | 1        | 10.0 |

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 26 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Sample: 288290 - Cell 9**

Laboratory: Lubbock  
Analysis: Alkalinity                      Analytical Method: SM 2320B                      Prep Method: N/A  
QC Batch: 88349                              Date Analyzed: 2012-02-06                      Analyzed By: AM  
Prep Batch: 75005                              Sample Preparation: 2012-02-06                      Prepared By: AM

| Parameter              | Flag | Cert | RL<br>Result | Units          | Dilution | RL   |
|------------------------|------|------|--------------|----------------|----------|------|
| Hydroxide Alkalinity   | u    |      | <1.00        | mg/Kg as CaCo3 | 1        | 1.00 |
| Carbonate Alkalinity   | u    |      | <1.00        | mg/Kg as CaCo3 | 1        | 1.00 |
| Bicarbonate Alkalinity |      |      | 100          | mg/Kg as CaCo3 | 1        | 4.00 |
| Total Alkalinity       |      |      | 100          | mg/Kg as CaCo3 | 1        | 4.00 |

**Sample: 288290 - Cell 9**

Laboratory: Lubbock  
Analysis: BTEX                              Analytical Method: S 8021B                      Prep Method: S 5035  
QC Batch: 88302                              Date Analyzed: 2012-02-03                      Analyzed By: ZLM  
Prep Batch: 74977                              Sample Preparation: 2012-02-03                      Prepared By: ZLM

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.86   | mg/Kg | 1        | 2.00            | 93                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.80   | mg/Kg | 1        | 2.00            | 90                  | 70 - 130           |

**Sample: 288290 - Cell 9**

Laboratory: Lubbock  
Analysis: Chloride (IC)                      Analytical Method: E 300.0                      Prep Method: N/A  
QC Batch: 88553                              Date Analyzed: 2012-02-13                      Analyzed By: RL  
Prep Batch: 75178                              Sample Preparation: 2012-02-11                      Prepared By: RL

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Chloride  |      | 1    | 31.3         | mg/Kg | 1        | 2.00 |

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 27 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Sample: 288290 - Cell 9**

Laboratory: Lubbock  
Analysis: Conductivity      Analytical Method: SM 2510B      Prep Method: N/A  
QC Batch: 88504      Date Analyzed: 2012-02-13      Analyzed By: RL  
Prep Batch: 75134      Sample Preparation: 2012-02-13      Prepared By: RL

| Parameter            | Flag | Cert | RL<br>Result | Units    | Dilution | RL   |
|----------------------|------|------|--------------|----------|----------|------|
| Specific Conductance |      | 1    | <b>435</b>   | uMHOS/cm | 1        | 0.00 |

**Sample: 288290 - Cell 9**

Laboratory: Lubbock  
Analysis: pH      Analytical Method: SM 4500-H+      Prep Method: N/A  
QC Batch: 88351      Date Analyzed: 2012-02-06      Analyzed By: AM  
Prep Batch: 75007      Sample Preparation: 2012-02-06      Prepared By: AM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| pH        |      |      | <b>8.16</b>  | s.u.  | 1        | 2.00 |

**Sample: 288290 - Cell 9**

Laboratory: Lubbock  
Analysis: Salts, Total      Analytical Method: S 6010C      Prep Method: S 3050B  
QC Batch: 88394      Date Analyzed: 2012-02-08      Analyzed By: RR  
Prep Batch: 75036      Sample Preparation: 2012-02-08      Prepared By: KV

| Parameter       | Flag | Cert | RL<br>Result   | Units | Dilution | RL  |
|-----------------|------|------|----------------|-------|----------|-----|
| Total Calcium   |      | 1    | <b>39400</b>   | mg/Kg | 10       | 100 |
| Total Magnesium |      | 1    | <b>1830</b>    | mg/Kg | 1        | 100 |
| Total Potassium |      | 1    | <b>760</b>     | mg/Kg | 1        | 100 |
| Total Sodium    |      | 1    | <b>&lt;100</b> | mg/Kg | 1        | 100 |

**Sample: 288290 - Cell 9**

Laboratory: Lubbock  
Analysis: SO4 (IC)      Analytical Method: E 300.0      Prep Method: N/A  
QC Batch: 88553      Date Analyzed: 2012-02-13      Analyzed By: RL  
Prep Batch: 75178      Sample Preparation: 2012-02-11      Prepared By: RL

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 28 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Sulfate   |      | 1    | 172          | mg/Kg | 1        | 2.00 |

**Sample: 288290 - Cell 9**

Laboratory: Lubbock  
Analysis: TCLP Total 8 Metals      Analytical Method: S 6010C      Prep Method: TCLP 1311  
QC Batch: 88427      Date Analyzed: 2012-02-09      Analyzed By: RR  
Prep Batch: 75069      TCLP Extraction: 2012-02-09      Prepared By: KV  
Sample Preparation: 2012-02-09      Prepared By: KV

Laboratory: Lubbock  
Analysis: TCLP Total 8 Metals      Analytical Method: S 7470A      Prep Method: TCLP 1311  
QC Batch: 88528      Date Analyzed: 2012-02-13      Analyzed By: TP  
Prep Batch: 75149      TCLP Extraction: 2012-02-13      Prepared By: TP  
Sample Preparation: 2012-02-13      Prepared By: TP

| Parameter     | Flag | Cert | RL<br>Result | Units | Dilution | RL      |
|---------------|------|------|--------------|-------|----------|---------|
| TCLP Silver   | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Arsenic  | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Barium   |      | 1    | 0.316        | mg/L  | 1        | 0.100   |
| TCLP Cadmium  | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Chromium | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Mercury  | u    | 1    | <0.00500     | mg/L  | 1        | 0.00500 |
| TCLP Lead     | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Sclenium | u    |      | <0.200       | mg/L  | 1        | 0.200   |

**Sample: 288290 - Cell 9**

Laboratory: Lubbock  
Analysis: TPH 418.1      Analytical Method: E 418.1      Prep Method: N/A  
QC Batch: 88454      Date Analyzed: 2012-02-09      Analyzed By: DS  
Prep Batch: 75096      Sample Preparation: 2012-02-09      Prepared By: DS

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     | u    |      | <10.0        | mg/Kg | 1        | 10.0 |

**Sample: 288291 - Cell 10**

Laboratory: Lubbock  
 Analysis: Alkalinity Analytical Method: SM 2320B Prep Method: N/A  
 QC Batch: 88349 Date Analyzed: 2012-02-06 Analyzed By: AM  
 Prep Batch: 75005 Sample Preparation: 2012-02-06 Prepared By: AM

| Parameter              | Flag | Cert | RL<br>Result | Units          | Dilution | RL   |
|------------------------|------|------|--------------|----------------|----------|------|
| Hydroxide Alkalinity   | u    |      | <1.00        | mg/Kg as CaCo3 | 1        | 1.00 |
| Carbonate Alkalinity   |      |      | 10.0         | mg/Kg as CaCo3 | 1        | 1.00 |
| Bicarbonate Alkalinity |      |      | 110          | mg/Kg as CaCo3 | 1        | 4.00 |
| Total Alkalinity       |      |      | 120          | mg/Kg as CaCo3 | 1        | 4.00 |

**Sample: 288291 - Cell 10**

Laboratory: Lubbock  
 Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035  
 QC Batch: 88302 Date Analyzed: 2012-02-03 Analyzed By: ZLM  
 Prep Batch: 74977 Sample Preparation: 2012-02-03 Prepared By: ZLM

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.95   | mg/Kg | 1        | 2.00            | 98                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.88   | mg/Kg | 1        | 2.00            | 94                  | 70 - 130           |

**Sample: 288291 - Cell 10**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 88553 Date Analyzed: 2012-02-13 Analyzed By: RL  
 Prep Batch: 75178 Sample Preparation: 2012-02-11 Prepared By: RL

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Chloride  |      | 1    | 132          | mg/Kg | 1        | 2.00 |

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 30 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Sample: 288291 - Cell 10**

Laboratory: Lubbock  
Analysis: Conductivity      Analytical Method: SM 2510B      Prep Method: N/A  
QC Batch: 88504      Date Analyzed: 2012-02-13      Analyzed By: RL  
Prep Batch: 75134      Sample Preparation: 2012-02-13      Prepared By: RL

| Parameter            | Flag | Cert | RL<br>Result | Units    | Dilution | RL   |
|----------------------|------|------|--------------|----------|----------|------|
| Specific Conductance |      | 1    | 590          | uMHOS/cm | 1        | 0.00 |

**Sample: 288291 - Cell 10**

Laboratory: Lubbock  
Analysis: pH      Analytical Method: SM 4500-H+      Prep Method: N/A  
QC Batch: 88351      Date Analyzed: 2012-02-06      Analyzed By: AM  
Prep Batch: 75007      Sample Preparation: 2012-02-06      Prepared By: AM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| pH        |      |      | 8.34         | s.u.  | 1        | 2.00 |

**Sample: 288291 - Cell 10**

Laboratory: Lubbock  
Analysis: Salts, Total      Analytical Method: S 6010C      Prep Method: S 3050B  
QC Batch: 88394      Date Analyzed: 2012-02-08      Analyzed By: RR  
Prep Batch: 75036      Sample Preparation: 2012-02-08      Prepared By: KV

| Parameter       | Flag | Cert | RL<br>Result | Units | Dilution | RL  |
|-----------------|------|------|--------------|-------|----------|-----|
| Total Calcium   |      | 1    | 63200        | mg/Kg | 10       | 100 |
| Total Magnesium |      | 1    | 3670         | mg/Kg | 1        | 100 |
| Total Potassium |      | 1    | 977          | mg/Kg | 1        | 100 |
| Total Sodium    |      | 1    | 302          | mg/Kg | 1        | 100 |

**Sample: 288291 - Cell 10**

Laboratory: Lubbock  
Analysis: SO4 (IC)      Analytical Method: E 300.0      Prep Method: N/A  
QC Batch: 88553      Date Analyzed: 2012-02-13      Analyzed By: RL  
Prep Batch: 75178      Sample Preparation: 2012-02-11      Prepared By: RL

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 31 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Sulfate   |      | 1    | 80.7         | mg/Kg | 1        | 2.00 |

**Sample: 288291 - Cell 10**

Laboratory: Lubbock  
Analysis: TCLP Total 8 Metals      Analytical Method: S 6010C      Prep Method: TCLP 1311  
QC Batch: 88427      Date Analyzed: 2012-02-09      Analyzed By: RR  
Prep Batch: 75069      TCLP Extraction: 2012-02-09      Prepared By: KV  
Sample Preparation: 2012-02-09      Prepared By: KV

Laboratory: Lubbock  
Analysis: TCLP Total 8 Metals      Analytical Method: S 7470A      Prep Method: TCLP 1311  
QC Batch: 88528      Date Analyzed: 2012-02-13      Analyzed By: TP  
Prep Batch: 75149      TCLP Extraction: 2012-02-13      Prepared By: TP  
Sample Preparation: 2012-02-13      Prepared By: TP

| Parameter     | Flag | Cert | RL<br>Result | Units | Dilution | RL      |
|---------------|------|------|--------------|-------|----------|---------|
| TCLP Silver   | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Arsenic  | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Barium   |      | 1    | 0.845        | mg/L  | 1        | 0.100   |
| TCLP Cadmium  | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Chromium | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Mercury  | u    | 1    | <0.00500     | mg/L  | 1        | 0.00500 |
| TCLP Lead     | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Selenium | u    |      | <0.200       | mg/L  | 1        | 0.200   |

**Sample: 288291 - Cell 10**

Laboratory: Lubbock  
Analysis: TPH 418.1      Analytical Method: E 418.1      Prep Method: N/A  
QC Batch: 88454      Date Analyzed: 2012-02-09      Analyzed By: DS  
Prep Batch: 75096      Sample Preparation: 2012-02-09      Prepared By: DS

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     | u    |      | <10.0        | mg/Kg | 1        | 10.0 |

**Sample: 288292 - Cell 11**

Laboratory: Lubbock  
 Analysis: Alkalinity                      Analytical Method: SM 2320B                      Prep Method: N/A  
 QC Batch: 88349                              Date Analyzed: 2012-02-06                      Analyzed By: AM  
 Prep Batch: 75005                              Sample Preparation: 2012-02-06                      Prepared By: AM

| Parameter              | Flag | Cert | RL<br>Result | Units          | Dilution | RL   |
|------------------------|------|------|--------------|----------------|----------|------|
| Hydroxide Alkalinity   | u    |      | <1.00        | mg/Kg as CaCo3 | 1        | 1.00 |
| Carbonate Alkalinity   | u    |      | <1.00        | mg/Kg as CaCo3 | 1        | 1.00 |
| Bicarbonate Alkalinity |      |      | 120          | mg/Kg as CaCo3 | 1        | 4.00 |
| Total Alkalinity       |      |      | 120          | mg/Kg as CaCo3 | 1        | 4.00 |

**Sample: 288292 - Cell 11**

Laboratory: Lubbock  
 Analysis: BTEX                              Analytical Method: S 8021B                      Prep Method: S 5035  
 QC Batch: 88302                              Date Analyzed: 2012-02-03                      Analyzed By: ZLM  
 Prep Batch: 74977                              Sample Preparation: 2012-02-03                      Prepared By: ZLM

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.73   | mg/Kg | 1        | 2.00            | 86                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.65   | mg/Kg | 1        | 2.00            | 82                  | 70 - 130           |

**Sample: 288292 - Cell 11**

Laboratory: Lubbock  
 Analysis: Chloride (IC)                      Analytical Method: E 300.0                      Prep Method: N/A  
 QC Batch: 88554                              Date Analyzed: 2012-02-13                      Analyzed By: RL  
 Prep Batch: 75178                              Sample Preparation: 2012-02-11                      Prepared By: RL

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Chloride  |      | 1    | 120          | mg/Kg | 1        | 2.00 |

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 33 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Sample: 288292 - Cell 11**

Laboratory: Lubbock  
Analysis: Conductivity      Analytical Method: SM 2510B      Prep Method: N/A  
QC Batch: 88504      Date Analyzed: 2012-02-13      Analyzed By: RL  
Prep Batch: 75134      Sample Preparation: 2012-02-13      Prepared By: RL

| Parameter            | Flag | Cert | RL<br>Result | Units    | Dilution | RL   |
|----------------------|------|------|--------------|----------|----------|------|
| Specific Conductance |      | 1    | <b>722</b>   | uMHOS/cm | 1        | 0.00 |

**Sample: 288292 - Cell 11**

Laboratory: Lubbock  
Analysis: pH      Analytical Method: SM 4500-H+      Prep Method: N/A  
QC Batch: 88351      Date Analyzed: 2012-02-06      Analyzed By: AM  
Prep Batch: 75007      Sample Preparation: 2012-02-06      Prepared By: AM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| pH        |      |      | <b>8.09</b>  | s.u.  | 1        | 2.00 |

**Sample: 288292 - Cell 11**

Laboratory: Lubbock  
Analysis: Salts, Total      Analytical Method: S 6010C      Prep Method: S 3050B  
QC Batch: 88394      Date Analyzed: 2012-02-08      Analyzed By: RR  
Prep Batch: 75036      Sample Preparation: 2012-02-08      Prepared By: KV

| Parameter       | Flag | Cert | RL<br>Result  | Units | Dilution | RL  |
|-----------------|------|------|---------------|-------|----------|-----|
| Total Calcium   |      | 1    | <b>165000</b> | mg/Kg | 100      | 100 |
| Total Magnesium |      | 1    | <b>2270</b>   | mg/Kg | 1        | 100 |
| Total Potassium |      | 1    | <b>569</b>    | mg/Kg | 1        | 100 |
| Total Sodium    |      | 1    | <b>245</b>    | mg/Kg | 1        | 100 |

**Sample: 288292 - Cell 11**

Laboratory: Lubbock  
Analysis: SO4 (IC)      Analytical Method: E 300.0      Prep Method: N/A  
QC Batch: 88554      Date Analyzed: 2012-02-13      Analyzed By: RL  
Prep Batch: 75178      Sample Preparation: 2012-02-11      Prepared By: RL

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 34 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Sulfate   |      | 1    | 432          | mg/Kg | 1        | 2.00 |

**Sample: 288292 - Cell 11**

|                               |                                |                        |
|-------------------------------|--------------------------------|------------------------|
| Laboratory: Lubbock           | Analytical Method: S 6010C     | Prep Method: TCLP 1311 |
| Analysis: TCLP Total 8 Metals | Date Analyzed: 2012-02-09      | Analyzed By: RR        |
| QC Batch: 88429               | TCLP Extraction: 2012-02-09    | Prepared By: KV        |
| Prep Batch: 75069             | Sample Preparation: 2012-02-09 | Prepared By: KV        |

|                               |                                |                        |
|-------------------------------|--------------------------------|------------------------|
| Laboratory: Lubbock           | Analytical Method: S 7470A     | Prep Method: TCLP 1311 |
| Analysis: TCLP Total 8 Metals | Date Analyzed: 2012-02-13      | Analyzed By: TP        |
| QC Batch: 88529               | TCLP Extraction: 2012-02-13    | Prepared By: TP        |
| Prep Batch: 75149             | Sample Preparation: 2012-02-13 | Prepared By: TP        |

| Parameter     | Flag | Cert | RL<br>Result | Units | Dilution | RL      |
|---------------|------|------|--------------|-------|----------|---------|
| TCLP Silver   | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Arsenic  | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Barium   |      | 1    | 1.35         | mg/L  | 1        | 0.100   |
| TCLP Cadmium  | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Chromium | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Mercury  | u    | 1    | <0.00500     | mg/L  | 1        | 0.00500 |
| TCLP Lead     | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Selenium | u    |      | <0.200       | mg/L  | 1        | 0.200   |

**Sample: 288292 - Cell 11**

|                     |                                |                  |
|---------------------|--------------------------------|------------------|
| Laboratory: Lubbock | Analytical Method: E 418.1     | Prep Method: N/A |
| Analysis: TPH 418.1 | Date Analyzed: 2012-02-09      | Analyzed By: DS  |
| QC Batch: 88454     | Sample Preparation: 2012-02-09 | Prepared By: DS  |
| Prep Batch: 75096   |                                |                  |

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     | u    |      | <10.0        | mg/Kg | 1        | 10.0 |

**Sample: 288293 - Cell 12**

Laboratory: Lubbock  
 Analysis: Alkalinity Analytical Method: SM 2320B Prep Method: N/A  
 QC Batch: 88349 Date Analyzed: 2012-02-06 Analyzed By: AM  
 Prep Batch: 75005 Sample Preparation: 2012-02-06 Prepared By: AM

| Parameter              | Flag | Cert | RL<br>Result | Units          | Dilution | RL   |
|------------------------|------|------|--------------|----------------|----------|------|
| Hydroxide Alkalinity   | u    |      | <1.00        | mg/Kg as CaCo3 | 1        | 1.00 |
| Carbonate Alkalinity   |      |      | <b>20.0</b>  | mg/Kg as CaCo3 | 1        | 1.00 |
| Bicarbonate Alkalinity |      |      | <b>260</b>   | mg/Kg as CaCo3 | 1        | 4.00 |
| Total Alkalinity       |      |      | <b>280</b>   | mg/Kg as CaCo3 | 1        | 4.00 |

**Sample: 288293 - Cell 12**

Laboratory: Lubbock  
 Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035  
 QC Batch: 88302 Date Analyzed: 2012-02-03 Analyzed By: ZLM  
 Prep Batch: 74977 Sample Preparation: 2012-02-03 Prepared By: ZLM

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.92   | mg/Kg | 1        | 2.00            | 96                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.88   | mg/Kg | 1        | 2.00            | 94                  | 70 - 130           |

**Sample: 288293 - Cell 12**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 88554 Date Analyzed: 2012-02-13 Analyzed By: RL  
 Prep Batch: 75178 Sample Preparation: 2012-02-11 Prepared By: RL

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Chloride  |      | 1    | <b>144</b>   | mg/Kg | 1        | 2.00 |

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 36 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Sample: 288293 - Cell 12**

Laboratory: Lubbock  
Analysis: Conductivity      Analytical Method: SM 2510B      Prep Method: N/A  
QC Batch: 88776      Date Analyzed: 2012-02-21      Analyzed By: RL  
Prep Batch: 75361      Sample Preparation: 2012-02-21      Prepared By: RL

| Parameter            | Flag | Cert | RL<br>Result | Units    | Dilution | RL   |
|----------------------|------|------|--------------|----------|----------|------|
| Specific Conductance |      | 1    | <b>779</b>   | uMHOS/cm | 1        | 0.00 |

**Sample: 288293 - Cell 12**

Laboratory: Lubbock  
Analysis: pH      Analytical Method: SM 4500-H+      Prep Method: N/A  
QC Batch: 88351      Date Analyzed: 2012-02-06      Analyzed By: AM  
Prep Batch: 75007      Sample Preparation: 2012-02-06      Prepared By: AM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| pH        |      |      | <b>8.93</b>  | s.u.  | 1        | 2.00 |

**Sample: 288293 - Cell 12**

Laboratory: Lubbock  
Analysis: Salts, Total      Analytical Method: S 6010C      Prep Method: S 3050B  
QC Batch: 88394      Date Analyzed: 2012-02-08      Analyzed By: RR  
Prep Batch: 75036      Sample Preparation: 2012-02-08      Prepared By: KV

| Parameter       | Flag | Cert | RL<br>Result | Units | Dilution | RL  |
|-----------------|------|------|--------------|-------|----------|-----|
| Total Calcium   |      | 1    | <b>2420</b>  | mg/Kg | 1        | 100 |
| Total Magnesium |      | 1    | <b>1160</b>  | mg/Kg | 1        | 100 |
| Total Potassium |      | 1    | <b>1310</b>  | mg/Kg | 1        | 100 |
| Total Sodium    |      | 1    | <b>466</b>   | mg/Kg | 1        | 100 |

**Sample: 288293 - Cell 12**

Laboratory: Lubbock  
Analysis: SO4 (IC)      Analytical Method: E 300.0      Prep Method: N/A  
QC Batch: 88554      Date Analyzed: 2012-02-13      Analyzed By: RL  
Prep Batch: 75178      Sample Preparation: 2012-02-11      Prepared By: RL

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Sulfate   |      | 1    | 149          | mg/Kg | 1        | 2.00 |

**Sample: 288293 - Cell 12**

|                               |                                |                        |
|-------------------------------|--------------------------------|------------------------|
| Laboratory: Lubbock           | Analytical Method: S 6010C     | Prep Method: TCLP 1311 |
| Analysis: TCLP Total 8 Metals | Date Analyzed: 2012-02-09      | Analyzed By: RR        |
| QC Batch: 88429               | TCLP Extraction: 2012-02-09    | Prepared By: KV        |
| Prep Batch: 75069             | Sample Preparation: 2012-02-09 | Prepared By: KV        |

|                               |                                |                        |
|-------------------------------|--------------------------------|------------------------|
| Laboratory: Lubbock           | Analytical Method: S 7470A     | Prep Method: TCLP 1311 |
| Analysis: TCLP Total 8 Metals | Date Analyzed: 2012-02-13      | Analyzed By: TP        |
| QC Batch: 88529               | TCLP Extraction: 2012-02-13    | Prepared By: TP        |
| Prep Batch: 75149             | Sample Preparation: 2012-02-13 | Prepared By: TP        |

| Parameter     | Flag | Cert | RL<br>Result | Units | Dilution | RL      |
|---------------|------|------|--------------|-------|----------|---------|
| TCLP Silver   | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Arsenic  | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Barium   |      | 1    | <b>0.561</b> | mg/L  | 1        | 0.100   |
| TCLP Cadmium  | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Chromium | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Mercury  | u    | 1    | <0.00500     | mg/L  | 1        | 0.00500 |
| TCLP Lead     | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Selenium | u    |      | <0.200       | mg/L  | 1        | 0.200   |

**Sample: 288293 - Cell 12**

|                     |                                |                  |
|---------------------|--------------------------------|------------------|
| Laboratory: Lubbock | Analytical Method: E 418.1     | Prep Method: N/A |
| Analysis: TPH 418.1 | Date Analyzed: 2012-02-09      | Analyzed By: DS  |
| QC Batch: 88454     | Sample Preparation: 2012-02-09 | Prepared By: DS  |
| Prep Batch: 75096   |                                |                  |

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     | u    |      | <10.0        | mg/Kg | 1        | 10.0 |

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 38 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Sample: 288294 - Cell 13**

Laboratory: Lubbock  
 Analysis: Alkalinity                      Analytical Method: SM 2320B                      Prep Method: N/A  
 QC Batch: 88350                              Date Analyzed: 2012-02-06                      Analyzed By: AM  
 Prep Batch: 75006                              Sample Preparation: 2012-02-06                      Prepared By: AM

| Parameter              | Flag | Cert | RL<br>Result | Units          | Dilution | RL   |
|------------------------|------|------|--------------|----------------|----------|------|
| Hydroxide Alkalinity   | u    |      | <1.00        | mg/Kg as CaCo3 | 1        | 1.00 |
| Carbonate Alkalinity   |      |      | 10.0         | mg/Kg as CaCo3 | 1        | 1.00 |
| Bicarbonate Alkalinity |      |      | 70.0         | mg/Kg as CaCo3 | 1        | 4.00 |
| Total Alkalinity       |      |      | 80.0         | mg/Kg as CaCo3 | 1        | 4.00 |

**Sample: 288294 - Cell 13**

Laboratory: Lubbock  
 Analysis: BTEX                              Analytical Method: S 8021B                      Prep Method: S 5035  
 QC Batch: 88302                              Date Analyzed: 2012-02-03                      Analyzed By: ZLM  
 Prep Batch: 74977                              Sample Preparation: 2012-02-03                      Prepared By: ZLM

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.94   | mg/Kg | 1        | 2.00            | 97                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.96   | mg/Kg | 1        | 2.00            | 98                  | 70 - 130           |

**Sample: 288294 - Cell 13**

Laboratory: Lubbock  
 Analysis: Chloride (IC)                      Analytical Method: E 300.0                      Prep Method: N/A  
 QC Batch: 88601                              Date Analyzed: 2012-02-15                      Analyzed By: RL  
 Prep Batch: 75208                              Sample Preparation: 2012-02-14                      Prepared By: RL

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Chloride  | qs   | 1    | 575          | mg/Kg | 5        | 2.00 |

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 39 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Sample: 288294 - Cell 13**

Laboratory: Lubbock  
Analysis: Conductivity Analytical Method: SM 2510B Prep Method: N/A  
QC Batch: 88776 Date Analyzed: 2012-02-21 Analyzed By: RL  
Prep Batch: 75361 Sample Preparation: 2012-02-21 Prepared By: RL

| Parameter            | Flag | Cert | RL<br>Result | Units    | Dilution | RL   |
|----------------------|------|------|--------------|----------|----------|------|
| Specific Conductance |      | 1    | 1920         | uMHOS/cm | 1        | 0.00 |

**Sample: 288294 - Cell 13**

Laboratory: Lubbock  
Analysis: pH Analytical Method: SM 4500-H+ Prep Method: N/A  
QC Batch: 88352 Date Analyzed: 2012-02-06 Analyzed By: AM  
Prep Batch: 75008 Sample Preparation: 2012-02-06 Prepared By: AM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| pH        |      |      | 8.33         | s.u.  | 1        | 2.00 |

**Sample: 288294 - Cell 13**

Laboratory: Lubbock  
Analysis: Salts, Total Analytical Method: S 6010C Prep Method: S 3050B  
QC Batch: 88395 Date Analyzed: 2012-02-08 Analyzed By: RR  
Prep Batch: 75037 Sample Preparation: 2012-02-08 Prepared By: KV

| Parameter       | Flag | Cert | RL<br>Result | Units | Dilution | RL    |
|-----------------|------|------|--------------|-------|----------|-------|
| Total Calcium   |      | 1    | 4220         | mg/Kg | 1        | 0.500 |
| Total Magnesium |      | 1    | 2030         | mg/Kg | 1        | 0.500 |
| Total Potassium |      | 1    | 1920         | mg/Kg | 1        | 50.0  |
| Total Sodium    |      | 1    | 1290         | mg/Kg | 1        | 50.0  |

**Sample: 288294 - Cell 13**

Laboratory: Lubbock  
Analysis: SO4 (IC) Analytical Method: E 300.0 Prep Method: N/A  
QC Batch: 88554 Date Analyzed: 2012-02-13 Analyzed By: RL  
Prep Batch: 75178 Sample Preparation: 2012-02-11 Prepared By: RL

Report Date: February 22, 2012  
 4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
 GMI Landfarm

Page Number: 40 of 95  
 Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Sulfate   |      | 1    | 249          | mg/Kg | 1        | 2.00 |

**Sample: 288294 - Cell 13**

|                               |  |  |                                |  |                        |  |
|-------------------------------|--|--|--------------------------------|--|------------------------|--|
| Laboratory: Lubbock           |  |  |                                |  |                        |  |
| Analysis: TCLP Total 8 Metals |  |  | Analytical Method: S 6010C     |  | Prep Method: TCLP 1311 |  |
| QC Batch: 88429               |  |  | Date Analyzed: 2012-02-09      |  | Analyzed By: RR        |  |
| Prep Batch: 75069             |  |  | TCLP Extraction: 2012-02-09    |  | Prepared By: KV        |  |
|                               |  |  | Sample Preparation: 2012-02-09 |  | Prepared By: KV        |  |

|                               |  |  |                                |  |                        |  |
|-------------------------------|--|--|--------------------------------|--|------------------------|--|
| Laboratory: Lubbock           |  |  |                                |  |                        |  |
| Analysis: TCLP Total 8 Metals |  |  | Analytical Method: S 7470A     |  | Prep Method: TCLP 1311 |  |
| QC Batch: 88529               |  |  | Date Analyzed: 2012-02-13      |  | Analyzed By: TP        |  |
| Prep Batch: 75149             |  |  | TCLP Extraction: 2012-02-13    |  | Prepared By: TP        |  |
|                               |  |  | Sample Preparation: 2012-02-13 |  | Prepared By: TP        |  |

| Parameter     | Flag | Cert | RL<br>Result | Units | Dilution | RL      |
|---------------|------|------|--------------|-------|----------|---------|
| TCLP Silver   | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Arsenic  | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Barium   |      | 1    | <b>0.736</b> | mg/L  | 1        | 0.100   |
| TCLP Cadmium  | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Chromium | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Mercury  | u    | 1    | <0.00500     | mg/L  | 1        | 0.00500 |
| TCLP Lead     | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Selenium | u    |      | <0.200       | mg/L  | 1        | 0.200   |

**Sample: 288294 - Cell 13**

|                     |  |  |                                |  |                  |  |
|---------------------|--|--|--------------------------------|--|------------------|--|
| Laboratory: Lubbock |  |  |                                |  |                  |  |
| Analysis: TPH 418.1 |  |  | Analytical Method: E 418.1     |  | Prep Method: N/A |  |
| QC Batch: 88454     |  |  | Date Analyzed: 2012-02-09      |  | Analyzed By: DS  |  |
| Prep Batch: 75096   |  |  | Sample Preparation: 2012-02-09 |  | Prepared By: DS  |  |

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     | u    |      | <10.0        | mg/Kg | 1        | 10.0 |

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 41 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Sample: 288295 - Cell 14**

Laboratory: Lubbock  
 Analysis: Alkalinity      Analytical Method: SM 2320B      Prep Method: N/A  
 QC Batch: 88350      Date Analyzed: 2012-02-06      Analyzed By: AM  
 Prep Batch: 75006      Sample Preparation: 2012-02-06      Prepared By: AM

| Parameter              | Flag | Cert | RL<br>Result | Units          | Dilution | RL   |
|------------------------|------|------|--------------|----------------|----------|------|
| Hydroxide Alkalinity   | u    |      | <1.00        | mg/Kg as CaCo3 | 1        | 1.00 |
| Carbonate Alkalinity   |      |      | <b>20.0</b>  | mg/Kg as CaCo3 | 1        | 1.00 |
| Bicarbonate Alkalinity |      |      | <b>500</b>   | mg/Kg as CaCo3 | 1        | 4.00 |
| Total Alkalinity       |      |      | <b>520</b>   | mg/Kg as CaCo3 | 1        | 4.00 |

**Sample: 288295 - Cell 14**

Laboratory: Lubbock  
 Analysis: BTEX      Analytical Method: S 8021B      Prep Method: S 5035  
 QC Batch: 88302      Date Analyzed: 2012-02-03      Analyzed By: ZLM  
 Prep Batch: 74977      Sample Preparation: 2012-02-03      Prepared By: ZLM

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.84   | mg/Kg | 1        | 2.00            | 92                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.79   | mg/Kg | 1        | 2.00            | 90                  | 70 - 130           |

**Sample: 288295 - Cell 14**

Laboratory: Lubbock  
 Analysis: Chloride (IC)      Analytical Method: E 300.0      Prep Method: N/A  
 QC Batch: 88554      Date Analyzed: 2012-02-13      Analyzed By: RL  
 Prep Batch: 75178      Sample Preparation: 2012-02-11      Prepared By: RL

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Chloride  |      | 1    | <b>323</b>   | mg/Kg | 1        | 2.00 |

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 42 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Sample: 288295 - Cell 14**

Laboratory: Lubbock  
Analysis: Conductivity      Analytical Method: SM 2510B      Prep Method: N/A  
QC Batch: 88776      Date Analyzed: 2012-02-21      Analyzed By: RL  
Prep Batch: 75361      Sample Preparation: 2012-02-21      Prepared By: RL

| Parameter            | Flag | Cert | RL<br>Result | Units    | Dilution | RL   |
|----------------------|------|------|--------------|----------|----------|------|
| Specific Conductance |      | 1    | <b>1380</b>  | uMHOS/cm | 1        | 0.00 |

**Sample: 288295 - Cell 14**

Laboratory: Lubbock  
Analysis: pH      Analytical Method: SM 4500-H+      Prep Method: N/A  
QC Batch: 88352      Date Analyzed: 2012-02-06      Analyzed By: AM  
Prep Batch: 75008      Sample Preparation: 2012-02-06      Prepared By: AM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| pH        |      |      | <b>8.96</b>  | s.u.  | 1        | 2.00 |

**Sample: 288295 - Cell 14**

Laboratory: Lubbock  
Analysis: Salts, Total      Analytical Method: S 6010C      Prep Method: S 3050B  
QC Batch: 88395      Date Analyzed: 2012-02-08      Analyzed By: RR  
Prep Batch: 75037      Sample Preparation: 2012-02-08      Prepared By: KV

| Parameter       | Flag | Cert | RL<br>Result  | Units | Dilution | RL    |
|-----------------|------|------|---------------|-------|----------|-------|
| Total Calcium   |      | 1    | <b>118000</b> | mg/Kg | 100      | 0.500 |
| Total Magnesium |      | 1    | <b>2020</b>   | mg/Kg | 1        | 0.500 |
| Total Potassium |      | 1    | <b>530</b>    | mg/Kg | 1        | 50.0  |
| Total Sodium    |      | 1    | <b>7320</b>   | mg/Kg | 1        | 50.0  |

**Sample: 288295 - Cell 14**

Laboratory: Lubbock  
Analysis: SO4 (IC)      Analytical Method: E 300.0      Prep Method: N/A  
QC Batch: 88554      Date Analyzed: 2012-02-13      Analyzed By: RL  
Prep Batch: 75178      Sample Preparation: 2012-02-11      Prepared By: RL

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Sulfate   |      | 1    | <b>106</b>   | mg/Kg | 1        | 2.00 |

**Sample: 288295 - Cell 14**

|                               |                                |                        |
|-------------------------------|--------------------------------|------------------------|
| Laboratory: Lubbock           | Analytical Method: S 6010C     | Prep Method: TCLP 1311 |
| Analysis: TCLP Total 8 Metals | Date Analyzed: 2012-02-09      | Analyzed By: RR        |
| QC Batch: 88429               | TCLP Extraction: 2012-02-09    | Prepared By: KV        |
| Prep Batch: 75069             | Sample Preparation: 2012-02-09 | Prepared By: KV        |

|                               |                                |                        |
|-------------------------------|--------------------------------|------------------------|
| Laboratory: Lubbock           | Analytical Method: S 7470A     | Prep Method: TCLP 1311 |
| Analysis: TCLP Total 8 Metals | Date Analyzed: 2012-02-13      | Analyzed By: TP        |
| QC Batch: 88529               | TCLP Extraction: 2012-02-13    | Prepared By: TP        |
| Prep Batch: 75149             | Sample Preparation: 2012-02-13 | Prepared By: TP        |

| Parameter     | Flag | Cert | RL<br>Result | Units | Dilution | RL      |
|---------------|------|------|--------------|-------|----------|---------|
| TCLP Silver   | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Arsenic  | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Barium   |      | 1    | <b>1.29</b>  | mg/L  | 1        | 0.100   |
| TCLP Cadmium  | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Chromium | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Mercury  | u    | 1    | <0.00500     | mg/L  | 1        | 0.00500 |
| TCLP Lead     | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Selenium | u    |      | <0.200       | mg/L  | 1        | 0.200   |

**Sample: 288295 - Cell 14**

|                     |                                |                  |
|---------------------|--------------------------------|------------------|
| Laboratory: Lubbock | Analytical Method: E 418.1     | Prep Method: N/A |
| Analysis: TPH 418.1 | Date Analyzed: 2012-02-09      | Analyzed By: DS  |
| QC Batch: 88454     | Sample Preparation: 2012-02-09 | Prepared By: DS  |
| Prep Batch: 75096   |                                |                  |

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     | u    |      | <10.0        | mg/Kg | 1        | 10.0 |

**Sample: 288296 - Cell 15**

Laboratory: Lubbock  
 Analysis: Alkalinity      Analytical Method: SM 2320B      Prep Method: N/A  
 QC Batch: 88350      Date Analyzed: 2012-02-06      Analyzed By: AM  
 Prep Batch: 75006      Sample Preparation: 2012-02-06      Prepared By: AM

| Parameter              | Flag | Cert | RL<br>Result | Units          | Dilution | RL   |
|------------------------|------|------|--------------|----------------|----------|------|
| Hydroxide Alkalinity   | u    |      | <1.00        | mg/Kg as CaCo3 | 1        | 1.00 |
| Carbonate Alkalinity   | u    |      | <1.00        | mg/Kg as CaCo3 | 1        | 1.00 |
| Bicarbonate Alkalinity |      |      | 90.0         | mg/Kg as CaCo3 | 1        | 4.00 |
| Total Alkalinity       |      |      | 90.0         | mg/Kg as CaCo3 | 1        | 4.00 |

**Sample: 288296 - Cell 15**

Laboratory: Lubbock  
 Analysis: BTEX      Analytical Method: S 8021B      Prep Method: S 5035  
 QC Batch: 88302      Date Analyzed: 2012-02-03      Analyzed By: ZLM  
 Prep Batch: 74977      Sample Preparation: 2012-02-03      Prepared By: ZLM

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.88   | mg/Kg | 1        | 2.00            | 94                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.86   | mg/Kg | 1        | 2.00            | 93                  | 70 - 130           |

**Sample: 288296 - Cell 15**

Laboratory: Lubbock  
 Analysis: Chloride (IC)      Analytical Method: E 300.0      Prep Method: N/A  
 QC Batch: 88601      Date Analyzed: 2012-02-15      Analyzed By: RL  
 Prep Batch: 75208      Sample Preparation: 2012-02-14      Prepared By: RL

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Chloride  | Qs   | 1    | 878          | mg/Kg | 5        | 2.00 |

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 45 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Sample: 288296 - Cell 15**

Laboratory: Lubbock  
Analysis: Conductivity      Analytical Method: SM 2510B      Prep Method: N/A  
QC Batch: 88776      Date Analyzed: 2012-02-21      Analyzed By: RL  
Prep Batch: 75361      Sample Preparation: 2012-02-21      Prepared By: RL

| Parameter            | Flag | Cert | RL<br>Result | Units    | Dilution | RL   |
|----------------------|------|------|--------------|----------|----------|------|
| Specific Conductance |      | 1    | <b>2150</b>  | uMHOS/cm | 1        | 0.00 |

**Sample: 288296 - Cell 15**

Laboratory: Lubbock  
Analysis: pH      Analytical Method: SM 4500-H+      Prep Method: N/A  
QC Batch: 88352      Date Analyzed: 2012-02-06      Analyzed By: AM  
Prep Batch: 75008      Sample Preparation: 2012-02-06      Prepared By: AM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| pH        |      |      | <b>7.27</b>  | s.u.  | 1        | 2.00 |

**Sample: 288296 - Cell 15**

Laboratory: Lubbock  
Analysis: Salts, Total      Analytical Method: S 6010C      Prep Method: S 3050B  
QC Batch: 88395      Date Analyzed: 2012-02-08      Analyzed By: RR  
Prep Batch: 75037      Sample Preparation: 2012-02-08      Prepared By: KV

| Parameter       | Flag | Cert | RL<br>Result | Units | Dilution | RL    |
|-----------------|------|------|--------------|-------|----------|-------|
| Total Calcium   |      | 1    | <b>3460</b>  | mg/Kg | 1        | 0.500 |
| Total Magnesium |      | 1    | <b>1400</b>  | mg/Kg | 1        | 0.500 |
| Total Potassium |      | 1    | <b>1190</b>  | mg/Kg | 1        | 50.0  |
| Total Sodium    |      | 1    | <b>190</b>   | mg/Kg | 1        | 50.0  |

**Sample: 288296 - Cell 15**

Laboratory: Lubbock  
Analysis: SO4 (IC)      Analytical Method: E 300.0      Prep Method: N/A  
QC Batch: 88554      Date Analyzed: 2012-02-13      Analyzed By: RL  
Prep Batch: 75178      Sample Preparation: 2012-02-11      Prepared By: RL

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Sulfate   |      | 1    | 103          | mg/Kg | 1        | 2.00 |

**Sample: 288296 - Cell 15**

|                               |  |  |                                |  |                        |  |
|-------------------------------|--|--|--------------------------------|--|------------------------|--|
| Laboratory: Lubbock           |  |  |                                |  |                        |  |
| Analysis: TCLP Total 8 Metals |  |  | Analytical Method: S 6010C     |  | Prep Method: TCLP 1311 |  |
| QC Batch: 88429               |  |  | Date Analyzed: 2012-02-09      |  | Analyzed By: RR        |  |
| Prep Batch: 75069             |  |  | TCLP Extraction: 2012-02-09    |  | Prepared By: KV        |  |
|                               |  |  | Sample Preparation: 2012-02-09 |  | Prepared By: KV        |  |

|                               |  |  |                                |  |                        |  |
|-------------------------------|--|--|--------------------------------|--|------------------------|--|
| Laboratory: Lubbock           |  |  |                                |  |                        |  |
| Analysis: TCLP Total 8 Metals |  |  | Analytical Method: S 7470A     |  | Prep Method: TCLP 1311 |  |
| QC Batch: 88529               |  |  | Date Analyzed: 2012-02-13      |  | Analyzed By: TP        |  |
| Prep Batch: 75149             |  |  | TCLP Extraction: 2012-02-13    |  | Prepared By: TP        |  |
|                               |  |  | Sample Preparation: 2012-02-13 |  | Prepared By: TP        |  |

| Parameter     | Flag | Cert | RL<br>Result | Units | Dilution | RL      |
|---------------|------|------|--------------|-------|----------|---------|
| TCLP Silver   | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Arsenic  | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Barium   |      | 1    | 1.04         | mg/L  | 1        | 0.100   |
| TCLP Cadmium  | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Chromium | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Mercury  | u    | 1    | <0.00500     | mg/L  | 1        | 0.00500 |
| TCLP Lead     | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Selenium | u    |      | <0.200       | mg/L  | 1        | 0.200   |

**Sample: 288296 - Cell 15**

|                     |  |  |                                |  |                  |  |
|---------------------|--|--|--------------------------------|--|------------------|--|
| Laboratory: Lubbock |  |  |                                |  |                  |  |
| Analysis: TPH 418.1 |  |  | Analytical Method: E 418.1     |  | Prep Method: N/A |  |
| QC Batch: 88454     |  |  | Date Analyzed: 2012-02-09      |  | Analyzed By: DS  |  |
| Prep Batch: 75096   |  |  | Sample Preparation: 2012-02-09 |  | Prepared By: DS  |  |

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     |      |      | <10.0        | mg/Kg | 1        | 10.0 |

**Sample: 288297 - Cell 16**

Laboratory: Lubbock  
 Analysis: Alkalinity                      Analytical Method: SM 2320B                      Prep Method: N/A  
 QC Batch: 88350                              Date Analyzed: 2012-02-06                      Analyzed By: AM  
 Prep Batch: 75006                              Sample Preparation: 2012-02-06                      Prepared By: AM

| Parameter              | Flag | Cert | RL<br>Result | Units          | Dilution | RL   |
|------------------------|------|------|--------------|----------------|----------|------|
| Hydroxide Alkalinity   | u    |      | <1.00        | mg/Kg as CaCo3 | 1        | 1.00 |
| Carbonate Alkalinity   | u    |      | <1.00        | mg/Kg as CaCo3 | 1        | 1.00 |
| Bicarbonate Alkalinity |      |      | 50.0         | mg/Kg as CaCo3 | 1        | 4.00 |
| Total Alkalinity       |      |      | 50.0         | mg/Kg as CaCo3 | 1        | 4.00 |

**Sample: 288297 - Cell 16**

Laboratory: Lubbock  
 Analysis: BTEX                              Analytical Method: S 8021B                      Prep Method: S 5035  
 QC Batch: 88302                              Date Analyzed: 2012-02-03                      Analyzed By: ZLM  
 Prep Batch: 74977                              Sample Preparation: 2012-02-03                      Prepared By: ZLM

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.86   | mg/Kg | 1        | 2.00            | 93                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.78   | mg/Kg | 1        | 2.00            | 89                  | 70 - 130           |

**Sample: 288297 - Cell 16**

Laboratory: Lubbock  
 Analysis: Chloride (IC)                      Analytical Method: E 300.0                      Prep Method: N/A  
 QC Batch: 88601                              Date Analyzed: 2012-02-15                      Analyzed By: RL  
 Prep Batch: 75208                              Sample Preparation: 2012-02-14                      Prepared By: RL

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Chloride  | Qs   | 1    | 712          | mg/Kg | 5        | 2.00 |

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 48 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Sample: 288297 - Cell 16**

Laboratory: Lubbock  
Analysis: Conductivity      Analytical Method: SM 2510B      Prep Method: N/A  
QC Batch: 88776      Date Analyzed: 2012-02-21      Analyzed By: RL  
Prep Batch: 75361      Sample Preparation: 2012-02-21      Prepared By: RL

| Parameter            | Flag | Cert | RL<br>Result | Units    | Dilution | RL   |
|----------------------|------|------|--------------|----------|----------|------|
| Specific Conductance |      | 1    | 1330         | uMHOS/cm | 1        | 0.00 |

**Sample: 288297 - Cell 16**

Laboratory: Lubbock  
Analysis: pH      Analytical Method: SM 4500-H+      Prep Method: N/A  
QC Batch: 88352      Date Analyzed: 2012-02-06      Analyzed By: AM  
Prep Batch: 75008      Sample Preparation: 2012-02-06      Prepared By: AM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| pH        |      |      | 7.82         | s.u.  | 1        | 2.00 |

**Sample: 288297 - Cell 16**

Laboratory: Lubbock  
Analysis: Salts, Total      Analytical Method: S 6010C      Prep Method: S 3050B  
QC Batch: 88395      Date Analyzed: 2012-02-08      Analyzed By: RR  
Prep Batch: 75037      Sample Preparation: 2012-02-08      Prepared By: KV

| Parameter       | Flag | Cert | RL<br>Result | Units | Dilution | RL    |
|-----------------|------|------|--------------|-------|----------|-------|
| Total Calcium   |      | 1    | 10400        | mg/Kg | 1        | 0.500 |
| Total Magnesium |      | 1    | 1150         | mg/Kg | 1        | 0.500 |
| Total Potassium |      | 1    | 760          | mg/Kg | 1        | 50.0  |
| Total Sodium    |      | 1    | 270          | mg/Kg | 1        | 50.0  |

**Sample: 288297 - Cell 16**

Laboratory: Lubbock  
Analysis: SO4 (IC)      Analytical Method: E 300.0      Prep Method: N/A  
QC Batch: 88554      Date Analyzed: 2012-02-13      Analyzed By: RL  
Prep Batch: 75178      Sample Preparation: 2012-02-11      Prepared By: RL

Report Date: February 22, 2012  
 4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
 GMI Landfarm

Page Number: 49 of 95  
 Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Sulfate   |      | 1    | <b>245</b>   | mg/Kg | 1        | 2.00 |

**Sample: 288297 - Cell 16**

|                               |                                |                        |
|-------------------------------|--------------------------------|------------------------|
| Laboratory: Lubbock           | Analytical Method: S 6010C     | Prep Method: TCLP 1311 |
| Analysis: TCLP Total 8 Metals | Date Analyzed: 2012-02-09      | Analyzed By: RR        |
| QC Batch: 88429               | TCLP Extraction: 2012-02-09    | Prepared By: KV        |
| Prep Batch: 75069             | Sample Preparation: 2012-02-09 | Prepared By: KV        |

|                               |                                |                        |
|-------------------------------|--------------------------------|------------------------|
| Laboratory: Lubbock           | Analytical Method: S 7470A     | Prep Method: TCLP 1311 |
| Analysis: TCLP Total 8 Metals | Date Analyzed: 2012-02-13      | Analyzed By: TP        |
| QC Batch: 88529               | TCLP Extraction: 2012-02-13    | Prepared By: TP        |
| Prep Batch: 75149             | Sample Preparation: 2012-02-13 | Prepared By: TP        |

| Parameter     | Flag | Cert | RL<br>Result | Units | Dilution | RL      |
|---------------|------|------|--------------|-------|----------|---------|
| TCLP Silver   | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Arsenic  | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Barium   |      | 1    | <b>0.580</b> | mg/L  | 1        | 0.100   |
| TCLP Cadmium  | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Chromium | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Mercury  | u    | 1    | <0.00500     | mg/L  | 1        | 0.00500 |
| TCLP Lead     | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Selenium | u    |      | <0.200       | mg/L  | 1        | 0.200   |

**Sample: 288297 - Cell 16**

|                     |                                |                  |
|---------------------|--------------------------------|------------------|
| Laboratory: Lubbock | Analytical Method: E 418.1     | Prep Method: N/A |
| Analysis: TPH 418.1 | Date Analyzed: 2012-02-09      | Analyzed By: DS  |
| QC Batch: 88454     | Sample Preparation: 2012-02-09 | Prepared By: DS  |
| Prep Batch: 75096   |                                |                  |

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     |      |      | <10.0        | mg/Kg | 1        | 10.0 |

**Sample: 288298 - Cell 17**

Laboratory: Lubbock  
 Analysis: Alkalinity Analytical Method: SM 2320B Prep Method: N/A  
 QC Batch: 88350 Date Analyzed: 2012-02-06 Analyzed By: AM  
 Prep Batch: 75006 Sample Preparation: 2012-02-06 Prepared By: AM

| Parameter              | Flag | Cert | RL<br>Result | Units          | Dilution | RL   |
|------------------------|------|------|--------------|----------------|----------|------|
| Hydroxide Alkalinity   | u    |      | <1.00        | mg/Kg as CaCo3 | 1        | 1.00 |
| Carbonate Alkalinity   | u    |      | <1.00        | mg/Kg as CaCo3 | 1        | 1.00 |
| Bicarbonate Alkalinity |      |      | 100          | mg/Kg as CaCo3 | 1        | 4.00 |
| Total Alkalinity       |      |      | 100          | mg/Kg as CaCo3 | 1        | 4.00 |

**Sample: 288298 - Cell 17**

Laboratory: Lubbock  
 Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035  
 QC Batch: 88302 Date Analyzed: 2012-02-03 Analyzed By: ZLM  
 Prep Batch: 74977 Sample Preparation: 2012-02-03 Prepared By: ZLM

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.94   | mg/Kg | 1        | 2.00            | 97                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.97   | mg/Kg | 1        | 2.00            | 98                  | 70 - 130           |

**Sample: 288298 - Cell 17**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 88601 Date Analyzed: 2012-02-15 Analyzed By: RL  
 Prep Batch: 75208 Sample Preparation: 2012-02-14 Prepared By: RL

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Chloride  | qs   | 1    | 880          | mg/Kg | 5        | 2.00 |

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 51 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Sample: 288298 - Cell 17**

Laboratory: Lubbock  
Analysis: Conductivity  
QC Batch: 88776  
Prep Batch: 75361

Analytical Method: SM 2510B  
Date Analyzed: 2012-02-21  
Sample Preparation: 2012-02-21

Prep Method: N/A  
Analyzed By: RL  
Prepared By: RL

| Parameter            | Flag | Cert | RL<br>Result | Units    | Dilution | RL   |
|----------------------|------|------|--------------|----------|----------|------|
| Specific Conductance |      | 1    | 2490         | uMHOS/cm | 1        | 0.00 |

**Sample: 288298 - Cell 17**

Laboratory: Lubbock  
Analysis: pH  
QC Batch: 88352  
Prep Batch: 75008

Analytical Method: SM 4500-H+  
Date Analyzed: 2012-02-06  
Sample Preparation: 2012-02-06

Prep Method: N/A  
Analyzed By: AM  
Prepared By: AM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| pH        |      |      | 7.89         | s.u.  | 1        | 2.00 |

**Sample: 288298 - Cell 17**

Laboratory: Lubbock  
Analysis: Salts, Total  
QC Batch: 88395  
Prep Batch: 75037

Analytical Method: S 6010C  
Date Analyzed: 2012-02-08  
Sample Preparation: 2012-02-08

Prep Method: S 3050B  
Analyzed By: RR  
Prepared By: KV

| Parameter       | Flag | Cert | RL<br>Result | Units | Dilution | RL    |
|-----------------|------|------|--------------|-------|----------|-------|
| Total Calcium   |      | 1    | 136000       | mg/Kg | 100      | 0.500 |
| Total Magnesium |      | 1    | 3890         | mg/Kg | 1        | 0.500 |
| Total Potassium |      | 1    | 1040         | mg/Kg | 1        | 50.0  |
| Total Sodium    |      | 1    | 596          | mg/Kg | 1        | 50.0  |

**Sample: 288298 - Cell 17**

Laboratory: Lubbock  
Analysis: SO4 (IC)  
QC Batch: 88554  
Prep Batch: 75178

Analytical Method: E 300.0  
Date Analyzed: 2012-02-13  
Sample Preparation: 2012-02-11

Prep Method: N/A  
Analyzed By: RL  
Prepared By: RL

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 52 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Sulfate   |      | 1    | 217          | mg/Kg | 1        | 2.00 |

**Sample: 288298 - Cell 17**

Laboratory: Lubbock  
Analysis: TCLP Total 8 Metals      Analytical Method: S 6010C      Prep Method: TCLP 1311  
QC Batch: 88429      Date Analyzed: 2012-02-09      Analyzed By: RR  
Prep Batch: 75069      TCLP Extraction: 2012-02-09      Prepared By: KV  
Sample Preparation: 2012-02-09      Prepared By: KV

Laboratory: Lubbock  
Analysis: TCLP Total 8 Metals      Analytical Method: S 7470A      Prep Method: TCLP 1311  
QC Batch: 88529      Date Analyzed: 2012-02-13      Analyzed By: TP  
Prep Batch: 75149      TCLP Extraction: 2012-02-13      Prepared By: TP  
Sample Preparation: 2012-02-13      Prepared By: TP

| Parameter     | Flag | Cert | RL<br>Result | Units | Dilution | RL      |
|---------------|------|------|--------------|-------|----------|---------|
| TCLP Silver   | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Arsenic  | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Barium   |      | 1    | 1.10         | mg/L  | 1        | 0.100   |
| TCLP Cadmium  | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Chromium | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Mercury  | u    | 1    | <0.00500     | mg/L  | 1        | 0.00500 |
| TCLP Lead     | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Selenium | u    |      | <0.200       | mg/L  | 1        | 0.200   |

**Sample: 288298 - Cell 17**

Laboratory: Lubbock  
Analysis: TPH 418.1      Analytical Method: E 418.1      Prep Method: N/A  
QC Batch: 88454      Date Analyzed: 2012-02-09      Analyzed By: DS  
Prep Batch: 75096      Sample Preparation: 2012-02-09      Prepared By: DS

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     |      |      | <10.0        | mg/Kg | 1        | 10.0 |

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 53 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Sample: 288299 - Cell 19**

Laboratory: Lubbock  
Analysis: Alkalinity Analytical Method: SM 2320B Prep Method: N/A  
QC Batch: 88350 Date Analyzed: 2012-02-06 Analyzed By: AM  
Prep Batch: 75006 Sample Preparation: 2012-02-06 Prepared By: AM

| Parameter              | Flag | Cert | RL<br>Result | Units          | Dilution | RL   |
|------------------------|------|------|--------------|----------------|----------|------|
| Hydroxide Alkalinity   | u    |      | <1.00        | mg/Kg as CaCo3 | 1        | 1.00 |
| Carbonate Alkalinity   | u    |      | <1.00        | mg/Kg as CaCo3 | 1        | 1.00 |
| Bicarbonate Alkalinity |      |      | 40.0         | mg/Kg as CaCo3 | 1        | 4.00 |
| Total Alkalinity       |      |      | 40.0         | mg/Kg as CaCo3 | 1        | 4.00 |

**Sample: 288299 - Cell 19**

Laboratory: Lubbock  
Analysis: BTEX Analytical Method: S 8021B Prep Method: S 5035  
QC Batch: 88302 Date Analyzed: 2012-02-03 Analyzed By: ZLM  
Prep Batch: 74977 Sample Preparation: 2012-02-03 Prepared By: ZLM

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.90   | mg/Kg | 1        | 2.00            | 95                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.78   | mg/Kg | 1        | 2.00            | 89                  | 70 - 130           |

**Sample: 288299 - Cell 19**

Laboratory: Lubbock  
Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
QC Batch: 88601 Date Analyzed: 2012-02-15 Analyzed By: RL  
Prep Batch: 75208 Sample Preparation: 2012-02-14 Prepared By: RL

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Chloride  | Qs   | 1    | 2420         | mg/Kg | 5        | 2.00 |

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 54 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Sample: 288299 - Cell 19**

Laboratory: Lubbock  
Analysis: Conductivity      Analytical Method: SM 2510B      Prep Method: N/A  
QC Batch: 88776      Date Analyzed: 2012-02-21      Analyzed By: RL  
Prep Batch: 75361      Sample Preparation: 2012-02-21      Prepared By: RL

| Parameter            | Flag | Cert | RL<br>Result | Units    | Dilution | RL   |
|----------------------|------|------|--------------|----------|----------|------|
| Specific Conductance |      | 1    | <b>3630</b>  | uMHOS/cm | 1        | 0.00 |

**Sample: 288299 - Cell 19**

Laboratory: Lubbock  
Analysis: pH      Analytical Method: SM 4500-H+      Prep Method: N/A  
QC Batch: 88352      Date Analyzed: 2012-02-06      Analyzed By: AM  
Prep Batch: 75008      Sample Preparation: 2012-02-06      Prepared By: AM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| pH        |      |      | <b>7.56</b>  | s.u.  | 1        | 2.00 |

**Sample: 288299 - Cell 19**

Laboratory: Lubbock  
Analysis: Salts, Total      Analytical Method: S 6010C      Prep Method: S 3050B  
QC Batch: 88395      Date Analyzed: 2012-02-08      Analyzed By: RR  
Prep Batch: 75037      Sample Preparation: 2012-02-08      Prepared By: KV

| Parameter       | Flag | Cert | RL<br>Result | Units | Dilution | RL    |
|-----------------|------|------|--------------|-------|----------|-------|
| Total Calcium   |      | 1    | <b>5540</b>  | mg/Kg | 1        | 0.500 |
| Total Magnesium |      | 1    | <b>1990</b>  | mg/Kg | 1        | 0.500 |
| Total Potassium |      | 1    | <b>1470</b>  | mg/Kg | 1        | 50.0  |
| Total Sodium    |      | 1    | <b>1030</b>  | mg/Kg | 1        | 50.0  |

**Sample: 288299 - Cell 19**

Laboratory: Lubbock  
Analysis: SO4 (IC)      Analytical Method: E 300.0      Prep Method: N/A  
QC Batch: 88554      Date Analyzed: 2012-02-13      Analyzed By: RL  
Prep Batch: 75178      Sample Preparation: 2012-02-11      Prepared By: RL

Report Date: February 22, 2012  
 4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
 GMI Landfarm

Page Number: 55 of 95  
 Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Sulfate   |      | 1    | <b>219</b>   | mg/Kg | 1        | 2.00 |

**Sample: 288299 - Cell 19**

|                               |  |  |                                |  |                        |  |
|-------------------------------|--|--|--------------------------------|--|------------------------|--|
| Laboratory: Lubbock           |  |  |                                |  |                        |  |
| Analysis: TCLP Total 8 Metals |  |  | Analytical Method: S 6010C     |  | Prep Method: TCLP 1311 |  |
| QC Batch: 88429               |  |  | Date Analyzed: 2012-02-09      |  | Analyzed By: RR        |  |
| Prep Batch: 75069             |  |  | TCLP Extraction: 2012-02-09    |  | Prepared By: KV        |  |
|                               |  |  | Sample Preparation: 2012-02-09 |  | Prepared By: KV        |  |

|                               |  |  |                                |  |                        |  |
|-------------------------------|--|--|--------------------------------|--|------------------------|--|
| Laboratory: Lubbock           |  |  |                                |  |                        |  |
| Analysis: TCLP Total 8 Metals |  |  | Analytical Method: S 7470A     |  | Prep Method: TCLP 1311 |  |
| QC Batch: 88529               |  |  | Date Analyzed: 2012-02-13      |  | Analyzed By: TP        |  |
| Prep Batch: 75149             |  |  | TCLP Extraction: 2012-02-13    |  | Prepared By: TP        |  |
|                               |  |  | Sample Preparation: 2012-02-13 |  | Prepared By: TP        |  |

| Parameter     | Flag | Cert | RL<br>Result | Units | Dilution | RL      |
|---------------|------|------|--------------|-------|----------|---------|
| TCLP Silver   | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Arsenic  | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Barium   |      | 1    | <b>0.525</b> | mg/L  | 1        | 0.100   |
| TCLP Cadmium  | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Chromium | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Mercury  | u    | 1    | <0.00500     | mg/L  | 1        | 0.00500 |
| TCLP Lead     | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Selenium | u    |      | <0.200       | mg/L  | 1        | 0.200   |

**Sample: 288299 - Cell 19**

|                     |  |  |                                |  |                  |  |
|---------------------|--|--|--------------------------------|--|------------------|--|
| Laboratory: Lubbock |  |  |                                |  |                  |  |
| Analysis: TPH 418.1 |  |  | Analytical Method: E 418.1     |  | Prep Method: N/A |  |
| QC Batch: 88454     |  |  | Date Analyzed: 2012-02-09      |  | Analyzed By: DS  |  |
| Prep Batch: 75096   |  |  | Sample Preparation: 2012-02-09 |  | Prepared By: DS  |  |

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     |      |      | <b>52.3</b>  | mg/Kg | 1        | 10.0 |

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 56 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Sample: 288300 - Cell 21**

Laboratory: Lubbock  
Analysis: Alkalinity      Analytical Method: SM 2320B      Prep Method: N/A  
QC Batch: 88350      Date Analyzed: 2012-02-06      Analyzed By: AM  
Prep Batch: 75006      Sample Preparation: 2012-02-06      Prepared By: AM

| Parameter              | Flag | Cert | RL<br>Result | Units          | Dilution | RL   |
|------------------------|------|------|--------------|----------------|----------|------|
| Hydroxide Alkalinity   | u    |      | <1.00        | mg/Kg as CaCo3 | 1        | 1.00 |
| Carbonate Alkalinity   | u    |      | <1.00        | mg/Kg as CaCo3 | 1        | 1.00 |
| Bicarbonate Alkalinity |      |      | 150          | mg/Kg as CaCo3 | 1        | 4.00 |
| Total Alkalinity       |      |      | 150          | mg/Kg as CaCo3 | 1        | 4.00 |

**Sample: 288300 - Cell 21**

Laboratory: Lubbock  
Analysis: BTEX      Analytical Method: S 8021B      Prep Method: S 5035  
QC Batch: 88302      Date Analyzed: 2012-02-03      Analyzed By: ZLM  
Prep Batch: 74977      Sample Preparation: 2012-02-03      Prepared By: ZLM

| Parameter    | Flag | Cert | RL<br>Result | Units | Dilution | RL     |
|--------------|------|------|--------------|-------|----------|--------|
| Benzene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Toluene      | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Ethylbenzene | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |
| Xylene       | u    | 1    | <0.0200      | mg/Kg | 1        | 0.0200 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.89   | mg/Kg | 1        | 2.00            | 94                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.89   | mg/Kg | 1        | 2.00            | 94                  | 70 - 130           |

**Sample: 288300 - Cell 21**

Laboratory: Lubbock  
Analysis: Chloride (IC)      Analytical Method: E 300.0      Prep Method: N/A  
QC Batch: 88554      Date Analyzed: 2012-02-13      Analyzed By: RL  
Prep Batch: 75178      Sample Preparation: 2012-02-11      Prepared By: RL

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Chloride  |      | 1    | 95.3         | mg/Kg | 1        | 2.00 |

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 57 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Sample: 288300 - Cell 21**

Laboratory: Lubbock  
Analysis: Conductivity Analytical Method: SM 2510B Prep Method: N/A  
QC Batch: 88776 Date Analyzed: 2012-02-21 Analyzed By: RL  
Prep Batch: 75361 Sample Preparation: 2012-02-21 Prepared By: RL

| Parameter            | Flag | Cert | RL<br>Result | Units    | Dilution | RL   |
|----------------------|------|------|--------------|----------|----------|------|
| Specific Conductance |      | 1    | 204          | uMHOS/cm | 1        | 0.00 |

**Sample: 288300 - Cell 21**

Laboratory: Lubbock  
Analysis: pH Analytical Method: SM 4500-H+ Prep Method: N/A  
QC Batch: 88352 Date Analyzed: 2012-02-06 Analyzed By: AM  
Prep Batch: 75008 Sample Preparation: 2012-02-06 Prepared By: AM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| pH        |      |      | 8.34         | s.u.  | 1        | 2.00 |

**Sample: 288300 - Cell 21**

Laboratory: Lubbock  
Analysis: Salts, Total Analytical Method: S 6010C Prep Method: S 3050B  
QC Batch: 88395 Date Analyzed: 2012-02-08 Analyzed By: RR  
Prep Batch: 75037 Sample Preparation: 2012-02-08 Prepared By: KV

| Parameter       | Flag | Cert | RL<br>Result | Units | Dilution | RL    |
|-----------------|------|------|--------------|-------|----------|-------|
| Total Calcium   |      | 1    | 69700        | mg/Kg | 10       | 0.500 |
| Total Magnesium |      | 1    | 2080         | mg/Kg | 1        | 0.500 |
| Total Potassium |      | 1    | 654          | mg/Kg | 1        | 50.0  |
| Total Sodium    |      | 1    | 50.3         | mg/Kg | 1        | 50.0  |

**Sample: 288300 - Cell 21**

Laboratory: Lubbock  
Analysis: SO4 (IC) Analytical Method: E 300.0 Prep Method: N/A  
QC Batch: 88554 Date Analyzed: 2012-02-13 Analyzed By: RL  
Prep Batch: 75178 Sample Preparation: 2012-02-11 Prepared By: RL

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 58 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| Sulfate   |      | 1    | <b>32.2</b>  | mg/Kg | 1        | 2.00 |

**Sample: 288300 - Cell 21**

Laboratory: Lubbock  
 Analysis: TCLP Total 8 Metals      Analytical Method: S 7470A      Prep Method: TCLP 1311  
 QC Batch: 88529      Date Analyzed: 2012-02-13      Analyzed By: TP  
 Prep Batch: 75149      TCLP Extraction: 2012-02-13      Prepared By: TP  
    Sample Preparation: 2012-02-13      Prepared By: TP

Laboratory: Lubbock  
 Analysis: TCLP Total 8 Metals      Analytical Method: S 6010C      Prep Method: TCLP 1311  
 QC Batch: 88591      Date Analyzed: 2012-02-15      Analyzed By: RR  
 Prep Batch: 75196      TCLP Extraction: 2012-02-15      Prepared By: KV  
    Sample Preparation: 2012-02-15      Prepared By: KV

| Parameter     | Flag | Cert | RL<br>Result | Units | Dilution | RL      |
|---------------|------|------|--------------|-------|----------|---------|
| TCLP Silver   | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Arsenic  | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Barium   |      | 1    | <b>1.54</b>  | mg/L  | 1        | 0.100   |
| TCLP Cadmium  | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Chromium | u    | 1    | <0.100       | mg/L  | 1        | 0.100   |
| TCLP Mercury  | u    | 1    | <0.00500     | mg/L  | 1        | 0.00500 |
| TCLP Lead     | u    | 1    | <0.0500      | mg/L  | 1        | 0.0500  |
| TCLP Selenium | u    |      | <0.200       | mg/L  | 1        | 0.200   |

**Sample: 288300 - Cell 21**

Laboratory: Lubbock  
 Analysis: TPH 418.1      Analytical Method: E 418.1      Prep Method: N/A  
 QC Batch: 88454      Date Analyzed: 2012-02-09      Analyzed By: DS  
 Prep Batch: 75096      Sample Preparation: 2012-02-09      Prepared By: DS

| Parameter | Flag | Cert | RL<br>Result | Units | Dilution | RL   |
|-----------|------|------|--------------|-------|----------|------|
| TRPHC     |      |      | <b>24.0</b>  | mg/Kg | 1        | 10.0 |

## Method Blanks

Method Blank (1) QC Batch: 88302

QC Batch: 88302  
 Prep Batch: 74977

Date Analyzed: 2012-02-03  
 QC Preparation: 2012-02-03

Analyzed By: ZLM  
 Prepared By: ZLM

| Parameter    | Flag | Cert | MDL<br>Result | Units | RL   |
|--------------|------|------|---------------|-------|------|
| Benzene      |      | 1    | <0.00335      | mg/Kg | 0.02 |
| Toluene      |      | 1    | <0.00471      | mg/Kg | 0.02 |
| Ethylbenzene |      | 1    | <0.00440      | mg/Kg | 0.02 |
| Xylene       |      | 1    | <0.00557      | mg/Kg | 0.02 |

| Surrogate                    | Flag | Cert | Result | Units | Dilution | Spike<br>Amount | Percent<br>Recovery | Recovery<br>Limits |
|------------------------------|------|------|--------|-------|----------|-----------------|---------------------|--------------------|
| Trifluorotoluene (TFT)       |      |      | 1.75   | mg/Kg | 1        | 2.00            | 88                  | 70 - 130           |
| 4-Bromofluorobenzene (4-BFB) |      |      | 1.85   | mg/Kg | 1        | 2.00            | 92                  | 70 - 130           |

Method Blank (1) QC Batch: 88349

QC Batch: 88349  
 Prep Batch: 75005

Date Analyzed: 2012-02-06  
 QC Preparation: 2012-02-06

Analyzed By: AM  
 Prepared By: AM

| Parameter              | Flag | Cert | MDL<br>Result | Units          | RL |
|------------------------|------|------|---------------|----------------|----|
| Hydroxide Alkalinity   |      |      | <1.00         | mg/Kg as CaCo3 | 1  |
| Carbonate Alkalinity   |      |      | <1.00         | mg/Kg as CaCo3 | 1  |
| Bicarbonate Alkalinity |      |      | 10.0          | mg/Kg as CaCo3 | 4  |
| Total Alkalinity       |      |      | 10.0          | mg/Kg as CaCo3 | 4  |

Method Blank (1) QC Batch: 88350

QC Batch: 88350  
 Prep Batch: 75006

Date Analyzed: 2012-02-06  
 QC Preparation: 2012-02-06

Analyzed By: AM  
 Prepared By: AM

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 60 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

| Parameter              | Flag | Cert | MDL<br>Result | Units          | RL |
|------------------------|------|------|---------------|----------------|----|
| Hydroxide Alkalinity   |      |      | <1.00         | mg/Kg as CaCo3 | 1  |
| Carbonate Alkalinity   |      |      | <1.00         | mg/Kg as CaCo3 | 1  |
| Bicarbonate Alkalinity |      |      | 10.0          | mg/Kg as CaCo3 | 4  |
| Total Alkalinity       |      |      | 10.0          | mg/Kg as CaCo3 | 4  |

**Method Blank (1)**      QC Batch: 88394

QC Batch: 88394  
Prep Batch: 75036

Date Analyzed: 2012-02-08  
QC Preparation: 2012-02-08

Analyzed By: RR  
Prepared By: KV

| Parameter       | Flag | Cert | MDL<br>Result | Units | RL  |
|-----------------|------|------|---------------|-------|-----|
| Total Calcium   |      | 1    | <5.03         | mg/Kg | 100 |
| Total Magnesium |      | 1    | <6.53         | mg/Kg | 100 |
| Total Potassium |      | 1    | <16.1         | mg/Kg | 100 |
| Total Sodium    |      | 1    | <8.62         | mg/Kg | 100 |

**Method Blank (1)**      QC Batch: 88395

QC Batch: 88395  
Prep Batch: 75037

Date Analyzed: 2012-02-08  
QC Preparation: 2012-02-08

Analyzed By: RR  
Prepared By: KV

| Parameter       | Flag | Cert | MDL<br>Result | Units | RL  |
|-----------------|------|------|---------------|-------|-----|
| Total Calcium   |      | 1    | <0.0866       | mg/Kg | 0.5 |
| Total Magnesium |      | 1    | <0.478        | mg/Kg | 0.5 |
| Total Potassium |      | 1    | <0.354        | mg/Kg | 50  |
| Total Sodium    |      | 1    | <3.88         | mg/Kg | 50  |

**Method Blank (1)**      QC Batch: 88427

QC Batch: 88427  
Prep Batch: 75069

Date Analyzed: 2012-02-09  
QC Preparation: 2012-02-09

Analyzed By: RR  
Prepared By: KV

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 61 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

| Parameter     | Flag | Cert | MDL<br>Result | Units | RL   |
|---------------|------|------|---------------|-------|------|
| TCLP Silver   |      | 1    | <0.00437      | mg/L  | 0.05 |
| TCLP Arsenic  |      | 1    | <0.0184       | mg/L  | 0.1  |
| TCLP Barium   |      | 1    | <0.0103       | mg/L  | 0.1  |
| TCLP Cadmium  |      | 1    | <0.0150       | mg/L  | 0.05 |
| TCLP Chromium |      | 1    | <0.0251       | mg/L  | 0.1  |
| TCLP Lead     |      | 1    | <0.0104       | mg/L  | 0.05 |
| TCLP Selenium |      |      | <0.0470       | mg/L  | 0.2  |

Method Blank (1) QC Batch: 88429

QC Batch: 88429  
Prep Batch: 75069

Date Analyzed: 2012-02-09  
QC Preparation: 2012-02-09

Analyzed By: RR  
Prepared By: KV

| Parameter     | Flag | Cert | MDL<br>Result | Units | RL   |
|---------------|------|------|---------------|-------|------|
| TCLP Silver   |      | 1    | <0.00437      | mg/L  | 0.05 |
| TCLP Arsenic  |      | 1    | <0.0184       | mg/L  | 0.1  |
| TCLP Barium   |      | 1    | <0.0103       | mg/L  | 0.1  |
| TCLP Cadmium  |      | 1    | <0.0150       | mg/L  | 0.05 |
| TCLP Chromium |      | 1    | <0.0251       | mg/L  | 0.1  |
| TCLP Lead     |      | 1    | <0.0104       | mg/L  | 0.05 |
| TCLP Selenium |      |      | <0.0470       | mg/L  | 0.2  |

Method Blank (1) QC Batch: 88454

QC Batch: 88454  
Prep Batch: 75096

Date Analyzed: 2012-02-09  
QC Preparation: 2012-02-09

Analyzed By: DS  
Prepared By: DS

| Parameter | Flag | Cert | MDL<br>Result | Units | RL |
|-----------|------|------|---------------|-------|----|
| TRPHC     |      |      | <4.79         | mg/Kg | 10 |

Method Blank (1) QC Batch: 88504

QC Batch: 88504  
Prep Batch: 75134

Date Analyzed: 2012-02-13  
QC Preparation: 2012-02-13

Analyzed By: RL  
Prepared By: RL

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 62 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

| Parameter            | Flag | Cert | MDL<br>Result | Units    | RL |
|----------------------|------|------|---------------|----------|----|
| Specific Conductance |      | 1    | 2.67          | uMHOS/cm |    |

**Method Blank (1)**      QC Batch: 88528

QC Batch: 88528      Date Analyzed: 2012-02-13      Analyzed By: TP  
Prep Batch: 75149      QC Preparation: 2012-02-13      Prepared By: TP

| Parameter    | Flag | Cert | MDL<br>Result | Units | RL    |
|--------------|------|------|---------------|-------|-------|
| TCLP Mercury |      | 1    | <0.000771     | mg/L  | 0.005 |

**Method Blank (1)**      QC Batch: 88529

QC Batch: 88529      Date Analyzed: 2012-02-13      Analyzed By: TP  
Prep Batch: 75149      QC Preparation: 2012-02-13      Prepared By: TP

| Parameter    | Flag | Cert | MDL<br>Result | Units | RL    |
|--------------|------|------|---------------|-------|-------|
| TCLP Mercury |      | 1    | <0.000771     | mg/L  | 0.005 |

**Method Blank (1)**      QC Batch: 88553

QC Batch: 88553      Date Analyzed: 2012-02-13      Analyzed By: RL  
Prep Batch: 75178      QC Preparation: 2012-02-11      Prepared By: RL

| Parameter | Flag | Cert | MDL<br>Result | Units | RL |
|-----------|------|------|---------------|-------|----|
| Chloride  |      | 1    | <0.909        | mg/Kg | 2  |

**Method Blank (1)**      QC Batch: 88553

QC Batch: 88553      Date Analyzed: 2012-02-13      Analyzed By: RL  
Prep Batch: 75178      QC Preparation: 2012-02-11      Prepared By: RL

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 63 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

| Parameter | Flag | Cert | MDL<br>Result | Units | RL |
|-----------|------|------|---------------|-------|----|
| Sulfate   |      | 1    | <0.413        | mg/Kg | 2  |

**Method Blank (1)**      QC Batch: 88554

QC Batch: 88554      Date Analyzed: 2012-02-13      Analyzed By: RL  
Prep Batch: 75178      QC Preparation: 2012-02-11      Prepared By: RL

| Parameter | Flag | Cert | MDL<br>Result | Units | RL |
|-----------|------|------|---------------|-------|----|
| Chloride  |      | 1    | <0.909        | mg/Kg | 2  |

**Method Blank (1)**      QC Batch: 88554

QC Batch: 88554      Date Analyzed: 2012-02-13      Analyzed By: RL  
Prep Batch: 75178      QC Preparation: 2012-02-11      Prepared By: RL

| Parameter | Flag | Cert | MDL<br>Result | Units | RL |
|-----------|------|------|---------------|-------|----|
| Sulfate   |      | 1    | <0.413        | mg/Kg | 2  |

**Method Blank (1)**      QC Batch: 88591

QC Batch: 88591      Date Analyzed: 2012-02-15      Analyzed By: RR  
Prep Batch: 75196      QC Preparation: 2012-02-15      Prepared By: KV

| Parameter     | Flag | Cert | MDL<br>Result | Units | RL   |
|---------------|------|------|---------------|-------|------|
| TCLP Silver   |      | 1    | <0.00437      | mg/L  | 0.05 |
| TCLP Arsenic  |      | 1    | <0.0184       | mg/L  | 0.1  |
| TCLP Barium   |      | 1    | <0.0103       | mg/L  | 0.1  |
| TCLP Cadmium  |      | 1    | <0.0150       | mg/L  | 0.05 |
| TCLP Chromium |      | 1    | <0.0251       | mg/L  | 0.1  |
| TCLP Lead     |      | 1    | <0.0104       | mg/L  | 0.05 |
| TCLP Selenium |      | 1    | <0.0470       | mg/L  | 0.2  |

Report Date: February 22, 2012  
 4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
 GMI Landfarm

Page Number: 64 of 95  
 Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Method Blank (1)**      QC Batch: 88601

QC Batch: 88601      Date Analyzed: 2012-02-15      Analyzed By: RL  
 Prep Batch: 75208      QC Preparation: 2012-02-14      Prepared By: RL

| Parameter | Flag | Cert | MDL<br>Result | Units | RL |
|-----------|------|------|---------------|-------|----|
| Chloride  |      | 1    | <0.909        | mg/Kg | 2  |

**Method Blank (1)**      QC Batch: 88601

QC Batch: 88601      Date Analyzed: 2012-02-15      Analyzed By: RL  
 Prep Batch: 75208      QC Preparation: 2012-02-14      Prepared By: RL

| Parameter | Flag | Cert | MDL<br>Result | Units | RL |
|-----------|------|------|---------------|-------|----|
| Sulfate   |      | 1    | <0.413        | mg/Kg | 2  |

**Method Blank (1)**      QC Batch: 88776

QC Batch: 88776      Date Analyzed: 2012-02-21      Analyzed By: RL  
 Prep Batch: 75361      QC Preparation: 2012-02-21      Prepared By: RL

| Parameter            | Flag | Cert | MDL<br>Result | Units    | RL |
|----------------------|------|------|---------------|----------|----|
| Specific Conductance |      | 1    | 2.01          | uMHOS/cm |    |

**Duplicates (1)**      Duplicated Sample: 288293

QC Batch: 88349      Date Analyzed: 2012-02-06      Analyzed By: AM  
 Prep Batch: 75005      QC Preparation: 2012-02-06      Prepared By: AM

| Param                  | Duplicate<br>Result | Sample<br>Result | Units          | Dilution | RPD | RPD<br>Limit |
|------------------------|---------------------|------------------|----------------|----------|-----|--------------|
| Hydroxide Alkalinity   | <1.00               | <1.00            | mg/Kg as CaCo3 | 1        | 0   | 20           |
| Carbonate Alkalinity   | 20.0                | 20.0             | mg/Kg as CaCo3 | 1        | 0   | 20           |
| Bicarbonate Alkalinity | 260                 | 260              | mg/Kg as CaCo3 | 1        | 0   | 20           |

*continued ...*

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 65 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

*duplicate continued ...*

| Param            | Duplicate Result | Sample Result | Units          | Dilution | RPD | RPD Limit |
|------------------|------------------|---------------|----------------|----------|-----|-----------|
| Total Alkalinity | 280              | 280           | mg/Kg as CaCo3 | 1        | 0   | 20        |

**Duplicates (1)** Duplicated Sample: 288300

QC Batch: 88350  
Prep Batch: 75006

Date Analyzed: 2012-02-06  
QC Preparation: 2012-02-06

Analyzed By: AM  
Prepared By: AM

| Param                  | Duplicate Result | Sample Result | Units          | Dilution | RPD | RPD Limit |
|------------------------|------------------|---------------|----------------|----------|-----|-----------|
| Hydroxide Alkalinity   | <1.00            | <1.00         | mg/Kg as CaCo3 | 1        | 0   | 20        |
| Carbonate Alkalinity   | <1.00            | <1.00         | mg/Kg as CaCo3 | 1        | 0   | 20        |
| Bicarbonate Alkalinity | 140              | 150           | mg/Kg as CaCo3 | 1        | 7   | 20        |
| Total Alkalinity       | 140              | 150           | mg/Kg as CaCo3 | 1        | 7   | 20        |

**Duplicates (1)** Duplicated Sample: 288293

QC Batch: 88351  
Prep Batch: 75007

Date Analyzed: 2012-02-06  
QC Preparation: 2012-02-06

Analyzed By: AM  
Prepared By: AM

| Param | Duplicate Result | Sample Result | Units | Dilution | RPD | RPD Limit |
|-------|------------------|---------------|-------|----------|-----|-----------|
| pH    | 8.92             | 8.93          | s.u.  | 1        | 0   | 20        |

**Duplicates (1)** Duplicated Sample: 288300

QC Batch: 88352  
Prep Batch: 75008

Date Analyzed: 2012-02-06  
QC Preparation: 2012-02-06

Analyzed By: AM  
Prepared By: AM

| Param | Duplicate Result | Sample Result | Units | Dilution | RPD | RPD Limit |
|-------|------------------|---------------|-------|----------|-----|-----------|
| pH    | 8.34             | 8.34          | s.u.  | 1        | 0   | 20        |

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 66 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Duplicates (1)** Duplicated Sample: 288292

QC Batch: 88504  
Prep Batch: 75134

Date Analyzed: 2012-02-13  
QC Preparation: 2012-02-13

Analyzed By: RL  
Prepared By: RL

| Param                |   | Duplicate<br>Result | Sample<br>Result | Units    | Dilution | RPD | RPD<br>Limit |
|----------------------|---|---------------------|------------------|----------|----------|-----|--------------|
| Specific Conductance | 1 | 730                 | 722              | uMHOS/cm | 1        | 1   | 20           |

**Duplicates (1)** Duplicated Sample: 288300

QC Batch: 88776  
Prep Batch: 75361

Date Analyzed: 2012-02-21  
QC Preparation: 2012-02-21

Analyzed By: RL  
Prepared By: RL

| Param                |   | Duplicate<br>Result | Sample<br>Result | Units    | Dilution | RPD | RPD<br>Limit |
|----------------------|---|---------------------|------------------|----------|----------|-----|--------------|
| Specific Conductance | 1 | 202                 | 204              | uMHOS/cm | 1        | 1   | 20           |

## Laboratory Control Spikes

### Laboratory Control Spike (LCS-1)

QC Batch: 88302  
Prep Batch: 74977

Date Analyzed: 2012-02-03  
QC Preparation: 2012-02-03

Analyzed By: ZLM  
Prepared By: ZLM

| Param        | F | C | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|--------------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|
| Benzene      | 1 | 1 | 2.01          | mg/Kg | 1    | 2.00            | <0.00335         | 100  | 70 - 130      |
| Toluene      |   | 1 | 1.99          | mg/Kg | 1    | 2.00            | <0.00471         | 100  | 70 - 130      |
| Ethylbenzene |   | 1 | 1.94          | mg/Kg | 1    | 2.00            | <0.00440         | 97   | 70 - 130      |
| Xylene       |   | 1 | 6.04          | mg/Kg | 1    | 6.00            | <0.00557         | 101  | 70 - 130      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param        | F | C | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|--------------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Benzene      |   | 1 | 2.01          | mg/Kg | 1    | 2.00            | <0.00335         | 100  | 70 - 130      | 0   | 20           |
| Toluene      |   | 1 | 2.02          | mg/Kg | 1    | 2.00            | <0.00471         | 101  | 70 - 130      | 1   | 20           |
| Ethylbenzene |   | 1 | 1.95          | mg/Kg | 1    | 2.00            | <0.00440         | 97   | 70 - 130      | 0   | 20           |
| Xylene       |   | 1 | 6.06          | mg/Kg | 1    | 6.00            | <0.00557         | 101  | 70 - 130      | 0   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Surrogate                    | LCS<br>Result | LCS<br>Result | Units | Dil. | Spike<br>Amount | LCS<br>Rec. | LCS<br>Rec. | Rec.<br>Limit |
|------------------------------|---------------|---------------|-------|------|-----------------|-------------|-------------|---------------|
| Trifluorotoluene (TFT)       | 1.72          | 1.79          | mg/Kg | 1    | 2.00            | 86          | 89          | 70 - 130      |
| 4-Bromofluorobenzene (4-BFB) | 1.82          | 1.84          | mg/Kg | 1    | 2.00            | 91          | 92          | 70 - 130      |

### Laboratory Control Spike (LCS-1)

QC Batch: 88394  
Prep Batch: 75036

Date Analyzed: 2012-02-08  
QC Preparation: 2012-02-08

Analyzed By: RR  
Prepared By: KV

| Param           | F | C | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|-----------------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|
| Total Calcium   |   | 1 | 5290          | mg/Kg | 1    | 5250            | <5.03            | 101  | 85 - 115      |
| Total Magnesium |   | 1 | 5320          | mg/Kg | 1    | 5250            | <6.53            | 101  | 85 - 115      |
| Total Potassium |   | 1 | 5360          | mg/Kg | 1    | 5250            | <16.1            | 102  | 85 - 115      |
| Total Sodium    |   | 1 | 5370          | mg/Kg | 1    | 5250            | <8.62            | 102  | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 68 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

| Param           | F | C | LCSD   |       |      | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|-----------------|---|---|--------|-------|------|--------------|---------------|------|------------|-----|-----------|
|                 |   |   | Result | Units | Dil. |              |               |      |            |     |           |
| Total Calcium   |   | 1 | 5120   | mg/Kg | 1    | 5250         | <5.03         | 98   | 85 - 115   | 3   | 20        |
| Total Magnesium |   | 1 | 5190   | mg/Kg | 1    | 5250         | <6.53         | 99   | 85 - 115   | 2   | 20        |
| Total Potassium |   | 1 | 5230   | mg/Kg | 1    | 5250         | <16.1         | 100  | 85 - 115   | 2   | 20        |
| Total Sodium    |   | 1 | 5220   | mg/Kg | 1    | 5250         | <8.62         | 99   | 85 - 115   | 3   | 20        |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 88395  
Prep Batch: 75037

Date Analyzed: 2012-02-08  
QC Preparation: 2012-02-08

Analyzed By: RR  
Prepared By: KV

| Param           | F | C | LCS    |       |      | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|-----------------|---|---|--------|-------|------|--------------|---------------|------|------------|
|                 |   |   | Result | Units | Dil. |              |               |      |            |
| Total Calcium   |   | 1 | 4630   | mg/Kg | 1    | 5000         | <0.0866       | 93   | 80 - 120   |
| Total Magnesium |   | 1 | 4760   | mg/Kg | 1    | 5000         | <0.478        | 95   | 80 - 120   |
| Total Potassium |   | 1 | 4750   | mg/Kg | 1    | 5000         | <0.354        | 95   | 85 - 115   |
| Total Sodium    |   | 1 | 4860   | mg/Kg | 1    | 5000         | <3.88         | 97   | 85 - 115   |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param           | F | C | LCSD   |       |      | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|-----------------|---|---|--------|-------|------|--------------|---------------|------|------------|-----|-----------|
|                 |   |   | Result | Units | Dil. |              |               |      |            |     |           |
| Total Calcium   |   | 1 | 4630   | mg/Kg | 1    | 5000         | <0.0866       | 93   | 80 - 120   | 0   | 20        |
| Total Magnesium |   | 1 | 4760   | mg/Kg | 1    | 5000         | <0.478        | 95   | 80 - 120   | 0   | 20        |
| Total Potassium |   | 1 | 4770   | mg/Kg | 1    | 5000         | <0.354        | 95   | 85 - 115   | 0   | 20        |
| Total Sodium    |   | 1 | 4880   | mg/Kg | 1    | 5000         | <3.88         | 98   | 85 - 115   | 0   | 20        |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 88427  
Prep Batch: 75069

Date Analyzed: 2012-02-09  
QC Preparation: 2012-02-09

Analyzed By: RR  
Prepared By: KV

| Param         | F | C | LCS    |       |      | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---------------|---|---|--------|-------|------|--------------|---------------|------|------------|
|               |   |   | Result | Units | Dil. |              |               |      |            |
| TCLP Silver   |   | 1 | 1.23   | mg/L  | 1    | 1.25         | <0.00437      | 98   | 85 - 115   |
| TCLP Arsenic  |   | 1 | 5.31   | mg/L  | 1    | 5.00         | <0.0184       | 106  | 85 - 115   |
| TCLP Barium   |   | 1 | 10.6   | mg/L  | 1    | 10.0         | <0.0103       | 106  | 85 - 115   |
| TCLP Cadmium  |   | 1 | 2.65   | mg/L  | 1    | 2.50         | <0.0150       | 106  | 85 - 115   |
| TCLP Chromium |   | 1 | 0.986  | mg/L  | 1    | 1.00         | <0.0251       | 99   | 85 - 115   |

*continued ...*

control spikes continued ...

| Param         | F | C | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|---------------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|
| TCLP Lead     |   | 1 | 5.42          | mg/L  | 1    | 5.00            | <0.0104          | 108  | 85 - 115      |
| TCLP Selenium |   |   | 4.84          | mg/L  | 1    | 5.00            | <0.0470          | 97   | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param         | F | C | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|---------------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| TCLP Silver   |   | 1 | 1.24          | mg/L  | 1    | 1.25            | <0.00437         | 99   | 85 - 115      | 1   | 20           |
| TCLP Arsenic  |   | 1 | 5.33          | mg/L  | 1    | 5.00            | <0.0184          | 107  | 85 - 115      | 0   | 20           |
| TCLP Barium   |   | 1 | 10.7          | mg/L  | 1    | 10.0            | <0.0103          | 107  | 85 - 115      | 1   | 20           |
| TCLP Cadmium  |   | 1 | 2.67          | mg/L  | 1    | 2.50            | <0.0150          | 107  | 85 - 115      | 1   | 20           |
| TCLP Chromium |   | 1 | 0.995         | mg/L  | 1    | 1.00            | <0.0251          | 100  | 85 - 115      | 1   | 20           |
| TCLP Lead     |   | 1 | 5.41          | mg/L  | 1    | 5.00            | <0.0104          | 108  | 85 - 115      | 0   | 20           |
| TCLP Selenium |   |   | 4.85          | mg/L  | 1    | 5.00            | <0.0470          | 97   | 85 - 115      | 0   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1)**

QC Batch: 88429  
Prep Batch: 75069

Date Analyzed: 2012-02-09  
QC Preparation: 2012-02-09

Analyzed By: RR  
Prepared By: KV

| Param         | F | C | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|---------------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|
| TCLP Silver   |   | 1 | 1.23          | mg/L  | 1    | 1.25            | <0.00437         | 98   | 85 - 115      |
| TCLP Arsenic  |   | 1 | 5.31          | mg/L  | 1    | 5.00            | <0.0184          | 106  | 85 - 115      |
| TCLP Barium   |   | 1 | 10.6          | mg/L  | 1    | 10.0            | <0.0103          | 106  | 85 - 115      |
| TCLP Cadmium  |   | 1 | 2.65          | mg/L  | 1    | 2.50            | <0.0150          | 106  | 85 - 115      |
| TCLP Chromium |   | 1 | 0.986         | mg/L  | 1    | 1.00            | <0.0251          | 99   | 85 - 115      |
| TCLP Lead     |   | 1 | 5.42          | mg/L  | 1    | 5.00            | <0.0104          | 108  | 85 - 115      |
| TCLP Selenium |   |   | 4.84          | mg/L  | 1    | 5.00            | <0.0470          | 97   | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param         | F | C | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|---------------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| TCLP Silver   |   | 1 | 1.24          | mg/L  | 1    | 1.25            | <0.00437         | 99   | 85 - 115      | 1   | 20           |
| TCLP Arsenic  |   | 1 | 5.33          | mg/L  | 1    | 5.00            | <0.0184          | 107  | 85 - 115      | 0   | 20           |
| TCLP Barium   |   | 1 | 10.7          | mg/L  | 1    | 10.0            | <0.0103          | 107  | 85 - 115      | 1   | 20           |
| TCLP Cadmium  |   | 1 | 2.67          | mg/L  | 1    | 2.50            | <0.0150          | 107  | 85 - 115      | 1   | 20           |
| TCLP Chromium |   | 1 | 0.995         | mg/L  | 1    | 1.00            | <0.0251          | 100  | 85 - 115      | 1   | 20           |
| TCLP Lead     |   | 1 | 5.41          | mg/L  | 1    | 5.00            | <0.0104          | 108  | 85 - 115      | 0   | 20           |
| TCLP Selenium |   |   | 4.85          | mg/L  | 1    | 5.00            | <0.0470          | 97   | 85 - 115      | 0   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 70 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Laboratory Control Spike (LCS-1)**

QC Batch: 88454  
Prep Batch: 75096

Date Analyzed: 2012-02-09  
QC Preparation: 2012-02-09

Analyzed By: DS  
Prepared By: DS

| Param | F | C | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|-------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|
| TRPHC |   |   | 293           | mg/Kg | 1    | 250             | <4.79            | 117  | 84.3 - 122    |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|-------|---|---|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| TRPHC |   |   | 293            | mg/Kg | 1    | 250             | <4.79            | 117  | 84.3 - 122    | 0   |              |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1)**

QC Batch: 88528  
Prep Batch: 75149

Date Analyzed: 2012-02-13  
QC Preparation: 2012-02-13

Analyzed By: TP  
Prepared By: TP

| Param        | F | C | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|--------------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|
| TCLP Mercury |   | 1 | 0.0414        | mg/L  | 1    | 0.0400          | <0.000771        | 104  | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param        | F | C | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|--------------|---|---|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| TCLP Mercury |   | 1 | 0.0422         | mg/L  | 1    | 0.0400          | <0.000771        | 106  | 85 - 115      | 2   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1)**

QC Batch: 88529  
Prep Batch: 75149

Date Analyzed: 2012-02-13  
QC Preparation: 2012-02-13

Analyzed By: TP  
Prepared By: TP

| Param        | F | C | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|--------------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|
| TCLP Mercury |   | 1 | 0.0414        | mg/L  | 1    | 0.0400          | <0.000771        | 104  | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Report Date: February 22, 2012  
 4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
 GMI Landfarm

Page Number: 71 of 95  
 Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

| Param        | F | C | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|--------------|---|---|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| TCLP Mercury |   | 1 | 0.0422         | mg/L  | 1    | 0.0400          | <0.000771        | 106  | 85 - 115      | 2   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 88553  
 Prep Batch: 75178

Date Analyzed: 2012-02-13  
 QC Preparation: 2012-02-11

Analyzed By: RL  
 Prepared By: RL

| Param    | F | C | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|
| Chloride |   | 1 | 252           | mg/Kg | 1    | 250             | <0.909           | 101  | 90 - 110      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | F | C | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|---|---|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride |   | 1 | 250            | mg/Kg | 1    | 250             | <0.909           | 100  | 90 - 110      | 1   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 88553  
 Prep Batch: 75178

Date Analyzed: 2012-02-13  
 QC Preparation: 2012-02-11

Analyzed By: RL  
 Prepared By: RL

| Param   | F | C | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|---------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|
| Sulfate |   | 1 | 274           | mg/Kg | 1    | 250             | <0.413           | 110  | 90 - 110      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param   | F | C | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|---------|---|---|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Sulfate |   | 1 | 274            | mg/Kg | 1    | 250             | <0.413           | 110  | 90 - 110      | 0   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 88554  
 Prep Batch: 75178

Date Analyzed: 2012-02-13  
 QC Preparation: 2012-02-11

Analyzed By: RL  
 Prepared By: RL

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 72 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

| Param    | F | C | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|
| Chloride |   | 1 | 240           | mg/Kg | 1    | 250             | <0.909           | 96   | 90 - 110      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | F | C | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|---|---|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride |   | 1 | 243            | mg/Kg | 1    | 250             | <0.909           | 97   | 90 - 110      | 1   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 88554  
Prep Batch: 75178

Date Analyzed: 2012-02-13  
QC Preparation: 2012-02-11

Analyzed By: RL  
Prepared By: RL

| Param   | F | C | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|---------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|
| Sulfate |   | 1 | 240           | mg/Kg | 1    | 250             | <0.413           | 96   | 90 - 110      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param   | F | C | LCSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|---------|---|---|----------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Sulfate |   | 1 | 246            | mg/Kg | 1    | 250             | <0.413           | 98   | 90 - 110      | 2   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 88591  
Prep Batch: 75196

Date Analyzed: 2012-02-15  
QC Preparation: 2012-02-15

Analyzed By: RR  
Prepared By: KV

| Param         | F | C | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|---------------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|
| TCLP Silver   |   | 1 | 1.23          | mg/L  | 1    | 1.25            | <0.00437         | 98   | 85 - 115      |
| TCLP Arsenic  |   | 1 | 5.32          | mg/L  | 1    | 5.00            | <0.0184          | 106  | 85 - 115      |
| TCLP Barium   |   | 1 | 10.6          | mg/L  | 1    | 10.0            | <0.0103          | 106  | 85 - 115      |
| TCLP Cadmium  |   | 1 | 2.68          | mg/L  | 1    | 2.50            | <0.0150          | 107  | 85 - 115      |
| TCLP Chromium |   | 1 | 0.981         | mg/L  | 1    | 1.00            | <0.0251          | 98   | 85 - 115      |
| TCLP Lead     |   | 1 | 5.31          | mg/L  | 1    | 5.00            | <0.0104          | 106  | 85 - 115      |
| TCLP Selenium |   | 1 | 4.90          | mg/L  | 1    | 5.00            | <0.0470          | 98   | 85 - 115      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param         | F | C | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|---------------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| TCLP Silver   |   | 1 | 1.23          | mg/L  | 1    | 1.25            | <0.00437         | 98   | 85 - 115      | 0   | 20           |
| TCLP Arsenic  |   | 1 | 5.32          | mg/L  | 1    | 5.00            | <0.0184          | 106  | 85 - 115      | 0   | 20           |
| TCLP Barium   |   | 1 | 10.7          | mg/L  | 1    | 10.0            | <0.0103          | 107  | 85 - 115      | 1   | 20           |
| TCLP Cadmium  |   | 1 | 2.68          | mg/L  | 1    | 2.50            | <0.0150          | 107  | 85 - 115      | 0   | 20           |
| TCLP Chromium |   | 1 | 0.978         | mg/L  | 1    | 1.00            | <0.0251          | 98   | 85 - 115      | 0   | 20           |
| TCLP Lead     |   | 1 | 5.35          | mg/L  | 1    | 5.00            | <0.0104          | 107  | 85 - 115      | 1   | 20           |
| TCLP Selenium |   |   | 4.95          | mg/L  | 1    | 5.00            | <0.0470          | 99   | 85 - 115      | 1   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1)**

QC Batch: 88601  
Prep Batch: 75208

Date Analyzed: 2012-02-15  
QC Preparation: 2012-02-14

Analyzed By: RL  
Prepared By: RL

| Param    | F | C | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|
| Chloride |   | 1 | 245           | mg/Kg | 1    | 250             | <0.909           | 98   | 90 - 110      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | F | C | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride |   | 1 | 250           | mg/Kg | 1    | 250             | <0.909           | 100  | 90 - 110      | 2   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1)**

QC Batch: 88601  
Prep Batch: 75208

Date Analyzed: 2012-02-15  
QC Preparation: 2012-02-14

Analyzed By: RL  
Prepared By: RL

| Param   | F | C | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|---------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|
| Sulfate |   | 1 | 244           | mg/Kg | 1    | 250             | <0.413           | 98   | 90 - 110      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param   | F | C | LCS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|---------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Sulfate |   | 1 | 248           | mg/Kg | 1    | 250             | <0.413           | 99   | 90 - 110      | 2   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 74 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Matrix Spike (MS-1) Spiked Sample: 288293**

QC Batch: 88394  
Prep Batch: 75036

Date Analyzed: 2012-02-08  
QC Preparation: 2012-02-08

Analyzed By: RR  
Prepared By: KV

| Param           | F | C | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|-----------------|---|---|--------------|-------|------|-----------------|------------------|------|---------------|
| Total Calcium   |   | 1 | 7620         | mg/Kg | 1    | 5250            | 2420             | 99   | 75 - 125      |
| Total Magnesium |   | 1 | 6400         | mg/Kg | 1    | 5250            | 1160             | 100  | 75 - 125      |
| Total Potassium |   | 1 | 6500         | mg/Kg | 1    | 5250            | 1310             | 99   | 75 - 125      |
| Total Sodium    |   | 1 | 5600         | mg/Kg | 1    | 5250            | 466              | 98   | 75 - 125      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param           | F | C | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|-----------------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Total Calcium   |   | 1 | 7680          | mg/Kg | 1    | 5250            | 2420             | 100  | 75 - 125      | 1   | 20           |
| Total Magnesium |   | 1 | 6390          | mg/Kg | 1    | 5250            | 1160             | 100  | 75 - 125      | 0   | 20           |
| Total Potassium |   | 1 | 6600          | mg/Kg | 1    | 5250            | 1310             | 101  | 75 - 125      | 2   | 20           |
| Total Sodium    |   | 1 | 5700          | mg/Kg | 1    | 5250            | 466              | 100  | 75 - 125      | 2   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1) Spiked Sample: 288294**

QC Batch: 88395  
Prep Batch: 75037

Date Analyzed: 2012-02-08  
QC Preparation: 2012-02-08

Analyzed By: RR  
Prepared By: KV

| Param           | F | C | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|-----------------|---|---|--------------|-------|------|-----------------|------------------|------|---------------|
| Total Calcium   |   | 1 | 9140         | mg/Kg | 1    | 5000            | 4220             | 98   | 75 - 125      |
| Total Magnesium |   | 1 | 6640         | mg/Kg | 1    | 5000            | 2030             | 92   | 75 - 125      |
| Total Potassium |   | 1 | 6580         | mg/Kg | 1    | 5000            | 1920             | 93   | 75 - 125      |
| Total Sodium    |   | 1 | 6010         | mg/Kg | 1    | 5000            | 1290             | 94   | 75 - 125      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param           | F | C | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|-----------------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Total Calcium   |   | 1 | 9220          | mg/Kg | 1    | 5000            | 4220             | 100  | 75 - 125      | 1   | 20           |
| Total Magnesium |   | 1 | 6600          | mg/Kg | 1    | 5000            | 2030             | 91   | 75 - 125      | 1   | 20           |
| Total Potassium |   | 1 | 6520          | mg/Kg | 1    | 5000            | 1920             | 92   | 75 - 125      | 1   | 20           |
| Total Sodium    |   | 1 | 5960          | mg/Kg | 1    | 5000            | 1290             | 93   | 75 - 125      | 1   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 288155

QC Batch: 88427  
Prep Batch: 75069

Date Analyzed: 2012-02-09  
QC Preparation: 2012-02-09

Analyzed By: RR  
Prepared By: KV

| Param         | F | C | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---------------|---|---|-----------|-------|------|--------------|---------------|------|------------|
| TCLP Silver   |   | 1 | 1.23      | mg/L  | 1    | 1.25         | <0.00437      | 98   | 75 - 125   |
| TCLP Arsenic  |   | 1 | 5.32      | mg/L  | 1    | 5.00         | <0.0184       | 106  | 75 - 125   |
| TCLP Barium   |   | 1 | 10.5      | mg/L  | 1    | 10.0         | <0.0103       | 105  | 75 - 125   |
| TCLP Cadmium  |   | 1 | 2.68      | mg/L  | 1    | 2.50         | <0.0150       | 107  | 75 - 125   |
| TCLP Chromium |   | 1 | 0.974     | mg/L  | 1    | 1.00         | <0.0251       | 97   | 75 - 125   |
| TCLP Lead     |   | 1 | 5.47      | mg/L  | 1    | 5.00         | <0.0104       | 109  | 75 - 125   |
| TCLP Selenium |   |   | 4.87      | mg/L  | 1    | 5.00         | <0.0470       | 97   | 75 - 125   |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param         | F | C | MSD Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---------------|---|---|------------|-------|------|--------------|---------------|------|------------|-----|-----------|
| TCLP Silver   |   | 1 | 1.23       | mg/L  | 1    | 1.25         | <0.00437      | 98   | 75 - 125   | 0   | 20        |
| TCLP Arsenic  |   | 1 | 5.29       | mg/L  | 1    | 5.00         | <0.0184       | 106  | 75 - 125   | 1   | 20        |
| TCLP Barium   |   | 1 | 10.6       | mg/L  | 1    | 10.0         | <0.0103       | 106  | 75 - 125   | 1   | 20        |
| TCLP Cadmium  |   | 1 | 2.69       | mg/L  | 1    | 2.50         | <0.0150       | 108  | 75 - 125   | 0   | 20        |
| TCLP Chromium |   | 1 | 0.979      | mg/L  | 1    | 1.00         | <0.0251       | 98   | 75 - 125   | 0   | 20        |
| TCLP Lead     |   | 1 | 5.43       | mg/L  | 1    | 5.00         | <0.0104       | 109  | 75 - 125   | 1   | 20        |
| TCLP Selenium |   |   | 4.76       | mg/L  | 1    | 5.00         | <0.0470       | 95   | 75 - 125   | 2   | 20        |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 288292

QC Batch: 88429  
Prep Batch: 75069

Date Analyzed: 2012-02-09  
QC Preparation: 2012-02-09

Analyzed By: RR  
Prepared By: KV

| Param         | F | C | MS Result | Units | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---------------|---|---|-----------|-------|------|--------------|---------------|------|------------|
| TCLP Silver   |   | 1 | 1.29      | mg/L  | 1    | 1.25         | <0.00437      | 103  | 75 - 125   |
| TCLP Arsenic  |   | 1 | 5.16      | mg/L  | 1    | 5.00         | <0.0184       | 103  | 75 - 125   |
| TCLP Barium   |   | 1 | 11.5      | mg/L  | 1    | 10.0         | 1.35          | 102  | 75 - 125   |
| TCLP Cadmium  |   | 1 | 2.51      | mg/L  | 1    | 2.50         | <0.0150       | 100  | 75 - 125   |
| TCLP Chromium |   | 1 | 0.958     | mg/L  | 1    | 1.00         | <0.0251       | 96   | 75 - 125   |
| TCLP Lead     |   | 1 | 5.14      | mg/L  | 1    | 5.00         | <0.0104       | 103  | 75 - 125   |
| TCLP Selenium |   |   | 4.88      | mg/L  | 1    | 5.00         | <0.0470       | 98   | 75 - 125   |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param         | F | C | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|---------------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| TCLP Silver   |   | 1 | 1.28          | mg/L  | 1    | 1.25            | <0.00437         | 102  | 75 - 125      | 1   | 20           |
| TCLP Arsenic  |   | 1 | 5.16          | mg/L  | 1    | 5.00            | <0.0184          | 103  | 75 - 125      | 0   | 20           |
| TCLP Barium   |   | 1 | 11.5          | mg/L  | 1    | 10.0            | 1.35             | 102  | 75 - 125      | 0   | 20           |
| TCLP Cadmium  |   | 1 | 2.50          | mg/L  | 1    | 2.50            | <0.0150          | 100  | 75 - 125      | 0   | 20           |
| TCLP Chromium |   | 1 | 0.955         | mg/L  | 1    | 1.00            | <0.0251          | 96   | 75 - 125      | 0   | 20           |
| TCLP Lead     |   | 1 | 5.12          | mg/L  | 1    | 5.00            | <0.0104          | 102  | 75 - 125      | 0   | 20           |
| TCLP Selenium |   |   | 4.87          | mg/L  | 1    | 5.00            | <0.0470          | 97   | 75 - 125      | 0   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 288284

QC Batch: 88454  
Prep Batch: 75096

Date Analyzed: 2012-02-09  
QC Preparation: 2012-02-09

Analyzed By: DS  
Prepared By: DS

| Param | F | C | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|-------|---|---|--------------|-------|------|-----------------|------------------|------|---------------|
| TRPHC |   |   | 264          | mg/Kg | 1    | 250             | 6.21             | 103  | 43 - 161      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param | F | C | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|-------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| TRPHC |   |   | 256           | mg/Kg | 1    | 250             | 6.21             | 100  | 43 - 161      | 3   |              |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 288284

QC Batch: 88528  
Prep Batch: 75149

Date Analyzed: 2012-02-13  
QC Preparation: 2012-02-13

Analyzed By: TP  
Prepared By: TP

| Param        | F | C | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|--------------|---|---|--------------|-------|------|-----------------|------------------|------|---------------|
| TCLP Mercury |   | 1 | 0.0408       | mg/L  | 1    | 0.0400          | <0.000771        | 102  | 75 - 125      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param        | F | C | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|--------------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| TCLP Mercury |   | 1 | 0.0424        | mg/L  | 1    | 0.0400          | <0.000771        | 106  | 75 - 125      | 4   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 77 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Matrix Spike (MS-1)** Spiked Sample: 288299

QC Batch: 88529  
Prep Batch: 75149

Date Analyzed: 2012-02-13  
QC Preparation: 2012-02-13

Analyzed By: TP  
Prepared By: TP

| Param        | F | C | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|--------------|---|---|--------------|-------|------|-----------------|------------------|------|---------------|
| TCLP Mercury |   | 1 | 0.0427       | mg/L  | 1    | 0.0400          | <0.000771        | 107  | 75 - 125      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param        | F | C | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|--------------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| TCLP Mercury |   | 1 | 0.0403        | mg/L  | 1    | 0.0400          | <0.000771        | 101  | 75 - 125      | 6   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 288291

QC Batch: 88553  
Prep Batch: 75178

Date Analyzed: 2012-02-13  
QC Preparation: 2012-02-11

Analyzed By: RL  
Prepared By: RL

| Param    | F | C | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|----------|---|---|--------------|-------|------|-----------------|------------------|------|---------------|
| Chloride |   | 1 | 328          | mg/Kg | 1    | 208             | 132              | 94   | 90 - 110      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | F | C | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|----------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| Chloride |   | 1 | 331           | mg/Kg | 1    | 208             | 132              | 96   | 90 - 110      | 1   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 288291

QC Batch: 88553  
Prep Batch: 75178

Date Analyzed: 2012-02-13  
QC Preparation: 2012-02-11

Analyzed By: RL  
Prepared By: RL

| Param   | F | C | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|---------|---|---|--------------|-------|------|-----------------|------------------|------|---------------|
| Sulfate |   | 1 | 278          | mg/Kg | 1    | 208             | 80.7             | 95   | 90 - 110      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Report Date: February 22, 2012  
 4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
 GMI Landfarm

Page Number: 78 of 95  
 Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

| Param   | F | C | MSD    |       | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---------|---|---|--------|-------|------|--------------|---------------|------|------------|-----|-----------|
|         |   |   | Result | Units |      |              |               |      |            |     |           |
| Sulfate |   | 1 | 283    | mg/Kg | 1    | 208          | 80.7          | 97   | 90 - 110   | 2   | 20        |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 288300

QC Batch: 88554 Date Analyzed: 2012-02-13 Analyzed By: RL  
 Prep Batch: 75178 QC Preparation: 2012-02-11 Prepared By: RL

| Param    | F | C | MS     |       | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|----------|---|---|--------|-------|------|--------------|---------------|------|------------|
|          |   |   | Result | Units |      |              |               |      |            |
| Chloride |   | 1 | 294    | mg/Kg | 1    | 208          | 95.3          | 96   | 90 - 110   |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | F | C | MSD    |       | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|----------|---|---|--------|-------|------|--------------|---------------|------|------------|-----|-----------|
|          |   |   | Result | Units |      |              |               |      |            |     |           |
| Chloride |   | 1 | 296    | mg/Kg | 1    | 208          | 95.3          | 96   | 90 - 110   | 1   | 20        |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 288300

QC Batch: 88554 Date Analyzed: 2012-02-13 Analyzed By: RL  
 Prep Batch: 75178 QC Preparation: 2012-02-11 Prepared By: RL

| Param   | F | C | MS     |       | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit |
|---------|---|---|--------|-------|------|--------------|---------------|------|------------|
|         |   |   | Result | Units |      |              |               |      |            |
| Sulfate |   | 1 | 248    | mg/Kg | 1    | 208          | 32.2          | 104  | 90 - 110   |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param   | F | C | MSD    |       | Dil. | Spike Amount | Matrix Result | Rec. | Rec. Limit | RPD | RPD Limit |
|---------|---|---|--------|-------|------|--------------|---------------|------|------------|-----|-----------|
|         |   |   | Result | Units |      |              |               |      |            |     |           |
| Sulfate |   | 1 | 235    | mg/Kg | 1    | 208          | 32.2          | 98   | 90 - 110   | 5   | 20        |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 287036

QC Batch: 88591 Date Analyzed: 2012-02-15 Analyzed By: RR  
 Prep Batch: 75196 QC Preparation: 2012-02-15 Prepared By: KV

| Param         | F | C | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|---------------|---|---|--------------|-------|------|-----------------|------------------|------|---------------|
| TCLP Silver   |   | 1 | 1.23         | mg/L  | 1    | 1.25            | <0.00437         | 98   | 75 - 125      |
| TCLP Arsenic  |   | 1 | 5.31         | mg/L  | 1    | 5.00            | 0.18             | 103  | 75 - 125      |
| TCLP Barium   |   | 1 | 10.8         | mg/L  | 1    | 10.0            | <0.0103          | 108  | 75 - 125      |
| TCLP Cadmium  |   | 1 | 2.70         | mg/L  | 1    | 2.50            | <0.0150          | 108  | 75 - 125      |
| TCLP Chromium |   | 1 | 0.976        | mg/L  | 1    | 1.00            | <0.0251          | 98   | 75 - 125      |
| TCLP Lead     |   | 1 | 5.34         | mg/L  | 1    | 5.00            | <0.0104          | 107  | 75 - 125      |
| TCLP Selenium |   |   | 4.81         | mg/L  | 1    | 5.00            | <0.0470          | 96   | 75 - 125      |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param         | F | C | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD | RPD<br>Limit |
|---------------|---|---|---------------|-------|------|-----------------|------------------|------|---------------|-----|--------------|
| TCLP Silver   |   | 1 | 1.24          | mg/L  | 1    | 1.25            | <0.00437         | 99   | 75 - 125      | 1   | 20           |
| TCLP Arsenic  |   | 1 | 5.21          | mg/L  | 1    | 5.00            | 0.18             | 101  | 75 - 125      | 2   | 20           |
| TCLP Barium   |   | 1 | 10.9          | mg/L  | 1    | 10.0            | <0.0103          | 109  | 75 - 125      | 1   | 20           |
| TCLP Cadmium  |   | 1 | 2.72          | mg/L  | 1    | 2.50            | <0.0150          | 109  | 75 - 125      | 1   | 20           |
| TCLP Chromium |   | 1 | 0.986         | mg/L  | 1    | 1.00            | <0.0251          | 99   | 75 - 125      | 1   | 20           |
| TCLP Lead     |   | 1 | 5.23          | mg/L  | 1    | 5.00            | <0.0104          | 105  | 75 - 125      | 2   | 20           |
| TCLP Selenium |   |   | 4.94          | mg/L  | 1    | 5.00            | <0.0470          | 99   | 75 - 125      | 3   | 20           |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 288299

QC Batch: 88601  
Prep Batch: 75208

Date Analyzed: 2012-02-15  
QC Preparation: 2012-02-14

Analyzed By: RL  
Prepared By: RL

| Param    | F  | C  | MS<br>Result | Units | Dil.  | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |          |
|----------|----|----|--------------|-------|-------|-----------------|------------------|------|---------------|----------|
| Chloride | Qs | Qs | 1            | 3160  | mg/Kg | 5               | 1040             | 2420 | 71            | 90 - 110 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param    | F  | C  | MSD<br>Result | Units | Dil.  | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit | RPD      | RPD<br>Limit |    |
|----------|----|----|---------------|-------|-------|-----------------|------------------|------|---------------|----------|--------------|----|
| Chloride | Qs | Qs | 1             | 3190  | mg/Kg | 5               | 1040             | 2420 | 74            | 90 - 110 | 1            | 20 |

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 288299

QC Batch: 88601  
Prep Batch: 75208

Date Analyzed: 2012-02-15  
QC Preparation: 2012-02-14

Analyzed By: RL  
Prepared By: RL

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 80 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

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| Param   | F | C | MS<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec. | Rec.<br>Limit |
|---------|---|---|--------------|-------|------|-----------------|------------------|------|---------------|
| Sulfate |   | 1 | 1230         | mg/Kg | 5    | 1040            | 239              | 95   | 90 - 110      |

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Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

| Param   | F | C | MSD<br>Result | Units | Dil. | Spike<br>Amount | Matrix<br>Result | Rec.<br>Limit | RPD | RPD<br>Limit |
|---------|---|---|---------------|-------|------|-----------------|------------------|---------------|-----|--------------|
| Sulfate |   | 1 | 1270          | mg/Kg | 5    | 1040            | 239              | 99            | 3   | 20           |

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Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Calibration Standards

### Standard (CCV-1)

QC Batch: 88302

Date Analyzed: 2012-02-03

Analyzed By: ZLM

| Param        | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|--------------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Benzene      |      | 1    | mg/Kg | 0.100                 | 0.0992                 | 99                          | 80 - 120                      | 2012-02-03       |
| Toluene      |      | 1    | mg/Kg | 0.100                 | 0.0995                 | 100                         | 80 - 120                      | 2012-02-03       |
| Ethylbenzene |      | 1    | mg/Kg | 0.100                 | 0.0964                 | 96                          | 80 - 120                      | 2012-02-03       |
| Xylene       |      | 1    | mg/Kg | 0.300                 | 0.300                  | 100                         | 80 - 120                      | 2012-02-03       |

### Standard (CCV-2)

QC Batch: 88302

Date Analyzed: 2012-02-03

Analyzed By: ZLM

| Param        | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|--------------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Benzene      |      | 1    | mg/Kg | 0.100                 | 0.101                  | 101                         | 80 - 120                      | 2012-02-03       |
| Toluene      |      | 1    | mg/Kg | 0.100                 | 0.102                  | 102                         | 80 - 120                      | 2012-02-03       |
| Ethylbenzene |      | 1    | mg/Kg | 0.100                 | 0.0969                 | 97                          | 80 - 120                      | 2012-02-03       |
| Xylene       |      | 1    | mg/Kg | 0.300                 | 0.301                  | 100                         | 80 - 120                      | 2012-02-03       |

### Standard (CCV-3)

QC Batch: 88302

Date Analyzed: 2012-02-03

Analyzed By: ZLM

| Param        | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|--------------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Benzene      |      | 1    | mg/Kg | 0.100                 | 0.100                  | 100                         | 80 - 120                      | 2012-02-03       |
| Toluene      |      | 1    | mg/Kg | 0.100                 | 0.101                  | 101                         | 80 - 120                      | 2012-02-03       |
| Ethylbenzene |      | 1    | mg/Kg | 0.100                 | 0.0957                 | 96                          | 80 - 120                      | 2012-02-03       |
| Xylene       |      | 1    | mg/Kg | 0.300                 | 0.296                  | 99                          | 80 - 120                      | 2012-02-03       |

**Standard (ICV-1)**

QC Batch: 88349

Date Analyzed: 2012-02-06

Analyzed By: AM

| Param                  | Flag | Cert | Units          | ICVs<br>True<br>Conc. | ICVs<br>Found<br>Conc. | ICVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|------------------------|------|------|----------------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Hydroxide Alkalinity   |      |      | mg/Kg as CaCo3 | 0.00                  | 30.0                   |                             | -                             | 2012-02-06       |
| Carbonate Alkalinity   |      |      | mg/Kg as CaCo3 | 0.00                  | 220                    |                             | -                             | 2012-02-06       |
| Bicarbonate Alkalinity |      |      | mg/Kg as CaCo3 | 0.00                  | <4.00                  |                             | -                             | 2012-02-06       |
| Total Alkalinity       |      |      | mg/Kg as CaCo3 | 250                   | 250                    | 100                         | 95 - 105                      | 2012-02-06       |

**Standard (CCV-1)**

QC Batch: 88349

Date Analyzed: 2012-02-06

Analyzed By: AM

| Param                  | Flag | Cert | Units          | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|------------------------|------|------|----------------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Hydroxide Alkalinity   |      |      | mg/Kg as CaCo3 | 0.00                  | 10.0                   |                             | -                             | 2012-02-06       |
| Carbonate Alkalinity   |      |      | mg/Kg as CaCo3 | 0.00                  | 240                    |                             | -                             | 2012-02-06       |
| Bicarbonate Alkalinity |      |      | mg/Kg as CaCo3 | 0.00                  | <4.00                  |                             | -                             | 2012-02-06       |
| Total Alkalinity       |      |      | mg/Kg as CaCo3 | 250                   | 250                    | 100                         | 95 - 105                      | 2012-02-06       |

**Standard (ICV-1)**

QC Batch: 88350

Date Analyzed: 2012-02-06

Analyzed By: AM

| Param                  | Flag | Cert | Units          | ICVs<br>True<br>Conc. | ICVs<br>Found<br>Conc. | ICVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|------------------------|------|------|----------------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Hydroxide Alkalinity   |      |      | mg/Kg as CaCo3 | 0.00                  | 30.0                   |                             | -                             | 2012-02-06       |
| Carbonate Alkalinity   |      |      | mg/Kg as CaCo3 | 0.00                  | 220                    |                             | -                             | 2012-02-06       |
| Bicarbonate Alkalinity |      |      | mg/Kg as CaCo3 | 0.00                  | <4.00                  |                             | -                             | 2012-02-06       |
| Total Alkalinity       |      |      | mg/Kg as CaCo3 | 250                   | 250                    | 100                         | 95 - 105                      | 2012-02-06       |

**Standard (CCV-1)**

QC Batch: 88350

Date Analyzed: 2012-02-06

Analyzed By: AM

Report Date: February 22, 2012  
 4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
 GMI Landfarm

Page Number: 83 of 95  
 Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

| Param                  | Flag | Cert | Units          | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|------------------------|------|------|----------------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Hydroxide Alkalinity   |      |      | mg/Kg as CaCo3 | 0.00                  | 30.0                   |                             | -                             | 2012-02-06       |
| Carbonate Alkalinity   |      |      | mg/Kg as CaCo3 | 0.00                  | 220                    |                             | -                             | 2012-02-06       |
| Bicarbonate Alkalinity |      |      | mg/Kg as CaCo3 | 0.00                  | <4.00                  |                             | -                             | 2012-02-06       |
| Total Alkalinity       |      |      | mg/Kg as CaCo3 | 250                   | 250                    | 100                         | 95 - 105                      | 2012-02-06       |

**Standard (ICV-1)**

QC Batch: 88351

Date Analyzed: 2012-02-06

Analyzed By: AM

| Param | Flag | Cert | Units | ICVs<br>True<br>Conc. | ICVs<br>Found<br>Conc. | ICVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| pH    |      |      | s.u.  | 7.00                  | 7.00                   | 100                         | 98 - 102                      | 2012-02-06       |

**Standard (CCV-1)**

QC Batch: 88351

Date Analyzed: 2012-02-06

Analyzed By: AM

| Param | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| pH    |      |      | s.u.  | 7.00                  | 7.02                   | 100                         | 98 - 102                      | 2012-02-06       |

**Standard (ICV-1)**

QC Batch: 88352

Date Analyzed: 2012-02-06

Analyzed By: AM

| Param | Flag | Cert | Units | ICVs<br>True<br>Conc. | ICVs<br>Found<br>Conc. | ICVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| pH    |      |      | s.u.  | 7.00                  | 7.00                   | 100                         | 98 - 102                      | 2012-02-06       |

**Standard (CCV-1)**

QC Batch: 88352

Date Analyzed: 2012-02-06

Analyzed By: AM

Report Date: February 22, 2012  
 4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
 GMI Landfarm

Page Number: 84 of 95  
 Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

| Param | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| pH    |      |      | s.u.  | 7.00                  | 7.02                   | 100                         | 98 - 102                      | 2012-02-06       |

**Standard (ICV-1)**

QC Batch: 88394

Date Analyzed: 2012-02-08

Analyzed By: RR

| Param           | Flag | Cert | Units | ICVs<br>True<br>Conc. | ICVs<br>Found<br>Conc. | ICVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-----------------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Total Calcium   |      | 1    | mg/Kg | 51.0                  | 51.3                   | 100                         | 90 - 110                      | 2012-02-08       |
| Total Magnesium |      | 1    | mg/Kg | 51.0                  | 51.2                   | 100                         | 90 - 110                      | 2012-02-08       |
| Total Potassium |      | 1    | mg/Kg | 55.0                  | 55.5                   | 101                         | 90 - 110                      | 2012-02-08       |
| Total Sodium    |      | 1    | mg/Kg | 51.0                  | 51.4                   | 101                         | 90 - 110                      | 2012-02-08       |

**Standard (CCV-1)**

QC Batch: 88394

Date Analyzed: 2012-02-08

Analyzed By: RR

| Param           | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-----------------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Total Calcium   |      | 1    | mg/Kg | 51.0                  | 47.9                   | 94                          | 90 - 110                      | 2012-02-08       |
| Total Magnesium |      | 1    | mg/Kg | 51.0                  | 49.8                   | 98                          | 90 - 110                      | 2012-02-08       |
| Total Potassium |      | 1    | mg/Kg | 55.0                  | 52.6                   | 96                          | 90 - 110                      | 2012-02-08       |
| Total Sodium    |      | 1    | mg/Kg | 51.0                  | 48.8                   | 96                          | 90 - 110                      | 2012-02-08       |

**Standard (ICV-1)**

QC Batch: 88395

Date Analyzed: 2012-02-08

Analyzed By: RR

| Param           | Flag | Cert | Units | ICVs<br>True<br>Conc. | ICVs<br>Found<br>Conc. | ICVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-----------------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Total Calcium   |      | 1    | mg/Kg | 51.0                  | 51.3                   | 100                         | 90 - 110                      | 2012-02-08       |
| Total Magnesium |      | 1    | mg/Kg | 51.0                  | 51.2                   | 100                         | 90 - 110                      | 2012-02-08       |
| Total Potassium |      | 1    | mg/Kg | 55.0                  | 55.5                   | 101                         | 90 - 110                      | 2012-02-08       |
| Total Sodium    |      | 1    | mg/Kg | 51.0                  | 51.4                   | 101                         | 90 - 110                      | 2012-02-08       |

**Standard (CCV-1)**

QC Batch: 88395

Date Analyzed: 2012-02-08

Analyzed By: RR

| Param           | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-----------------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Total Calcium   |      | 1    | mg/Kg | 51.0                  | 48.6                   | 95                          | 90 - 110                      | 2012-02-08       |
| Total Magnesium |      | 1    | mg/Kg | 51.0                  | 47.9                   | 94                          | 90 - 110                      | 2012-02-08       |
| Total Potassium |      | 1    | mg/Kg | 55.0                  | 53.2                   | 97                          | 90 - 110                      | 2012-02-08       |
| Total Sodium    |      | 1    | mg/Kg | 51.0                  | 48.8                   | 96                          | 90 - 110                      | 2012-02-08       |

**Standard (ICV-1)**

QC Batch: 88427

Date Analyzed: 2012-02-09

Analyzed By: RR

| Param         | Flag | Cert | Units | ICVs<br>True<br>Conc. | ICVs<br>Found<br>Conc. | ICVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|---------------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| TCLP Silver   |      | 1    | mg/L  | 0.125                 | 0.126                  | 101                         | 90 - 110                      | 2012-02-09       |
| TCLP Arsenic  |      | 1    | mg/L  | 1.00                  | 1.01                   | 101                         | 90 - 110                      | 2012-02-09       |
| TCLP Barium   |      | 1    | mg/L  | 1.00                  | 1.02                   | 102                         | 90 - 110                      | 2012-02-09       |
| TCLP Cadmium  |      | 1    | mg/L  | 1.00                  | 1.02                   | 102                         | 90 - 110                      | 2012-02-09       |
| TCLP Chromium |      | 1    | mg/L  | 1.00                  | 1.02                   | 102                         | 90 - 110                      | 2012-02-09       |
| TCLP Lead     |      | 1    | mg/L  | 1.00                  | 1.02                   | 102                         | 90 - 110                      | 2012-02-09       |
| TCLP Selenium |      |      | mg/L  | 1.00                  | 1.02                   | 102                         | 90 - 110                      | 2012-02-09       |

**Standard (CCV-1)**

QC Batch: 88427

Date Analyzed: 2012-02-09

Analyzed By: RR

| Param         | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|---------------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| TCLP Silver   |      | 1    | mg/L  | 0.125                 | 0.125                  | 100                         | 90 - 110                      | 2012-02-09       |
| TCLP Arsenic  |      | 1    | mg/L  | 1.00                  | 1.00                   | 100                         | 90 - 110                      | 2012-02-09       |
| TCLP Barium   |      | 1    | mg/L  | 1.00                  | 1.01                   | 101                         | 90 - 110                      | 2012-02-09       |
| TCLP Cadmium  |      | 1    | mg/L  | 1.00                  | 1.01                   | 101                         | 90 - 110                      | 2012-02-09       |
| TCLP Chromium |      | 1    | mg/L  | 1.00                  | 1.01                   | 101                         | 90 - 110                      | 2012-02-09       |
| TCLP Lead     |      | 1    | mg/L  | 1.00                  | 1.00                   | 100                         | 90 - 110                      | 2012-02-09       |
| TCLP Selenium |      |      | mg/L  | 1.00                  | 1.00                   | 100                         | 90 - 110                      | 2012-02-09       |

**Standard (ICV-1)**

QC Batch: 88429

Date Analyzed: 2012-02-09

Analyzed By: RR

| Param         | Flag | Cert | Units | ICVs<br>True<br>Conc. | ICVs<br>Found<br>Conc. | ICVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|---------------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| TCLP Silver   |      | 1    | mg/L  | 0.125                 | 0.126                  | 101                         | 90 - 110                      | 2012-02-09       |
| TCLP Arsenic  |      | 1    | mg/L  | 1.00                  | 1.01                   | 101                         | 90 - 110                      | 2012-02-09       |
| TCLP Barium   |      | 1    | mg/L  | 1.00                  | 1.02                   | 102                         | 90 - 110                      | 2012-02-09       |
| TCLP Cadmium  |      | 1    | mg/L  | 1.00                  | 1.02                   | 102                         | 90 - 110                      | 2012-02-09       |
| TCLP Chromium |      | 1    | mg/L  | 1.00                  | 1.02                   | 102                         | 90 - 110                      | 2012-02-09       |
| TCLP Lead     |      | 1    | mg/L  | 1.00                  | 1.02                   | 102                         | 90 - 110                      | 2012-02-09       |
| TCLP Selenium |      |      | mg/L  | 1.00                  | 1.02                   | 102                         | 90 - 110                      | 2012-02-09       |

**Standard (CCV-1)**

QC Batch: 88429

Date Analyzed: 2012-02-09

Analyzed By: RR

| Param         | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|---------------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| TCLP Silver   |      | 1    | mg/L  | 0.125                 | 0.126                  | 101                         | 90 - 110                      | 2012-02-09       |
| TCLP Arsenic  |      | 1    | mg/L  | 1.00                  | 0.996                  | 100                         | 90 - 110                      | 2012-02-09       |
| TCLP Barium   |      | 1    | mg/L  | 1.00                  | 1.01                   | 101                         | 90 - 110                      | 2012-02-09       |
| TCLP Cadmium  |      | 1    | mg/L  | 1.00                  | 1.01                   | 101                         | 90 - 110                      | 2012-02-09       |
| TCLP Chromium |      | 1    | mg/L  | 1.00                  | 1.01                   | 101                         | 90 - 110                      | 2012-02-09       |
| TCLP Lead     |      | 1    | mg/L  | 1.00                  | 0.997                  | 100                         | 90 - 110                      | 2012-02-09       |
| TCLP Selenium |      |      | mg/L  | 1.00                  | 1.00                   | 100                         | 90 - 110                      | 2012-02-09       |

**Standard (CCV-1)**

QC Batch: 88454

Date Analyzed: 2012-02-09

Analyzed By: DS

| Param | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| TRPHC |      |      | mg/Kg | 100                   | 114                    | 114                         | 80 - 120                      | 2012-02-09       |

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 87 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

**Standard (CCV-2)**

QC Batch: 88454

Date Analyzed: 2012-02-09

Analyzed By: DS

| Param | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| TRPHC |      |      | mg/Kg | 100                   | 107                    | 107                         | 80 - 120                      | 2012-02-09       |

**Standard (CCV-3)**

QC Batch: 88454

Date Analyzed: 2012-02-09

Analyzed By: DS

| Param | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| TRPHC |      |      | mg/Kg | 100                   | 114                    | 114                         | 80 - 120                      | 2012-02-09       |

**Standard (CCV-4)**

QC Batch: 88454

Date Analyzed: 2012-02-09

Analyzed By: DS

| Param | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|-------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| TRPHC |      |      | mg/Kg | 100                   | 106                    | 106                         | 80 - 120                      | 2012-02-09       |

**Standard (ICV-1)**

QC Batch: 88504

Date Analyzed: 2012-02-13

Analyzed By: RL

| Param                | Flag | Cert | Units    | ICVs<br>True<br>Conc. | ICVs<br>Found<br>Conc. | ICVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------------------|------|------|----------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Specific Conductance |      |      | uMHOS/cm | 1410                  | 1330                   | 94                          | 90 - 110                      | 2012-02-13       |

**Standard (CCV-1)**

QC Batch: 88504

Date Analyzed: 2012-02-13

Analyzed By: RL

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 88 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

| Param                | Flag | Cert | Units    | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------------------|------|------|----------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Specific Conductance |      | 1    | uMHOS/cm | 1410                  | 1310                   | 93                          | 90 - 110                      | 2012-02-13       |

**Standard (CCV-1)**

QC Batch: 88528

Date Analyzed: 2012-02-13

Analyzed By: TP

| Param        | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|--------------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| TCLP Mercury |      | 1    | mg/L  | 0.00500               | 0.00501                | 100                         | 90 - 110                      | 2012-02-13       |

**Standard (CCV-2)**

QC Batch: 88528

Date Analyzed: 2012-02-13

Analyzed By: TP

| Param        | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|--------------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| TCLP Mercury |      | 1    | mg/L  | 0.00500               | 0.00514                | 103                         | 90 - 110                      | 2012-02-13       |

**Standard (CCV-1)**

QC Batch: 88529

Date Analyzed: 2012-02-13

Analyzed By: TP

| Param        | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|--------------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| TCLP Mercury |      | 1    | mg/L  | 0.00500               | 0.00501                | 100                         | 90 - 110                      | 2012-02-13       |

**Standard (CCV-2)**

QC Batch: 88529

Date Analyzed: 2012-02-13

Analyzed By: TP

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 89 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

| Param        | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|--------------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| TCLP Mercury |      | 1    | mg/L  | 0.00500               | 0.00478                | 96                          | 90 - 110                      | 2012-02-13       |

**Standard (CCV-1)**

QC Batch: 88553

Date Analyzed: 2012-02-13

Analyzed By: RL

| Param    | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | 1    | mg/Kg | 25.0                  | 23.8                   | 95                          | 90 - 110                      | 2012-02-13       |

**Standard (CCV-1)**

QC Batch: 88553

Date Analyzed: 2012-02-13

Analyzed By: RL

| Param   | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|---------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Sulfate |      | 1    | mg/Kg | 25.0                  | 24.5                   | 98                          | 90 - 110                      | 2012-02-13       |

**Standard (CCV-2)**

QC Batch: 88553

Date Analyzed: 2012-02-13

Analyzed By: RL

| Param    | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | 1    | mg/Kg | 25.0                  | 23.5                   | 94                          | 90 - 110                      | 2012-02-13       |

**Standard (CCV-2)**

QC Batch: 88553

Date Analyzed: 2012-02-13

Analyzed By: RL



Report Date: February 22, 2012  
 4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
 GMI Landfarm

Page Number: 91 of 95  
 Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

| Param   | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|---------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Sulfate |      | 1    | mg/Kg | 25.0                  | 24.7                   | 99                          | 90 - 110                      | 2012-02-13       |

**Standard (ICV-1)**

QC Batch: 88591

Date Analyzed: 2012-02-15

Analyzed By: RR

| Param         | Flag | Cert | Units | ICVs<br>True<br>Conc. | ICVs<br>Found<br>Conc. | ICVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|---------------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| TCLP Silver   |      | 1    | mg/L  | 0.125                 | 0.127                  | 102                         | 90 - 110                      | 2012-02-15       |
| TCLP Arsenic  |      | 1    | mg/L  | 1.00                  | 1.01                   | 101                         | 90 - 110                      | 2012-02-15       |
| TCLP Barium   |      | 1    | mg/L  | 1.00                  | 1.02                   | 102                         | 90 - 110                      | 2012-02-15       |
| TCLP Cadmium  |      | 1    | mg/L  | 1.00                  | 1.03                   | 103                         | 90 - 110                      | 2012-02-15       |
| TCLP Chromium |      | 1    | mg/L  | 1.00                  | 1.03                   | 103                         | 90 - 110                      | 2012-02-15       |
| TCLP Lead     |      | 1    | mg/L  | 1.00                  | 1.02                   | 102                         | 90 - 110                      | 2012-02-15       |
| TCLP Selenium |      |      | mg/L  | 1.00                  | 1.02                   | 102                         | 90 - 110                      | 2012-02-15       |

**Standard (CCV-1)**

QC Batch: 88591

Date Analyzed: 2012-02-15

Analyzed By: RR

| Param         | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|---------------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| TCLP Silver   |      | 1    | mg/L  | 0.125                 | 0.127                  | 102                         | 90 - 110                      | 2012-02-15       |
| TCLP Arsenic  |      | 1    | mg/L  | 1.00                  | 1.03                   | 103                         | 90 - 110                      | 2012-02-15       |
| TCLP Barium   |      | 1    | mg/L  | 1.00                  | 1.06                   | 106                         | 90 - 110                      | 2012-02-15       |
| TCLP Cadmium  |      | 1    | mg/L  | 1.00                  | 1.03                   | 103                         | 90 - 110                      | 2012-02-15       |
| TCLP Chromium |      | 1    | mg/L  | 1.00                  | 1.03                   | 103                         | 90 - 110                      | 2012-02-15       |
| TCLP Lead     |      | 1    | mg/L  | 1.00                  | 1.04                   | 104                         | 90 - 110                      | 2012-02-15       |
| TCLP Selenium |      |      | mg/L  | 1.00                  | 1.02                   | 102                         | 90 - 110                      | 2012-02-15       |

**Standard (CCV-1)**

QC Batch: 88601

Date Analyzed: 2012-02-15

Analyzed By: RL

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 92 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

| Param    | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | 1    | mg/Kg | 25.0                  | 24.1                   | 96                          | 90 - 110                      | 2012-02-15       |

**Standard (CCV-1)**

QC Batch: 88601

Date Analyzed: 2012-02-15

Analyzed By: RL

| Param   | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|---------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Sulfate |      | 1    | mg/Kg | 25.0                  | 24.8                   | 99                          | 90 - 110                      | 2012-02-15       |

**Standard (CCV-2)**

QC Batch: 88601

Date Analyzed: 2012-02-15

Analyzed By: RL

| Param    | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Chloride |      | 1    | mg/Kg | 25.0                  | 24.5                   | 98                          | 90 - 110                      | 2012-02-15       |

**Standard (CCV-2)**

QC Batch: 88601

Date Analyzed: 2012-02-15

Analyzed By: RL

| Param   | Flag | Cert | Units | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|---------|------|------|-------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Sulfate |      | 1    | mg/Kg | 25.0                  | 24.9                   | 100                         | 90 - 110                      | 2012-02-15       |

**Standard (ICV-1)**

QC Batch: 88776

Date Analyzed: 2012-02-21

Analyzed By: RL

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 93 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

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| Param                | Flag | Cert | Units    | ICVs<br>True<br>Conc. | ICVs<br>Found<br>Conc. | ICVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------------------|------|------|----------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Specific Conductance |      | 1    | uMHOS/cm | 1410                  | 1390                   | 99                          | 90 - 110                      | 2012-02-21       |

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**Standard (CCV-1)**

QC Batch: 88776

Date Analyzed: 2012-02-21

Analyzed By: RL

| Param                | Flag | Cert | Units    | CCVs<br>True<br>Conc. | CCVs<br>Found<br>Conc. | CCVs<br>Percent<br>Recovery | Percent<br>Recovery<br>Limits | Date<br>Analyzed |
|----------------------|------|------|----------|-----------------------|------------------------|-----------------------------|-------------------------------|------------------|
| Specific Conductance |      | 1    | uMHOS/cm | 1410                  | 1360                   | 96                          | 90 - 110                      | 2012-02-21       |

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## Appendix

### Report Definitions

| Name | Definition                 |
|------|----------------------------|
| MDL  | Method Detection Limit     |
| MQL  | Minimum Quantitation Limit |
| SDL  | Sample Detection Limit     |

### Laboratory Certifications

| C | Certifying Authority | Certification Number | Laboratory Location |
|---|----------------------|----------------------|---------------------|
| - | NCTRCA               | WFWB384444Y0909      | TraceAnalysis       |
| - | DBE                  | VN 20657             | TraceAnalysis       |
| - | HUB                  | 1752439743100-86536  | TraceAnalysis       |
| - | WBE                  | 237019               | TraceAnalysis       |
| 1 | NELAP                | T104704219-12-8      | Lubbock             |

### Standard Flags

| F   | Description   |
|-----|---|
| B   | Analyte detected in the corresponding method blank above the method detection limit   |
| H   | Analyzed out of hold time   |
| J   | Estimated concentration   |
| Jb  | The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less than ten times the concentration found in the method blank. The result should be considered non-detect to the SDL. |
| Jc  | Estimated concentration exceeding calibration range.  |
| Qc  | Calibration check outside of laboratory limits.   |
| Qr  | RPD outside of laboratory limits  |
| Qs  | Spike recovery outside of laboratory limits.  |
| Qsr | Surrogate recovery outside of laboratory limits.  |
| U   | The analyte is not detected above the SDL   |

### Result Comments

1 MS/MSD ran but not reportable due to spike error.

### Attachments

Report Date: February 22, 2012  
4th Qtr. 2011/Year End Soil Sampling

Work Order: 12020326  
GMI Landfarm

Page Number: 95 of 95  
Sec. 4, 5, 8, & 9, T11S-R31E, Chaves Co., NM

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The scanned attachments will follow this page.  
Please note, each attachment may consist of more than one page.

# Trace Analysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9  
Lubbock, Texas 79424  
Tel (806) 794-1296  
Fax (806) 794-1298  
1 (800) 378-1296

200 East Sunset Rd., Suite E  
El Paso, Texas 79922  
Tel (915) 585-3443  
Fax (915) 585-4944  
1 (888) 588-3443

BioAquatic Testing  
2501 Mayes Rd., Ste 100  
Carrollton, Texas 75006  
Tel (972) 242-7750

Company Name: Sandy Marley Inc. Phone #: 576.347.0434  
Address: 1 (Street, City, Zip) Fax #: 576.347.0435  
P.O. Box 1658 Roswell NM 88202  
Contact Person: Drew Riley C 505-330-2461 E-mail: emico@tm.com  
riley-brother@yaher.com

Invoice to: (If different from above)  
Project Name: New End 2011 Soil Sampling SMI Land Farm  
Project Location (including state): Channing, NM  
Sel. 4, 5, 8, & 9 T.11S. R.31.E. New Mexico

| LAB #<br>(LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX |      |     | PRESERVATIVE METHOD |     |                  |                                |      | SAMPLING TIME |
|-------------------------|------------|--------------|-----------------|--------|------|-----|---------------------|-----|------------------|--------------------------------|------|---------------|
|                         |            |              |                 | WATER  | SOIL | AIR | SLUDGE              | HCl | HNO <sub>3</sub> | H <sub>2</sub> SO <sub>4</sub> | NaOH |               |
| 288284                  | Cell 1     | 2            | 402             | X      |      |     |                     |     |                  |                                |      | 1435          |
| 285                     | Cell 2     | 1            |                 |        |      |     |                     |     |                  |                                |      | 1440          |
| 286                     | Cell 3     | 1            |                 |        |      |     |                     |     |                  |                                |      | 1445          |
| 287                     | Cell 4     | 1            |                 |        |      |     |                     |     |                  |                                |      | 1450          |
| 288                     | Cell 5     | 1            |                 |        |      |     |                     |     |                  |                                |      | 1458          |
| 289                     | Cell 7     | 1            |                 |        |      |     |                     |     |                  |                                |      | 1504          |
| 290                     | Cell 9     | 1            |                 |        |      |     |                     |     |                  |                                |      | 1509          |
| 291                     | Cell 10    | 1            |                 |        |      |     |                     |     |                  |                                |      | 1513          |
| 292                     | Cell 11    | 1            |                 |        |      |     |                     |     |                  |                                |      | 1520          |
| 293                     | Cell 12    | 1            |                 |        |      |     |                     |     |                  |                                |      | 1527          |
| 294                     | Cell 13    | 1            |                 |        |      |     |                     |     |                  |                                |      | 1532          |

Relinquished by: [Signature] Company: AMS Date: 02/04/12 10:00 INST: 1000  
OBS: 0 COR: 0  
Time: 10:00

Received by: [Signature] Company: AMS Date: 2/3/12 10:00 INST: 1000  
OBS: 0 COR: 0  
Time: 10:00

Relinquished by: [Signature] Company: AMS Date: 02/04/12 10:00 INST: 1000  
OBS: 0 COR: 0  
Time: 10:00

Received by: [Signature] Company: AMS Date: 2/3/12 10:00 INST: 1000  
OBS: 0 COR: 0  
Time: 10:00

## ANALYSIS REQUEST

(Circle or Specify Method No.)

|   |                                     |
|---|-------------------------------------|
| MTBE 8021 / 602 / 8260 / 624  | <input checked="" type="checkbox"/> |
| TEX 8021 / 602 / 8260 / 624   | <input checked="" type="checkbox"/> |
| PAH 418 / TX1005 / TX1005 Ext(C35)                                      | <input checked="" type="checkbox"/> |
| PAH 8270 / 625  | <input checked="" type="checkbox"/> |
| Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/200.7                         | <input checked="" type="checkbox"/> |
| TCLP Metals Ag As Ba Cd Cr Pb Se Hg                                     | <input checked="" type="checkbox"/> |
| TCLP Volatiles  | <input checked="" type="checkbox"/> |
| TCLP Semi Volatiles   | <input checked="" type="checkbox"/> |
| RCI   | <input checked="" type="checkbox"/> |
| GC/MS Vol. 8260 / 624   | <input checked="" type="checkbox"/> |
| GC/MS Semi. Vol. 8270 / 625   | <input checked="" type="checkbox"/> |
| PCB's 8082 / 608  | <input checked="" type="checkbox"/> |
| Pesticides 8081 / 608   | <input checked="" type="checkbox"/> |
| BOD, TSS, PH  | <input checked="" type="checkbox"/> |
| Moisture Content  | <input checked="" type="checkbox"/> |
| Cl, F, SO <sub>4</sub> , NO <sub>3</sub> , NO <sub>2</sub> , Alkalinity | <input checked="" type="checkbox"/> |
| Na, Ca, Mg, K, TDS, EC  | <input checked="" type="checkbox"/> |
| Hydride   | <input checked="" type="checkbox"/> |

LAB USE ONLY  
Intad: Y N  
Headspace: Y N / N / N / A

REMARKS: Please send copy of Risk #2 ASAP to: Amben@me.ath.com

Dry Weight Basis Required   
TRRP Report Required   
Check if Special Reporting Limits Are Needed

Carrier # 931 8557 5297

Submital of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

# Trace Analysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9  
Lubbock, Texas 79424  
Tel (806) 794-1296  
Fax (806) 794-1298  
1 (800) 378-1296

200 East Sunset Rd., Suite E  
El Paso, Texas 79922  
Tel (915) 585-3443  
Fax (915) 585-4944  
1 (888) 588-3443

BioAquatic Testing  
2501 Mayes Rd., Ste 100  
Carrollton, Texas 75006  
Tel (972) 242-7750

Company Name: Gandy Markey Inc. Phone #: 575.347.0434  
 Address: PO Box 1658 Roswell NM 88202 Fax #: 575.347.0435  
 Contact Person: Bret Riley @ 505.330.2461 E-mail: gandymarkey.com  
 Invoice to: Bret Riley @ 505.330.2461 E-mail: riley-bret@gahu.com

Project Name: 4th Quarter Year End Soil Sampling 2011 GMI Land Farm  
 Project Location (including state): 4th Quarter Year End Soil Sampling 2011 GMI Land Farm  
 (If different from above): Sec. 4.5, 8 & 9 T.11S. R.31E. New Mexico

| LAB #<br>(LAB USE ONLY) | FIELD CODE | # CONTAINERS | Volume / Amount | MATRIX |      |     | PRESERVATIVE METHOD |     |                  |                                |      | SAMPLING |          | Turn Around Time if different from standard |      |
|-------------------------|------------|--------------|-----------------|--------|------|-----|---------------------|-----|------------------|--------------------------------|------|----------|----------|---|------|
|                         |            |              |                 | WATER  | SOIL | AIR | SLUDGE              | HCl | HNO <sub>3</sub> | H <sub>2</sub> SO <sub>4</sub> | NaOH | ICE      | NONE     |   | DATE |
| 288295                  | Cell 14    | 2            | 442             | X      |      |     |                     |     |                  |                                |      | XX       | 01/14/12 | 1537  | Hold |
| 296                     | Cell 15    | 1            |                 |        |      |     |                     |     |                  |                                |      | XX       |          | 1543  |      |
| 297                     | Cell 16    | 1            |                 |        |      |     |                     |     |                  |                                |      | XX       |          | 1548  |      |
| 298299                  | Cell 17    | 1            |                 |        |      |     |                     |     |                  |                                |      | XX       |          | 1554  |      |
| 299300                  | Cell 19    | 1            |                 |        |      |     |                     |     |                  |                                |      | XX       |          | 1600  |      |
| 300301                  | Cell 21    | 1            |                 |        |      |     |                     |     |                  |                                |      | XX       |          | 1605  |      |
|                         | Temp Blank | 1            |                 |        |      |     |                     |     |                  |                                |      | XX       |          |   |      |

## ANALYSIS REQUEST

(Circle or Specify Method No.)

|  |  |  |  |   |  |   |   |   |   |   |  |   |  |  |  |  |
|--|--|--|--|---|--|---|---|---|---|---|--|---|--|--|--|--|
| <input checked="" type="checkbox"/> MTBE 8021 / 602 / 8260 / 624 | <input checked="" type="checkbox"/> TPH 418 / TX1005 / TX1005 Exr(C35) | <input checked="" type="checkbox"/> PAH 8270 / 625 | <input checked="" type="checkbox"/> Total Metals Ag As Ba Cd Cr Pb Se Hg 6010/2007 | <input checked="" type="checkbox"/> TCLP Metals Ag As Ba Cd Cr Pb Se Hg | <input checked="" type="checkbox"/> TCLP Volatiles | <input checked="" type="checkbox"/> TCLP Semi Volatiles | <input checked="" type="checkbox"/> TCLP Pesticides | <input checked="" type="checkbox"/> RCI | <input checked="" type="checkbox"/> GC/MS Vol. 8260 / 624 | <input checked="" type="checkbox"/> GC/MS Semi. Vol. 8270 / 625 | <input checked="" type="checkbox"/> PCB's 8082 / 608 | <input checked="" type="checkbox"/> Pesticides 8081 / 608 | <input checked="" type="checkbox"/> BOD, TSS <sup>PH</sup> | <input checked="" type="checkbox"/> Moisture Content | <input checked="" type="checkbox"/> Cl, FI, NO <sub>3</sub> , NO <sub>2</sub> , Alkalinity | <input checked="" type="checkbox"/> Na, Ca, Mg, K, TDS, EC |
|--|--|--|--|---|--|---|---|---|---|---|--|---|--|--|--|--|

REMARKS: Please Send Copy of Res to the P&AP TO: Amben@me dth.com

| LAB USE ONLY   | INST | OBS | COR |
|--|------|-----|-----|
| Received by: <u>[Signature]</u> Company: <u>CMB</u> Date: <u>02/01/12</u> Time: <u>10:00</u>     |      |     |     |
| Received by: <u>[Signature]</u> Company: <u>CMB</u> Date: <u>02/01/12</u> Time: <u>10:00</u>     |      |     |     |
| Relinquished by: <u>[Signature]</u> Company: <u>CMB</u> Date: <u>02/01/12</u> Time: <u>10:00</u> |      |     |     |

Carrier # 8799185575294

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.