

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
Sundry Notices and Reports on Wells

2005 DEC 12 5:00 PM

1. Type of Well

Oil Well

2. Name of Operator

Vulcan Minerals & Energy, c/o NMOCD Aztec District Office

3. Address & Phone No. of Operator

1000 Rio Brazos Road, Aztec, NM 87410 505-334-6178

4. Location of Well, Footage, Sec., T, R, M

778' FNL and 1863' FWL, Section 32, T-31-N, R-16-W

Lease Number

BIA #14-20-603-734

If Indian, All. or

Tribe Name

Navajo

7. Unit Agreement Name

Horseshoe Gallup

8. Well Name & Number

HSGU #44

9. API Well No.

30-045-10223

10. Field and Pool

Horseshoe Gallup

11. County & State

San Juan County, NM

12. CHECK APPROPRIATE BOX TO INDICATE NATURE OF NOTICE, REPORT, OTHER DATA

Type of Submission

☐ Notice of Intent

☒ Subsequent Report

☐ Final Abandonment

Type of Action

☒ Abandonment

☐ Recompletion

☐ Plugging Back

☐ Casing Repair

☐ Altering Casing

☐ Other -

☐ Change of Plans

☐ New Construction

☐ Non-Routine Fracturing

☐ Water Shut off

☐ Conversion to Injection

13. Describe Proposed or Completed Operations

Historical contamination discovered during clean up at the well bore after plugging was excavated, remediated to NMOCD standards and returned to the excavation. See attached diagram and analysis.

This well was plugged and abandoned on March 31, 2005.

The surface remediation was completed on November 17, 2005 per the attached reports.

SIGNATURE

*William F. Clark*

Contractor

December 2, 2005

William F. Clark, President, A-Plus Well Service, as contractor for reclamation fund

(This space for Federal or State Office use)

APPROVED BY

*Ray Sane*

Title

*Branch Chief*

Date

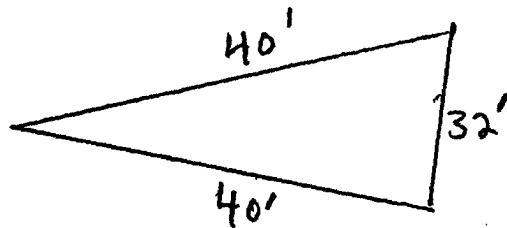
*12/13/05*

CONDITION OF APPROVAL, if any

NMOCD

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Surface Remediation  
Horseshoe Gallup Unit #44  
C-32-31N-16W



- 4/13/05 Excavated 12' to bedrock, hit fractured shale at 3'.
- 5/23/05 Turn biopile and take 5 point samples.
- 7/28/05 Turn biopile and take 5 point samples.
- 9/02/05 Turn biopile and take 5 point samples.
- 10/12/05 Add fertilizer and turn biopile, take 5 point sample.
- 11/2/05 Add fertilizer and turn biopile, take 5 point samples. Biopile meets standards.
- 11/17/05 Backfill Excavation.

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

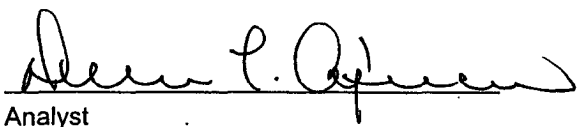
|                      |                         |                     |           |
|----------------------|-------------------------|---------------------|-----------|
| Client:              | A-Plus Horseshoe Gallup | Project #:          | 99042-004 |
| Sample ID:           | HSGU #44 Biopile        | Date Reported:      | 05-26-05  |
| Laboratory Number:   | 33092                   | Date Sampled:       | 05-23-05  |
| Chain of Custody No: | 14094                   | Date Received:      | 05-24-05  |
| Sample Matrix:       | Soil                    | Date Extracted:     | 05-24-05  |
| Preservative:        | Cool                    | Date Analyzed:      | 05-26-05  |
| Condition:           | Cool and Intact         | Analysis Requested: | 8015 TPH  |

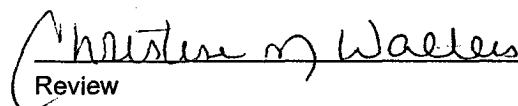
| Parameter                    | Concentration<br>(mg/Kg) | Det.<br>Limit<br>(mg/Kg) |
|------------------------------|--------------------------|--------------------------|
| Gasoline Range (C5 - C10)    | 44.7                     | 0.2                      |
| Diesel Range (C10 - C28)     | 1,690                    | 0.1                      |
| Total Petroleum Hydrocarbons | 1,730                    | 0.2                      |

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Horseshoe Gallup.

  
Analyst

  
Review

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# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

|                    |                         |                     |           |
|--------------------|-------------------------|---------------------|-----------|
| Client:            | A-Plus Horseshoe Gallup | Project #:          | 99042-004 |
| Sample ID:         | HSGU #44 Biopile        | Date Reported:      | 05-26-05  |
| Laboratory Number: | 33092                   | Date Sampled:       | 05-23-05  |
| Chain of Custody:  | 14094                   | Date Received:      | 05-24-05  |
| Sample Matrix:     | Soil                    | Date Analyzed:      | 05-26-05  |
| Preservative:      | Cool                    | Date Extracted:     | 05-24-05  |
| Condition:         | Cool & Intact           | Analysis Requested: | BTEX      |

| Parameter    | Concentration<br>(ug/Kg) | Det.<br>Limit<br>(ug/Kg) |
|--------------|--------------------------|--------------------------|
| Benzene      | 18.5                     | 2.1                      |
| Toluene      | 19.2                     | 1.8                      |
| Ethylbenzene | 79.2                     | 1.7                      |
| p,m-Xylene   | 332                      | 1.5                      |
| o-Xylene     | 44.9                     | 2.2                      |
| Total BTEX   | 494                      |                          |

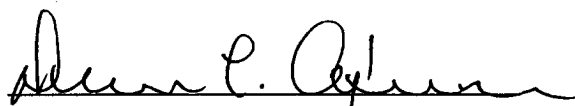
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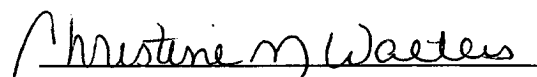
| Surrogate Recoveries: | Parameter           | Percent Recovery |
|-----------------------|---------------------|------------------|
|                       | Fluorobenzene       | 99.0 %           |
|                       | 1,4-difluorobenzene | 99.0 %           |
|                       | Bromochlorobenzene  | 99.0 %           |

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Horseshoe Gallup.

  
Analyst

  
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# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

|                    |                       |                     |           |
|--------------------|-----------------------|---------------------|-----------|
| Client:            | A-Plus (OCD)          | Project #:          | 99042-010 |
| Sample ID:         | 1 - 5 Point Composite | Date Reported:      | 08-03-05  |
| Laboratory Number: | 33909                 | Date Sampled:       | 07-28-05  |
| Chain of Custody:  | 14346                 | Date Received:      | 07-28-05  |
| Sample Matrix:     | Soil                  | Date Analyzed:      | 08-03-05  |
| Preservative:      | Cool                  | Date Extracted:     | 08-01-05  |
| Condition:         | Cool & Intact         | Analysis Requested: | BTEX      |

| Parameter    | Concentration<br>(ug/Kg) | Det.<br>Limit<br>(ug/Kg) |
|--------------|--------------------------|--------------------------|
| Benzene      | 4.2                      | 2.1                      |
| Toluene      | 34.4                     | 1.8                      |
| Ethylbenzene | 114                      | 1.7                      |
| p,m-Xylene   | 324                      | 1.5                      |
| o-Xylene     | 62.7                     | 2.2                      |
| Total BTEX   | 539                      |                          |

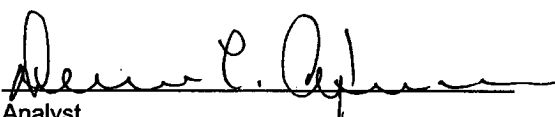
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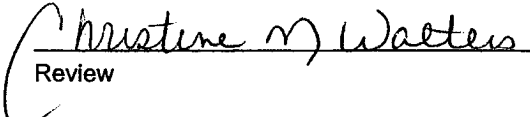
| Surrogate Recoveries: | Parameter           | Percent Recovery |
|-----------------------|---------------------|------------------|
|                       | Fluorobenzene       | 97.0 %           |
|                       | 1,4-difluorobenzene | 97.0 %           |
|                       | Bromochlorobenzene  | 97.0 %           |

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Pit 44, Gallup Horseshoe. Biopile

  
Analyst

  
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# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

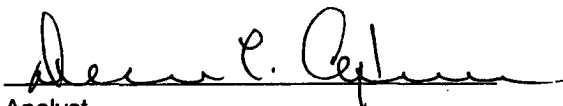
|                      |                       |                     |           |
|----------------------|-----------------------|---------------------|-----------|
| Client:              | A Plus (OCD)          | Project #:          | 99042-010 |
| Sample ID:           | 1 - 5 Point Composite | Date Reported:      | 08-03-05  |
| Laboratory Number:   | 33909                 | Date Sampled:       | 07-28-05  |
| Chain of Custody No: | 14346                 | Date Received:      | 07-28-05  |
| Sample Matrix:       | Soil                  | Date Extracted:     | 08-01-05  |
| Preservative:        | Cool                  | Date Analyzed:      | 08-03-05  |
| Condition:           | Cool and Intact       | Analysis Requested: | 8015 TPH  |

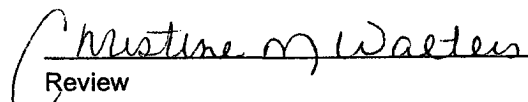
| Parameter                    | Concentration<br>(mg/Kg) | Det.<br>Limit<br>(mg/Kg) |
|------------------------------|--------------------------|--------------------------|
| Gasoline Range (C5 - C10)    | 67.5                     | 0.2                      |
| Diesel Range (C10 - C28)     | 1,960                    | 0.1                      |
| Total Petroleum Hydrocarbons | 2,030                    | 0.2                      |

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Pit 44, Gallup Horseshoe. Biopile

  
Analyst

  
Review

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# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

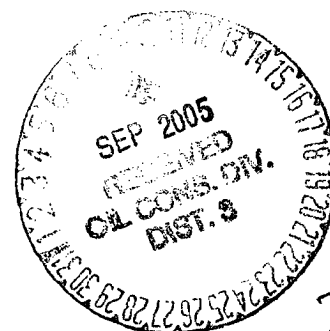
|                      |                 |                     |           |
|----------------------|-----------------|---------------------|-----------|
| Client:              | A-Plus - OCD    | Project #:          | 99042-011 |
| Sample ID:           | 1 - #44         | Date Reported:      | 09-07-05  |
| Laboratory Number:   | 34261           | Date Sampled:       | 09-02-05  |
| Chain of Custody No: | 14786           | Date Received:      | 09-02-05  |
| Sample Matrix:       | Soil            | Date Extracted:     | 09-06-05  |
| Preservative:        | Cool            | Date Analyzed:      | 09-07-05  |
| Condition:           | Cool and Intact | Analysis Requested: | 8015 TPH  |

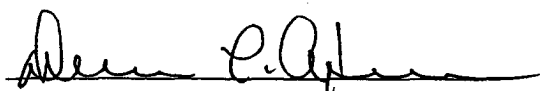
| Parameter                    | Concentration<br>(mg/Kg) | Det.<br>Limit<br>(mg/Kg) |
|------------------------------|--------------------------|--------------------------|
| Gasoline Range (C5 - C10)    | 50.3                     | 0.2                      |
| Diesel Range (C10 - C28)     | 1,310                    | 0.1                      |
| Total Petroleum Hydrocarbons | 1,360                    | 0.2                      |

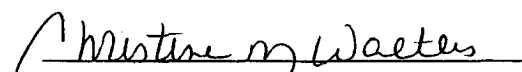
ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Horseshoe Gallup.**



  
Analyst

  
Review

# ENVIROTECH LABS

PRactical SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

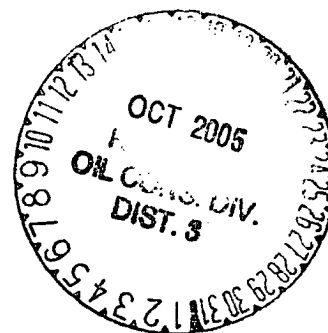
|                      |                           |                     |           |
|----------------------|---------------------------|---------------------|-----------|
| Client:              | A Plus Well Service / OCD | Project #:          | 99042-011 |
| Sample ID:           | #3 Well #44               | Date Reported:      | 10-13-05  |
| Laboratory Number:   | 34660                     | Date Sampled:       | 10-12-05  |
| Chain of Custody No: | 14915                     | Date Received:      | 10-12-05  |
| Sample Matrix:       | Soil                      | Date Extracted:     | 10-13-05  |
| Preservative:        | Cool                      | Date Analyzed:      | 10-13-05  |
| Condition:           | Cool and Intact           | Analysis Requested: | 8015 TPH  |

| Parameter                    | Concentration<br>(mg/Kg) | Det.<br>Limit<br>(mg/Kg) |
|------------------------------|--------------------------|--------------------------|
| Gasoline Range (C5 - C10)    | 47.6                     | 0.2                      |
| Diesel Range (C10 - C28)     | 1,410                    | 0.1                      |
| Total Petroleum Hydrocarbons | 1,460                    | 0.2                      |

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Gallup Horseshoe.**



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Christine M. Walters  
Analyst

Mary Bruce  
Review

# ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

## EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

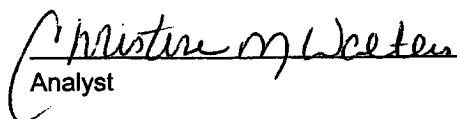
|                      |                          |                     |           |
|----------------------|--------------------------|---------------------|-----------|
| Client:              | APlus Well Service / OCD | Project #:          | 99042-011 |
| Sample ID:           | #44                      | Date Reported:      | 11-04-05  |
| Laboratory Number:   | 34878                    | Date Sampled:       | 11-02-05  |
| Chain of Custody No: | 15010                    | Date Received:      | 11-02-05  |
| Sample Matrix:       | Soil                     | Date Extracted:     | 11-03-05  |
| Preservative:        | Cool                     | Date Analyzed:      | 11-03-05  |
| Condition:           | Cool and Intact          | Analysis Requested: | 8015 TPH  |

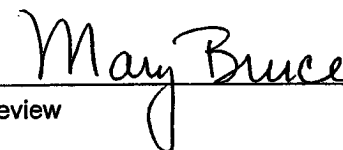
| Parameter                    | Concentration<br>(mg/Kg) | Det.<br>Limit<br>(mg/Kg) |
|------------------------------|--------------------------|--------------------------|
| Gasoline Range (C5 - C10)    | ND                       | 0.2                      |
| Diesel Range (C10 - C28)     | 338                      | 0.1                      |
| Total Petroleum Hydrocarbons | 338                      | 0.2                      |

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Horseshoe, Gallup.

  
Analyst

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Review