

submitted in lieu of Form 3160-5

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

DEC 12 PM 2 12

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

660' FSL and 660' FWL, Section 29, T-31-N, R-16-W

RECEIVED

OTO FARMINGTON NM

5. Lease Number

BIA #14-20-603-734

6. If Indian, All. or

Tribe Name

Navajo

7. Unit Agreement Name

Horseshoe Gallup

8. Well Name & Number

HSGU #45

9. API Well No.

30-045-10300

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 June 27, 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 Sanchez

Title

Branch Chief

Date

12/13/05

CONDITION OF APPROVAL, if any:

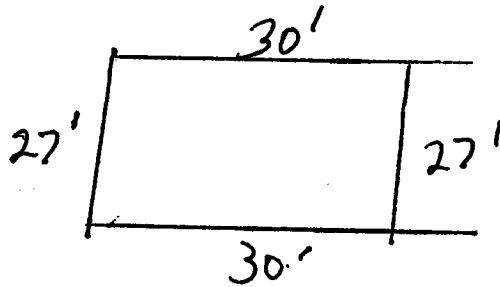
OPERATOR

1/14

Surface Remediation

Horseshoe Gallup Unit #45

M-29-31N-16W



- 7/28/05 Excavated 5' to bedrock
- 9/2/05 Turn biopile and take 5pt sample
- 10/13/05 Add fert. lizer, turn biopile and take 5 point sample
- 11/4/05 Add fertilizer, turn biopile take 5 point sample, Sample was below required remediation levels.
- 11/17/05 Backfill excavation

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	A-Plus (OCD)	Project #:	99042-011
Sample ID:	1 - South Wall	Date Reported:	08-03-05
Laboratory Number:	33910	Date Sampled:	07-28-05
Chain of Custody:	14345	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 (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	2.1
Toluene	ND	1.8
Ethylbenzene	2.6	1.7
p,m-Xylene	144	1.5
o-Xylene	19.2	2.2
Total BTEX	166	

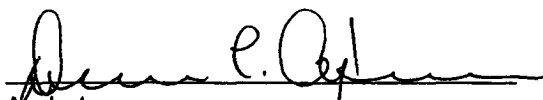
ND - Parameter not detected at the stated detection limit.

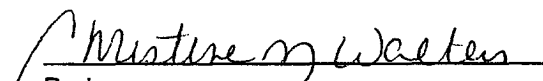
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

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 45, Gallup Horseshoe.


Analyst


Review

3/14

ENVIROTECH LABS

PRactical SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

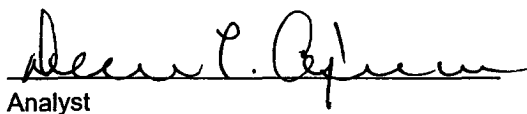
Client:	A Plus (OCD)	Project #:	99042-011
Sample ID:	1 - South Wall	Date Reported:	08-03-05
Laboratory Number:	33910	Date Sampled:	07-28-05
Chain of Custody No:	14345	Date Received:	07-28-05
Sample Matrix:	Soil	Date Extracted:	08-01-05
Preservative:	Cool	Date Analyzed:	08-03-05
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

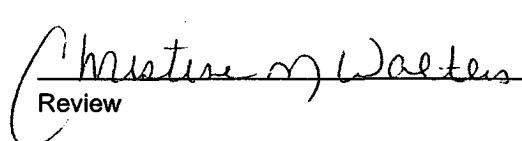
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	64.2	0.1
Total Petroleum Hydrocarbons	64.2	0.2

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 45, Gallup Horseshoe.


Analyst


Review

4/14

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	A-Plus (OCD)	Project #:	99042-011
Sample ID:	2 - North Wall	Date Reported:	08-03-05
Laboratory Number:	33911	Date Sampled:	07-28-05
Chain of Custody:	14345	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 (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	2.1
Toluene	8.1	1.8
Ethylbenzene	3.7	1.7
p,m-Xylene	44.5	1.5
o-Xylene	13.7	2.2
Total BTEX	70.0	

ND - Parameter not detected at the stated detection limit.

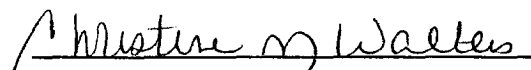
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

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 45, Gallup Horseshoe.


Analyst

5/14

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

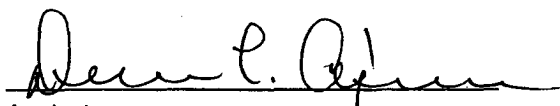
Client:	A Plus (OCD)	Project #:	99042-011
Sample ID:	2 - North Wall	Date Reported:	08-03-05
Laboratory Number:	33911	Date Sampled:	07-28-05
Chain of Custody No:	14345	Date Received:	07-28-05
Sample Matrix:	Soil	Date Extracted:	08-01-05
Preservative:	Cool	Date Analyzed:	08-03-05
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

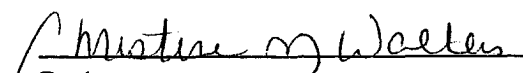
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	8.0	0.2
Diesel Range (C10 - C28)	230	0.1
Total Petroleum Hydrocarbons	238	0.2

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 45, Gallup Horseshoe.


Analyst


Review

6/14

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	A-Plus (OCD)	Project #:	99042-011
Sample ID:	3 - East Wall	Date Reported:	08-03-05
Laboratory Number:	33912	Date Sampled:	07-28-05
Chain of Custody:	14345	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 (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	2.1
Toluene	ND	1.8
Ethylbenzene	7.6	1.7
p,m-Xylene	75.0	1.5
o-Xylene	26.1	2.2
Total BTEX	109	

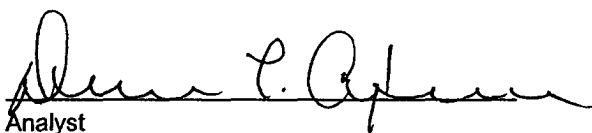
ND - Parameter not detected at the stated detection limit.

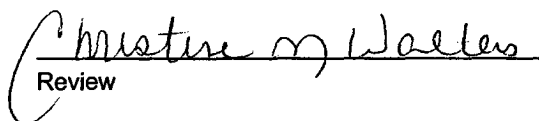
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

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: Pit 45, Gallup Horseshoe.


Analyst

7/104

Review

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:	3 - East Wall	Date Reported:	08-03-05
Laboratory Number:	33912	Date Sampled:	07-28-05
Chain of Custody No:	14345	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 (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	170	0.1
Total Petroleum Hydrocarbons	170	0.2

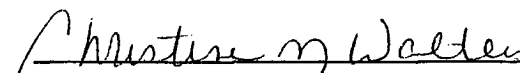
ND - Parameter not detected at the stated detection limit.

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

Comments: Pit 45, Gallup Horseshoe.

8/14


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	A-Plus (OCD)	Project #:	99042-011
Sample ID:	4 - West Wall	Date Reported:	08-03-05
Laboratory Number:	33913	Date Sampled:	07-28-05
Chain of Custody:	14345	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 (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	2.1
Toluene	3.0	1.8
Ethylbenzene	ND	1.7
p,m-Xylene	5.8	1.5
o-Xylene	ND	2.2
Total BTEX	8.8	

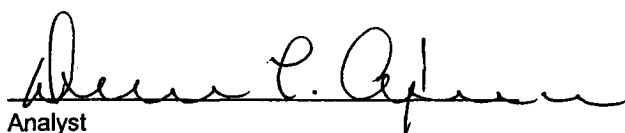
ND - Parameter not detected at the stated detection limit.

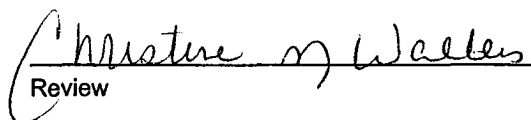
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

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: Pit 45, Gallup Horseshoe.


Analyst

9/14

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

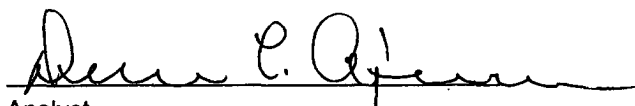
Client:	A Plus (OCD)	Project #:	99042-011
Sample ID:	4 - West Wall	Date Reported:	08-03-05
Laboratory Number:	33913	Date Sampled:	07-28-05
Chain of Custody No:	14345	Date Received:	07-28-05
Sample Matrix:	Soil	Date Extracted:	08-01-05
Preservative:	Cool	Date Analyzed:	08-03-05
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

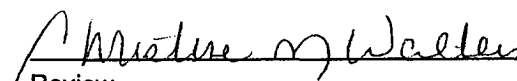
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	34.3	0.1
Total Petroleum Hydrocarbons	34.3	0.2

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 45, Gallup Horseshoe.


Analyst


Review

10/14

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	A-Plus - OCD	Project #:	99042-011
Sample ID:	5 - #45	Date Reported:	09-07-05
Laboratory Number:	34265	Date Sampled:	09-02-05
Chain of Custody:	14786	Date Received:	09-02-05
Sample Matrix:	Soil	Date Analyzed:	09-07-05
Preservative:	Cool	Date Extracted:	09-06-05
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	ND	1.7
Ethylbenzene	241	1.5
p,m-Xylene	211	2.2
o-Xylene	98.4	1.0
Total BTEX	550	

ND - Parameter not detected at the stated detection limit.

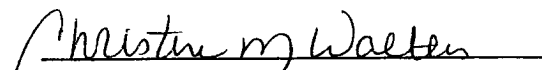
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

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: Horseshoe Gallup.


Analyst


Review

11/14

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

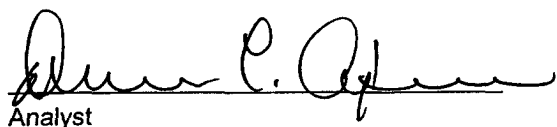
Client:	A-Plus - OCD	Project #:	99042-011
Sample ID:	5 - #45	Date Reported:	09-07-05
Laboratory Number:	34265	Date Sampled:	09-02-05
Chain of Custody No:	14786	Date Received:	09-02-05
Sample Matrix:	Soil	Date Extracted:	09-06-05
Preservative:	Cool	Date Analyzed:	09-07-05
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

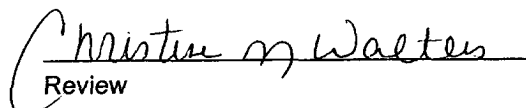
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	149	0.2
Diesel Range (C10 - C28)	3,030	0.1
Total Petroleum Hydrocarbons	3,180	0.2

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

12/14

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:	#2 Well #45	Date Reported:	10-13-05
Laboratory Number:	34659	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 (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	54.1	0.2
Diesel Range (C10 - C28)	1,110	0.1
Total Petroleum Hydrocarbons	1,160	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.



13/14

Mistie M. Woelke
Analyst

Mary Bruce
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

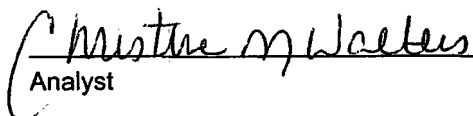
Client:	APlus Well Service / OCD	Project #:	99042-011
Sample ID:	#45	Date Reported:	11-04-05
Laboratory Number:	34879	Date Sampled:	11-02-05
Chain of Custody No:	15010	Date Received:	11-02-05
Sample Matrix:	Soil	Date Extracted:	11-03-05
Preservative:	Cool	Date Analyzed:	11-03-05
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

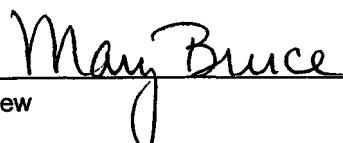
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	76.9	0.2
Diesel Range (C10 - C28)	827	0.1
Total Petroleum Hydrocarbons	904	0.2

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

14/14