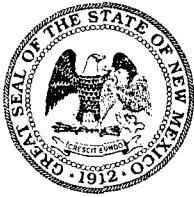


NM1 - 10A

**GENERAL
CORRESPONDENCE**

YEAR(S):

2006-2004



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

Joanna Prukop

Cabinet Secretary

Mark E. Fesmire, P.E.

Director

Oil Conservation Division

June 19, 2006

Mr. Phillip C. Nobis
Tierra Environmental Co., Inc.
P.O. Box 566
Bloomfield, NM 87413

RE: Final Report – Closure of Tierra Landfarm NMOCD Permit # NM-01-0010
NW/4, SE/4 of Section 2, Township 29 North, Range 12 West
San Juan County, New Mexico

Dear Mr. Nobis:

The New Mexico Oil Conservation Division (NMOCD) has received and reviewed the above report. This report is hereby approved and the landfarm covered by permit number NM-01-0010 is hereby closed.

NMOCD approval of this closure does not relieve Tierra Environmental Co., Inc. (Tierra) of responsibility should its operations at this site prove to have been harmful to public health or the environment. Nor does it relieve Tierra of its responsibility to comply with the rules and regulations of any other governmental agency.

If you have any questions, contact Wayne Price at (505) 476-3490 or wayne.price@state.nm.us

NEW MEXICO OIL CONSERVATION DIVISION

A handwritten signature in black ink, appearing to read "Ed Martin".

Ed Martin
Environmental Bureau

Copy: NMOCD, Aztec
Gary Howlett, Citizens Bank, Farmington

INTRODUCTION

The Tierra Environmental Co., Inc., Landfarm located in the NW/4 SE/4 of Section 2, Township 29 North, Range 12 West at San Juan County, New Mexico has operated under a New Mexico Oil Conservation (NMOCD) Permit # NM-01-0010 since January of 1992.

In September of 2002 approximately 62 of the permitted 82 acres were sold to Industrial Eco Systems. NMOCD split the permit to # NM-01-0010B the 62 acres acquired by Industrial Eco Systems and NM-01-0010A the portion retained by Tierra Environmental Co., Inc.

In 2003 San Juan County NM acquired a 60' R-O-W from Tierra Environmental Co., Inc. for re-construction of CR 3100 and an adjacent County Road intersecting CR 3100. This left approximately 17 acres regulated by the OCD Permit # NM-01-0010A. Later in 2004 OCD released approximately 4.5 acres of the permitted 17 acres.

In July of 2005 and again in April of 2006 soil samples were taken. It appears from the analysis that the remaining approximately 12 acres are free of any migratory contaminants.

The following is a final report to NMOCD, diagrams and laboratory analysis conducted by Envirotech Labs of Farmington, New Mexico

TABLE OF CONTENTS

1. Introduction
2. Final Report
3. Sampling diagram and synopsis of results
4. TPH analysis July 2005
5. BTEX analysis July 2005
6. Metals and Cation/ion analysis July 2005
7. Sampling diagram April 2006 and results
8. TPH analysis April 2006
9. BTEX analysis April 2006

**FINAL REPORT
CLOSURE
Of
THE TIERRA LANDFARM OCD PERMIT # NM-01-0010
NW/4 SE/4 of Section 2, Township 29 North, Range 12 West
San Juan County, New Mexico**

April 20, 2006

Mr. Ed Martin
Environmental Bureau
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

On July 7, 2005 Sterns Enterprises of Aztec, NM who had been contracted by me sampled soil at the Tierra Landfarm as described in the title above. The samples were taken pursuant to your letter of instruction dated April 20, 2005.

According to the map furnished by you with the instructions, samples were to be taken from certain cells you had identified as A, B, C, D, E, F and G. One sample each was to be taken from cells A through E and then five samples each were to be taken from cells F and G.

Sterns Enterprises retrieved the samples in accordance with EPA approved methods, placed them in approved sample jars, kept them cool and intact and delivered them to Envirotech Lab's in San Juan County, New Mexico that same date.

An attempt was made by me to contact Denny Foust of the Aztec, NM OCD office, 48 hours in advance of the sampling. He was unavailable. A voice mail was left at his Aztec, NM office, notifying him of the date and time the samples were to be taken.

I was personally present while the samples were collected on July 14, 2005. In the northeast and northwest corner of the property as shown in the attached exhibit 1, I noticed stained soil with a moderate hydrocarbon odor. I directed Sterns to take two additional samples at about 12" below the surface in those areas. Those samples were identified as P-1 and P-2.

Tierra Environmental Co., Inc., had previously contracted with Industrial Eco Systems who occupy the adjacent landfarm for the purpose of remediating any contaminated soil within and upon the remaining approximately 12 acres in question. Obviously they did not complete the remediation.

After the analytical results were received from Envirotech of the samples taken referred to previously, it was apparent that some contamination still existed in the Northeast and Northwest portion of the remaining approximate 12 acres. Industrial Eco Systems was notified and again failed to act. Second on the liability list was San Juan County who had been granted a right-of-way not only for the new CR 3100 project but also for the alignment of the existing County Road to the east of the remaining approximate 12 acres. The county apparently had pushed the contaminated soil from the right-of-way alignment onto the Northeast and Northwest portion of the 12 + or - 12 acres. It had been compacted to a depth of approximately three feet. In mid March 2006, San Juan County at my request excavated the contaminated soil and spread it upon the surface as described in Exhibit 2.

On March 31, 2006, in the presence of Denny Foust OCD Aztec, three, five-point samples were taken by me of the excavated and spread soil. Reference Exhibit 2. Those samples were retrieved according to EPA approved methods, kept cool and intact and delivered to Envirotech Labs in San Juan County, NM that same date.

Because the area wherein the three five point samples were taken on March 31, 2006 had passed sub surface testing for Metal's and Cation/Anion as a result of the July 14, 2006, analysis, further sampling was not repeated for those constituents.

The July 14, 2006 Analytical Data is attached hereto and incorporated by reference as an attachment to Exhibit 1. The March 31, 2006 Analytical Date is attached hereto and incorporated by reference as an attachment to Exhibit 2.

On behalf of Tierra Environmental Co., Inc., I would respectfully request that final closure of the remaining approximately 12 acres be granted by OCD.

Tierra Environmental Co., Inc. c/o

Phillip C. Nobis
President
P.O. Box 566
Bloomfield, New Mexico 87413
Phone 505-632-0463 Cell 505-860-5872
E-mail Phil@instreem.net

Xc: D. Foust NMOCD Aztec, NM

FINAL CLOSURE
TIERRA LANDFARM

Exhibit 1

PERMIT # NM-01-0010A

NW/4 SE/4 of SECTION 2, TOWNSHIP 29 NORTH, RANGE 12 WEST
SAN JUAN COUNTY, NEW MEXICO

SAMPLING LOCATIONS: 1st 7/14/05

CR 3100

P1 P2

NORTH

→

A

B

C

D

E

F

G

C

O

T

Y

R

O

A

D

TPH - A ND	B- 20.1mg/Kg	C- ND	D- ND	E- 0.8mg/Kg	F- 1SW 0.6mg/Kg	G- 1NE 207 mg/kg
					F-2 SE ND	G-2NW 82 mg/kg
					F-3 Cen ND	G-3 Cen 81.5 mg/kg
					F-4 NW 4.0 m/kg	G-4 SE ND
					F-5 NE ND	G-5 SW ND
					P-1 NNW 12" depth	501mg/kg
					P-2 NNE 12" depth	1,070 mg/kg
					F-1 SW ND	G-1 NE 42.1 ug/kg
					F-2 SE ND	G-2 NW 95.9 ug/kg
					F-3 Cen 55.1ug/kg	G-3 Cen 50.6 ug/kg
					F-4 NW 2.210	G-4 SE 48.9 ug/kg
					F-5 NE 54.0 ug/kg	G-5 SW 36.0 ug/kg

BTEX - A 32.7ug/Kg

B-115ug/Kg

C-34.6ug/Kg

D-42.6ug/Kg

E-16.1ug/Kg

F-1.5ug/Kg

G-1.5ug/Kg

Benzene A-ND	B-ND	C-ND	D-ND	E-ND	F-1 SW ND	G-1 NE ND
					F-2 SE ND	G-2 NW ND
					F-3 Cen ND	G-3 Cen ND
					F-4 NW 42.3 ug/Kg	G-4 SE ND
					F-5 NE 14.1 ug/Kg	G-5 SW ND

All Metals all sampling locations below regulatory limits
Cation/Anion Difference 0.08%

ENVIROTECH LABS

ENVIRONMENTAL & INDUSTRIAL ANALYTICAL LABORATORY

July 22, 2005

Mr. Phill Nobis
37 CR 5285
Bloomfield, NM 87413

Phone: (505) 632-1404
Client No.: 04184-001

Dear Mr. Nobis,

Enclosed are the analytical results for the samples collected from the location designated as "Crouch Mesa Landfarm". Seventeen soil samples were collected by Sterns Enterprises on 7/14/05, and received by the Envirotech laboratory on 7/14/05 for BTEX per USEPA Method 8021, Total Petroleum Hydrocarbons (TPH) per USEPA Method 8015, RCRA 8 List Metals analysis.

The samples were documented on Envirotech Chain of Custody No. 14285 and assigned Laboratory Nos. 33648 (A), 33649 (B), 33650 (C), 33651 (D), 33652 (E), 33653 (F-1), 33654 (F-2), 33655 (F-3), 33656 (F-4), 33657 (F-5), 33658 (G-1), 33659 (G-2), 33660 (G-3), 33661 (G-4), 33662 (G-5), 33663 (P-1) and 33664 (P-2) for tracking purposes.

The samples were analyzed 7/16/04 through 7/19/05 by EMC Labs, Inc using USEPA or equivalent methods.

Should you have any questions or require additional information, please do not hesitate to contact us at (505) 632-0615.

Respectfully submitted,
Envirotech, Inc.

Christine M. Walters
Christine M. Walters
Laboratory Coordinator / Environmental Scientist

enc.

CMW/cmw

C:/files/labreports/Nobis.wpd

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

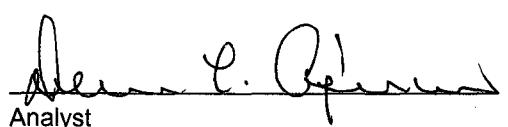
Client:	Phil Nobis	Project #:	04184-001
Sample ID:	A	Date Reported:	07-16-05
Laboratory Number:	33648	Date Sampled:	07-14-05
Chain of Custody No:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-14-05
Preservative:	Cool	Date Analyzed:	07-16-05
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

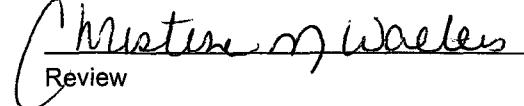
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

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: **Crouch Mesa Landfarm.**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	B	Date Reported:	07-16-05
Laboratory Number:	33649	Date Sampled:	07-14-05
Chain of Custody No:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-14-05
Preservative:	Cool	Date Analyzed:	07-16-05
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

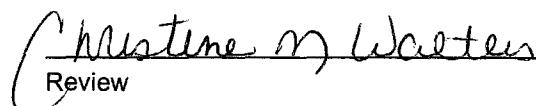
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	20.1	0.1
Total Petroleum Hydrocarbons	20.1	0.2

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: Crouch Mesa Landfarm.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

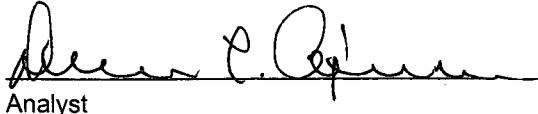
Client:	Phil Nobis	Project #:	04184-001
Sample ID:	C	Date Reported:	07-16-05
Laboratory Number:	33650	Date Sampled:	07-14-05
Chain of Custody No:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-14-05
Preservative:	Cool	Date Analyzed:	07-16-05
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

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

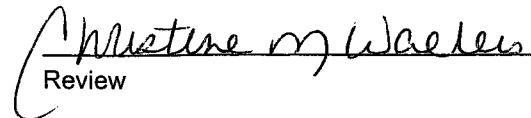
ND - Parameter not detected at the stated detection limit.

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

Comments: **Crouch Mesa Landfarm.**


Sean C. Reiter

Analyst


Christine M. Wheeler
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	D	Date Reported:	07-16-05
Laboratory Number:	33651	Date Sampled:	07-14-05
Chain of Custody No:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-14-05
Preservative:	Cool	Date Analyzed:	07-16-05
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)	ND	0.1
Total Petroleum Hydrocarbons	ND	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: Crouch Mesa Landfarm.

Allen L. Aguirre
Analyst

Christine M. Webster
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	E	Date Reported:	07-16-05
Laboratory Number:	33652	Date Sampled:	07-14-05
Chain of Custody No:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-14-05
Preservative:	Cool	Date Analyzed:	07-16-05
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)	0.8	0.1
Total Petroleum Hydrocarbons	0.8	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: **Crouch Mesa Landfarm.**

Dee C. Rehm
Analyst

Christine M. Waeter
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	F - 1	Date Reported:	07-16-05
Laboratory Number:	33653	Date Sampled:	07-14-05
Chain of Custody No:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-14-05
Preservative:	Cool	Date Analyzed:	07-16-05
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)	0.6	0.1
Total Petroleum Hydrocarbons	0.6	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: Crouch Mesa Landfarm.

Deen C. Ryburn
Analyst

Christine M. Woeter
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	F - 2	Date Reported:	07-16-05
Laboratory Number:	33654	Date Sampled:	07-14-05
Chain of Custody No:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-14-05
Preservative:	Cool	Date Analyzed:	07-16-05
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)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

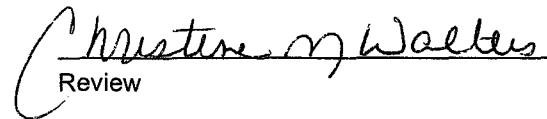
ND - Parameter not detected at the stated detection limit.

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

Comments: Crouch Mesa Landfarm.


Sean C. Clegg

Analyst


Christine M. Walters

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

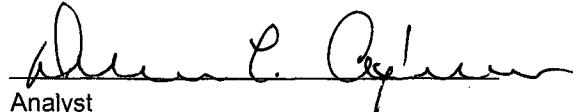
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Sample ID:	F - 3	Date Reported:	07-16-05
Laboratory Number:	33655	Date Sampled:	07-14-05
Chain of Custody No:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-14-05
Preservative:	Cool	Date Analyzed:	07-16-05
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

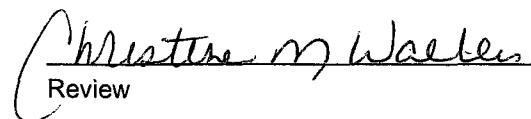
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

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: **Crouch Mesa Landfarm.**


Alan L. Ogden
Analyst


Christine M. Waeter
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

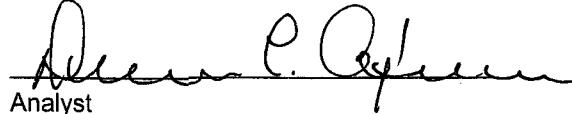
Client:	Phil Nobis	Project #:	04184-001
Sample ID:	F - 4	Date Reported:	07-16-05
Laboratory Number:	33656	Date Sampled:	07-14-05
Chain of Custody No:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-14-05
Preservative:	Cool	Date Analyzed:	07-16-05
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	3.6	0.2
Diesel Range (C10 - C28)	0.4	0.1
Total Petroleum Hydrocarbons	4.0	0.2

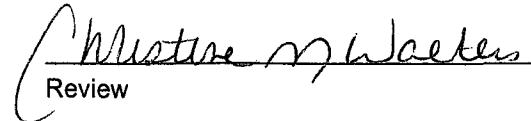
ND - Parameter not detected at the stated detection limit.

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

Comments: Crouch Mesa Landfarm.


Allen P. Ogle

Analyst


Christine M. Waeter

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

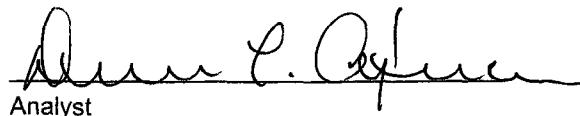
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Sample ID:	F - 5	Date Reported:	07-16-05
Laboratory Number:	33657	Date Sampled:	07-14-05
Chain of Custody No:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-14-05
Preservative:	Cool	Date Analyzed:	07-16-05
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

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

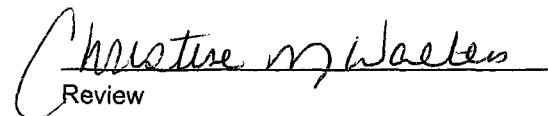
ND - Parameter not detected at the stated detection limit.

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

Comments: Crouch Mesa Landfarm.


Alan L. Olson

Analyst


Christine M. Webster

Review

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

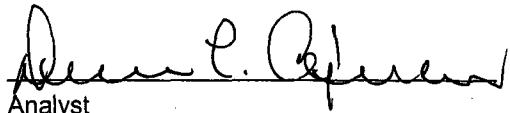
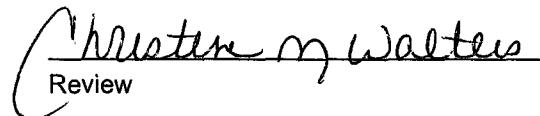
Client:	Phil Nobis	Project #:	04184-001
Sample ID:	G - 1	Date Reported:	07-17-05
Laboratory Number:	33658	Date Sampled:	07-14-05
Chain of Custody No:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-15-05
Preservative:	Cool	Date Analyzed:	07-17-05
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	207	0.1
Total Petroleum Hydrocarbons	207	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: Crouch Mesa Landfarm.


Dennis C. Rehman
Analyst
Christine M. Walters
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	G - 2	Date Reported:	07-17-05
Laboratory Number:	33659	Date Sampled:	07-14-05
Chain of Custody No:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-15-05
Preservative:	Cool	Date Analyzed:	07-17-05
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)	82.0	0.1
Total Petroleum Hydrocarbons	82.0	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: Crouch Mesa Landfarm.


Alan C. Johnson

Analyst


Christine M. Waeter

Review

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

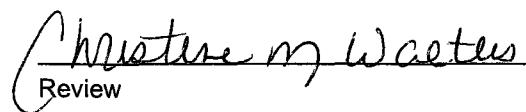
Client:	Phil Nobis	Project #:	04184-001
Sample ID:	G - 3	Date Reported:	07-17-05
Laboratory Number:	33660	Date Sampled:	07-14-05
Chain of Custody No:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-15-05
Preservative:	Cool	Date Analyzed:	07-17-05
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	81.5	0.1
Total Petroleum Hydrocarbons	81.5	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: Crouch Mesa Landfarm.


Analyst
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	G - 4	Date Reported:	07-17-05
Laboratory Number:	33661	Date Sampled:	07-14-05
Chain of Custody No:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-15-05
Preservative:	Cool	Date Analyzed:	07-17-05
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)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

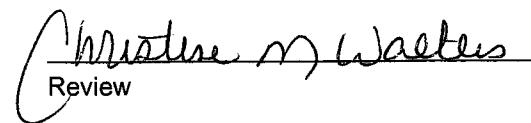
ND - Parameter not detected at the stated detection limit.

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

Comments: Crouch Mesa Landfarm.


Dennis L. Olson

Analyst


Christine M. Waeters

Review

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	G - 5	Date Reported:	07-17-05
Laboratory Number:	33662	Date Sampled:	07-14-05
Chain of Custody No:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-15-05
Preservative:	Cool	Date Analyzed:	07-17-05
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)	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

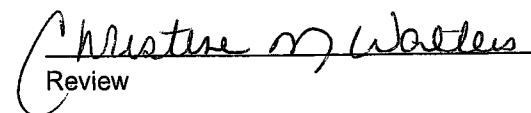
ND - Parameter not detected at the stated detection limit.

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

Comments: Crouch Mesa Landfarm.


Dennis C. O'Brien

Analyst


Christine M. Waller

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

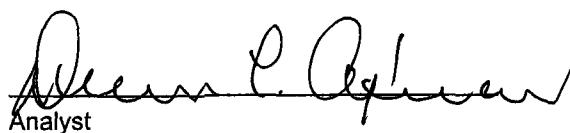
Client:	Phil Nobis	Project #:	04184-001
Sample ID:	P - 1	Date Reported:	07-17-05
Laboratory Number:	33663	Date Sampled:	07-14-05
Chain of Custody No:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-15-05
Preservative:	Cool	Date Analyzed:	07-17-05
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	501	0.1
Total Petroleum Hydrocarbons	501	0.2

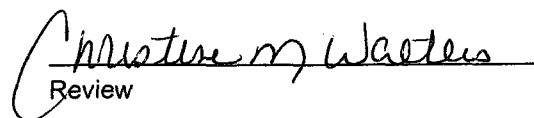
ND - Parameter not detected at the stated detection limit.

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

Comments: Crouch Mesa Landfarm.


Dennis P. O'Brien

Analyst


Christine M. Wasten

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	P - 2	Date Reported:	07-17-05
Laboratory Number:	33664	Date Sampled:	07-14-05
Chain of Custody No:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-15-05
Preservative:	Cool	Date Analyzed:	07-17-05
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

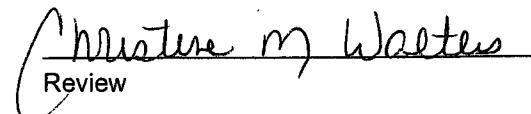
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	1,070	0.1
Total Petroleum Hydrocarbons	1,070	0.2

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: Crouch Mesa Landfarm.


Analyst


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ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	07-17-05 QA/QC	Date Reported:	07-17-05
Laboratory Number:	33658	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-17-05
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept. Range
Gasoline Range C5 - C10	02-04-05	9.9962E+002	1.0006E+003	0.10%	0 - 15%
Diesel Range C10 - C28	02-04-05	1.0015E+003	1.0035E+003	0.20%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	207	206	0.8%	0 - 30%

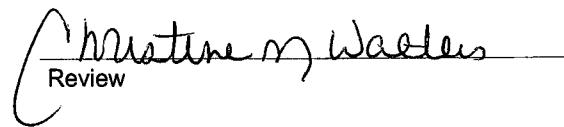
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	250	100.0%	75 - 125%
Diesel Range C10 - C28	207	250	456	99.8%	75 - 125%

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: QA/QC for Samples 33658 - 33664.


Debra C. Aguirre
Analyst


Christine M. Waelter
Review

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	07-16-05 QA/QC	Date Reported:	07-16-05
Laboratory Number:	33648	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-16-05
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept. Range
Gasoline Range C5 - C10	02-04-05	9.9731E+002	9.9831E+002	0.10%	0 - 15%
Diesel Range C10 - C28	02-04-05	1.0010E+003	1.0030E+003	0.20%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	ND	ND	0.0%	0 - 30%

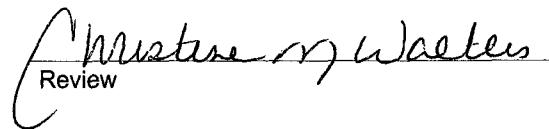
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	250	100.0%	75 - 125%
Diesel Range C10 - C28	ND	250	250	100.0%	75 - 125%

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: QA/QC for Samples 33648 - 33657.


Alan P. Gleeson
Analyst


Christine M. Waeters
Review

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PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	A	Date Reported:	07-16-05
Laboratory Number:	33648	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-16-05
Preservative:	Cool	Date Extracted:	07-14-05
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	2.1
Toluene	15.7	1.8
Ethylbenzene	3.9	1.7
p,m-Xylene	9.7	1.5
o-Xylene	3.4	2.2
Total BTEX	32.7	

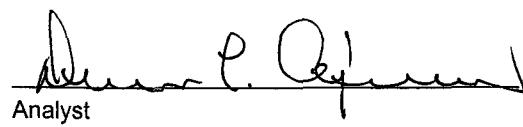
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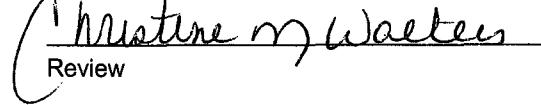
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

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: Crouch Mesa Landfarm.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	B	Date Reported:	07-16-05
Laboratory Number:	33649	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-16-05
Preservative:	Cool	Date Extracted:	07-14-05
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	2.1
Toluene	13.9	1.8
Ethylbenzene	3.8	1.7
p,m-Xylene	84.4	1.5
o-Xylene	13.2	2.2
Total BTEX	115	

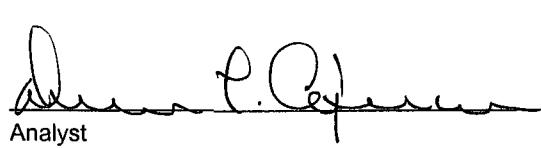
ND - Parameter not detected at the stated detection limit.

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

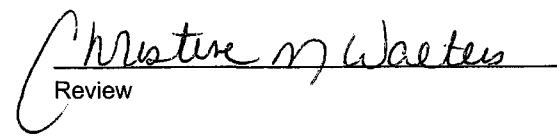
References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

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

Comments: Crouch Mesa Landfarm.



Analyst



Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	C	Date Reported:	07-16-05
Laboratory Number:	33650	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-16-05
Preservative:	Cool	Date Extracted:	07-14-05
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	2.1
Toluene	15.0	1.8
Ethylbenzene	ND	1.7
p,m-Xylene	19.6	1.5
o-Xylene	ND	2.2
Total BTEX	34.6	

ND - Parameter not detected at the stated detection limit.

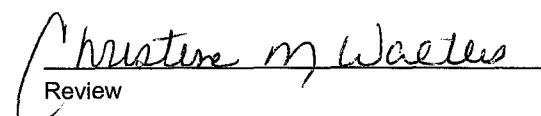
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

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: Crouch Mesa Landfarm.


Allen L. Ogles


Christine M. Waetjen
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	D	Date Reported:	07-16-05
Laboratory Number:	33651	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-16-05
Preservative:	Cool	Date Extracted:	07-14-05
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	2.1
Toluene	15.3	1.8
Ethylbenzene	16.8	1.7
p,m-Xylene	10.5	1.5
o-Xylene	ND	2.2
Total BTEX	42.6	

ND - Parameter not detected at the stated detection limit.

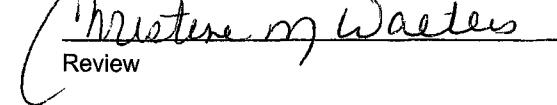
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

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: Crouch Mesa Landfarm.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	E	Date Reported:	07-16-05
Laboratory Number:	33652	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-16-05
Preservative:	Cool	Date Extracted:	07-14-05
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	2.1
Toluene	10.9	1.8
Ethylbenzene	ND	1.7
p,m-Xylene	5.2	1.5
o-Xylene	ND	2.2
Total BTEX	16.1	

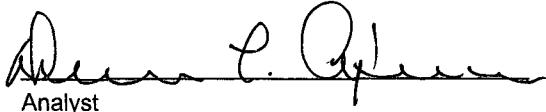
ND - Parameter not detected at the stated detection limit.

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

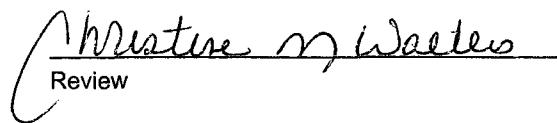
References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

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

Comments: Crouch Mesa Landfarm.


Dennis L. O'Brien

Analyst


Christine M. Waetjen

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	F - 1	Date Reported:	07-16-05
Laboratory Number:	33653	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-16-05
Preservative:	Cool	Date Extracted:	07-14-05
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	2.1
Toluene	ND	1.8
Ethylbenzene	ND	1.7
p,m-Xylene	ND	1.5
o-Xylene	ND	2.2
Total BTEX	ND	

ND - Parameter not detected at the stated detection limit.

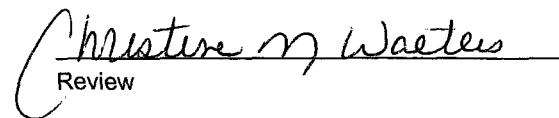
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

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: Crouch Mesa Landfarm.


Dennis C. O'Brien
Analyst


Christine M. Waeters
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	F - 2	Date Reported:	07-16-05
Laboratory Number:	33654	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-16-05
Preservative:	Cool	Date Extracted:	07-14-05
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	2.1
Toluene	ND	1.8
Ethylbenzene	ND	1.7
p,m-Xylene	ND	1.5
o-Xylene	ND	2.2
Total BTEX	ND	

ND - Parameter not detected at the stated detection limit.

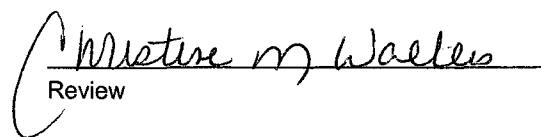
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

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: Crouch Mesa Landfarm.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	F - 3	Date Reported:	07-16-05
Laboratory Number:	33655	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-16-05
Preservative:	Cool	Date Extracted:	07-14-05
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	2.1
Toluene	18.8	1.8
Ethylbenzene	3.7	1.7
p,m-Xylene	27.9	1.5
o-Xylene	4.7	2.2
Total BTEX	55.1	

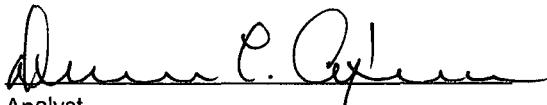
ND - Parameter not detected at the stated detection limit.

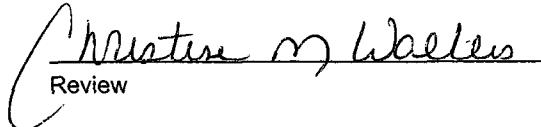
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

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: Crouch Mesa Landfarm.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	F - 4	Date Reported:	07-16-05
Laboratory Number:	33656	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-16-05
Preservative:	Cool	Date Extracted:	07-14-05
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	42.2	2.1
Toluene	231	1.8
Ethylbenzene	371	1.7
p,m-Xylene	1,090	1.5
o-Xylene	471	2.2
Total BTEX	2,210	

ND - Parameter not detected at the stated detection limit.

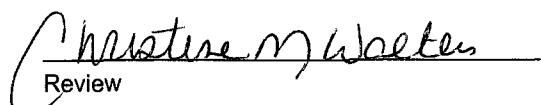
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

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: Crouch Mesa Landfarm.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	F - 5	Date Reported:	07-16-05
Laboratory Number:	33657	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-16-05
Preservative:	Cool	Date Extracted:	07-14-05
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	14.1	2.1
Toluene	5.0	1.8
Ethylbenzene	6.0	1.7
p,m-Xylene	18.0	1.5
o-Xylene	10.9	2.2
Total BTEX	54.0	

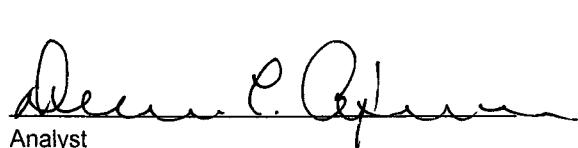
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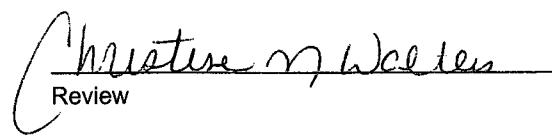
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

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: Crouch Mesa Landfarm.


Dennis P. Rehman
Analyst


Christine M. Waters
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	G - 1	Date Reported:	07-17-05
Laboratory Number:	33658	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-17-05
Preservative:	Cool	Date Extracted:	07-15-05
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	2.1
Toluene	16.9	1.8
Ethylbenzene	4.6	1.7
p,m-Xylene	15.6	1.5
o-Xylene	5.0	2.2
Total BTEX	42.1	

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: Crouch Mesa Landfarm.

Karen C. Ogle
Analyst

Christine M. Whetstone
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	G - 2	Date Reported:	07-17-05
Laboratory Number:	33659	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-17-05
Preservative:	Cool	Date Extracted:	07-15-05
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	2.1
Toluene	25.6	1.8
Ethylbenzene	4.2	1.7
p,m-Xylene	55.1	1.5
o-Xylene	11.0	2.2
Total BTEX	95.9	

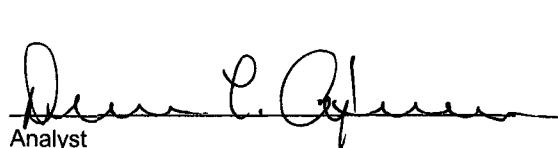
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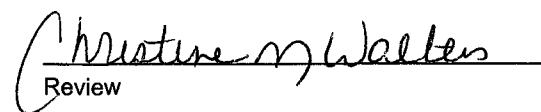
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

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: Crouch Mesa Landfarm.


Dennis P. Gleason
Analyst


Christine M. Walters
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	G - 3	Date Reported:	07-17-05
Laboratory Number:	33660	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-17-05
Preservative:	Cool	Date Extracted:	07-15-05
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	2.1
Toluene	18.8	1.8
Ethylbenzene	ND	1.7
p,m-Xylene	27.8	1.5
o-Xylene	4.0	2.2
Total BTEX	50.6	

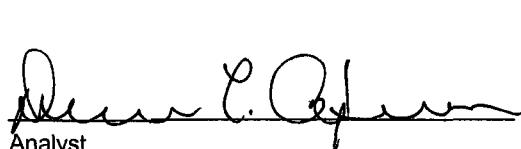
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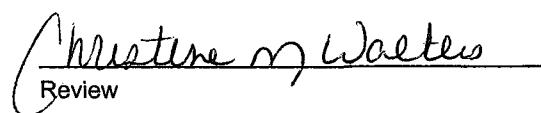
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

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: Crouch Mesa Landfarm.


Dennis C. O'Brien
Analyst


Christine M. Waite
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	G - 4	Date Reported:	07-17-05
Laboratory Number:	33661	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-17-05
Preservative:	Cool	Date Extracted:	07-15-05
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	2.1
Toluene	18.5	1.8
Ethylbenzene	16.7	1.7
p,m-Xylene	13.7	1.5
o-Xylene	ND	2.2
Total BTEX	48.9	

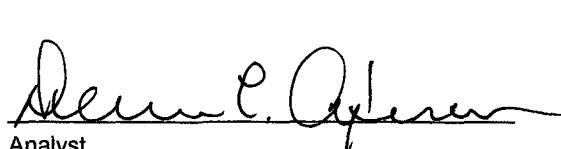
ND - Parameter not detected at the stated detection limit.

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

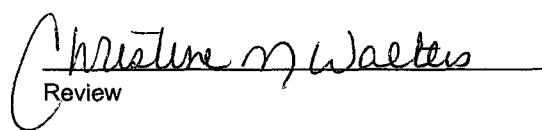
References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

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

Comments: Crouch Mesa Landfarm.


Dennis C. Ayers

Analyst


Christine M. Walters

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	G - 5	Date Reported:	07-17-05
Laboratory Number:	33662	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-17-05
Preservative:	Cool	Date Extracted:	07-15-05
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	2.1
Toluene	17.4	1.8
Ethylbenzene	ND	1.7
p,m-Xylene	15.5	1.5
o-Xylene	3.1	2.2
Total BTEX	36.0	

ND - Parameter not detected at the stated detection limit.

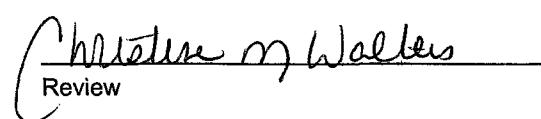
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

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: Crouch Mesa Landfarm.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	P - 1	Date Reported:	07-17-05
Laboratory Number:	33663	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-17-05
Preservative:	Cool	Date Extracted:	07-15-05
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	2.1
Toluene	21.0	1.8
Ethylbenzene	23.9	1.7
p,m-Xylene	20.6	1.5
o-Xylene	3.4	2.2
Total BTEX	68.9	

ND - Parameter not detected at the stated detection limit.

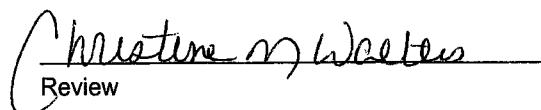
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

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: Crouch Mesa Landfarm.


Dennis P. Gleeson
Analyst


Christine M. Whetstone
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	P - 2	Date Reported:	07-17-05
Laboratory Number:	33664	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-17-05
Preservative:	Cool	Date Extracted:	07-15-05
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	2.1
Toluene	19.5	1.8
Ethylbenzene	2.4	1.7
p,m-Xylene	18.1	1.5
o-Xylene	3.0	2.2
Total BTEX	43.0	

ND - Parameter not detected at the stated detection limit.

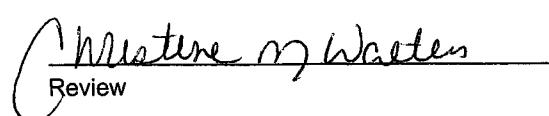
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

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: Crouch Mesa Landfarm.


Karen C. Andersen
Analyst


Christine M. Whetstone
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	07-17-BTEX QA/QC	Date Reported:	07-17-05
Laboratory Number:	33658	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-17-05
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff.	Blank Conc	Detect. Limit
		Accept Range 0 - 15%			

Benzene	2.0241E+007	2.0282E+007	0.2%	ND	0.2
Toluene	5.7602E+007	5.7717E+007	0.2%	ND	0.2
Ethylbenzene	4.2557E+007	4.2642E+007	0.2%	ND	0.2
p,m-Xylene	8.7989E+007	8.8166E+007	0.2%	ND	0.2
o-Xylene	4.3634E+007	4.3721E+007	0.2%	ND	0.2

Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
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Benzene	ND	ND	0.0%	0 - 30%	2.0
Toluene	16.9	16.8	0.6%	0 - 30%	2.0
Ethylbenzene	4.6	4.5	2.2%	0 - 30%	2.0
p,m-Xylene	15.6	15.5	0.6%	0 - 30%	2.0
o-Xylene	5.0	4.9	2.0%	0 - 30%	2.0

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
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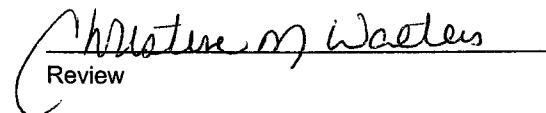
Benzene	ND	50.0	49.9	99.8%	39 - 150
Toluene	16.9	50.0	66.8	99.9%	46 - 148
Ethylbenzene	4.6	50.0	54.6	100.0%	32 - 160
p,m-Xylene	15.6	100	115	99.8%	46 - 148
o-Xylene	5.0	50.0	54.9	99.8%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 33658 - 33664.


Analyst


Review

Client:	N/A	Project #:	N/A
Sample ID:	07-16-BTEX QA/QC	Date Reported:	07-16-05
Laboratory Number:	33648	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	07-16-05
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff.	Blank Conc	Detect. Limit
Benzene	1.6854E+007	1.6887E+007	0.2%	ND	0.2
Toluene	5.8906E+007	5.9024E+007	0.2%	ND	0.2
Ethylbenzene	4.5978E+007	4.6070E+007	0.2%	ND	0.2
p,m-Xylene	9.1897E+007	9.2081E+007	0.2%	ND	0.2
o-Xylene	4.6181E+007	4.6273E+007	0.2%	ND	0.2

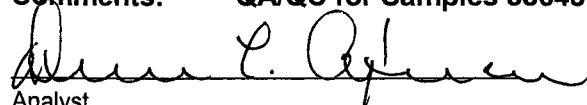
Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	ND	ND	0.0%	0 - 30%	2.0
Toluene	15.7	15.6	0.6%	0 - 30%	2.0
Ethylbenzene	3.9	3.8	2.6%	0 - 30%	2.0
p,m-Xylene	9.7	9.6	1.0%	0 - 30%	2.0
o-Xylene	3.4	3.3	2.9%	0 - 30%	2.0

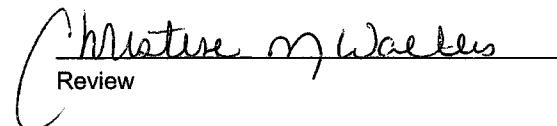
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	50.0	49.9	99.8%	39 - 150
Toluene	15.7	50.0	65.7	100.0%	46 - 148
Ethylbenzene	3.9	50.0	53.8	99.8%	32 - 160
p,m-Xylene	9.7	100	109	99.7%	46 - 148
o-Xylene	3.4	50.0	53.4	100.0%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
 Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 33648 - 33657.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	A	Date Reported:	07-18-05
Laboratory Number:	33648	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-18-05
Preservative:	Cool	Date Digested:	07-17-05
Condition:	Cool & Intact	Analysis Needed:	8 RCRA Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.130	0.001	5.0
Barium	39.9	0.001	100
Cadmium	0.013	0.001	1.0
Chromium	0.287	0.001	5.0
Lead	0.524	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	0.755	0.001	1.0
Silver	ND	0.001	5.0

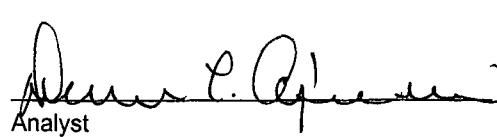
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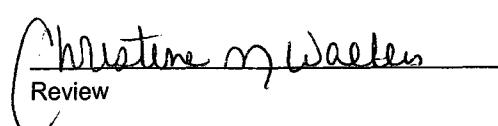
References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C
section 261.24, August 24, 1998.

Comments: Crouch Mesa Landfarm.


Analyst


Review

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	B	Date Reported:	07-18-05
Laboratory Number:	33649	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-18-05
Preservative:	Cool	Date Digested:	07-17-05
Condition:	Cool & Intact	Analysis Needed:	8 RCRA Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.149	0.001	5.0
Barium	37.2	0.001	100
Cadmium	0.023	0.001	1.0
Chromium	0.294	0.001	5.0
Lead	0.453	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	0.784	0.001	1.0
Silver	ND	0.001	5.0

ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils. SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: Crouch Mesa Landfarm.

Allen C. Barnes
Analyst

Christine M. Walters
Review

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	C	Date Reported:	07-18-05
Laboratory Number:	33650	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-18-05
Preservative:	Cool	Date Digested:	07-17-05
Condition:	Cool & Intact	Analysis Needed:	8 RCRA Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.131	0.001	5.0
Barium	38.8	0.001	100
Cadmium	0.018	0.001	1.0
Chromium	0.302	0.001	5.0
Lead	0.458	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	0.746	0.001	1.0
Silver	ND	0.001	5.0

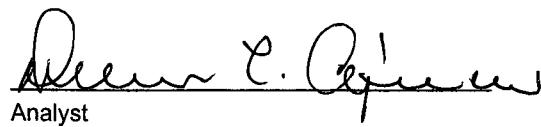
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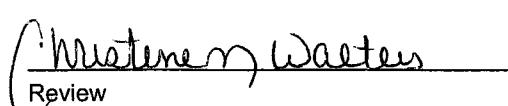
References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils. SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: Crouch Mesa Landfarm.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	D	Date Reported:	07-18-05
Laboratory Number:	33651	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-18-05
Preservative:	Cool	Date Digested:	07-17-05
Condition:	Cool & Intact	Analysis Needed:	8 RCRA Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.152	0.001	5.0
Barium	36.3	0.001	100
Cadmium	0.012	0.001	1.0
Chromium	0.267	0.001	5.0
Lead	0.469	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	0.689	0.001	1.0
Silver	ND	0.001	5.0

ND - Parameter not detected at the stated detection limit.

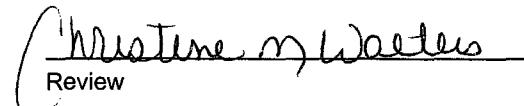
References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C
section 261.24, August 24, 1998.

Comments: **Crouch Mesa Landfarm.**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	E	Date Reported:	07-18-05
Laboratory Number:	33652	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-18-05
Preservative:	Cool	Date Digested:	07-17-05
Condition:	Cool & Intact	Analysis Needed:	8 RCRA Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.150	0.001	5.0
Barium	39.1	0.001	100
Cadmium	0.011	0.001	1.0
Chromium	0.294	0.001	5.0
Lead	0.461	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	0.733	0.001	1.0
Silver	ND	0.001	5.0

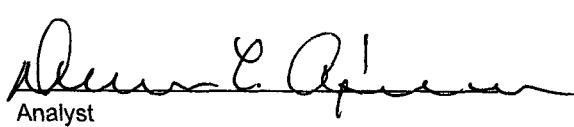
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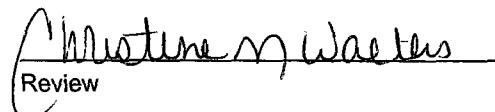
References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C
section 261.24, August 24, 1998.

Comments: Crouch Mesa Landfarm.


Alan E. Aguirre
Analyst


Christine M. Walters
Review

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	F - 1	Date Reported:	07-18-05
Laboratory Number:	33653	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-18-05
Preservative:	Cool	Date Digested:	07-17-05
Condition:	Cool & Intact	Analysis Needed:	8 RCRA Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.138	0.001	5.0
Barium	6.42	0.001	100
Cadmium	0.014	0.001	1.0
Chromium	0.266	0.001	5.0
Lead	0.440	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	0.711	0.001	1.0
Silver	ND	0.001	5.0

ND - Parameter not detected at the stated detection limit.

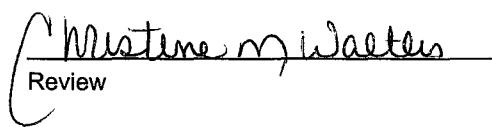
References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C
section 261.24, August 24, 1998.

Comments: Crouch Mesa Landfarm.


Allen C. Johnson
Analyst


Christine M. Waeter
Review

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	F - 2	Date Reported:	07-18-05
Laboratory Number:	33654	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-18-05
Preservative:	Cool	Date Digested:	07-17-05
Condition:	Cool & Intact	Analysis Needed:	8 RCRA Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.111	0.001	5.0
Barium	40.9	0.001	100
Cadmium	0.012	0.001	1.0
Chromium	0.273	0.001	5.0
Lead	0.462	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	0.663	0.001	1.0
Silver	ND	0.001	5.0

ND - Parameter not detected at the stated detection limit.

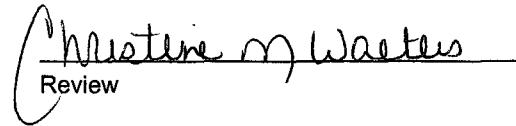
References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C
section 261.24, August 24, 1998.

Comments: Crouch Mesa Landfarm.


Analyst


Review

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	F - 3	Date Reported:	07-18-05
Laboratory Number:	33655	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-18-05
Preservative:	Cool	Date Digested:	07-17-05
Condition:	Cool & Intact	Analysis Needed:	8 RCRA Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.193	0.001	5.0
Barium	36.2	0.001	100
Cadmium	0.009	0.001	1.0
Chromium	0.281	0.001	5.0
Lead	0.444	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	0.724	0.001	1.0
Silver	ND	0.001	5.0

ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C
section 261.24, August 24, 1998.

Comments: Crouch Mesa Landfarm.

Deeann C. Nelson
Analyst

Christine M. Waller
Review

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	F - 4	Date Reported:	07-18-05
Laboratory Number:	33656	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-18-05
Preservative:	Cool	Date Digested:	07-17-05
Condition:	Cool & Intact	Analysis Needed:	8 RCRA Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.141	0.001	5.0
Barium	36.6	0.001	100
Cadmium	0.014	0.001	1.0
Chromium	0.393	0.001	5.0
Lead	0.467	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	0.748	0.001	1.0
Silver	ND	0.001	5.0

ND - Parameter not detected at the stated detection limit.

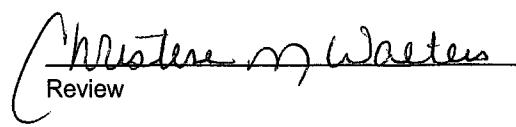
References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils. SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: Crouch Mesa Landfarm.


Dennis C. Quinn
Analyst


Christine M. Waeter
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	F - 5	Date Reported:	07-18-05
Laboratory Number:	33657	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-18-05
Preservative:	Cool	Date Digested:	07-17-05
Condition:	Cool & Intact	Analysis Needed:	8 RCRA Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.189	0.001	5.0
Barium	7.36	0.001	100
Cadmium	0.011	0.001	1.0
Chromium	0.178	0.001	5.0
Lead	0.328	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	0.564	0.001	1.0
Silver	ND	0.001	5.0

ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils. SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: Crouch Mesa Landfarm.

Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	G - 1	Date Reported:	07-19-05
Laboratory Number:	33658	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-19-05
Preservative:	Cool	Date Digested:	07-17-05
Condition:	Cool & Intact	Analysis Needed:	8 RCRA Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.149	0.001	5.0
Barium	38.9	0.001	100
Cadmium	0.017	0.001	1.0
Chromium	0.348	0.001	5.0
Lead	0.717	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	0.568	0.001	1.0
Silver	0.001	0.001	5.0

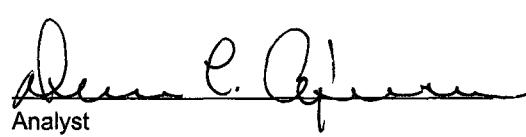
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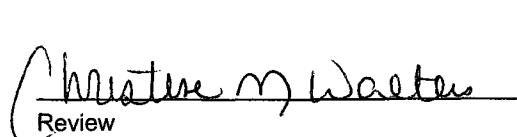
References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C
section 261.24, August 24, 1998.

Comments: Crouch Mesa Landfarm.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	G - 2	Date Reported:	07-19-05
Laboratory Number:	33659	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-19-05
Preservative:	Cool	Date Digested:	07-17-05
Condition:	Cool & Intact	Analysis Needed:	8 RCRA Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.136	0.001	5.0
Barium	40.6	0.001	100
Cadmium	0.018	0.001	1.0
Chromium	0.316	0.001	5.0
Lead	0.860	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	0.643	0.001	1.0
Silver	0.001	0.001	5.0

ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C
section 261.24, August 24, 1998.

Comments: Crouch Mesa Landfarm.

Dee C. Apuzzo
Analyst

Christine M. Walters
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	G - 3	Date Reported:	07-19-05
Laboratory Number:	33660	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-19-05
Preservative:	Cool	Date Digested:	07-17-05
Condition:	Cool & Intact	Analysis Needed:	8 RCRA Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.132	0.001	5.0
Barium	40.4	0.001	100
Cadmium	0.018	0.001	1.0
Chromium	0.464	0.001	5.0
Lead	0.645	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	0.688	0.001	1.0
Silver	ND	0.001	5.0

ND - Parameter not detected at the stated detection limit.

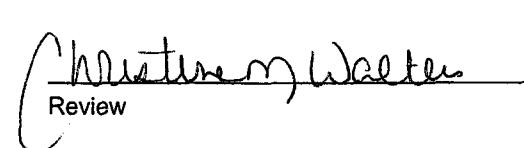
References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils. SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: Crouch Mesa Landfarm.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	G - 4	Date Reported:	07-19-05
Laboratory Number:	33661	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-19-05
Preservative:	Cool	Date Digested:	07-17-05
Condition:	Cool & Intact	Analysis Needed:	8 RCRA Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.112	0.001	5.0
Barium	39.6	0.001	100
Cadmium	0.016	0.001	1.0
Chromium	0.238	0.001	5.0
Lead	0.446	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	0.611	0.001	1.0
Silver	ND	0.001	5.0

ND - Parameter not detected at the stated detection limit.

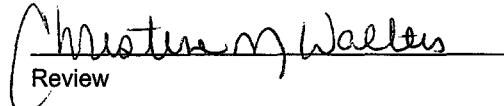
References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils. SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, August 24, 1998.

Comments: Crouch Mesa Landfarm.


Analyst


Review

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	G - 5	Date Reported:	07-19-05
Laboratory Number:	33662	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Analyzed:	07-19-05
Preservative:	Cool	Date Digested:	07-17-05
Condition:	Cool & Intact	Analysis Needed:	8 RCRA Metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	TCLP Regulatory Level (mg/Kg)
Arsenic	0.124	0.001	5.0
Barium	40.8	0.001	100
Cadmium	0.017	0.001	1.0
Chromium	0.250	0.001	5.0
Lead	0.539	0.001	5.0
Mercury	ND	0.001	0.2
Selenium	0.655	0.001	1.0
Silver	ND	0.001	5.0

ND - Parameter not detected at the stated detection limit.

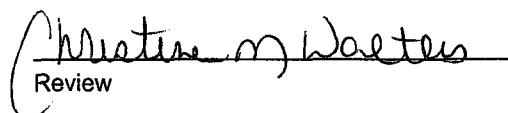
References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

Note: Regulatory Limits based on 40 CFR part 261 subpart C
section 261.24, August 24, 1998.

Comments: Crouch Mesa Landfarm.


Phillip L. Quinn
Analyst


Christine M. Walters
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS
Quality Control /
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	07-19 TM QA/AC	Date Reported:	07-19-05
Laboratory Number:	33659	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Analysis Requested:	Total RCRA Metals	Date Analyzed:	07-19-05
Condition:	N/A	Date Digested:	07-17-05

Blank & Duplicate Conc. (mg/Kg)	Instrument Blank (mg/L)	Method Blank	Detection Limit	Sample	Duplicate	% Diff.	Acceptance Range
Arsenic	ND	ND	0.001	0.149	0.147	1.3%	0% - 30%
Barium	ND	ND	0.001	38.9	39.0	0.3%	0% - 30%
Cadmium	ND	ND	0.001	0.017	0.017	0.0%	0% - 30%
Chromium	ND	ND	0.001	0.348	0.350	0.6%	0% - 30%
Lead	ND	ND	0.001	0.717	0.715	0.3%	0% - 30%
Mercury	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Selenium	ND	ND	0.001	0.568	0.571	0.5%	0% - 30%
Silver	ND	ND	0.001	0.001	0.001	0.0%	0% - 30%

Spike Conc. (mg/Kg)	Spike Added	Sample	Spiked Sample	Percent Recovery	Acceptance Range
Arsenic	0.500	0.149	0.647	99.7%	80% - 120%
Barium	0.500	38.9	39.4	100.0%	80% - 120%
Cadmium	0.500	0.017	0.516	99.8%	80% - 120%
Chromium	0.500	0.348	0.847	99.9%	80% - 120%
Lead	0.500	0.717	1.21	99.4%	80% - 120%
Mercury	0.500	ND	0.500	100.0%	80% - 120%
Selenium	0.500	0.568	1.06	99.3%	80% - 120%
Silver	0.500	0.001	0.501	100.0%	80% - 120%

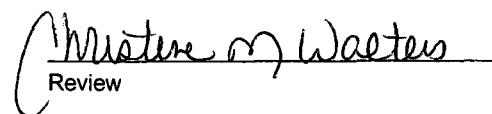
ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

Comments: QA/QC for samples 33658 - 33662.


Dennis C. Queen
Analyst


Christine M. Waeter
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

TRACE METAL ANALYSIS
Quality Control /
Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	07-18 TM QA/AC	Date Reported:	07-18-05
Laboratory Number:	33648	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Analysis Requested:	Total RCRA Metals	Date Analyzed:	07-18-05
Condition:	N/A	Date Digested:	07-17-05

Blank & Duplicate Conc. (mg/Kg)	Instrument Blank (mg/L)	Method Blank	Detection Limit	Sample	Duplicate	% Diff.	Acceptance Range
Arsenic	ND	ND	0.001	0.130	0.128	1.5%	0% - 30%
Barium	ND	ND	0.001	39.9	40.0	0.3%	0% - 30%
Cadmium	ND	ND	0.001	0.013	0.013	0.0%	0% - 30%
Chromium	ND	ND	0.001	0.287	0.290	1.0%	0% - 30%
Lead	ND	ND	0.001	0.524	0.525	0.2%	0% - 30%
Mercury	ND	ND	0.001	ND	ND	0.0%	0% - 30%
Selenium	ND	ND	0.001	0.755	0.756	0.1%	0% - 30%
Silver	ND	ND	0.001	ND	ND	0.0%	0% - 30%

Spike Conc. (mg/Kg)	Spike Added	Sample	Spiked Sample	Percent Recovery	Acceptance Range
Arsenic	0.500	0.130	0.629	99.8%	80% - 120%
Barium	0.500	39.9	40.3	99.8%	80% - 120%
Cadmium	0.500	0.013	0.512	99.8%	80% - 120%
Chromium	0.500	0.287	0.786	99.9%	80% - 120%
Lead	0.500	0.524	1.020	99.6%	80% - 120%
Mercury	0.500	ND	0.498	99.6%	80% - 120%
Selenium	0.500	0.755	1.250	99.6%	80% - 120%
Silver	0.500	ND	0.499	99.8%	80% - 120%

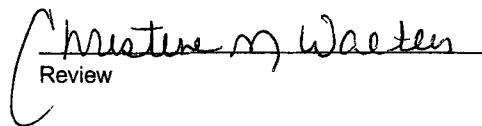
ND - Parameter not detected at the stated detection limit.

References: Method 3050B, Acid Digestion of Sediments, Sludges and Soils.
SW-846, USEPA, December 1996.

Method 6010B, Analysis of Metals by Inductively Coupled Plasma Atomic Emission Spectroscopy, SW-846, USEPA, December 1996.

Comments: QA/QC for samples 33648 - 33657.


Dennis C. Apuzzo
Analyst


Christine M. Waeter
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	A	Date Reported:	07-19-05
Laboratory Number:	33648	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-17-05
Preservative:	Cool	Date Analyzed:	07-18-05
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		
pH	7.25	s.u.		
Conductivity @ 25° C	333	umhos/cm		
Total Dissolved Solids @ 180C	166	mg/L		
Total Dissolved Solids (Calc)	172	mg/L		
SAR	2.3	ratio		
Total Alkalinity as CaCO ₃	29.6	mg/L		
Total Hardness as CaCO ₃	39.9	mg/L		
Bicarbonate as HCO ₃	29.6	mg/L	0.49	meq/L
Carbonate as CO ₃	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	1.0	mg/L	0.02	meq/L
Nitrite Nitrogen	0.002	mg/L	0.00	meq/L
Chloride	37.6	mg/L	1.06	meq/L
Fluoride	0.01	mg/L	0.00	meq/L
Phosphate	0.7	mg/L	0.02	meq/L
Sulfate	57.0	mg/L	1.19	meq/L
Iron	<0.001	mg/L	0.00	meq/L
Calcium	14.1	mg/L	0.70	meq/L
Magnesium	4.69	mg/L	0.39	meq/L
Potassium	0.06	mg/L	0.00	meq/L
Sodium	38.7	mg/L	1.68	meq/L
Cations			2.77	meq/L
Anions			2.77	meq/L
Cation/Anion Difference			0.08%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Crouch Mesa Landfarm.

Christene M. Waters
Analyst

Dee C. Queen
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	B	Date Reported:	07-19-05
Laboratory Number:	33649	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-17-05
Preservative:	Cool	Date Analyzed:	07-18-05
Condition:	Cool & Intact		

Parameter	Result	Analytical Units		
pH	8.21	s.u.		
Conductivity @ 25° C	166	umhos/cm		
Total Dissolved Solids @ 180C	102	mg/L		
Total Dissolved Solids (Calc)	104	mg/L		
SAR	2.0	ratio		
Total Alkalinity as CaCO ₃	37.2	mg/L		
Total Hardness as CaCO ₃	19.0	mg/L		
 Bicarbonate as HCO ₃	 37.2	 mg/L	 0.61	 meq/L
Carbonate as CO ₃	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	0.4	mg/L	0.01	meq/L
Nitrite Nitrogen	0.005	mg/L	0.00	meq/L
Chloride	13.6	mg/L	0.38	meq/L
Fluoride	0.79	mg/L	0.04	meq/L
Phosphate	1.3	mg/L	0.04	meq/L
Sulfate	30.5	mg/L	0.64	meq/L
Iron	0.008	mg/L	0.00	meq/L
Calcium	6.08	mg/L	0.30	meq/L
Magnesium	3.80	mg/L	0.31	meq/L
Potassium	<0.01	mg/L	0.00	meq/L
Sodium	25.3	mg/L	1.10	meq/L
 Cations			1.72	meq/L
Anions			1.72	meq/L
 Cation/Anion Difference			0.04%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
 Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Crouch Mesa Landfarm.

Christen M. Waeter
Analyst

Devin P. O'Brien
Review

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	C	Date Reported:	07-19-05
Laboratory Number:	33650	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-17-05
Preservative:	Cool	Date Analyzed:	07-18-05
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		
pH	8.56	s.u.		
Conductivity @ 25° C	392	umhos/cm		
Total Dissolved Solids @ 180C	242	mg/L		
Total Dissolved Solids (Calc)	249	mg/L		
SAR	4.9	ratio		
Total Alkalinity as CaCO ₃	33.6	mg/L		
Total Hardness as CaCO ₃	29.3	mg/L		
Bicarbonate as HCO ₃	33.6	mg/L	0.55	meq/L
Carbonate as CO ₃	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	1.2	mg/L	0.02	meq/L
Nitrite Nitrogen	<0.001	mg/L	0.00	meq/L
Chloride	60.8	mg/L	1.72	meq/L
Fluoride	2.06	mg/L	0.11	meq/L
Phosphate	0.7	mg/L	0.02	meq/L
Sulfate	76.5	mg/L	1.59	meq/L
Iron	<0.001	mg/L	0.00	meq/L
Calcium	10.1	mg/L	0.50	meq/L
Magnesium	4.10	mg/L	0.34	meq/L
Potassium	<0.01	mg/L	0.00	meq/L
Sodium	72.8	mg/L	3.17	meq/L
Cations			4.01	meq/L
Anions			4.01	meq/L
Cation/Anion Difference			0.03%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
 Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Crouch Mesa Landfarm.

Christene M. Waeter
Analyst

Dee C. Allen
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	D	Date Reported:	07-19-05
Laboratory Number:	33651	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-17-05
Preservative:	Cool	Date Analyzed:	07-18-05
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		
pH	8.39	s.u.		
Conductivity @ 25° C	510	umhos/cm		
Total Dissolved Solids @ 180C	307	mg/L		
Total Dissolved Solids (Calc)	324	mg/L		
SAR	5.5	ratio		
Total Alkalinity as CaCO ₃	28.4	mg/L		
Total Hardness as CaCO ₃	31.2	mg/L		
Bicarbonate as HCO ₃	28.4	mg/L	0.47	meq/L
Carbonate as CO ₃	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	0.9	mg/L	0.01	meq/L
Nitrite Nitrogen	0.001	mg/L	0.00	meq/L
Chloride	52.0	mg/L	1.47	meq/L
Fluoride	1.81	mg/L	0.10	meq/L
Phosphate	0.6	mg/L	0.02	meq/L
Sulfate	142	mg/L	2.96	meq/L
Iron	<0.001	mg/L	0.00	meq/L
Calcium	12.5	mg/L	0.62	meq/L
Magnesium	4.99	mg/L	0.41	meq/L
Potassium	0.21	mg/L	0.01	meq/L
Sodium	91.5	mg/L	3.98	meq/L
Cations			5.02	meq/L
Anions			5.02	meq/L
Cation/Anion Difference			0.03%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
 Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Crouch Mesa Landfarm.

Christine M. Walters
Analyst

Allen P. Allen
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	E	Date Reported:	07-19-05
Laboratory Number:	33652	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-17-05
Preservative:	Cool	Date Analyzed:	07-18-05
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		
pH	8.06	s.u.		
Conductivity @ 25° C	486	umhos/cm		
Total Dissolved Solids @ 180C	290	mg/L		
Total Dissolved Solids (Calc)	312	mg/L		
SAR	5.8	ratio		
Total Alkalinity as CaCO ₃	28.0	mg/L		
Total Hardness as CaCO ₃	34.9	mg/L		
Bicarbonate as HCO ₃	28.0	mg/L	0.46	meq/L
Carbonate as CO ₃	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	0.8	mg/L	0.01	meq/L
Nitrite Nitrogen	<0.001	mg/L	0.00	meq/L
Chloride	30.4	mg/L	0.86	meq/L
Fluoride	0.68	mg/L	0.04	meq/L
Phosphate	<0.1	mg/L	0.00	meq/L
Sulfate	160	mg/L	3.33	meq/L
Iron	<0.001	mg/L	0.00	meq/L
Calcium	12.8	mg/L	0.64	meq/L
Magnesium	2.93	mg/L	0.24	meq/L
Potassium	<0.01	mg/L	0.00	meq/L
Sodium	87.7	mg/L	3.81	meq/L
Cations			4.69	meq/L
Anions			4.70	meq/L
Cation/Anion Difference			0.03%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
 Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Crouch Mesa Landfarm.

Mistine M. Waeter
Analyst

Dawn C. Jensen
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client: Phil Nobis Project #: 04184-001
Sample ID: F - 1 Date Reported: 07-19-05
Laboratory Number: 33653 Date Sampled: 07-14-05
Chain of Custody: 14285 Date Received: 07-14-05
Sample Matrix: Soil Date Extracted: 07-17-05
Preservative: Cool Date Analyzed: 07-18-05
Condition: Cool & Intact

Parameter	Analytical Result	Units		
pH	8.22	s.u.		
Conductivity @ 25° C	649	umhos/cm		
Total Dissolved Solids @ 180C	404	mg/L		
Total Dissolved Solids (Calc)	412	mg/L		
SAR	7.0	ratio		
Total Alkalinity as CaCO ₃	30.8	mg/L		
Total Hardness as CaCO ₃	39.6	mg/L		
Bicarbonate as HCO ₃	30.8	mg/L	0.50	meq/L
Carbonate as CO ₃	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	0.1	mg/L	0.00	meq/L
Nitrite Nitrogen	<0.001	mg/L	0.00	meq/L
Chloride	88.0	mg/L	2.48	meq/L
Fluoride	0.94	mg/L	0.05	meq/L
Phosphate	0.1	mg/L	0.00	meq/L
Sulfate	163	mg/L	3.39	meq/L
Iron	<0.001	mg/L	0.00	meq/L
Calcium	13.6	mg/L	0.68	meq/L
Magnesium	5.56	mg/L	0.46	meq/L
Potassium	0.05	mg/L	0.00	meq/L
Sodium	122	mg/L	5.31	meq/L
Cations			6.44	meq/L
Anions			6.44	meq/L
Cation/Anion Difference			0.14%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Crouch Mesa Landfarm.

Christine M. Walters
Analyst

Dean C. O'Brien
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	F - 2	Date Reported:	07-19-05
Laboratory Number:	33654	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-17-05
Preservative:	Cool	Date Analyzed:	07-18-05
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		
pH	9.09	s.u.		
Conductivity @ 25° C	374	umhos/cm		
Total Dissolved Solids @ 180C	238	mg/L		
Total Dissolved Solids (Calc)	239	mg/L		
SAR	5.0	ratio		
Total Alkalinity as CaCO ₃	73.2	mg/L		
Total Hardness as CaCO ₃	23.6	mg/L		
Bicarbonate as HCO ₃	73.2	mg/L	1.20	meq/L
Carbonate as CO ₃	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	<0.1	mg/L	0.00	meq/L
Nitrite Nitrogen	<0.001	mg/L	0.00	meq/L
Chloride	6.0	mg/L	0.17	meq/L
Fluoride	0.82	mg/L	0.04	meq/L
Phosphate	<0.1	mg/L	0.00	meq/L
Sulfate	108	mg/L	2.25	meq/L
Iron	0.058	mg/L	0.00	meq/L
Calcium	8.00	mg/L	0.40	meq/L
Magnesium	3.60	mg/L	0.30	meq/L
Potassium	<0.01	mg/L	0.00	meq/L
Sodium	68.1	mg/L	2.96	meq/L
Cations			3.66	meq/L
Anions			3.66	meq/L
Cation/Anion Difference			0.02%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Crouch Mesa Landfarm.

Analyst
Christine M. Waeter

Review
Dawn C. O'Brien

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	F - 3	Date Reported:	07-19-05
Laboratory Number:	33655	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-17-05
Preservative:	Cool	Date Analyzed:	07-18-05
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		
pH	8.63	s.u.		
Conductivity @ 25° C	521	umhos/cm		
Total Dissolved Solids @ 180C	330	mg/L		
Total Dissolved Solids (Calc)	330	mg/L		
SAR	6.8	ratio		
Total Alkalinity as CaCO ₃	32.4	mg/L		
Total Hardness as CaCO ₃	27.7	mg/L		
Bicarbonate as HCO ₃	32.4	mg/L	0.53	meq/L
Carbonate as CO ₃	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	0.7	mg/L	0.01	meq/L
Nitrite Nitrogen	0.002	mg/L	0.00	meq/L
Chloride	45.2	mg/L	1.28	meq/L
Fluoride	2.16	mg/L	0.11	meq/L
Phosphate	0.5	mg/L	0.02	meq/L
Sulfate	150	mg/L	3.12	meq/L
Iron	<0.001	mg/L	0.00	meq/L
Calcium	9.60	mg/L	0.48	meq/L
Magnesium	3.70	mg/L	0.30	meq/L
Potassium	<0.01	mg/L	0.00	meq/L
Sodium	98.5	mg/L	4.28	meq/L
Cations			5.07	meq/L
Anions			5.07	meq/L
Cation/Anion Difference			0.03%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
 Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Crouch Mesa Landfarm.

Christine M. Waeters
Analyst

Dee P. Apel
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	F - 4	Date Reported:	07-19-05
Laboratory Number:	33656	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-17-05
Preservative:	Cool	Date Analyzed:	07-18-05
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		
pH	8.47	s.u.		
Conductivity @ 25° C	282	umhos/cm		
Total Dissolved Solids @ 180C	192	mg/L		
Total Dissolved Solids (Calc)	179	mg/L		
SAR	3.0	ratio		
Total Alkalinity as CaCO ₃	34.0	mg/L		
Total Hardness as CaCO ₃	31.5	mg/L		
Bicarbonate as HCO ₃	34.0	mg/L	0.56	meq/L
Carbonate as CO ₃	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	0.4	mg/L	0.01	meq/L
Nitrite Nitrogen	<0.001	mg/L	0.00	meq/L
Chloride	47.2	mg/L	1.33	meq/L
Fluoride	0.94	mg/L	0.05	meq/L
Phosphate	1.0	mg/L	0.03	meq/L
Sulfate	47.0	mg/L	0.98	meq/L
Iron	<0.001	mg/L	0.00	meq/L
Calcium	10.7	mg/L	0.53	meq/L
Magnesium	4.69	mg/L	0.39	meq/L
Potassium	0.18	mg/L	0.00	meq/L
Sodium	46.7	mg/L	2.03	meq/L
Cations			2.96	meq/L
Anions			2.95	meq/L
Cation/Anion Difference			0.04%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
 Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Crouch Mesa Landfarm.

Christine M. Walters
Analyst

Dee C. Ayers
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	F - 5	Date Reported:	07-19-05
Laboratory Number:	33657	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-17-05
Preservative:	Cool	Date Analyzed:	07-18-05
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		
pH	7.91	s.u.		
Conductivity @ 25° C	1,540	umhos/cm		
Total Dissolved Solids @ 180C	954	mg/L		
Total Dissolved Solids (Calc)	962	mg/L		
SAR	3.5	ratio		
Total Alkalinity as CaCO ₃	28.8	mg/L		
Total Hardness as CaCO ₃	294	mg/L		
Bicarbonate as HCO ₃	28.8	mg/L	0.47	meq/L
Carbonate as CO ₃	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	<0.1	mg/L	0.00	meq/L
Nitrite Nitrogen	0.006	mg/L	0.00	meq/L
Chloride	63.2	mg/L	1.78	meq/L
Fluoride	0.85	mg/L	0.04	meq/L
Phosphate	<0.1	mg/L	0.00	meq/L
Sulfate	588	mg/L	12.24	meq/L
Iron	<0.001	mg/L	0.00	meq/L
Calcium	106	mg/L	5.27	meq/L
Magnesium	29.8	mg/L	2.45	meq/L
Potassium	0.13	mg/L	0.00	meq/L
Sodium	157	mg/L	6.83	meq/L
Cations			14.55	meq/L
Anions			14.54	meq/L
Cation/Anion Difference			0.09%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Crouch Mesa Landfarm.

Christine M. Wallen
Analyst

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	G - 1	Date Reported:	07-19-05
Laboratory Number:	33658	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-18-05
Preservative:	Cool	Date Analyzed:	07-19-05
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		
pH	7.04	s.u.		
Conductivity @ 25° C	1,090	umhos/cm		
Total Dissolved Solids @ 180C	694	mg/L		
Total Dissolved Solids (Calc)	696	mg/L		
SAR	4.1	ratio		
Total Alkalinity as CaCO ₃	31.6	mg/L		
Total Hardness as CaCO ₃	187	mg/L		
Bicarbonate as HCO ₃	31.6	mg/L	0.52	meq/L
Carbonate as CO ₃	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	0.2	mg/L	0.00	meq/L
Nitrite Nitrogen	0.004	mg/L	0.00	meq/L
Chloride	44.0	mg/L	1.24	meq/L
Fluoride	0.75	mg/L	0.04	meq/L
Phosphate	1.7	mg/L	0.05	meq/L
Sulfate	410	mg/L	8.54	meq/L
Iron	0.005	mg/L	0.00	meq/L
Calcium	70.9	mg/L	3.54	meq/L
Magnesium	9.47	mg/L	0.78	meq/L
Potassium	0.85	mg/L	0.02	meq/L
Sodium	139	mg/L	6.05	meq/L
Cations			10.38	meq/L
Anions			10.39	meq/L
Cation/Anion Difference			0.07%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Crouch Mesa Landfarm.

Christine M. Waeters
Analyst

Dee C. Ayers
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	G - 2	Date Reported:	07-19-05
Laboratory Number:	33659	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-18-05
Preservative:	Cool	Date Analyzed:	07-19-05
Condition:	Cool & Intact		

Parameter	Result	Analytical Units		
pH	7.26	s.u.		
Conductivity @ 25° C	264	umhos/cm		
Total Dissolved Solids @ 180C	170	mg/L		
Total Dissolved Solids (Calc)	167	mg/L		
SAR	1.9	ratio		
Total Alkalinity as CaCO ₃	25.6	mg/L		
Total Hardness as CaCO ₃	38.0	mg/L		
Bicarbonate as HCO ₃	25.6	mg/L	0.42	meq/L
Carbonate as CO ₃	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	1.1	mg/L	0.02	meq/L
Nitrite Nitrogen	0.013	mg/L	0.00	meq/L
Chloride	29.6	mg/L	0.84	meq/L
Fluoride	0.27	mg/L	0.01	meq/L
Phosphate	4.1	mg/L	0.13	meq/L
Sulfate	62.5	mg/L	1.30	meq/L
Iron	0.067	mg/L	0.00	meq/L
Calcium	12.2	mg/L	0.61	meq/L
Magnesium	7.60	mg/L	0.63	meq/L
Potassium	0.63	mg/L	0.02	meq/L
Sodium	33.7	mg/L	1.47	meq/L
Cations			2.72	meq/L
Anions			2.72	meq/L
Cation/Anion Difference			0.04%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
 Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Crouch Mesa Landfarm.

Mistine M. Wheeler
Analyst

Devin E. Petersen
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	G - 3	Date Reported:	07-19-05
Laboratory Number:	33660	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-18-05
Preservative:	Cool	Date Analyzed:	07-19-05
Condition:	Cool & Intact		

Parameter	Result	Analytical Units		
pH	7.19	s.u.		
Conductivity @ 25° C	1,020	umhos/cm		
Total Dissolved Solids @ 180C	652	mg/L		
Total Dissolved Solids (Calc)	650	mg/L		
SAR	7.2	ratio		
Total Alkalinity as CaCO ₃	18.4	mg/L		
Total Hardness as CaCO ₃	95.3	mg/L		
Bicarbonate as HCO ₃	18.4	mg/L	0.30	meq/L
Carbonate as CO ₃	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	0.1	mg/L	0.00	meq/L
Nitrite Nitrogen	0.001	mg/L	0.00	meq/L
Chloride	37.2	mg/L	1.05	meq/L
Fluoride	0.71	mg/L	0.04	meq/L
Phosphate	0.6	mg/L	0.02	meq/L
Sulfate	390	mg/L	8.12	meq/L
Iron	0.003	mg/L	0.00	meq/L
Calcium	36.6	mg/L	1.83	meq/L
Magnesium	3.71	mg/L	0.31	meq/L
Potassium	0.28	mg/L	0.01	meq/L
Sodium	170	mg/L	7.40	meq/L
Cations			9.53	meq/L
Anions			9.53	meq/L
Cation/Anion Difference			0.05%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
 Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Crouch Mesa Landfarm.

Christine M. Walters
Analyst

Alexander P. O'Leary
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	G - 4	Date Reported:	07-19-05
Laboratory Number:	33661	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-18-05
Preservative:	Cool	Date Analyzed:	07-19-05
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		
pH	7.74	s.u.		
Conductivity @ 25° C	264	umhos/cm		
Total Dissolved Solids @ 180C	161	mg/L		
Total Dissolved Solids (Calc)	164	mg/L		
SAR	2.3	ratio		
Total Alkalinity as CaCO ₃	26.8	mg/L		
Total Hardness as CaCO ₃	34.6	mg/L		
Bicarbonate as HCO ₃	26.8	mg/L	0.44	meq/L
Carbonate as CO ₃	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	2.1	mg/L	0.03	meq/L
Nitrite Nitrogen	0.066	mg/L	0.00	meq/L
Chloride	29.6	mg/L	0.84	meq/L
Fluoride	0.54	mg/L	0.03	meq/L
Phosphate	0.6	mg/L	0.02	meq/L
Sulfate	61.0	mg/L	1.27	meq/L
Iron	<0.001	mg/L	0.00	meq/L
Calcium	11.8	mg/L	0.59	meq/L
Magnesium	4.98	mg/L	0.41	meq/L
Potassium	<0.01	mg/L	0.00	meq/L
Sodium	37.4	mg/L	1.63	meq/L
Cations			2.63	meq/L
Anions			2.63	meq/L
Cation/Anion Difference			0.06%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Crouch Mesa Landfarm.

Christine M. Walten
Analyst

Devin P. O'Brien
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

CATION / ANION ANALYSIS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	G - 5	Date Reported:	07-19-05
Laboratory Number:	33662	Date Sampled:	07-14-05
Chain of Custody:	14285	Date Received:	07-14-05
Sample Matrix:	Soil	Date Extracted:	07-18-05
Preservative:	Cool	Date Analyzed:	07-19-05
Condition:	Cool & Intact		

Parameter	Analytical Result	Units		
pH	8.37	s.u.		
Conductivity @ 25° C	234	umhos/cm		
Total Dissolved Solids @ 180C	126	mg/L		
Total Dissolved Solids (Calc)	125	mg/L		
SAR	3.7	ratio		
Total Alkalinity as CaCO ₃	35.6	mg/L		
Total Hardness as CaCO ₃	18.4	mg/L		
Bicarbonate as HCO ₃	35.6	mg/L	0.58	meq/L
Carbonate as CO ₃	<0.1	mg/L	0.00	meq/L
Hydroxide as OH	<0.1	mg/L	0.00	meq/L
Nitrate Nitrogen	9.5	mg/L	0.15	meq/L
Nitrite Nitrogen	0.015	mg/L	0.00	meq/L
Chloride	16.0	mg/L	0.45	meq/L
Fluoride	0.95	mg/L	0.05	meq/L
Phosphate	2.9	mg/L	0.09	meq/L
Sulfate	30.3	mg/L	0.63	meq/L
Iron	0.021	mg/L	0.00	meq/L
Calcium	7.36	mg/L	0.37	meq/L
Magnesium	<0.01	mg/L	0.00	meq/L
Potassium	<0.01	mg/L	0.00	meq/L
Sodium	36.6	mg/L	1.59	meq/L
Cations			1.96	meq/L
Anions			1.96	meq/L
Cation/Anion Difference			0.04%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.
 Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Crouch Mesa Landfarm.

Analyst
Christine M. Wooters

Review
Dennis E. Ogle

CHAIN OF CUSTODY RECORD

14285
Page 1 of 2

Client / Project Name	Project Location	ANALYSIS / PARAMETERS			
Sampler:	Client No.				
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers
A	7/14	9:00 AM	33648	Soil	2
B	7/14		33649		2
C	7/14		33650		2
D	7/14		33651		2
E	7/14		33652		2
F-1	7/14		33653		2
F-2	7/14		33654		2
F-3	7/14		33655		2
F-4	7/14		33656		2
F-5	7/14		33657		2

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
<i>Phil Nobis</i>	7-15-01	11:15	<i>John C. Ogle</i>	7-14-01	11:15
Relinquished by: (Signature)			Received by: (Signature)		
Relinquished by: (Signature)			Received by: (Signature)		

ENVIROTECH INC.

Sample Receipt

P.O. Box 566
Blownfield 87413
860-5872

5796 U.S. Highway 64
Farmington, New Mexico 87401
(505) 632-0615

	Y	N	N/A
Received Intact	✓		
Cool - Ice/Blue Ice	✓		

CHAIN OF CUSTODY RECORD

14285 page 2 of

Client / Project Name <i>Phil Nobis</i>	Project Location <i>Crouch Mesa Landfarm</i>	ANALYSIS / PARAMETERS																						
		8015	8020																					
Sampler: <i>Sterns Enterprises</i>	Client No. <i>04184-001</i>	Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH	BTEX	Total RCRA metols	cations & Anions	Remarks												
G-1		7/14		33658	20:1		2																	
G-2		7/14		33659			2																	
G-3		7/14		33660			2																	
G-4		7/14		33661			2																	
G-5		7/14	10:15	33662			2																	
P-1		7/14	10:20	33663			1	✓	✓															
P-2		7/14	10:20	33664			1	✓	✓															
<i>5784</i>																								
Relinquished by: (Signature) <i>23/11/05</i>	Date 7-15-05	Time 11:15	Received by: (Signature) <i>Releinquished by: (Signature)</i> <i>Heles C. Oliver</i>	Entered 7/15/05	Date 7/15/05	Time 11:15																		
Relinquished by: (Signature)			Received by: (Signature) <i>Received by: (Signature)</i> <i>Heles C. Oliver</i>																					
Sample Receipt																								
<table border="1"> <tr> <td></td> <td>Y</td> <td>N</td> <td>N/A</td> </tr> <tr> <td>Received Intact</td> <td>✓</td> <td></td> <td></td> </tr> <tr> <td>Cool - Ice/Blue Ice</td> <td></td> <td></td> <td></td> </tr> </table>														Y	N	N/A	Received Intact	✓			Cool - Ice/Blue Ice			
	Y	N	N/A																					
Received Intact	✓																							
Cool - Ice/Blue Ice																								

ENVIROTECH Inc.

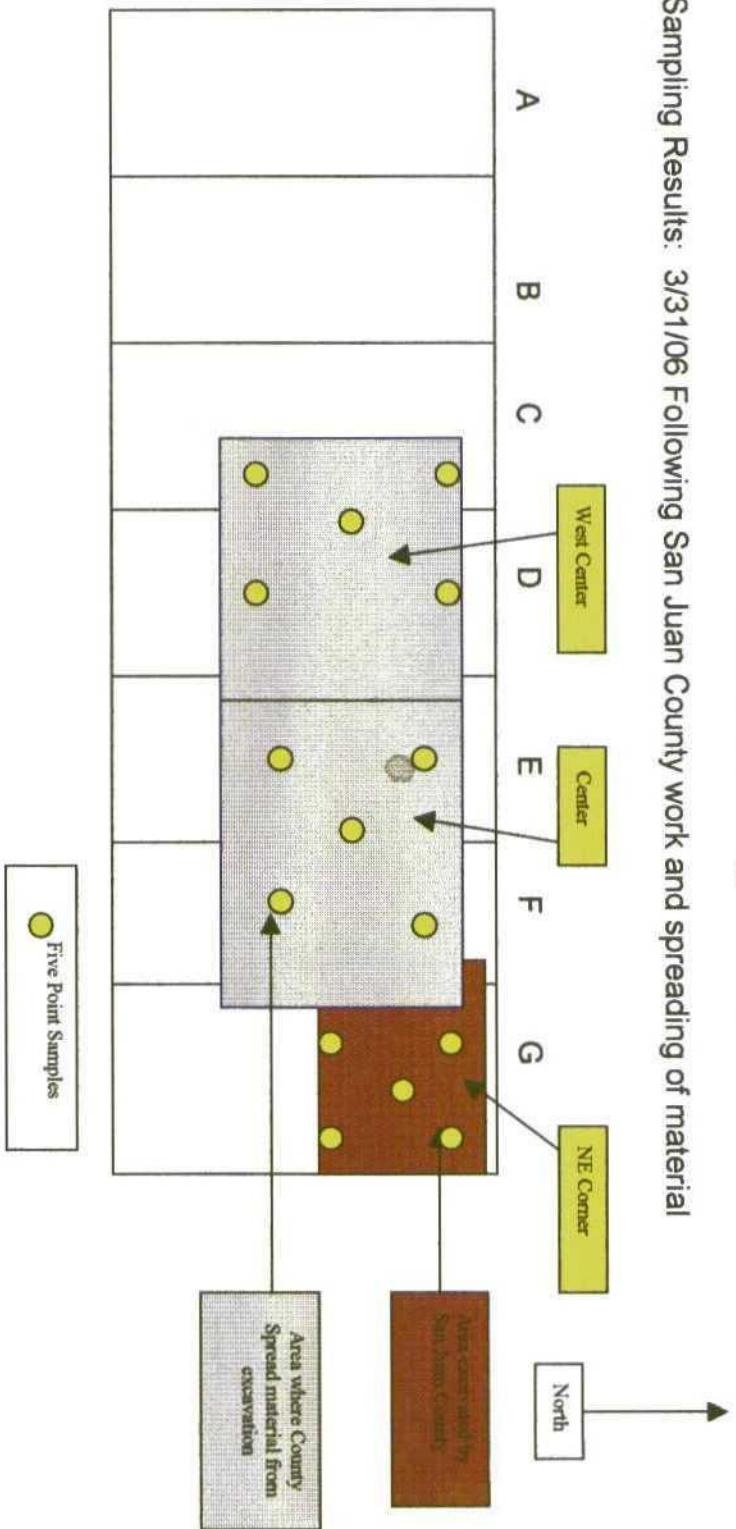
5796 U.S. Highway 64
Farmington, New Mexico 87401
(505) 322-0615

Final Closure

**Tierra Landfarm Permit # NM-01-0010A
NW/4 SE/4 of Section 2, Township 29 North, Range 12 West
San Juan County, New Mexico**

Exhibit 2

Sampling Results: 3/31/06 Following San Juan County work and spreading of material



Following excavation of a pocket of contaminated soil shown in brown above, the material was spread in thin lifts upon the remainder of the area shown in gray. On 3/31/06, 3-five point samples were taken in the presents of Denny Foust OCD Representative from Aztec, NM. The samples were taken to Envirotech Labs where they were analyzed for TPH and BTEX.

Results: North East Corner

	West Center	Center
TPH	102 mg/Kg	584 mg/Kg
BTEX	66.8 ug/Kg	428 mg/Kg
Benzene	ND	57.8 ug/Kg
		98.2 ug/Kg
	ND	ND

West Center

Center

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

April 6, 2006

Mr. Phill Nobis
37 CR 5285
Bloomfield, NM 87413

Phone: (505) 632-1404

Client No.: 04184-001

Dear Mr. Nobis,

Enclosed are the analytical results for the samples collected from the location designated as "TECI Landfarm". Three soil samples were collected on 3/31/06, and received by the Envirotech laboratory on 3/31/06 for BTEX per USEPA Method 8021 and Total Petroleum Hydrocarbons (TPH) per USEPA Method 8015.

The samples were documented on Envirotech Chain of Custody No. 15774 and assigned Laboratory Nos. 36671 (NE Corner), 36672 (West Center) and 36673 (Center) for tracking purposes.

The samples were analyzed on 4/05/06 using USEPA or equivalent methods.

Should you have any questions or require additional information, please do not hesitate to contact us at (505) 632-0615.

Respectfully submitted,
Envirotech, Inc.

Christine M. Walters
Christine M. Walters
Laboratory Coordinator / Environmental Scientist

enc.

CMW/cmw

C:/files/labreports/Nobis.wpd

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

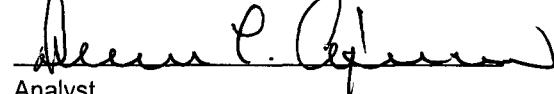
Client:	Phil Nobis	Project #:	04184-001
Sample ID:	NE Corner	Date Reported:	04-05-06
Laboratory Number:	36671	Date Sampled:	03-31-06
Chain of Custody No:	15774	Date Received:	03-31-06
Sample Matrix:	Soil	Date Extracted:	04-03-06
Preservative:	Cool	Date Analyzed:	04-05-06
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

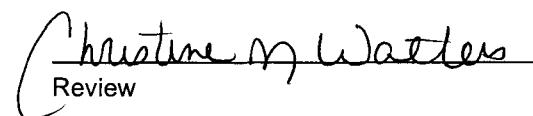
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	102	0.1
Total Petroleum Hydrocarbons	102	0.2

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: TECI Landfarm.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	West Center	Date Reported:	04-05-06
Laboratory Number:	36672	Date Sampled:	03-31-06
Chain of Custody No:	15774	Date Received:	03-31-06
Sample Matrix:	Soil	Date Extracted:	04-03-06
Preservative:	Cool	Date Analyzed:	04-05-06
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)	584	0.1
Total Petroleum Hydrocarbons	584	0.2

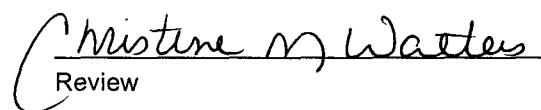
ND - Parameter not detected at the stated detection limit.

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

Comments: TECI Landfarm.


Dennis P. O'Brien

Analyst


Christine M. Watters

Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	Center	Date Reported:	04-05-06
Laboratory Number:	36673	Date Sampled:	03-31-06
Chain of Custody No:	15774	Date Received:	03-31-06
Sample Matrix:	Soil	Date Extracted:	04-03-06
Preservative:	Cool	Date Analyzed:	04-05-06
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

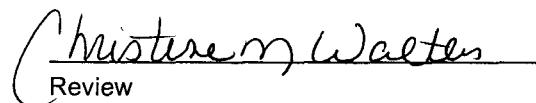
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1.3	0.2
Diesel Range (C10 - C28)	427	0.1
Total Petroleum Hydrocarbons	428	0.2

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: TECI Landfarm.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	04-05-06 QA/QC	Date Reported:	04-05-06
Laboratory Number:	36671	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-05-06
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept. Range
Gasoline Range C5 - C10	02-04-05	9.9753E+002	9.9853E+002	0.10%	0 - 15%
Diesel Range C10 - C28	02-04-05	9.9541E+002	9.9740E+002	0.20%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept. Range
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%
Diesel Range C10 - C28	102	104	2.6%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	ND	250	250	100.0%	75 - 125%
Diesel Range C10 - C28	102	250	351	99.9%	75 - 125%

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: QA/QC for Samples 36671 - 36673, 36688 - 36689, 36692.

Debra L. Aguirre
Analyst

Christine M. Waters
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	NE Corner	Date Reported:	04-05-06
Laboratory Number:	36671	Date Sampled:	03-31-06
Chain of Custody:	15774	Date Received:	03-31-06
Sample Matrix:	Soil	Date Analyzed:	04-05-06
Preservative:	Cool	Date Extracted:	04-03-06
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	12.2	1.7
Ethylbenzene	6.2	1.5
p,m-Xylene	35.8	2.2
o-Xylene	12.6	1.0
Total BTEX	66.8	

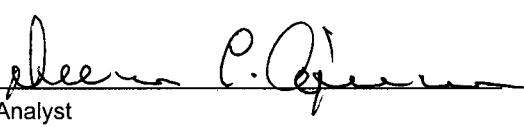
ND - Parameter not detected at the stated detection limit.

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: TECI Landfarm.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	West Center	Date Reported:	04-05-06
Laboratory Number:	36672	Date Sampled:	03-31-06
Chain of Custody:	15774	Date Received:	03-31-06
Sample Matrix:	Soil	Date Analyzed:	04-05-06
Preservative:	Cool	Date Extracted:	04-03-06
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	14.8	1.7
Ethylbenzene	9.1	1.5
p,m-Xylene	24.1	2.2
o-Xylene	9.8	1.0
Total BTEX	57.8	

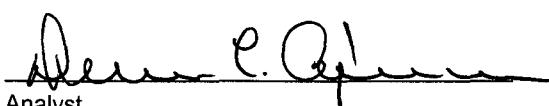
ND - Parameter not detected at the stated detection limit.

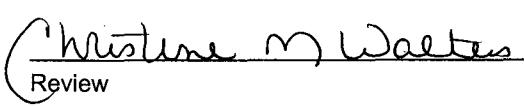
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

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: TECI Landfarm.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Phil Nobis	Project #:	04184-001
Sample ID:	Center	Date Reported:	04-05-06
Laboratory Number:	36673	Date Sampled:	03-31-06
Chain of Custody:	15774	Date Received:	03-31-06
Sample Matrix:	Soil	Date Analyzed:	04-05-06
Preservative:	Cool	Date Extracted:	04-03-06
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	20.0	1.7
Ethylbenzene	9.2	1.5
p,m-Xylene	63.7	2.2
o-Xylene	5.3	1.0
Total BTEX	98.2	

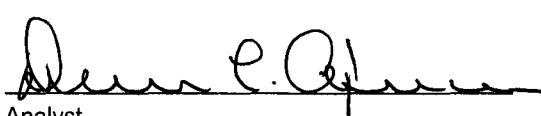
ND - Parameter not detected at the stated detection limit.

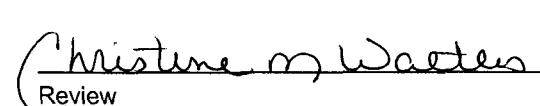
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

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: TECI Landfarm.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	04-05-BTEX QA/QC	Date Reported:	04-05-06
Laboratory Number:	36671	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-05-06
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff. Accept. Range 0 - 15%	Blank Conc.	Detect. Limit
Benzene	3.7688E+007	3.7764E+007	0.2%	ND	0.2
Toluene	3.8699E+007	3.8777E+007	0.2%	ND	0.2
Ethylbenzene	2.1950E+007	2.1994E+007	0.2%	ND	0.2
p,m-Xylene	6.7225E+007	6.7360E+007	0.2%	ND	0.2
o-Xylene	2.9914E+007	2.9974E+007	0.2%	ND	0.1

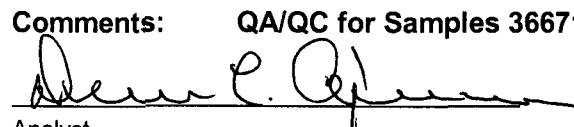
Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect. Limit
Benzene	ND	ND	0.0%	0 - 30%	1.8
Toluene	12.2	12.2	0.0%	0 - 30%	1.7
Ethylbenzene	6.2	6.2	0.0%	0 - 30%	1.5
p,m-Xylene	35.8	35.7	0.3%	0 - 30%	2.2
o-Xylene	12.6	12.6	0.0%	0 - 30%	1.0

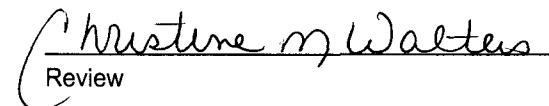
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	50.0	49.9	99.8%	39 - 150
Toluene	12.2	50.0	62.2	100.0%	46 - 148
Ethylbenzene	6.2	50.0	56.1	99.8%	32 - 160
p,m-Xylene	35.8	100	135	99.7%	46 - 148
o-Xylene	12.6	50.0	62.5	99.8%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
 Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 36671 - 36673, 36688 - 36689, 36692.


Analyst


Review

CHAIN OF CUSTODY RECORD

15774

Client / Project Name Phil Nobis		Project Location TECI Landfarm		ANALYSIS / PARAMETERS																											
Sampler:	Client No.	04184 - 001			Remarks																										
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	Containers																										
NE Corner	3/31/06	11:25	36671	Sed	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓																
West Center	1	1155	36672		1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓																
Center	1	1145	36673	gm	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓																
Relinquished by: (Signature) <i>John M. Nobis</i>		Date 3/31/06		Time 12:10		Received by: (Signature) <i>John the m Water</i>		Date 3/31/06		Time 12:10		Received by: (Signature) <i>John the m Water</i>		Date 3/31/06		Time 12:10															
Relinquished by: (Signature)																															
Relinquished by: (Signature)																															
ENVIROTECH INC. Sample Receipt <table border="1"> <tr> <td></td> <td></td> <td>Y</td> <td>N</td> <td>N/A</td> </tr> <tr> <td>Received Intact</td> <td></td> <td>✓</td> <td></td> <td></td> </tr> <tr> <td>Cool - Ice/Blue Ice</td> <td></td> <td>✓</td> <td></td> <td></td> </tr> </table>																			Y	N	N/A	Received Intact		✓			Cool - Ice/Blue Ice		✓		
		Y	N	N/A																											
Received Intact		✓																													
Cool - Ice/Blue Ice		✓																													
5796 U.S. Highway 64 Farmington, New Mexico 87401 (505) 632-0615																															



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON

Governor

May 18, 2004

Joanna Prukop

Cabinet Secretary

Acting Director

Oil Conservation Division

Mr. James Hatcher
JFJ Landfarm L.L.C.
P.O. Box 2043
Farmington, NM 87499

**RE: Approval To Recycle Soil
JFJ Landfarm L.L.C.
NW/4 SE/4, Section 2, Township 29 North, Range 12 West, NMPM,
San Juan County, New Mexico**

Dear Mr. Hatcher:

The New Mexico Oil Conservation Division (OCD) has received JFJ Landfarm L.L.C. (JFJ) letter dated April 26, 2004 and the E-mail dated May 18, 2004 from Darrin Church with Tierra acknowledging the removal of the remediated soil from Tierra to JFJ Landfarm. The OCD has reviewed these letters and the analytical data concerning remediated soils within compost piles T1, T2, T3, T4, T5, T6, T7, T8, T9, T10, T11 and T12 (material pushed up from Tierra Environmental Company, Inc. portion of the landfarm). JFJ's request to recycle soil from Compost piles T1, T2, T3, T4, T5, T6, T7, T8, T9, T10, T11 and T12 are hereby approved with the following recycling uses:

1. Use remediated soils to solidify incoming tank bottom sludge. And
2. Use remediated soils to recondition the berms within the JFJ facility.

Application of these soils in the approved project list above must not result in run-off into any waters of the U.S. If JFJ wants to move the soils from these compost piles for any other use than those approved here separate OCD authorization must be granted. Please be advised that OCD approval does not relieve JFJ of liability should their operation result in pollution of the ground water, surface water or the environment. In addition, OCD approval does not relieve JFJ of the responsibility for compliance with other federal state and/or local regulations.

If you have any further questions please do not hesitate to contact me at (505) 476-3488.

Sincerely,

Martyne J. Kieling
Environmental Geologist

xc:

Aztec OCD Office

Philip C. Nobis, Tierra Environmental Company, Inc., PO Box 1812, Bloomfield, New Mexico 87413

Kieling, Martyne

From: IEISOIL@aol.com
Sent: Tuesday, May 18, 2004 1:02 PM
To: MKieling@state.nm.us
Cc: dfoust@state.nm.us
Subject: Fwd: Landfarm Backfill

Martyne / Dennie

This is the emai from Tierra Environmental that you requested.

Thanks
Jake Hatcher
IEI Soil
JFJ Landfarm

This email has been scanned by the MessageLabs Email Security System.
For more information please visit <http://www.messagelabs.com/email>

Kieling, Martyne

From: Darrin Church [darrin@instreem.net]
Sent: Tuesday, May 18, 2004 10:09 AM
To: ieisoil@aol.com
Subject: Landfarm Backfill

Jake,

Tierra Environmental Company is aware that you will be transferring clean backfill from the portion of the landfarm currently owned by Tierra to your adjacent facility.

Please let me know if you need any more documentation.

Sincerely,

Darrin Church
Tierra Environmental Company



P.O. Box 2043
Farmington, NM 87499

**Industrial Ecosystems Inc.
Soil Reclamation Center**

Phone: (505) 632-1782
Fax: (505) 632-1876

#81 CR 3150
Aztec, NM 87410

April 26, 2004

RECEIVED

New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

MAY 06 2004

**OIL CONSERVATION
DIVISION**

RE: Reclaimed soil

Attn: Martyne Kieling

Dear Martyne:

Recent analytical results show that several piles containing hydrocarbon impacted soil have reached acceptable levels as required by the NMOCD.

The following biopiles have reached the acceptable levels: T1, T2, T4, T6, T7, T8, T9, T10, T11, T12. All of these biopiles contain material pushed up off Tierra's portion of the landfarm.

We are seeking your approval to recycle this soil by using it as mix material to solidify incoming tank bottom sludge and material to recondition existing berms within the JFJ Facility.

Please find the enclosed analytical reports for these biopiles.

Thanks in advance

James (Jake) Hatcher
Manager JFJ Landfarms (permit # NM 01 0010B J.F.J Landfarms LLC)

Cc: Denny Foust

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

Client:	Blagg / IEI	Project #:	94034-010
Sample ID:	Pile 2	Date Reported:	04-09-04
Laboratory Number:	28327	Date Sampled:	04-07-04
Chain of Custody No:	11991	Date Received:	04-07-04
Sample Matrix:	Soil	Date Extracted:	04-08-04
Preservative:	Cool	Date Analyzed:	04-09-04
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	3.5	0.2
Diesel Range (C10 - C28)	70.0	0.1
Total Petroleum Hydrocarbons	73.5	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: Tierra Cell 5-Pt. Composite.

Deon L. Oden
Analyst

Christine M. Waeters
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / IEI	Project #:	94034-010
Sample ID:	Pile 4	Date Reported:	04-09-04
Laboratory Number:	28328	Date Sampled:	04-07-04
Chain of Custody No:	11991	Date Received:	04-07-04
Sample Matrix:	Soil	Date Extracted:	04-08-04
Preservative:	Cool	Date Analyzed:	04-09-04
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

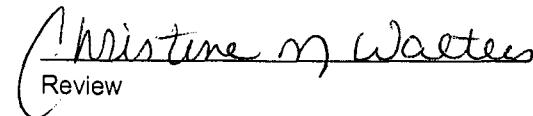
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1.0	0.2
Diesel Range (C10 - C28)	68.7	0.1
Total Petroleum Hydrocarbons	69.7	0.2

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: Tierra Cell 5-Pt. Composite.


Analyst


Review

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client: Blagg / IEI Project #: 94034-010
Sample ID: Pile 6 Date Reported: 04-09-04
Laboratory Number: 28329 Date Sampled: 04-07-04
Chain of Custody No: 11991 Date Received: 04-07-04
Sample Matrix: Soil Date Extracted: 04-08-04
Preservative: Cool Date Analyzed: 04-09-04
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)	23.5	0.1
Total Petroleum Hydrocarbons	23.5	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: Tierra Cell 5-Pt. Composite.

Shawn C. Allen
Analyst

Christine M. Waters
Review

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

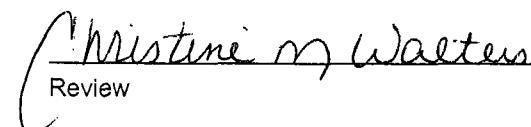
Client:	Blagg / IEI	Project #:	94034-010
Sample ID:	Pile 8	Date Reported:	04-09-04
Laboratory Number:	28330	Date Sampled:	04-07-04
Chain of Custody No:	11991	Date Received:	04-07-04
Sample Matrix:	Soil	Date Extracted:	04-08-04
Preservative:	Cool	Date Analyzed:	04-09-04
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	29.6	0.1
Total Petroleum Hydrocarbons	29.6	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: Tierra Cell 5-Pt. Composite.


Sean C. O'Brien
Analyst
Christine M. Watters
Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / IEI	Project #:	94034-010
Sample ID:	Pile 10	Date Reported:	04-09-04
Laboratory Number:	28331	Date Sampled:	04-07-04
Chain of Custody No:	11991	Date Received:	04-07-04
Sample Matrix:	Soil	Date Extracted:	04-08-04
Preservative:	Cool	Date Analyzed:	04-09-04
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

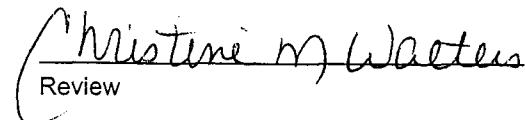
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	14.2	0.1
Total Petroleum Hydrocarbons	14.2	0.2

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: Tierra Cell 5-Pt. Composite.


Dennis C. Odum
Analyst


Christine M. Waters
Review

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / IEI	Project #:	94034-010
Sample ID:	Pile 12	Date Reported:	04-09-04
Laboratory Number:	28332	Date Sampled:	04-07-04
Chain of Custody No:	11991	Date Received:	04-07-04
Sample Matrix:	Soil	Date Extracted:	04-08-04
Preservative:	Cool	Date Analyzed:	04-09-04
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

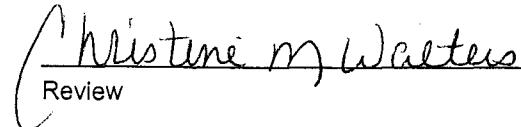
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	37.5	0.1
Total Petroleum Hydrocarbons	37.5	0.2

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: Tierra Cell 5-Pt. Composite.


Analyst


Review

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	04-09-TPH QA/QC	Date Reported:	04-09-04
Laboratory Number:	28327	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-09-04
Condition:	N/A	Analysis Requested:	TPH

	Cal Date	1-Cal RF	2-Cal RF	% Difference	Acceptable Range
Gasoline Range C5 - C10	02-19-04	1.8591E-002	1.8572E-002	0.10%	0 - 15%
Diesel Range C10 - C28	02-19-04	1.5507E-002	1.5492E-002	0.10%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Acceptable Range
Gasoline Range C5 - C10	3.5	3.4	2.9%	0 - 30%
Diesel Range C10 - C28	70.0	69.8	0.3%	0 - 30%

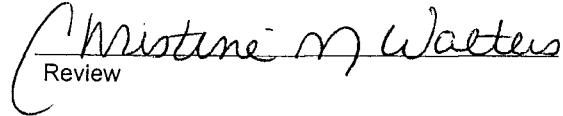
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Acceptable Range
Gasoline Range C5 - C10	3.5	250	253	99.8%	75 - 125%
Diesel Range C10 - C28	70.0	250	319	99.8%	75 - 125%

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: QA/QC for samples 28327 - 28334.


Alan C. O'Brien
Analyst


Christine M. Waters
Review

Client:	Blagg / IEI	Project #:	94034-010
Sample ID:	Pile 2	Date Reported:	04-09-04
Laboratory Number:	28327	Date Sampled:	04-07-04
Chain of Custody:	11991	Date Received:	04-07-04
Sample Matrix:	Soil	Date Analyzed:	04-09-04
Preservative:	Cool	Date Extracted:	04-08-04
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	37.6	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	48.9	2.2
o-Xylene	66.5	1.0
Total BTEX	153	

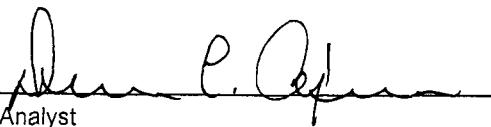
ND - Parameter not detected at the stated detection limit.

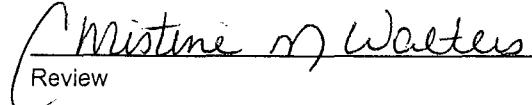
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	100 %
	1,4-difluorobenzene	100 %
	Bromochlorobenzene	100 %

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: Tierra Cell 5-Pt. Composite.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Blagg / IEI	Project #:	94034-010
Sample ID:	Pile 4	Date Reported:	04-09-04
Laboratory Number:	28328	Date Sampled:	04-07-04
Chain of Custody:	11991	Date Received:	04-07-04
Sample Matrix:	Soil	Date Analyzed:	04-09-04
Preservative:	Cool	Date Extracted:	04-08-04
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	71.1	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	22.5	2.2
o-Xylene	36.0	1.0
Total BTEX	130	

ND - Parameter not detected at the stated detection limit.

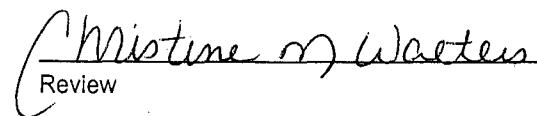
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	100 %
	1,4-difluorobenzene	100 %
	Bromochlorobenzene	100 %

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: Tierra Cell 5-Pt. Composite.


Analyst


Review

Client:	Blagg / IEI	Project #:	94034-010
Sample ID:	Pile 6	Date Reported:	04-09-04
Laboratory Number:	28329	Date Sampled:	04-07-04
Chain of Custody:	11991	Date Received:	04-07-04
Sample Matrix:	Soil	Date Analyzed:	04-09-04
Preservative:	Cool	Date Extracted:	04-08-04
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	104	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	2.5	2.2
o-Xylene	ND	1.0
Total BTEX	107	

ND - Parameter not detected at the stated detection limit.

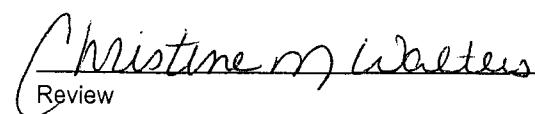
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	100 %
	1,4-difluorobenzene	100 %
	Bromochlorobenzene	100 %

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: Tierra Cell 5-Pt. Composite.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Blagg / IEI	Project #:	94034-010
Sample ID:	Pile 8	Date Reported:	04-09-04
Laboratory Number:	28330	Date Sampled:	04-07-04
Chain of Custody:	11991	Date Received:	04-07-04
Sample Matrix:	Soil	Date Analyzed:	04-09-04
Preservative:	Cool	Date Extracted:	04-08-04
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	38.5	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	ND	2.2
o-Xylene	ND	1.0
Total BTEX	38.5	

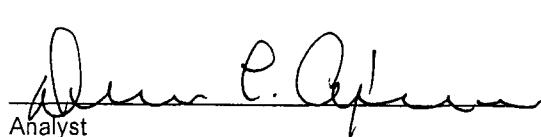
ND - Parameter not detected at the stated detection limit.

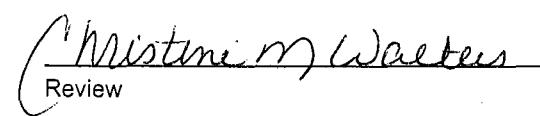
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	100 %
	1,4-difluorobenzene	100 %
	Bromochlorobenzene	100 %

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: Tierra Cell 5-Pt. Composite.


Allen C. Apes
Analyst


Christine M. Waeters
Review

Client:	Blagg / IEI	Project #:	94034-010
Sample ID:	Pile 10	Date Reported:	04-09-04
Laboratory Number:	28331	Date Sampled:	04-07-04
Chain of Custody:	11991	Date Received:	04-07-04
Sample Matrix:	Soil	Date Analyzed:	04-09-04
Preservative:	Cool	Date Extracted:	04-08-04
Condition:	Cool & Intact	Analysis Requested:	BTEX

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

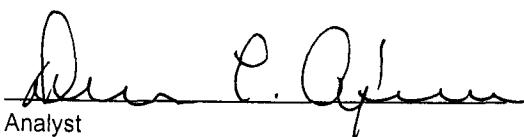
ND - Parameter not detected at the stated detection limit.

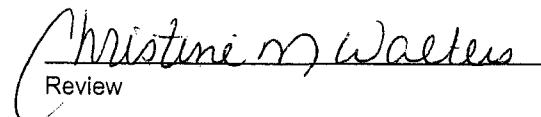
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	94 %
	1,4-difluorobenzene	94 %
	Bromochlorobenzene	94 %

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: Tierra Cell 5-Pt. Composite.


Analyst


Review

Client:	Blagg / IEI	Project #:	94034-010
Sample ID:	Pile 12	Date Reported:	04-09-04
Laboratory Number:	28332	Date Sampled:	04-07-04
Chain of Custody:	11991	Date Received:	04-07-04
Sample Matrix:	Soil	Date Analyzed:	04-09-04
Preservative:	Cool	Date Extracted:	04-08-04
Condition:	Cool & Intact	Analysis Requested:	BTEX

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

ND - Parameter not detected at the stated detection limit.

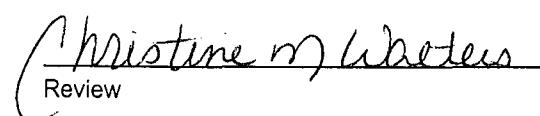
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	94 %
	1,4-difluorobenzene	94 %
	Bromochlorobenzene	94 %

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: Tierra Cell 5-Pt. Composite.


Analyst


Review

Client:	N/A	Project #:	N/A
Sample ID:	04-09-BTEX QA/QC	Date Reported:	04-09-04
Laboratory Number:	28327	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-09-04
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF	C-Cal RF	%Diff	Blank Conc	Detect Limit
Benzene	4.2776E-002	4.2905E-002	0.3%	ND	0.2
Toluene	4.8966E-002	4.9064E-002	0.2%	ND	0.2
Ethylbenzene	7.4036E-002	7.4259E-002	0.3%	ND	0.2
p,m-Xylene	6.8275E-002	6.8480E-002	0.3%	ND	0.2
o-Xylene	5.5866E-002	5.5978E-002	0.2%	ND	0.1

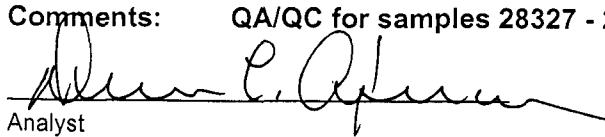
Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff	Accept Range	Detect Limit
Benzene	ND	ND	0.0%	0 - 30%	1.8
Toluene	37.6	36.8	2.1%	0 - 30%	1.7
Ethylbenzene	ND	ND	0.0%	0 - 30%	1.5
p,m-Xylene	48.9	50.8	3.9%	0 - 30%	2.2
o-Xylene	66.5	69.1	3.9%	0 - 30%	1.0

Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	50.0	50.0	100.0%	39 - 150
Toluene	37.6	50.0	87.5	99.9%	46 - 148
Ethylbenzene	ND	50.0	50.0	100.0%	32 - 160
p,m-Xylene	48.9	100	148	99.3%	46 - 148
o-Xylene	66.5	50.0	116	99.9%	46 - 148

ND - Parameter not detected at the stated detection limit.

References:
Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for samples 28327 - 28332.


Analyst


Review

CHAIN OF CUSTODY RECORD

11991

Client / Project Name		Project Location		ANALYSIS / PARAMETERS				
BLAES / IEI		TIERRA CELL						
Sampler: J. C. Stog		Client No. 94034-010						
Sample No./ Identification	Sample Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH 8015	BTEX 8021	Remarks
BLUE 2	4-7-04	0940	28327	SOL	1	X	X	5 - Rx. Composite
BLUE 4	11	0950	28328	11	1	X	X	11
BLUE 6	11	1000	28329	11	1	X	X	11
BLUE 8	11	1010	28330	11	1	X	X	11
BLUE 10	11	1025	28331	11	1	X	X	11
BLUE 12	11	1035	28332	11	1	X	X	11
Please Run BTX ONLY IF TPH < 100								
Relinquished by: (Signature)	Date	Time	Received by: (Signature)		Date	Time		
J. C. Stog	4/3/04	1400	John C. O'Brien		4/3/04	1400		
Relinquished by: (Signature)	Received by: (Signature)							
Relinquished by: (Signature)	Received by: (Signature)							
Sample Receipt								
				Y	N	N/A		
Received Intact				C				
Cool - Ice/Blue Ice				C				

ENVIROTECH INC.

5796 U.S. Highway 64
Farmington, New Mexico 87401
(505) 632-0615

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / IEI	Project #:	94034-010
Sample ID:	Pile #1	Date Reported:	04-03-04
Laboratory Number:	28276	Date Sampled:	03-31-04
Chain of Custody No:	11970	Date Received:	03-31-04
Sample Matrix:	Soil	Date Extracted:	04-01-04
Preservative:	Cool	Date Analyzed:	04-03-04
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

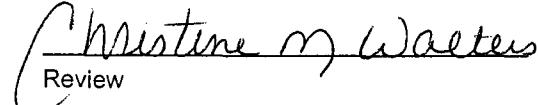
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1.1	0.2
Diesel Range (C10 - C28)	71.2	0.1
Total Petroleum Hydrocarbons	72.3	0.2

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: JFJ - Tierra Cell 5-Pt. Composite.


Analyst


Review

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

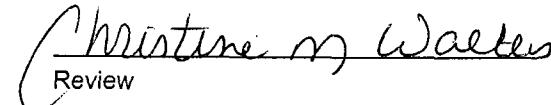
Client:	Blagg / IEI	Project #:	94034-010
Sample ID:	Pile #7	Date Reported:	04-03-04
Laboratory Number:	28279	Date Sampled:	03-31-04
Chain of Custody No:	11970	Date Received:	03-31-04
Sample Matrix:	Soil	Date Extracted:	04-01-04
Preservative:	Cool	Date Analyzed:	04-03-04
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	26.0	0.1
Total Petroleum Hydrocarbons	26.0	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: JFJ - Tierra Cell 5-Pt. Composite.


Aless C. Oliver
Analyst
Christine M. Waeters
Review

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Blagg / IEI	Project #:	94034-010
Sample ID:	Pile #9	Date Reported:	04-03-04
Laboratory Number:	28280	Date Sampled:	03-31-04
Chain of Custody No:	11970	Date Received:	03-31-04
Sample Matrix:	Soil	Date Extracted:	04-01-04
Preservative:	Cool	Date Analyzed:	04-03-04
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

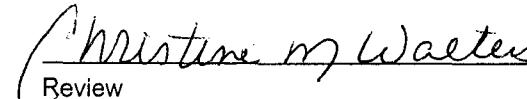
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	70.8	0.1
Total Petroleum Hydrocarbons	70.8	0.2

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: JFJ - Tierra Cell 5-Pt. Composite.


Dennis C. Apel
Analyst


Christine M. Waeters
Review

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

Client:	Blagg / IEI	Project #:	94034-010
Sample ID:	Pile #11	Date Reported:	04-03-04
Laboratory Number:	28281	Date Sampled:	03-31-04
Chain of Custody No:	11970	Date Received:	03-31-04
Sample Matrix:	Soil	Date Extracted:	04-01-04
Preservative:	Cool	Date Analyzed:	04-03-04
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)	55.7	0.1
Total Petroleum Hydrocarbons	55.7	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: JFJ - Tierra Cell 5-Pt. Composite.

A handwritten signature in black ink, appearing to read "Alan C. Ofen".
AnalystA handwritten signature in black ink, appearing to read "Christine M. Waller".
Review

EPA Method 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons**Quality Assurance Report**

Client:	QA/QC	Project #:	N/A
Sample ID:	04-03-TPH QA/QC	Date Reported:	04-03-04
Laboratory Number:	28276	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-03-04
Condition:	N/A	Analysis Requested:	TPH

	HCd Date	HCd RF	C-Cd RF	% Difference	Accept Range
Gasoline Range C5 - C10	02-19-04	1.8591E-002	1.8572E-002	0.10%	0 - 15%
Diesel Range C10 - C28	02-19-04	1.5507E-002	1.5492E-002	0.10%	0 - 15%

Blank Conc. (mg/L/mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

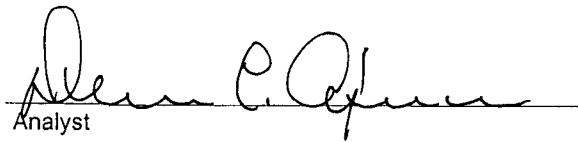
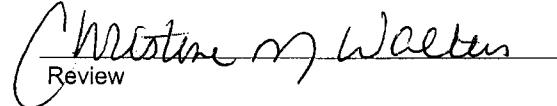
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept Range
Gasoline Range C5 - C10	1.1	1.1	0.0%	0 - 30%
Diesel Range C10 - C28	71.2	70.9	0.4%	0 - 30%

Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	1.1	250	251	99.8%	75 - 125%
Diesel Range C10 - C28	71.2	250	321	99.8%	75 - 125%

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: QA/QC for samples 28276 - 28283.


Analyst
Review

Client:	Blagg / IEI	Project #:	94034-010
Sample ID:	Pile #1	Date Reported:	04-03-04
Laboratory Number:	28276	Date Sampled:	03-31-04
Chain of Custody:	11970	Date Received:	03-31-04
Sample Matrix:	Soil	Date Analyzed:	04-03-04
Preservative:	Cool	Date Extracted:	04-01-04
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	6.2	1.8
Toluene	21.4	1.7
Ethylbenzene	43.9	1.5
p,m-Xylene	54.9	2.2
o-Xylene	34.3	1.0
Total BTEX	161	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	95 %
	1,4-difluorobenzene	95 %
	Bromochlorobenzene	95 %

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: JFJ - Tierra Cell 5-Pt. Composite.

Dennis L. O'Brien
 Analyst

Christine M. Walters
 Review

Client:	Blagg / IEI	Project #:	94034-010
Sample ID:	Pile #3	Date Reported:	04-03-04
Laboratory Number:	28277	Date Sampled:	03-31-04
Chain of Custody:	11970	Date Received:	03-31-04
Sample Matrix:	Soil	Date Analyzed:	04-03-04
Preservative:	Cool	Date Extracted:	04-01-04
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	56.2	1.7
Ethylbenzene	40.3	1.5
p,m-Xylene	68.2	2.2
o-Xylene	ND	1.0
Total BTEX	165	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	95 %
	1,4-difluorobenzene	95 %
	Bromochlorobenzene	95 %

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: JFJ - Tierra Cell 5-Pt. Composite.

Dennis P. Apel
Analyst
Christine M. Waeters
Review

Client:	Blagg / IEI	Project #:	94034-010
Sample ID:	Pile #5	Date Reported:	04-03-04
Laboratory Number:	28278	Date Sampled:	03-31-04
Chain of Custody:	11970	Date Received:	03-31-04
Sample Matrix:	Soil	Date Analyzed:	04-03-04
Preservative:	Cool	Date Extracted:	04-01-04
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	42.2	1.7
Ethylbenzene	38.3	1.5
p,m-Xylene	26.8	2.2
o-Xylene	18.1	1.0
Total BTEX	125	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	95 %
	1,4-difluorobenzene	95 %
	Bromochlorobenzene	95 %

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: JFJ - Tierra Cell 5-Pt. Composite.

Don C. Allen
Analyst

Christine M. Walters
Review

Client:	Blagg / IEI	Project #:	94034-010
Sample ID:	Pile #7	Date Reported:	04-03-04
Laboratory Number:	28279	Date Sampled:	03-31-04
Chain of Custody:	11970	Date Received:	03-31-04
Sample Matrix:	Soil	Date Analyzed:	04-03-04
Preservative:	Cool	Date Extracted:	04-01-04
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	ND	1.7
Ethylbenzene	14.3	1.5
p,m-Xylene	18.3	2.2
o-Xylene	1.2	1.0
Total BTEX	33.8	

ND - Parameter not detected at the stated detection limit.

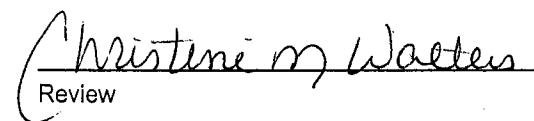
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	95 %
	1,4-difluorobenzene	95 %
	Bromochlorobenzene	95 %

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: JFJ - Tierra Cell 5-Pt. Composite.


Dennis E. Quinn
Analyst


Christine M. Waeters
Review

Client:	Blagg / IEI	Project #:	94034-010
Sample ID:	Pile #9	Date Reported:	04-03-04
Laboratory Number:	28280	Date Sampled:	03-31-04
Chain of Custody:	11970	Date Received:	03-31-04
Sample Matrix:	Soil	Date Analyzed:	04-03-04
Preservative:	Cool	Date Extracted:	04-01-04
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	69.1	1.7
Ethylbenzene	21.2	1.5
p,m-Xylene	32.4	2.2
o-Xylene	24.0	1.0
Total BTEX	147	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	95 %
	1,4-difluorobenzene	95 %
	Bromochlorobenzene	95 %

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: JFJ - Tierra Cell 5-Pt. Composite.

Aless E. Alfaro
Analyst

Christen M. Walters
Review

Client:	Blagg / IEI	Project #:	94034-010
Sample ID:	Pile #11	Date Reported:	04-03-04
Laboratory Number:	28281	Date Sampled:	03-31-04
Chain of Custody:	11970	Date Received:	03-31-04
Sample Matrix:	Soil	Date Analyzed:	04-03-04
Preservative:	Cool	Date Extracted:	04-01-04
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	ND	1.7
Ethylbenzene	39.1	1.5
p,m-Xylene	45.1	2.2
o-Xylene	ND	1.0
Total BTEX	84.2	

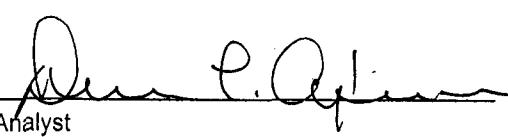
ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	96 %
	1,4-difluorobenzene	96 %
	Bromochlorobenzene	96 %

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: JFJ - Tierra Cell 5-Pt. Composite.


Alan P. Quinn
Analyst


Christine M. Walters
Review

Client:	N/A	Project #:	N/A
Sample ID:	04-03-BTEX QA/QC	Date Reported:	04-03-04
Laboratory Number:	28276	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-03-04
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF	G-Cal RF	%Diff Accept Range 0 - 15%	Blank Conc	Detect Limit
Benzene	4.2776E-002	4.2905E-002	0.3%	ND	0.2
Toluene	4.8966E-002	4.9064E-002	0.2%	ND	0.2
Ethylbenzene	7.4036E-002	7.4259E-002	0.3%	ND	0.2
p,m-Xylene	6.8275E-002	6.8480E-002	0.3%	ND	0.2
o-Xylene	5.5866E-002	5.5978E-002	0.2%	ND	0.1

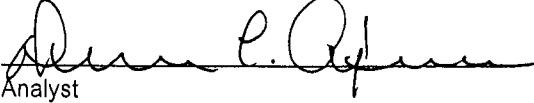
Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff	Accept Range	Detect Limit
Benzene	6.2	6.2	0.0%	0 - 30%	1.8
Toluene	21.4	21.0	1.9%	0 - 30%	1.7
Ethylbenzene	43.9	43.0	2.1%	0 - 30%	1.5
p,m-Xylene	54.9	54.3	1.1%	0 - 30%	2.2
o-Xylene	34.3	34.0	0.9%	0 - 30%	1.0

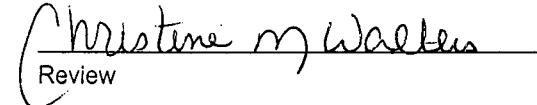
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	6.2	50.0	56.1	99.8%	39 - 150
Toluene	21.4	50.0	71.3	99.9%	46 - 148
Ethylbenzene	43.9	50.0	93.7	99.8%	32 - 160
p,m-Xylene	54.9	100	154	99.3%	46 - 148
o-Xylene	34.3	50.0	84.2	99.9%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for samples 28276 - 28283.


Analyst


Review

CHAIN OF CUSTODY RECORD

11970

Client / Project Name	Project Location	ANALYSIS / PARAMETERS			
BLACK / IEI	JFF - TIERRA CEL				
Sampler:					

Sample No./ Identification	Date	Sample Time	Lab Number	Sample Matrix	No. of Containers	TPH	BTEX	Remarks
PICE # 1	3/3/04	1125	28276	Soil	1	X	X	5 - Pt. Composite
PICE # 3	"	1135	28277	"	1	X	X	"
PICE # 5	"	1146	28278	"	1	X	X	"
PICE # 7	"	1156	28279	"	1	X	X	"
PICE # 9	"	1208	28280	"	1	X	X	"
PICE # 11	"	1217	28281	"	1	X	X	"

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Received by: (Signature)	Date	Time
J-C-S	3/3/04	1239	C. Mastine or Walker	3/3/04	1239	
Relinquished by: (Signature)			Received by: (Signature)			
Relinquished by: (Signature)			Received by: (Signature)			

ENVIROTECH Inc.

Sample Receipt

	Y	N	N/A
Received Intact	✓		
Cool - Ice/Blue Ice	✓		

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