NM1 - ____11

APPROVALS

YEAR(S):

2010

New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson Governor

Jim Noel Cabinet Secretary

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Karen W. Garcia Deputy Cabinet Secretary Mark Fesmire Division Director Oil Conservation Division



December 8, 2010

Kyle P. Kerr Envirotech, Inc. 5796 US Highway 64 Farmington, New Mexico 87401

 RE: Request for Approval to Reuse Remediated Soils for the Stabilization/Solidification of Drilling Mud, Tank Bottoms, and Sludge Envirotech, Inc.
 Commercial Landfarm #2: Permit NM-1-0011 Location: NW/4 Section 6, Township 26 North, Range 10 West, NMPM San Juan County, New Mexico

Dear Mr. Kerr:

The Oil Conservation Division (OCD) has reviewed Envirotech, Inc.'s (Envirotech) request, dated November 2, 2010 to remove approximately 15,000 cubic yards of remediated soils from **Cell 5**; stockpile in a designated bermed area; and utilize the remediated soils for the stabilization and/or solidification of incoming drilling mud, tank bottoms, and sludge. The analytical results provided in the request, demonstrates that Envirotech has remediated the contaminated soils within **Cell 5** to the concentration limits that would allow OCD the authority approval the application of additional lift.

OCD hereby grants Envirotech approval to reuse the remediated soils from **Cell 5** for the stabilization and/or solidification of incoming drilling mud, tank bottoms, and sludge with the following conditions:

Cell 5:

- Envirotech shall control blowing dust and reduce the potential of fugitive dust emissions while transferring the remediated soils from Cell 5 to the designated stockpile area. Pursuant Paragraph (6) of Subsection C of Section 15 of 19.15.36 NMAC, operational requirements regarding landfarms, Envirotech may "add moisture, as necessary," to the remediated soils "to control blowing dust."
- Envirotech shall complete a vadose zone monitoring/sampling event upon the removal of the remediated soils to the original native ground surface.

• If the remediated soils are removed in a phased approach, Envirotech shall complete a vadose zone monitoring/sampling event upon the removal of the remediated soils to the original native ground surface within each phase.

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Oil Conservation Division 1220 South St. Francis Drive • Santa Fe, New Mexico 87505 Phone (505) 476-3440 • Fax (505) 476-3462 • <u>www.emnrd.state.nm.us/OCD</u>

Envirotech, Inc. Commercial Landfarm #2 Permit NM-1-0011 December 8, 2010 Page 2 of 2

• Envirotech shall comply with the release response provision of Paragraph (5) of Subsection E of 19.15.36.15 NMAC, if "vadose zone sampling results show that the concentrations of TPH, BTEX or chlorides exceed the higher of the PQL or the background soil concentrations."

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• Envirotech shall obtain OCD approval prior to the placement and application of contaminated soils within Cell 5.

Stockpiling of Remediated Soils:

• Envirotech shall ensure that the area containing the stockpiled remediated soils be properly bermed to prevent the collection of surface water run-on and control storm water run-off.

• Envirotech shall ensure that no pooling or ponding of run-off water occur within the bermed stockpile area. Envirotech shall remove any ponding of precipitation within twenty-four (24) hours of discovery.

• Envirotech shall ensure that the stockpiled remediated soils do not exceed a height of six (6) feet.

• Envirotech shall control blowing dust and reduce the potential of fugitive dust emissions of the stockpiled remediated soils from leaving the surface waste management facility. Pursuant Paragraph (6) of Subsection C of Section 15 of 19.15.36 NMAC, operational requirements regarding landfarms, Envirotech may "add moisture, as necessary," to the stockpiled remediated soils "to control blowing dust." If necessary, OCD may require Envirotech to reduce the height of the stockpiled remediated soils to address fugitive dust emissions.

Please be advised that approval of this request does not relieve Envirotech of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve Envirotech of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or <u>brad.a.jones@state.nm.us</u>.

Sincerely

Brad A. Jones Environmental Engineer

BAJ/baj

Attachment: Facility Map (dated August 12, 2010)

cc: OCD District III Office, Aztec

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SCALE: 1=100' FIGURE NO. PROJECT NO. REVISIONS 19 5 ACRE CELL. NO. DATE BY DESCRIPTION MAP DRWN BWW 8-12-10 BASE DRWN CONTROLECT

5796 U.S. HIGHWAY 64, FARMINGTON, NM 87401 505-632-0615



November 2, 2010

Mr. Brad Jones New Mexico Oil Conservation District 1220 South St. Francis Drive Santa Fe, New Mexico 87505

203 MAY -3 P 2: 00

RE: Second Request for removal of remediated soil in Cell 5.

Dear Mr. Jones:

On August 12, we sent in a request to remove remediated soil from a five (5) acre cell from an area in Land Farm 2. This letter is to remind you of this request as we realize you have been extremely busy.

In reviewing the total cubic yardages in our five (5) acre cells we would like to request approval from the NMOCD to remove remediated soil from Cell 5 in Land Farm 2 and reuse it as blending stock.

Cell 5 presently contains 12,051 cubic yards of soil. In the effort to keep the remediation zone at an acceptable level of less than 15,000 cubic yards or less than 24", we do not want to add an additional layer of soil. Envirotech Inc proposes to remove approximately 12,100 cubic yards of remediated soil and stockpile it to be used as blending stock. The material will be stored in the bermed area in use for the current supply of blending stock. All of the remediated soil has been tested and has passed the NMOCD requirements for discontinued maintenance. As per Envirotech's OCD Rule 711 Permit Approval NM 01-0011 dated April 8, 2000 cell 5 has passed laboratory analysis with less than 100 ppm TPH, 50 ppm BTEX and 10 ppm Benzene. In addition, Envirotech has sampled for chlorides. Cell 5 was sampled using a five point composite protocol, results are attached. In addition the area designated for stockpiling is mapped as requested.

Envirotech Inc. anticipates the remediated material will be used for blending stock in the next five (5) years, however, that is not guaranteed, as we have no way to forecast the amount of material we will receive.

Envirotech Inc. respectfully requests expedition of this matter, in order that we may continue to serve the Four Corners region without interruption.

Thank you for your consideration in this matter. If you have any questions or require additional information, please do not hesitate to contact our office at (505) 632-0615.

Respectfully submitted,

Envirotech. Inc. Vie P. Kerr

Vice President, CHMM kpkerr@envirotech-inc.com

April E. Pohl

Land Farm Administrator apohl@envirotech-inc.com

AEP/Office/Corporate/LF/2ndLF2Cell5removalrequest/2010/11-2-10





Client:	Envirotech	Project #:	1-02-60001
Sample ID:	5	Date Reported:	08-05-10
Laboratory Number:	55396	Date Sampled:	08-02-10
Chain of Custody No:	10091	Date Received:	08-02-10
Sample Matrix:	Soil	Date Extracted:	08-04-10
Preservative:	Cool	Date Analyzed:	08-05-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	47.9	0.1
Total Petroleum Hydrocarbons	47.9	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: Land Farm 2 Closures

Analyst



EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

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Client:	QA/QC		Project #:		N/A
Sample ID:	08-05-10 QA/	QC	Date Reported:		08-05-10
Laboratory Number:	55425		Date Sampled:		N/A
Sample Matrix:	Methylene Chlo	ride	Date Received:		N/A
Preservative:	N/A		Date Analyzed:		08-05-10
Condition:	N/A		Analysis Reque	ested:	трн
er en la companya de la companya de La companya de la comp	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	05-07-07	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	9.9960E+002	1.0000E+003	0.04%	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	258	103%	75 - 125%
Diesel Range C10 - C28	ND	250	253	101%	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 55393-55397, 55410-55411, 55425, 55428 and 55431

Analyst



Client:	Envirotech	Project #:	1-02-60001
Sample ID:	5	Date Reported:	08-05-10
Laboratory Number:	55396	Date Sampled:	08-02-10
Chain of Custody:	10091	Date Received:	08-02-10
Sample Matrix:	Soil	Date Analyzed:	08-05-10
Preservative:	Cool	Date Extracted:	08-04-10
Condition:	Intact	Analysis Requested:	BTEX

		Det.	
	Concentration	Limit	
Parameter	<u>(ug/Kg)</u>	(ug/Kg)	

Benzene	ND	0.9	
Toluene	ND	1.0	
Ethylbenzene	ND	1.0	
p,m-Xylene	ND	1.2	
o-Xylene	ND	0.9	
Total BTEX	ND		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
······	Fluorobenzene	99.6 %
	1,4-difluorobenzene	103 %
	Bromochlorobenzene	101 %

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: Land Farm 2 Closures

Analyst



Client:	N/A	<i>.</i>	Project #:		N/A				
Sample ID:	0805BBLK QA/QC								
Laboratory Number:	55393	•	Date Sampled:		N/A				
Sample Matrix:	Soil		Date Received:	ł	N/A				
Preservative:	N/A		Date Analyzed:		08-05-10				
Condition:	N/A		Analysis:	1	BTEX				
Calibration and	I-Cal RF:	C-Cal RF:	%Diff.	Blank	Detect.				
Detection Limits (ug/L)	.7	Accept. Ran	ge 0 - 15%	Conc	Limit				
Benzene	1.0839E+006	1.0861E+006	0.2%	ND	0.1				
Toluene	1.2145E+006	1.2169E+006	0.2%	ND	0.1				
Ethylbenzene	1.0890E+006	1.0912E+006	0.2%	ND	0.1				
p,m-Xylene	2.7702E+006	2.7757E+006	0.2%	ND	0.1				
o-Xylene	9.8493E+005	9.8690E+005	0.2%	ND	0.1				
Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Rarige	Detect. Limit				
Benzene	ND	ND	0.0%	0 - 30%	0.9				
Toluene	ND	ND	0.0%	0 - 30%	1.0				
Ethylbenzene	ND	ND	0.0%	0 - 30%	1.0				
p,m-Xylene	ND	ND	0.0%	0 - 30%	1.2				
o-Xylene	ND	ND	0.0%	0 - 30%	0.9				
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample,	% Recovery	Accept Range				
Benzene	ND	50.0	50.5	101%	39 - 150				
Toluene	ND	50.0	50.3	101%	46 - 148				
Ethylbenzene	ND	50.0	49.4	98.8%	32 - 160				
p,m-Xylene	ND	100	99.4	99.4%	46 - 148				
				99.4% 46 - 148 97.7% 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 Hatogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 55393-55397, 55410-55411, 55428 and 55431

Analyst

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Chloride

Parameter		Concentration (mg	/Kġ)
Condition:	Intact	Chain of Custody:	10091
Preservative:	Cool	Date Analyzed:	08-04-10
Sample Matrix:	Soil	Date Received:	08-02-10
Lab ID#:	55396	Date Sampled:	08-02-10
Sample ID:	5	Date Reported:	08-04-10
Client:	Envirotech	Project #:	1-02-60001

Total Chloride

.

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Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Land Farm 2 Closures

thompon Analyst

CHAIN OF CUSTODY RECORD 10091

Client:				P	roject Name / L	ocation											ΔΝΔΪ	YSIS		PAR		FRS				
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New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson Governor

Jim Noel Cabinet Secretary

Karen W. Garcia Deputy Cabinet Secretary Mark Fesmire Division Director Oil Conservation Division

December 8, 2010

Kyle P. Kerr Envirotech, Inc. 5796 US Highway 64 Farmington, New Mexico 87401 SULL OF NEW MEADO

RE: Request for Approval to Apply a Successive Lift Envirotech, Inc. Commercial Landfarm #2: Permit NM-1-0011 Location: NW/4 Section 6, Township 26 North, Range 10 West, NMPM San Juan County, New Mexico

Dear Mr. Kerr:

The Oil Conservation Division (OCD) has reviewed Envirotech, Inc.'s (Envirotech) request, dated November 2, 2010 to grant approval to apply an additional six-inch lift to the following cell(s): Cells 21, 22, 23, 25, and 27.

Based upon the analytical results provided, OCD hereby grants Envirotech approval to apply an additional six-inch lift of contaminated soils to the above referenced landfarm cell(s). Envirotech shall ensure that the application of an additional six-inch lift of contaminated soils to the above referenced landfarm cells *does not exceed the maximum thickness of two feet or 3000 cubic yards per acre limit* as specified in 19.15.36.15 NMAC. The "parameter for cubic yardages of 15,000 or less to be applied in each five (5) acre cell," as stated in the November 2, 2010 request, is not equivalent to the regulatory requirement is identified above. *It is OCD's understand, from conversations with Mr. Kyle Kerr, that <u>the thickness of each cell would be measured</u> and <i>confirmed during the next vadose zone sampling event.* Please provide the thickness in future requests. Also, please note that with the addition of successive lifts Envirotech must initiate treatment zone monitoring and resume vadose zone monitoring. The vadose zone monitoring depth must be adjusted to reach the 2-3 foot zone below the original native ground surface.

Please be advised that approval of this request does not relieve Envirotech of liability should operations result in pollution of surface water, ground water or the environment. Nor does

Oil Conservation Division 1220 South St. Francis Drive - Santa Fe, New Mexico 87505 Phone (505) 476-3440 - Fax (505) 476-3462 - <u>www.emnrd.state.nm.us/OCE</u> Envirotech, Inc. Commercial Landfarm #2 Permit NM-1-0011 December 8, 2010 Page 2 of 2

approval relieve Envirotech of its responsibility to comply with any other applicable governmental authority's rules and regulations.

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If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or <u>brad.a.jones@state.nm.us</u>.

Sincerely,

Brad A. Jones Environmental Engineer

BAJ/baj

Attachment: Facility Map (Revision Date: December 7, 2009)

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cc: OCD District III Office, Aztec





November 2, 2010

Mr. Brad Jones New Mexico Oil Conservation District 1220 South St. Francis Drive Santa Fe, New Mexico 87505

RE: ENVIROTECH'S LANDFARM #2 DISCONTINUED MAINTENANCE AND ADDITIONAL LIFT FOR CELLS 21, 22, 23, 25 AND 27 IN LANDFARM 2 UNIT 4.

Dear Mr. Jones:

Attached please find analytical documentation supporting our request for discontinued maintenance at Envirotech's Land Farm #2 Unit 4, for cells 21, 22, 23, 25 AND 27 located near Hilltop, New Mexico. The area being submitted is shown on the attached map, marked by blue crosshatch design. As per Envirotech's OCD Rule 711 Permit Approval NM 01-0011 dated April 8, 2000 all cells being requested for discontinued maintenance have passed laboratory analysis of less than 100 ppm TPH, 50 ppm BTEX and 10 ppm Benzene. In addition, Envirotech has sampled for chlorides. As stated in the treatment zone monitoring portion of Envirotech's permit, no cell sampled was larger than five acres. Samples were five-point composites. Remediation zone layers averaged 6" in depth, results available upon request.

The blue cells (21, 22, 23, 25 AND 27) have passed analysis for total petroleum hydrocarbons, benzene, toluene, ethylbenzene and total xylenes (see attached laboratory results). Envirotech hereby requests these cells be granted discontinued maintenance status and approval to apply an additional lift of qualifying material to these cells.

Given the parameter for cubic yardages of 15,000 or less to be applied in each five (5) acre cell, we are happy to provide the following cubic yard amounts in each cell up to this time:

Cell 21: 7,708 cy	Cell 22: 5,418 cy	Cell 23: 6,651 cy
Cell 25: 7,606 cy	Cell 27: 6,492 cy	

Due to the unusually large amounts of contaminated soil Envirotech has accepted recently, our Land Farm #2 suffers limited space constraints. Envirotech respectfully requests expedition of this matter that to serve the Four Corners region without interruption.

Thank you for your consideration in this matter. If you have any questions or require additional information, please do not hesitate to contact our office at (505) 632-0615.

Respectfully submitted,

Envirotech. le P. Keri

Vice President/CHMM kpkerr@envirotech-inc.com

April E. Pøhl / Landfarm Administrator apohl@envirotech-inc.com

AEP/Office/Corporate/LF/Closure&added lift/11-2-10

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Client:	Envirotech	Project #:	1-02-60001
Sample ID:	23	Date Reported:	10-04-10
Laboratory Number:	55981	Date Sampled:	09-27-10
Chain of Custody No:	10411	Date Received:	09-27-10
Sample Matrix:	Soil	Date Extracted:	09-30-10
Preservative:	Cool	Date Analyzed:	10-01-10
Condition:	Intact	Analysis Requested:	8015 TPH

		Det.
	Concentration	Limit
Parameter	(mg/Kg)	(mg/Kg)

Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	6.4	0.1
Total Petroleum Hydrocarbons	6.4	

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: Land Farm 2 Unit 4 Closures

Analyst

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Review



Client:	Envirotech	Project #:	1-02-60001
Sample ID:	22	Date Reported:	10-04-10
Laboratory Number:	55982	Date Sampled:	09-27-10
Chain of Custody No:	10411	Date Received:	09-27-10
Sample Matrix:	Soil	Date Extracted:	09-30-10
 Preservatives 	Cool	Date Analyzed:	10-01-10
Condition: Statistic Level 1.	Intact	Analysis Requested:	8015 TPH

Concernation Parameter	1	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)		0.6	0.2
Diesel Range (C10 - C28)		4.0	0.1
Total Petroleum Hydrocarbons		4.6	

the state ND - Parameter not detected at the stated detection limit.

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

Sectors comments: Land Farm 2 Unit 4 Closures

Analyst



Client:	Envirotech	Project #:	1-02-60001
Sample ID:	21	Date Reported:	10-04-10
Laboratory Number:	55983	Date Sampled:	09-27-10
Chain of Custody No:	10411	Date Received:	09-27-10
Sample Matrix:	Soil	Date Extracted:	09-30-10
Preservative:	Cool	Date Analyzed:	10-01-10
Condition:	Intact	Analysis Requested:	8015 TPH

	1 m		Det.
· 「「「「」」」、「「」」、「」、「」、「」、「」、「」、「」、「」、「」、「」、	*. ····	Concentration	Limit
Parameter		(mg/Kg)	(mg/Kg)

Gasoline Range (C5 - C10)		ND	0.2
Diesel Range (C10 - C28)	1 ¹⁰	ND	0.1
Total Petroleum Hydrocarbons		ND	

enables (at ND - Parameter not detected at the stated detection limit.

SW-846, USEPA, December 1996.

Comments: Land Farm 2 Unit 4 Closures

Analyst

Review

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Client:	Envirotech	Project #:	1-02-60001
Sample ID:	25	Date Reported:	10-04-10
Laboratory Number:	55984	Date Sampled:	09-27-10
Chain of Custody No:	10411	Date Received:	09-27-10
Sample Matrix:	Soil	Date Extracted:	09-30-10
Preservative:	Cool	Date Analyzed:	10-01-10
Condition:	Intact	Analysis Requested:	8015 TPH

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

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: Land Farm 2 Unit 4 Closures

Analyst

Review



Client:	Envirotech	Project #:	1-02-60001
Sample ID:	27	Date Reported:	10-04-10
Laboratory Number:	55985	Date Sampled:	09-27-10
Chain of Custody No:	10411	Date Received:	09-27-10
Sample Matrix:	Soil	Date Extracted:	09-30-10
Preservative:	Cool	Date Analyzed:	10-01-10
Condition:	Intact	Analysis Requested:	8015 TPH

		Det.
	Concentration	Limit
Parameter	(mg/Kg)	(mg/Kg)

Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	

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: Land Farm 2 Unit 4 Closures

Analyst

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Quality Assurance Report

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Client:	QA/QC		Project #:		N/A
Sample ID:	10-01-10 QA/0	C	Date Reported:		10-04-10
Laboratory Number:	55981		Date Sampled:		N/A
Sample Matrix:	Methylene Chlor	ride	Date Received:		N/A
Preservative:	N/A		Date Analyzed:		10-01-10
Condition:	N/A		Analysis Request	ted:	TPH
	l-Cal Dale		C-Calire	% Difference	Accept Range
Gasoline Range C5 - C10	10-01-10	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	10-01-10	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Blank Cone. (mg/Lemg/Kc)		Concentration		Detection Lin	Ē.
Gasoline Range C5 - C10		ND		0.2	—
Diesel Range C10 - C28		ND		0.1	
Total Petroleum Hydrocarbons		ND			
		ND			
					~
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accepterange	
Duplicate Conc. (mg/Kg) Gasoline Range C5 - C10	Sample ND		%Difference // 0.0%	AccepteRange 0 - 30%	
		Duplicate			
Gasoline Range C5 - C10 Diesel Range C10 - C28	ND 6.4	Duplicate ND 6.3	0.0% 1.6%	0 - 30% 0 - 30%	
Gasoline Range C5 - C10 Diesel Range C10 - C28 Spike Conc((mg/Kg))	ND	ND ND	0.0% 1.6%	0 - 30%	
Gasoline Range C5 - C10 Diesel Range C10 - C28	ND 6.4	Duplicate ND 6.3	0.0% 1.6%	0 - 30% 0 - 30%	

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 55981-55985, 56008-56011

-N



Total BTEX		ND			
o-Xylene		ND		0.9	
p,m-Xylene		ND		1.0	
Ethylbenzene		ND		1.0	
Toluene		ND		1.0	
Benzene		ND		0.9	
Parameter		(ug/Kg)		(ug/Kg)	
		Concentration		Limit	
		_		Det.	
			Dilution:		10
Condition:	Intact		Analysis Requested:		BTEX
Preservative:	Cool		Date Extracted:		09-30-10
Sample Matrix:	Soil		Date Analyzed:		09-30-10
Chain of Custody:	10411		Date Received:		09-27-10
Laboratory Number:	55981		Date Sampled:		09-27-10
Sample ID:	23		Date Reported:		10-06-10
Client:	Envirotech		Project #:		1-02-60001

ND - Parameter not detected at the stated detection limit.

Surrogate Recovéries:	Parameter	Percent Recovery
	Fluorobenzene	90.8 %
	1,4-difluorobenzene	86.0 %
	Bromochlorobenzene	91.2 %

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: Land Farm 2 Unit 4 Closures

Analyst



Client:	Envirotech		Project #:	1-02-60001	I
Sample ID:	22		Date Reported:	10-06-10	
Laboratory Number:	55982		Date Sampled:	09-27-10	
Chain of Custody:	10411		Date Received:	09-27-10	
Sample Matrix:	Soil		Date Analyzed:	09-30-10	
Preservative:	Cool		Date Extracted:	09-30-10	
Condition:	Intact		Analysis Requested:	BTEX	
			Dilution:	10	
				Det.	
		Concentration		Limit	
Parameter		(ug/Kg)		(ug/Kg)	
Benzene		ND		0.9	
Toluene		ND		1.0	
Ethylbenzene		ND		1.0	
p,m-Xylene		ND		1.2	
o-Xylene		ND		0.9	
Total BTEX		ND			

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	85.8 %
	1,4-difluorobenzene	78.2 %
	Bromochlorobenzene	88.2 %

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: Land Farm 2 Unit 4 Closures



Client:	Envirotech		Project #:		1-02-60001
Sample ID:	21		Date Reported:		10-06-10
Laboratory Number:	55983		Date Sampled:		09-27-10
Chain of Custody:	10411		Date Received:		09-27-10
Sample Matrix:	Soil		Date Analyzed:		09-30-10
Preservative:	Cool		Date Extracted:		09-30-10
Condition:	Intact		Analysis Requested:		BTEX
			Dilution:		10
n in se		Concentration		Det. Limit	
Parameter		(ug/Kg)		(ug/Kg)	
Benzene		ND		0.9	
		ND ND		0.9 1.0	
Toluene					
-		ND		1.0	
		ND ND		1.0 1.0	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	96.7 %
	1,4-difluorobenzene	92.6 %
	Bromochlorobenzene	93.1 %

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: Land Farm 2 Unit 4 Closures

Analyst



Client:	Envirotech		Project #:		1-02-60001
Sample ID:	25		Date Reported:		10-06-10
Laboratory Number:	55984		Date Sampled:		09-27-10
Chain of Custody:	10411		Date Received:		09-27-10
Sample Matrix:	Soil		Date Analyzed:		09-30-10
Preservative:	Cool		Date Extracted:		09-30-10
Condition:	Intact		Analysis Requested:		BTEX
			Dilution:		10
				Det.	
· · · ·		Concentration		Limit	
Parameter		(ug/Kg)		(ug/Kg)	
Benzene	,	ND		0.9	
Toluene	·	ND		1.0	
Ethylbenzene		ND		1.0	
p,m-Xylene		ND		1.2	
o-Xylene		ND		0.9	
-					
Total BTEX		ND			

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	88.7 %
	Bromochlorobenzene	95.7 %

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: Land Farm 2 Unit 4 Closures

Analyst



Client:	Envirotech		Project #:		1-02-60001
Sample ID:	27		Date Reported:		10-06-10
Laboratory Number:	55985		Date Reported.		09-27-10
Chain of Custody:	10411		Date Received:		09-27-10
Sample Matrix:	Soil	,	Date Analyzed:		09-30-10
Preservative:	Cool		Date Extracted:		09-30-10
Condition:	Intact		Analysis Requested:		BTEX
,			Dilution:		10
Parameter		Concentration (ug/Kg)		Det. Limit (ug/Kg)	
Benzene Toluene		ND ND		0.9 1.0	
Ethylbenzene		ND		1.0	
p,m-Xylene		ND		1.2	
o-Xylene		ND		0.9	
Total BTEX		ND			

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.1 %
	1,4-difluorobenzene	84.3 %
	Bromochlorobenzene	95.2 %

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: Land Farm 2 Unit 4 Closures

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Analyst



Client: Sample ID: Laboratory Number: Sample Matrix: Preservative: Condition:	N/A 0930BBLK QA/QC 55981 Soil N/A N/A		Project #: Date Reported: Date Sampled: Date Received: Date Analyzed: Analysis:	1 1 0 8	N/A 10-06-10 N/A N/A 99-30-10 BTEX
Callbration and	l-CaliRF 8	C Cal RF Accept Ran		1 Blank Conce	o Detect, * Unit
Benzene Toluene Ethylbenzene	4.7025E+006 4.0356E+006 3.0406E+006	4.7119E+006 4.0437E+006 3.0467E+006	0.2% 0.2% 0.2%	ND ND ND	0.1 0.1 0.1
p,m-Xylene o-Xylene	7 3692E+006 2.7144E+006	7.3840E+006 2.7198E+006	0.2% 0.2%	ND ND	0.1 0.1
Duplicate Conc (ug/Kg)	ND ND ND ND ND ND ND	ND ND ND ND ND ND ND ND	0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	Accept/Range 0 - 30% 0 - 30% 0 - 30% 0 - 30% 0 - 30%	0.9 1.0 1.0 1.2 0.9
Spike/Conc: (ug/Kg)	Sampler	AmountiSpiked	Spiked Sample.	% Recovery *	Acceptinance
Benzene	ND	500	479	95.8%	39 - 150
Toluene	ND	500	546	109%	46 - 148
Ethylbenzene	ND	500	438	87.5%	32 - 160
p,m-Xylene	ND	1000	935	93.5%	46 - 148
o-Xylene	ND	500	459	91.7%	46 - 148

ND - Parameter not detected at the stated detection limit.

Dilution: Spike and spiked sample concentration represent a dilution proportional to sample dilution.

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.

QA/QC for Samples 55981-55985 Comments: Analyst

Review



Total Chloride

Chloride

340

Parameter		Concentration (mg/Kg)						
		chan of outday.	10411					
Condition:	Intact	Chain of Custody:	10411					
Preservative:	Cool	Date Analyzed:	09-29-10					
Sample Matrix:	Soil	Date Received:	09-27-10					
Lab ID#:	55981	Date Sampled:	09-27-10					
Sample ID:	23	Date Reported:	09-29-10					
Client:	Envirotech	Project #:	1-02-60001					

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Land Farm 2 Unit 4 Closures

Analyst

LM



Total Chloride

Chloride

80

Parameter		Concentration (mg	/Kg)
		,	
Condition: Intact		Chain of Custody:	10411
Preservative:	Cool	Date Analyzed:	09-29-10
Sample Matrix:	Soil	Date Received:	09-27-10
Lab ID#:	55982	Date Sampled:	09-27-10
Sample ID:	22	Date Reported:	09-29-10
Client:	Envirotech	Project #:	1-02-60001

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Land Farm 2 Unit 4 Closures

Analyst



Chloride

Parameter		Concentration (mg/Kg)						
Condutori.	mact	Chain of Custody:	10411					
Condition:	Intact	•						
Preservative:	Cool	Date Analyzed:	09-29-10					
Sample Matrix:	Soil	Date Received:	09-27-10					
Lab ID#:	55983	Date Sampled:	09-27-10					
Sample ID:	21	Date Reported:	09-29-10					
Client:	Envirotech	Project #:	1-02-60001					

Total Chloride

60

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Land Farm 2 Unit 4 Closures

Analyst



Chloride

Client:	Envirotech	Project #:	1-02-60001		
Sample ID:	25	Date Reported:	09-29-10		
Lab ID#:	55984	Date Sampled:	09-27-10		
Sample Matrix:	Soil	Date Received:	09-27-10		
Preservative:	Cool	Date Analyzed:	09-29-10		
Condition:	Intact	Chain of Custody:	10411		

Parameter

Concentration (mg/Kg)

Total Chloride

95

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Land Farm 2 Unit 4 Closures

Analyst



Chloride

Total Chloride	_	45						
Parameter		Concentration (mg/Kg)						
o onakioni	index	chain of outdouy.	10411					
Condition:	Intact	Chain of Custody:	10411					
Preservative:	Cool	Date Analyzed:	09-29-10					
Sample Matrix:	Soil	Date Received:	09-27-10					
Lab ID#:	55985	Date Sampled:	09-27-10					
Sample ID:	27	Date Reported:	09-29-10					
Client:	Envirotech	Project #:	1-02-60001					

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Land Farm 2 Unit 4 Closures

Analyst

CHAIN OF CUSTODY RECORD

10411

Client: Project Name / Location Enviro Tech Land Form 2					Name / Location: d Farme Unit of Clorones ANALYSIS/PARAMETERS																			
tu VILO	fech		hand to	cm2	Unil	4		570	<u>, н</u>	Y														
Client Address:			Sampler Name:							K _G	Xa	(ĵ										•		
]	Client No.:	bord	cía Z	20~	ee,			801	d 80	826	s											
Client Phone No.:			Client No.:			(pou	itho	poq	leta	nion	\ .	Ĩ		(1)	ш				Cool	Itact
			1-02-	600	01					TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion		TCLP with H/P		TPH (418.1)	CHLORIDE			i	le O	Sample Intact
Sample No./	Sample			S	ample		olume			н Н	Ĕ) N	CRA	atior	5	LP L	PAH	н Н	FC				Sample (amp
Identification	Date	Time			Matrix	Cont	ainers	HgCl ₂ H	a g	Ĕ	<u></u>	×	Ĕ	Ö	RCI	¥	à	F	ō				<u>ö</u>	<u>ő</u>
23	9/22/1	015:30	55981	Solid	Sludge Aqueous	Æ.	oz		Κ	$\left[\right] $	X			 					\times				<u>K</u> ,	\succ
22		15:45	55982	Solid	Sludge Aqueous				K	$\left \right $	X								λ				\wedge	X
21			\$ 55983	Solid	Sludge Aqueous				X	\langle	X					1			ア				\times	x
25		16:15	55984	Solid	Sludge Aqueous				X	X	\wedge								\times				Z	$\overset{'}{\mathcal{K}}$
27	L		55985	Soil	Sludge Aqueous	-			×	$\overline{\mathbf{x}}$	K								$\left \right\rangle$				\mathcal{X}	X
				Soil Solid	Sludge Aqueous				1															
		1		Soil Solid	Sludge Aqueous				-															
		+		Soil Solid	Sludge Aqueous																			:
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				Soil Solid	Sludge Aqueous				-															
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			5796 U	S Highwa	y 64 • Farmin	gton, I	NM 874	101 • !	505-63	32-061	5 • la	b@en	viroteo	h-inc.a	com									

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New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson Governor

Jim Noel Cabinet Secretary

Karen W. Garcia Deputy Cabinet Secretary Mark Fesmire Division Director Oil Conservation Division



September 28, 2010

Kyle P. Kerr Envirotech, Inc. 5796 US Highway 64 Farmington, New Mexico 87401

RE: Clearance Completion Notification/Demonstration for Cell 28 Envirotech, Inc. Commercial Landfarm #2: Permit NM-1-0011 Location: NW/4 Section 6, Township 26 North, Range 10 West, NMPM San Juan County, New Mexico

Dear Mr. Kerr:

The Oil Conservation Division (OCD) has reviewed Envirotech, Inc.'s (Envirotech) demonstration and request, dated September 20, 2010 to demonstrate that after the removal of all remediated soils from Cell 28 for the stabilization and/or solidification of incoming drilling mud, tank bottoms, and sludge the landfarm operations did not contaminate the vadose zone and to grant approval to apply a six-inch lift of petroleum hydrocarbon-contaminated soils for remediation to the following cell(s): Cell 28.

Based upon the analytical results provided, OCD hereby grants Envirotech approval to apply an additional six-inch lift of contaminated soils to the above referenced landfarm cell(s). Please note that by applying a six-inch lift of petroleum hydrocarbon-contaminated soils for remediation to Cell 28 Envirotech must re-initiate treatment zone monitoring and resume vadose zone monitoring. The vadose zone monitoring depth must be 2-3 foot zone below the original native ground surface.

Please be advised that approval of this request does not relieve Envirotech of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve Envirotech of its responsibility to comply with any other applicable governmental authority's rules and regulations.

Oil Conservation Division 1220 South St. Francis Drive • Santa Fe, New Mexico 87505 Phone-(505)-476=3440----Eax-(505)-476-3462-•-<u>www-emnrd-state-nm-us/@GD</u>.


Envirotech. Inc. Commercial Landfarm #2 Permit NM-1-0011 September 28, 2010 Page 2 of 2

.

If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or <u>brad.a.jones@state.nm.us</u>.

Sincerely,

Brad A. Jones Environmental Engineer

BAJ/baj

Attachment: Facility Map (Revision Date: August 12, 2010)

cc: OCD District III Office, Aztec





September 20, 2010

Mr. Brad Jones New Mexico Oil Conservation District 1220 South St. Francis Drive Santa Fe, New Mexico 87505

RE: Clearance completion notification for Cell 28, Landfarm 2, Envirotech Inc.

Dear Mr. Jones:

Envirotech Inc. is pleased to confirm the completion of the clearance of remediated soil from Cell 28, Landfarm 2 located near Hilltop, New Mexico.

Over the span of several months spanning January 11 to June 8, 2010 the clearing of the remediation zone on Cell 28 was completed. We anticipated removing at least 14,765 cubic yards. A total of 14, 995 cubic yards of remediated soil were removed, down to the native soil. We used the guidelines provided by the NMOCD, staging the soil to be reused in the appropriate manner, no more than six (6) feet high and controlled to prevent fugitive dust emissions.

As per Envirotech's OCD Rule 711 Permit Approval NM 01-0011 dated April 8, 2000 cell 28 has passed laboratory analysis for background standards, proven by a vadose sampling as stated on the Chain of Custody form dated 9-15-10. In addition, Envirotech has sampled for chlorides. Cell 28 was sampled using a five point composite protocol, artist's rendition attached. Also, pursuant to our phone conversation of September 8, I have attached a copy of the first background sampling event in this area of Landfarm 2 Unit 5, done on October 8, 1993.

As Envirotech has successfully completed the removal, we respectfully request permission to begin using this area for a new application of soil to be remediated. As per normal procedure each layer of soil applied will be six inches or less in depth and the remediation process will begin anew.

Thank you for your consideration in this matter. If you have any questions or require additional information, please do not hesitate to contact our office at (505) 632-0615.

Respectfully submitted Envirotech. In

Kyle P. Kerr

Vice President/CHMM kpkerr@envirotech-inc.com

April E. Pohl / Landfarm Administrator <u>apohl@envirotech-inc.com</u>

AEP/Office/Corporate/LF/LF2cell28clearance/2010/9-20-10





EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

:"

Client:	Envirotech	Project #:	1-02-60001
Sample ID:	28	Date Reported:	09-15-10
Laboratory Number:	55855	Date Sampled:	09-14-10
Chain of Custody No:	10351	Date Received:	09-14-10
Sample Matrix:	Soil	Date Extracted:	09-14-10
Preservative:	Cool	Date Analyzed:	09-15-10
Condition:	Intact	Analysis Requested:	8015 TPH

		Det.
	Concentration	Limit
Parameter	(mg/Kg)	(mg/Kg)

Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	ND	

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: Land Farm 2 Unit 5 Background Vadose Sampling (per April Pohl 9/14/10) Sample collected 24"-36" below the treatment zone

Analyst

Review



EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

2

Quality Assurance Report

Client:	QA/QC		Project #:		N/A
Sample ID:	09-15-10 QA/0	2C	Date Reported:		09-15-10
Laboratory Number:	55845		Date Sampled:		N/A
Sample Matrix:	Methylene Chlor	ide	Date Received:		N/A
Preservative:	N/A		Date Analyzed:		09-15-10
Condition:	N/A		Analysis Reques	ted:	TPH
	I-Cal Date	l⊧©aliRP:	CiCal RF	% Difference	Accept, Range
Gasoline Range C5 - C10	09-15-10	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	09-15-10	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Blank(Conc. (mg/L=mg/Kg))		Concentration		DetectionLim	it
Gasoline Range C5 - C10		ND		0.2	
Diesel Range C10 - C28		ND		0.1	
Total Petroleum Hydrocarbons		ND			
ene and all the second s			and the second of the second secon		2121
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%	
and which you have a subject of the					
Spike Conc. (mg/Kg)	Sample	Spike Added.	Spike Result	%Recovery	Accept Range
Gasoline Range C5 - C10	ND	250	255	102%	75 - 125%
Diesel Range C10 - C28	ND	250	252	101%	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 55845-55846, 55849-55851, 55855-55858

Analyst

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Review



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Envirotech		Project #:		1-02-60001
Sample ID:	28		Date Reported:		09-15-10
Laboratory Number:	55855		Date Sampled:		09-14-10
Chain of Custody:	10351		Date Received:		09-14-10
Sample Matrix:	Soil		Date Analyzed:		09-15-10
Preservative:	Cool		Date Extracted:		09-14-10
Condition:	Intact		Analysis Requested:		BTEX
			Dilution:		10
Parameter		Concentration (ug/Kg)		Det. Limit (ug/Kg)	
Benzene Toluene		ND		0.9	
Ethylbenzene		ND ND		1.0 1.0	
p,m-Xylene		ND		1.2	
o-Xylene		ND		0.9	
Total BTEX		ND			

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery				
	Fluorobenzene	105 %				
	1,4-difluorobenzene	99.4 %				
	Bromochlorobenzene	103 %				

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: Land Farm 2 Unit 5 Background Vadose Sampling (per April Pohl 9/14/10) Sample collected 24"-36" below the treatment zone

Analyst

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Review



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

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Client: Sample ID: Laboratory Number: Sample Matrix: Preservative: Condition: Callbration (and Detection Limits (ug/L)	N/A 0915BBLK QA/QC 55845 Soil N/A N/A	C-Cal/RF.	Project #: Date Reported: Date Sampled: Date Received: Date Analyzed: Analysis: Dilution: %Diff Qe:0-4/5%		N/A 09-15-10 N/A N/A 09-15-10 BTEX 10 Detect Limit
Terrenting () - Constant Constant Sector () -		n a linn an a		/*##721241001_49672 ^{**} ******	n an
Benzene	3 7083E+006	3.7158E+006	0.2%	ND	0.1
Toluene	1.8075E+006	1.8111E+006	0.2%	ND	0.1
Ethylbenzene	1.4413E+006	1.4442E+006	0.2%	ND	0.1
p,m-Xylene o-Xylene	2.8355E+006 9.7261E+005	2.8411E+006 9.7456E+005	0.2% 0.2%	ND ND	0.1 0.1
Duplicate Conc! (Ug/Kg)					
Benzene	ND	ND	0.0%	0 - 30%	0.9
Toluene	ND	ND	0.0%	0 - 30%	1.0
Ethylbenzene	ND	ND	0.0%	0 - 30%	1.0
p,m-Xylene	ND	ND	0.0%	0 - 30%	1.2
o-Xylene	ND	ND	0.0%	0 - 30%	0.9
Spike Conc. (ug/Kg) Benzene Toluene Ethylbenzene p,m-Xylene o-Xylene	Sample of the ND ND ND ND ND ND	Amount Spiked 500 500 500 1000 500	Spiked Samples 493 501 498 1,000 500	98.7% 98.7% 100% 99.6% 100% 100%	39 - 150 46 - 148 32 - 160 46 - 148 46 - 148 46 - 148

ND - Parameter not detected at the stated detection limit.

Dilution: Spike and spiked sample concentration represent a dilution proportional to sample dilution.

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.

QA/QC for Samples 55845-55846, 55851-55858 Comments:

Analyst

Review



Chloride

Parameter		Concentration (mg/Kg)				
	Intact	Chain of Custody:	10351			
Condition:	Cool Intact	Date Analyzed:	09-15-10			
Preservative:						
Sample Matrix:	Soil	Date Received:	09-14-10			
Lab ID#:	55855	Date Sampled:	09-14-10			
Sample ID:	28	Date Reported:	09-15-10			
Client:	Envirotech	Project #:	1-02-60001			

Total Chloride

85

Reference:	U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Land Farm 2 Unit 5 Background Vadose Sampling (per April Pohl 9/14/10) Sample collected 24"-36" below the treatment zone

Analyst

64

Review

CHAIN OF CUSTODY RECORD

10351

Client:			Project Name / I LandFa Sampler Name: Iandfa Client No.: I - 0 2 e Lab No.	ocation	:	, , , , , , , , , , , , , , , , , , , ,	sad	loș	e	Jan	pļi	ig P	ert	xpri	∖_{∕ ANAL	YSIS.	/ PAR	AME	FERS	,				
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Client Address:			Sampler Name:			~		/		5)	21)	Ô												
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			5796 US	S Highwa	y 64 • Farming	gton, NM 87	401	• 505	5-632	2-061	5 • la	b@en	viroteo	h-inc.	com									





5796 U.S. HIGHWAY 64 - 3014 FARMINGTON, NEW MEXICO 87401 PHONE: (505) 632-0615 UNDERGROUND TANK TESTING . SITE ASSESSMENT . SITE REMEDIATIO

RECEILED

'93 NJ: 5 AM 9 09

November 1, 1993

Ms. Kathy Brown State of New Mexico Oil Conservation Division P.O. Box 2088 State Land Office Building Santa Fe, New Mexico 87504

Dear Ms. Brown:

Attached please find the analytical results for the initial Quarterly Soil Sample taken from the approximate center of the proposed Landfarm #2 Expansion Area. This is per requirements set by our September 29, 1993 Rule 711 Permit.

The samples were taken from approximately two feet (2') below the original soil surface. The sample was obtained by hand auguring approximately two feet into the underlying soil.

The underlying soil is anticipated to be uniform over the area of the proposed expansion area. The soil is described as: Light brown, poorly graded, fine sand to coarse silt, non-cohesive, dry to moist, soft, loose, and eolian in origin.

The attached site diagram shows the location of where this soil sample was taken.

We appreciate working with you on our landfarms, and the many other areas were you have been so helpful.

Respectfully submitted, ENVIROTECH, INC.

Morris D. Young President

100893LT.OCD

Attachment: Laboratory Analysis Site Diagram

cc: Mr. Denny Foust, NMOCD Aztec, NM office. File





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5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401 PHONE: (505) 632-0615 • FAX: (505) 632-1865

EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	Envirotech	Project #:	NA
Sample ID:	EXP	Date Sampled:	10-08-93
Laboratory Number:	6278	Date Received:	10-08-93
Sample Matrix:	Soil	Date Analyzed:	10-11-93
Preservative:	Cool	Date Reported:	10-11-93
Condition:	Cool & Intact	Analysis Needed:	TPH

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	9.9	5.0

ND = Parameter not detected at the stated detection limit. N/A = Not applicable

Method: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

Comments: Land Farm 2

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EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	Envirotech	Project #:	NA
Sample ID:	EXP	Date Reported:	10-11-93
Laboratory Number:	6278	Date Sampled:	10-08-93
Sample Matrix:	Soil	Date Received:	10-08-93
Preservative:	Cool	Date Extracted:	10-11-93
Condition:	Cool & Intact	Date Analyzed:	10-11-93
		Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	13.2
Toluene	82	32.9
Ethylbenzene	ND	13.2
p,m-Xylene	67	19.8
o-Xylene	14.8	13.2

SURROGATE RECOVERIES:	Parameter	Percent Recovery
	Trifluorotoluene	98 %
	Bromofluorobenzene	103 %

Method: Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

> Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

ND - Parameter not detected at the stated detection limit.

Comments: Land Farm 2

uen Analyst





5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401 PHONE: (505) 632-0615 • FAX: (505) 632-1865

TRACE METAL ANALYSIS

Client:	Envirotech	Project #:	NA
Sample ID:	EXP	Date Reported:	10-12-93
Laboratory Number:	6278	Date Sampled:	10-08-93
Sample Matrix:	Soil	Date Received:	10-08-93
Preservative:	Cool	Date Analyzed:	10-12-93
Condition:	Cool & Intact	Analysis Needed:	Trace metals

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
ARSENIC	0.625	0.0001
BARIUM	ND	0.01
CADMIUM	0.055	0.0001
CHROMIUM	1.675	0.0001
LEAD	2.275	0.0001
MERCURY	0.020	0.0002
SELENIUM	0.095	0.0001

Method: Methods 3010A, 3020A, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA 1992

> Methods 7060A, 7080, 7131, 7191, 7470, 7421, 7740, 7760A Analysis of Metals by GFAA and FLAA, SW-846, USEPA 1992

ND - Parameter not detected at the stated detection limit.

Comments: Land Farm 2



Inter Mountain Laboratories, Inc.

2506 West Main Street

Farmington, New Mexico 87401

Tel. (505) 326-4737

ENVIROTECH Farmington, New Mexico

DATE SAMPLED: October 8, 1993 DATE REPORTED: October 28, 1993 LOCATION: Landfarm 2

Lab No.	Location	Depths	Calcium meq/1	Magnesium meq/1	Sodium meq/l	SAR	K K	Nitrate- Nitrogen ppm	Chloride PE meq/l	Alkalinity PE meq/l	SO4 PE meq/1
31971	EXP (3948)	0~0	1.22	0.40	0.94	1.04	0.10	2.26	0.15	0.37	3.77

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Page 1 of 1

Abbreviations for extractants: PE= Saturated Paste Extract, H2OSol= water soluble, ABPTA= Ammonium Bicarbonate-DPTA, AAO= Acid Ammonium Oxalate Micrallanaque Abbrovistione, SAR= Sodium Advantion Pation FES- Sation Evolution Foresty, FSD= Evolutionable Sodium Dercontage Evolation Static Augilable

Envirotech Laboratories

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-: :

QUALITY ASSURANCE/QUALITY CONTROL

DOCUMENTATION

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EPA METHOD 8020 AROMATIC VOLATILE ORGANICS

Client:	NA	Project #:	NA
Sample ID:	Laboratory Blank	Date Reported:	10-11-93
Laboratory Number:	1011AM.BLK	Date Sampled:	NA
Sample Matrix:	Water	Date Received:	NA
Preservative:	NA	Date Analyzed:	10-11-93
Condition:	NA	Analysis Requested:	BTEX

Parameter	Concentration (ug/L)	Det. Limit (ug/L)
Benzene	ND	0.2
Toluene	ND	0.5
Ethylbenzene p,m-Xylene	ND . ND	0.2 0.3
o-Xylene	ND	0.2

SURROGATE	RECOVERIES:	Parameter	Percent	Recover	У
		~ ~ ~ ~ ~ ~ ~ ~ ~			-
		Trifluorotoluene		99	z
		Bromofluorobenzene		95	8

Method: Method 5030A, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

> Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

ND - Parameter not detected at the stated detection limit.

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EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:	N/A	Project #:	N/A
Sample ID:	Laboratory Blank	Date Sampled:	N/A
Laboratory Number:	TPSB1011	Date Received:	N/A
Sample Matrix:	Soil	Date Analyzed:	10-11-93
Preservative:	N/A	Date Reported:	10-11-93
Condition:	N/A	Analysis Needed:	ТРН

Parameter	Concentration (mg/kg)	Det. Limit (mg/kg)
Total Petroleum Hydrocarbons	ND	5.0

ND = Parameter not detected at the stated detection limit. N/A = Not applicable

Method: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

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TRACE METAL ANALYSIS - BLANKS

Client:	NA	Project #:	NA
Sample ID:	Blanks	Date Reported:	10-12-93
Laboratory Number:	NA	Date Sampled:	NA
Sample Matrix:	Soil	Date Received:	NA
Preservative:	Cool	Date Analyzed:	10-12-93
Condition:	NA	Analysis Needed:	Trace Metals

	Instrument		Det.
	Blank	Method Blank	Limit
Parameter	(mg/Kg)	(mg / Kg)	(mg/Kg)
ARSENIC	ND	ND	0.0001
BARIUM	ND	ND	0.01
CADMIUM	ND	ND	0.0001
CHROMIUM	ND	ND	0.0001
LEAD	ND	ND	0.0001
MERCURY	ND	ND	0.0002
SELENIUM	ND	ND	0.0001
SILVER	ND	ND	0.0001

Method: Methods 3010A, 3020A, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, Sept. 1992

> Methods 7060A, 7080, 7131, 7191, 7470, 7421, 7740, 7760A Analysis of Metals by GFAA and FLAA, SW-846, USEPA, 1992

ND - Parameter not detected at the stated detection limit.

Analyst





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** QUALITY ASSURANCE EPA METHOD 8020 MATRIX SPIKE - AROMATIC VOLATILE ORGANICS

Client: Sample ID: Laboratory Number: Sample Matrix:	NA Sample Spi 6277-S-BTE Water		Project Date Re Date Sa Date Re	ported: 1 mpled: 1	A 0-11-93 0-08-93 0-08-93
Analysis Requested: Condition:	BTEX NA		Date An	alyzed: 1	0-11-93
Parameter	Result Ad	Spike Sampl Ided Resul Ig/L) (ug/I	.e Det. t Limit	Percent Recovery	SW-846 % Rec. Accept. Range
Benzene Toluene Ethylbenzene p,m-Xylene	2.7 2 3.0 2	20.0 21	1 0.2 9 0.5 2.5 0.2 5.5 0.3	95 96 98 99	39-150 46-148 32-160 46-148

Method: Method 5030A, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

20.0

Method 8020, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

20.6

ND - Parameter not detected at the stated detection limit.

0.6

Comments:

o-Xylene

Analyst

0.2

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5796 US Highway 64-3014 • Farmington, New Mexico 87401 Phone: (505) 632-0615 • Fax: (505) 632-1865

** QUALITY ASSURANCE REPORT MATRIX SPIKE - TOTAL PETROLEUM HYDROCARBONS

Client:	N/A	Project #:	N/A
Sample ID:	Laboratory Spike	Date Sampled:	N/A
Laboratory Number:	TPSS1011	Date Received:	N/A
Sample Matrix:	Soil	Date Analyzed:	10-11-93
Analysis Requested:	TPH	Date Reported:	10-11-93

Sample Result (mg/kg)	Spike Added (mg/kg)	Spiked sample Result (mg/kg)	Percent Recovery
	`		
ND	504	453	90
	Result (mg/kg)	Result Added (mg/kg) (mg/kg)	Result Added Result (mg/kg) (mg/kg) (mg/kg)

QA	ACCEPTANCE	CRITERIA:	Parameter	Acceptance Range %
			TPH	80 - 120

ND = Parameter not detected at the stated detection limit. N/A = Not applicable

Method: Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis of Water and Waste, USEPA Storet No.4551, 1978

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QUALITY ASSURANCE REPORT

TRACE METAL ANALYSIS - MATRIX SPIKE

Client: Sample ID: Laboratory Number: Sample Matrix: Analysis Requested:	Soil		Project #: Date Reported: Date Sampled: Date Received: Date Analyzed:	NA NA
Condition:	NA		Date Extracted:	NA
Parameter	Added	Sample Result (mg/Kg)	Result	Percent
ARSENIC BARIUM CADMIUM CHROMIUM LEAD MERCURY SELENIUM SILVER	0.0100 1.00 0.0100 0.0200 0.0200 0.025 0.0100 0.100	0.02 0.000 0.000 0.000 0.000	6 0.0106	98 100 100 101 100 96 97 97
QA ACCEPTANCE CRITER	IA:	Parameter	Acceptance	Range %

---------Trace Metals 80 - 120

Method: Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, July 1992.

> Methods 7060, 7080, 7131, 7191, 7470, 7421, 7740, 7760A Analysis of Metals by GFAA and FLAA, SW-846, USEPA

ND - Parameter not detected at the stated detection limit.

Comments:

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Analyst

CHAIN OF CUSTODY RECORD

ent/Project Name Project Location Land Farm 2				ANALYSIS/PARAMETERS													
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npler: (Signature)			Chain of C	Custody Tape	3 No.					X	55	22			1	Remarks	
	T	r			<i>.</i>			No. of Containers		μ.	24	e tr					
Sample No./ Identification	Sample Date	Sample Time	Lab N	Number		Sample Matrix		Conte	418.	B	J	Hea					
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New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson

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Jim Noel Cabinet Secretary

Karen W. Garcia Deputy Cabinet Secretary Mark Fesmire Division Director Oil Conservation Division



September 28, 2010

Kyle P. Kerr Envirotech, Inc. 5796 US Highway 64 Farmington, New Mexico 87401

RE: Request for Approval to Apply a Successive Lift Envirotech, Inc. Commercial Landfarm #2: Permit NM-1-0011 Location: NW/4 Section 6, Township 26 North, Range 10 West, NMPM

San Juan County, New Mexico

Dear Mr. Kerr:

The Oil Conservation Division (OCD) has reviewed Envirotech, Inc.'s (Envirotech) request, dated September 20, 2010 to grant approval to apply an additional six-inch lift to the following cell(s): Cells 47, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, and 65:

Based upon the analytical results provided, OCD hereby grants Envirotech approval to apply an additional six-inch lift of contaminated soils to the above referenced landfarm cell(s). Envirotech shall ensure that the application of an additional six-inch lift of contaminated soils to the above referenced landfarm cells *does not exceed the maximum thickness of two feet or 3000 cubic yards per acre limit* as specified in 19.15.36.15 NMAC. The "parameter for cubic yardages of 15,000 or less to be applied in each five (5) acre cell," as stated in the September 20, 2010 request, is not equivalent to the regulatory requirement is identified above. *It is OCD's understand, from conversations with Mr. Kyle Kerr, that the thickness of each cell would be measured and confirmed during the next vadose zone sampling event.* Please note that with the addition of successive lifts Envirotech must initiate treatment zone monitoring and resume vadose zone monitoring. The vadose zone monitoring depth must be adjusted to reach the 2-3 foot zone below the original native ground surface.

Please be advised that approval of this request does not relieve Envirotech of liability should operations result in pollution of surface water, ground water or the environment. Nor does

Oil Conservation Division 1220 South St. Francis Drive • Santa Fe, New Mexico 87505 <u>Phone (505) 476-3440 • Eax (505) 476-3462 • www.emnrd.state.nm.us/OCD</u> Envirotech, Inc. Commercial Landfarm #2 Permit NM-1-0011 September 28, 2010 Page 2 of 2

approval relieve Envirotech of its responsibility to comply with any other applicable governmental authority's rules and regulations.

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If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or <u>brad.a.jones@state.nm.us</u>.

Sincerely,

Brad A. Jones Environmental Engineer

BAJ/baj

Attachment: Facility Map (Revision Date: September 17, 2010)

cc: OCD District III Office, Aztec





September 20, 2010

Mr. Brad Jones New Mexico Oil Conservation District 1220 South St. Francis Drive Santa Fe, New Mexico 87505

RE: ENVIROTECH'S LANDFARM #2 DISCONTINUED MAINTENANCE AND ADDITIONAL LIFT FOR CELLS 47, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64 AND 65 IN LANDFARM 2 UNIT 5

Dear Mr. Jones:

Attached please find analytical documentation supporting our request for discontinued maintenance at Envirotech's Land Farm #2, for cells 47, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64 and 65 located near Hilltop, New Mexico. The area being submitted is shown on the attached map, marked by blue crosshatch design. As per Envirotech's OCD Rule 711 Permit Approval NM 01-0011 dated April 8, 2000 all cells being requested for discontinued maintenance have passed laboratory analysis of less than 100 ppm TPH, 50 ppm BTEX and 10 ppm Benzene. In addition, Envirotech has sampled for chlorides. As stated in the treatment zone monitoring portion of Envirotech's permit, no cell sampled was larger than five acres. Samples were five-point composites. Remediation zone layers averaged 6" in depth, results available upon request.

The blue cells (47, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64 and 65) have passed analysis for total petroleum hydrocarbons, benzene, toluene, ethylbenzene and total xylenes (see attached laboratory results). Envirotech hereby requests these cells be granted discontinued maintenance status and approval to apply an additional lift of qualifying material to these cells.

Given the parameter for cubic yardages of 15,000 or less to be applied in each five (5) acre cell, we are happy to provide the following cubic yard amounts in each cell up to this time:

Cell 47:	7,420 cy
Cell 55:	5,714 cy
Cell 58:	4,860 cy
Cell 61:	7,747 су
Cell 64:	5,896 cy

Cell 53: 6,112 cy Cell 56: 7,807 cy Cell 59: 4,814 cy Cell 62: 5,561 cy Cell 65: 6,933 cy Cell 54: 3,995 cy Cell 57: 4,952 cy Cell 60: 5,257 cy Cell 63: 6,497 cy \triangleright

Due to the unusually large amounts of contaminated soil Envirotech has accepted recently, our Land Farm #2 suffers limited space constraints. Envirotech respectfully requests expedition of this matter that to serve the Four Corners region without interruption.

Thank you for your consideration in this matter. If you have any questions or require additional information, please do not hesitate to contact our office at (505) 632-0615.

Respectfully submitted

Envirotech. Ind

Kyle P. Kerr Vice President/CHMM <u>kpkerr@envirotech-inc.com</u>

AEP/Office/Corporate/LF/Closure&added lift/9-20-10

April E. Pphl Landfarm Administrator <u>apohl@envirotech-inc.com</u>





EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Envirotech	Project #:	1-02-60001
Sample ID:	58	Date Reported:	08-04-10
Laboratory Number:	55388	Date Sampled:	08-02-10
Chain of Custody No:	10090	Date Received:	08-02-10
Sample Matrix:	Soil	Date Extracted:	08-03-10
Preservative:	Cool	Date Analyzed:	08-04-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2

Gasonne Kange (CS - CTO)		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: Land Farm 2 Closures

Analyst

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Review	F	$\langle \rangle$



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

		Concentration	Det. Limit
Condition:	Intact	Analysis Requested:	8015 TPH
Preservative:	Cool	Date Analyzed:	08-04-10
Sample Matrix:	Soil	Date Extracted:	08-03-10
Chain of Custody No:	10090	Date Received:	08-02-10
Laboratory Number:	55389	Date Sampled:	08-02-10
Sample ID:	59	Date Reported:	08-04-10
Client:	Envirotech	Project #:	1-02-60001

Parameter	(mg/Kg)	(mg/Kg)	
Gasoline Range (C5 - C10)	3.6	0.2	
Diesel Range (C10 - C28)	0.7	0.1	
Total Petroleum Hydrocarbons	4.3	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: Land Farm 2 Closures

Analyst

Review



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client: Envirotech Project #: 1-02-60001 08-04-10 Sample ID: 60 Date Reported: Laboratory Number: 55390 Date Sampled: 08-02-10 Chain of Custody No: 10090 Date Received: 08-02-10 Sample Matrix: Date Extracted: 08-03-10 Soil Preservative: Cool Date Analyzed: 08-04-10 Condition: 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: Land Farm 2 Closures

Analyst

Review



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Envirotech	Project #:	1-02-60001
Sample ID:	61	Date Reported:	08-04-10
Laboratory Number:	55391	Date Sampled:	08-02-10
Chain of Custody No:	10090	Date Received:	08-02-10
Sample Matrix:	Soil	Date Extracted:	08-03-10
Preservative:	Cool	Date Analyzed:	08-04-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	
Gasoline Range (C5 - C10)	ND	0.2	
Diesel Range (C10 - C28)	5.9	0.1	

		••••
Total Petroleum Hydrocarbons	5.9	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: Land Farm 2 Closures

Analyst

Review



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

0.2

Client:	Envirotech	Project #:	1-02-60001
Sample ID:	62 ⁻	Date Reported:	08-04-10
Laboratory Number:	55392	Date Sampled:	08-02-10
Chain of Custody No:	10090	Date Received:	08-02-10
Sample Matrix:	Soil	Date Extracted:	08-03-10
Preservative:	Cool	Date Analyzed:	08-04-10
Condition:	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	

ND

Total Petrole	eum Hvdroca	rbons

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: Land Farm 2 Closures

Analyst

Review



EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC		Project #:		N/A
Sample ID:	08-04-10 QA/Q	C	Date Reported:		08-04-10
Laboratory Number:	55404		Date Sampled:		N/A
Sample Matrix:	Methylene Chlori	de	Date Received:		N/A
Preservative:	N/A		Date Analyzed:		08-04-10
Condition:	N/A		Analysis Reques	ted:	TPH (
	I-Cal Date		C=Cal RFs	% Difference	Accept Range
Gasoline Range C5 - C10	08-04-10	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	08-04-10	9.9960E+002	1.0000E+003	0.04%	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	20.7	20.5	1.0%	0 - 30%	
Diesel Range C10 - C28	0.4	0.4	0.0%	0 - 30%	
Spike Conc. (mg/Kg)	Sample Sample	Spike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	20.7	250	280	104%	75 - 125%
Diesel Range C10 - C28	0.4	250	255	102%	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 55388-55392; 55403-55405; 55408-55409

Rev


Parameter

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

(ug/Kg)

		Concentration		Det. Limit	
Condition:			Analysis Requested:		BTEX
Preservative:	Cool		Date Extracted:		08-03-10
Sample Matrix:	Soil		Date Analyzed:		08-04-10
Chain of Custody:	10090		Date Received:		08-02-10
Laboratory Number:	55388		Date Sampled:		08-02-10
Sample ID:	58		Date Reported:		08-04-10
Client:	Envirotech		Project #:		1-02-60001

Benzene	ND	0.9
Toluene	· ND	1.0
Ethylbenzene	ND	1.0
p,m-Xylene	ND	1.2
o-Xylene	1.2	0.9
Total BTEX	1.2	

(ug/Kg)

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	98.1 %
	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.

Analyst

Review



Client:	Envirotech	F	Project #:		1-02-60001
Sample ID:	59	[Date Reported:		08-04-10
Laboratory Number:	55389	ſ	Date Sampled:		08-02-10
Chain of Custody:	10090	[Date Received:		08-02-10
Sample Matrix:	Soil	I	Date Analyzed:		08-04-10
Preservative:	Cool	ſ	Date Extracted:		08-03-10
Condition:	Intact	/	Analysis Requested:		BTEX
		Concentration	· · · ····	Det. Limit	
Parameter		(ug/Kg)		(ug/Kg)	
Benzene		15.5		0.9	
Toluene		2.6		1.0	
		3.3		1.0	
Ethylbenzene		2.6		1.0	
p,m-Xylene					
o-Xylene		1.9		0.9	
Total BTEX		25.9			

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	100 %
	1,4-difluorobenzene	103 %
	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.

Analyst

Review



Client:	Envirotech	•	Project #:		1-02-60001
Sample ID:	60	~	Date Reported:		08-04-10
Laboratory Number:	55390		Date Sampled:		08-02-10
Chain of Custody:	10090		Date Received:		08-02-10
Sample Matrix:	Soit		Date Analyzed:		08-04-10
Preservative:	Cool		Date Extracted:		08-03-10
Condition:	Intact		Analysis Requested:		BTEX
				Det.	
		Concentration		Limit	
Parameter		(ug/Kg)		(ug/Kg)	
Benzene		ND		0.9	
Toluene		ND		1.0	
Ethylbenzene		ND		1.0	
p,m-Xylene		ND		1.2	
o-Xylene		ND		0.9	
•					

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	101 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	103 %

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: Land Farm 2 Closures

Analyst

Review



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Client:	Envirotech	1	Project #:		1-02-60001
Sample ID:	61	1	Date Reported:		08-04-10
Laboratory Number:	55391	1	Date Sampled:		08-02-10
Chain of Custody:	10090	I	Date Received:		08-02-10
Sample Matrix:	Soil	l	Date Analyzed:		08-04-10
Preservative:	Cool	l	Date Extracted:		08-03-10
Condition:	Intact	,	Analysis Requested:		BTEX
		Concentration		Det. Limit	
Parameter		(ug/Kg)		(ug/Kg)	
Benzene		ND		0.9	
Toluene		ND		1.0	
Ethylbenzene		ND		1.0	
p,m-Xylene		ND		1.2	-
o-Xylene		ND		0.9	
Total BTEX		ND			

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	96.6 %
	1,4-difluorobenzene	102 %
	Bromochlorobenzene	103 %

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.

Analyst

Review



Client:	Envirotech		Project #:		1-02-60001
Sample ID:	62		Date Reported:		08-04-10
Laboratory Number:	55392		Date Sampled:		08-02-10
Chain of Custody:	10090		Date Received:		08-02-10
Sample Matrix:	Soil		Date Analyzed:		08-04-10
Preservative:	Cool		Date Extracted:		08-03-10
Condition:	Intact		Analysis Requested:		BTEX
		Concentration		Det. Limit	
Parameter		(ug/Kg)		(ug/Kg)	
Benzene		ND		0.9	
Toluene		ND		1.0	
Ethylbenzene		ND		1.0	
p,m-Xylene		ND		1.2	
o-Xylene		ND		0.9	
Total BTEX		ND			

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.7 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	98.8 %

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: Land Farm 2 Closures

Analyst

1

Review



Sample ID:	N/A	P	roject #:	N/	A
oumpio io.	0804Bblk QA/QC	D	ate Reported	30	3-04-10
_aboratory Number:	55388	D	ate Sampled	N/	Ά
Sample Matrix	Soil		ate Received:	N/	
Preservative:	N/A		ate Analyzed		3-04-10
Condition:	N/A	A	nalysis:	B	TEX
Calibration and	1-Cal RF:	C-Cal RF:	%Diff.	Blank	Detect.
Detection Limits (ug/L)		Accept. Range	e 0 - 15%	Conc	Limit
Benzene	1 3846E+007	1.3874E+007	0.2%	ND	0.1
oluene	9.5430E+006	9 5621E+006	0.2%	ND	0.1
Ethylbenzene	6 7927E+006	6 8063E+006	0.2%	ND	0.1
o,m-Xylene	1.6107E+007	1.6139E+007	0.2%	ND	0.1
o-Xylene	5.4695E+006	5.4805E+006	0.2%	ND	0.1
Benzene Foluene	ND ND	ND ND	0.0% 0.0%	0 - 30% 0 - 30%	0.9 1.0
ithylbenzene ,m-Xylene	ND ND 1.2	ND ND 1.1	0.0% 0.0% 8.3%	0 - 30% 0 - 30% 0 - 30%	1.0 1.2 0.9
ithylbenzene o,m-Xylene o-Xylene	ND	ND 1.1	0.0%	0 - 30%	1.2
ithylbenzene o,m-Xylene o-Xylene pike Conc: (ug/Kg) Benzene	ND 1.2 Samplê ND	ND 1.1 Amount Spiked 5 50.0	0.0% 8.3% Spiked Sämple 57.1	0 - 30% 0 - 30% % Recovery 114%	1.2 0.9 - Accept Range 39 - 150
ithylbenzene o,m-Xylene o-Xylene pike Conc: (ug/Kg) Benzene	ND 1.2 Sample ND ND	ND 1.1	0.0% 8.3% Spiked Sample 57.1 56.9	0 - 30% 0 - 30% % Recovery 114% 114%	1.2 0.9
Spike Conc (ug/Kg) Benzene Foluene	ND 1.2 Samplê ND	ND 1.1 Amount Spiked 5 50.0	0.0% 8.3% Spiked Sämple 57.1	0 - 30% 0 - 30% % Recovery 114%	1.2 0.9 - Accept Range 39 - 150
Sthylbenzene o,m-Xylene o-Xylene Spike Conc? (ug/Kg) Benzene Foluene Ethylbenzene o,m-Xylene	ND 1.2 Sample ND ND	ND 1.1 Amount Spiked 50.0 50.0	0.0% 8.3% Spiked Sample 57.1 56.9	0 - 30% 0 - 30% % Recovery 114% 114%	1.2 0.9 - Accept Range 39 - 150 46 - 148
Ethylbenzene o,m-Xylene o-Xylene Spike(Conc>(ug/Kg) Benzene Foluene Ethylbenzene	ND 1.2 Sample ND ND ND ND	ND 1.1 Amount Spiked 50.0 50.0 50.0	0.0% 8.3% Spiked Sämple 57.1 56.9 58.5	0 - 30% 0 - 30% % Recovery 114% 114% 117%	1.2 0.9 - Accept Range 39 - 150 46 - 148 32 - 160

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 55388-55392; 55403-55405; 55408-55409

Analyst Review



Chloride

- - - -

Client:	Envirotech	Project #:	1-02-60001
Sample ID:	58	Date Reported:	08-05-10
Lab ID#:	55388	Date Sampled:	08-02-10
Sample Matrix:	Soil	Date Received:	08-02-10
Preservative:	Cool	Date Analyzed:	08-04-10
Condition:	Intact	Chain of Custody:	10090
Parameter		Concentration (mg	/Kg)

Total Chloride

75

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

por Analyst

Review



Chloride

Parameter		Concentration (mg	/Kg)
Condition:	Intact	Chain of Custody:	10090
Preservative:	Cool	Date Analyzed:	08-04-10
Sample Matrix:	Soil	Date Received:	08-02-10
Lab ID#:	55389	Date Sampled:	08-02-10
Sample ID:	59	Date Reported:	08-05-10
Client:	Envirotech	Project #:	1-02-60001

Total Chloride

65

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Land Farm 2 Closures

mon Analyst

Review



Chloride

Total Chloride		95	
Parameter		Concentration (mg	/Kg)
Condition:	Intact	Chain of Custody:	10090
Preservative:	Cool	Date Analyzed:	08-04-10
Sample Matrix:	Soil	Date Received:	08-02-10
Lab ID#:	55390	Date Sampled:	08-02-10
Sample ID:	60	Date Reported:	08-05-10
Client:	Envirotech	Project #:	1-02-60001

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Analyst

Review



Chloride

Client:	Envirotech	Project #:	1-02-60001
Sample ID:	61	Date Reported:	08-05-10
Lab ID#:	55391	Date Sampled:	08-02-10
Sample Matrix:	Soil	Date Received:	08-02-10
Preservative:	Cool	Date Analyzed:	08-04-10
Condition:	Intact	Chain of Custody:	10090

Parameter

Concentration (mg/Kg)

Total Chloride

70

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Analyst

Review



Chloride

Parameter		Concentration (mg	/Kg)
		,	
Condition:	Intact	Chain of Custody:	10090
Preservative:	Cool	Date Analyzed:	08-04-10
Sample Matrix:	Soil	Date Received:	08-02-10
_ab ID#:	55392	Date Sampled:	08-02-10
Sample ID:	62	Date Reported:	08-05-10
Client:	Envirotech	. Project #:	1-02-60001

Total Chloride

100

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

DA) Analyst

Review

CHAIN OF CUSTODY RECORD

10090

Client:	\$		Pre	oject Name / L	ocation	:				1			-	-			YSIS		AME	TERS					
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Client Address:			Sa	mpler Name:							X	K.	6		<u> </u>										
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Client Phone No.:			Cli	ent No.:			1				bo	ţ	po	leta	noir		Ĭ		F.	ш				8	tact
				1-02-	-60	00 (TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion		TCLP with H/P		TPH (418.1)	CHLORIDE				Sample Cool	Sample Intact
Sample No./	Sample	Samp	le	Lab No.	S	ample		- 1	Preserv		I) H	Ш.) S	RA	tion	5	СЪ	PAH	H	우				dm	du
Identification	Date	Time	-			Matrix	Cont	ainers	HgCl, HCl	3	Г <u>д</u>	E E	2	Ĕ	ပိ	ВĊ	12	A		ㅎ				<u>ຶ</u>	
58	8/2/10	13:5	0	55388	Soil Solid	Sludge Aqueous	æ	o2		7	λ	X								$\left \right\rangle$				Y	Y
59		14:0	0	55389	Soil' Solid	Sludge Aqueous				R	K	X								$ $ \times					
60		14:11	5 3	55390	Solid	Sludge Aqueous				X	X	X								x					
61		14:2	20	55391	Solid	Sludge Aqueous				X	X	X								x					
62	2	14:3	30	55390 55391 55392	Soil Solid	Sludge Aqueous	-	L		\bigwedge	×	X								X				\mathcal{T}	T
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Client:	Envirotech	Project #:	1-02-60001
Sample ID:	63	Date Reported:	08-05-10
Laboratory Number:	55393	Date Sampled:	08-02-10
Chain of Custody No:	10091	Date Received:	08-02-10
Sample Matrix:	Soil	Date Extracted:	08-04-10
Preservative:	Cool	Date Analyzed:	08-05-10
Condition:	Intact	Analysis Requested:	8015 TPH

		Det.
	Concentration	Limit
Parameter	(mg/Kg)	(mg/Kg)

Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	5.7	0.1
Total Petroleum Hydrocarbons	5.7	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.

Analyst



Client:	Envirotech	Project #:	1-02-60001
Sample ID:	64	Date Reported:	08-05-10
Laboratory Number:	553 94	Date Sampled:	08-02-10
Chain of Custody No:	10091	Date Received:	08-02-10
Sample Matrix:	Soil	Date Extracted:	08-04-10
Preservative:	Cool	Date Analyzed:	08-05-10
Condition:	Intact	Analysis Requested:	8015 TPH

		Det.
	Concentration	Limit
Parameter	(mg/Kg)	(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.

Analyst



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Envirotech	Project #:	1-02-60001
Sample ID:	65	Date Reported:	08-05-10
Laboratory Number:	55395	Date Sampled:	08-02-10
Chain of Custody No:	10091	Date Received:	08-02-10
Sample Matrix:	Soil	Date Extracted:	08-04-10
Preservative:	Cool	Date Analyzed:	08-05-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2

Gasonne Range (C5 - C10)	NU	0.2
Diesel Range (C10 - C28)	1.9	0.1
Total Petroleum Hydrocarbons	1.9	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.

Analyst



Quality Assurance Report

	-				
Client:	QA/QC		Project #:		N/A
Sample ID:	08-05-10 QA/0	2C	Date Reported:		08-05-10
Laboratory Number:	55425		Date Sampled:		N/A
Sample Matrix:	Methylene Chlor	ide	Date Received:		N/A
Preservative:	N/A		Date Analyzed:		08-05-10
Condition:	N/A		Analysis Request	ted:	ТРН
		J-Cal RF	C-Cal RF:	% Difference	Accept Range
Gasoline Range C5 - C10	05-07-07	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	9.9960E+002	1.0000E+003	0.04%	0 - 15%
		er er fan de stande ar stande a Er stande ar	The water as the second second		No. 40
Blank Conc. (mg/L - mg/Kg	9)	Concentration,		Detection Lin	<u>nit</u> ,
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. Rang	
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
Spike Conc. (mg/Kg) Gasoline Range C5 - C10	<u>Sample</u> ND	Spike Added 250	Spike Result	% Recovery 103%	Accept Range 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 55393-55397, 55410-55411, 55425, 55428 and 55431

Analyst



Client:	Envirotech	Proj	ect #:	1-02-60001
Sample ID:	. 63	Date	e Reported:	08-05-10
Laboratory Number:	55393	Date	e Sampled:	08-02-10
Chain of Custody:	10091	Date	e Received:	08-02-10
Sample Matrix:	Soil	Date	e Analyzed:	08-05-10
Preservative:	Cool	Date	e Extracted:	08-04-10
Condition:	Intact	Ana	lysis Requested:	BTEX
		Concentration	Det Limit	
Parameter		(ug/Kg)	(ug/Kg	<u> </u>
Benzene		ND	0.9)
Toluene		ND	1.0)
Ethylbenzene		ND	1.0	
p,m-Xylene		ND	1.2	
o-Xylene		ND	0.9)
Total BTEX		ND		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	96.0 %
	1,4-difluorobenzene	97.2 %
	Bromochlorobenzene	101 %

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.

Analyst



Client:	Envirotech		Project #:		1-02-60001
Sample ID:	64		Date Reported:		08-05-10
Laboratory Number:	55394		Date Sampled:		08-02-10
Chain of Custody:	10091		Date Received:		08-02-10
Sample Matrix:	Soil		Date Analyzed:		08-05-10
Preservative:	Cool		Date Extracted:		08-04-10
Condition:	Intact		Analysis Requested:		BTEX
				Det.	
		Concentration		Limit	
Parameter		(ug/Kg)		(ug/Kg)	
Benzene		ND		0.9	
Toluene		ND		1.0	
Ethylbenzene		ND		1.0	
p,m-Xylene		ND		1.2	
o-Xylene		ND		0.9	
Total BTEX		ND			

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
L	Fluorobenzene	98.4 %
-	1,4-difluorobenzene	98.6 %
,	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.

Analyst



		1			
Client:	Envirotech	Pr	oject #:		1-02-6000
Sample ID:	65	- Da	ate Reported:		08-05-10
Laboratory Number:	55395	Da	ate Sampled:		08-02-10
Chain of Custody:	10091	Da	ate Received:		08-02-10
Sample Matrix:	Soil	Da	ate Analyzed:		08-05-10
Preservative:	Cool	Da	ate Extracted:		08-04-10
Condition:	Intact	Ar	nalysis Requested:		BTEX
				Det.	
		Concentration		Limit	
Parameter		(ug/Kg)		(ug/Kg)	•
Benzene		ND		0.9	
Toluene		ND		1.0	
Ethylbenzene		ND		1.0	
p,m-Xylene		ND		1.2	
o-Xylene		ND		0.9	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.8 %
	1,4-difluorobenzene	101 %
	Bromochlorobenzene	100 %

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

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

Analyst

Reviev



Client:	N/A	P	roject #:	N	I/A
Sample ID:	0805BBLK QA/QC		ate Reported:	0	8-05-10
Laboratory Number:	55393	C	ate Sampled:	N	I/A
Sample Matrix:	Soil	0	ate Received:	N	I/A
Preservative:	N/A		ate Analyzed:	-	8-05-10
Condition:	N/A	А	nalysis:	B	TEX
Calibration and	I-Cal RF	C-Cal RF	%Diff.	Blánk	Detect:
Detection Limits (ug/L)		Accept. Range	e Q - 15%	Conc	Limit
Benzene	1.0839E+006	1 0861E+006	0.2%	ND	0.1
Toluene	1 2145E+006	1.2169E+006	0.2%	ND	0.1
Ethylbenzene	1 0890E+006	1.0912E+006	0.2%	ND	0.1
p,m-Xylene	2.7702E+006	2.7757E+006	0.2%	ND	0.1
o-Xylene	9.8493E+005	9 8690E+005	0.2%	ND	0.1
Duplicate:Conc: (ug/Kg))	landun menandakan di kanangan pertuku (ke menandarakan).		an a	Accept Range	Detect Limi
Duplicate:Conc: (ug/Kg)) Benzene Toluene Ethylbenzene p,m-Xylene o-Xylene	Sample ND ND ND ND ND ND	Duplicate ND ND ND ND ND ND	0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	Accept\Range 0 - 30% 0 - 30% 0 - 30% 0 - 30% 0 - 30%	0.9 1.0 1.0 1.2 0.9
Benzene Toluene Ethylbenzene p,m-Xylene p-Xylene	ND ND ND ND ND	ND ND ND ND	0.0% 0.0% 0.0% 0.0% 0.0%	0 - 30% 0 - 30% 0 - 30% 0 - 30% 0 - 30%	0.9 1.0 1.0 1.2
Benzene Foluene Ethylbenzene p,m-Xylene p-Xylene Spike Conc. (ug/Kg) Benzene	ND ND ND ND ND Sample ND	ND ND ND ND ND	0.0% 0.0% 0.0% 0.0% Spiked Sample, 1	0 - 30% 0 - 30% 0 - 30% 0 - 30% 0 - 30% % Recovery	0.9 1.0 1.0 1.2 0.9 Accept Range 39 - 150
Benzene Foluene Ethylbenzene o,m-Xylene o-Xylene Spike Conc. (ug/Kg) Benzene	ND ND ND ND ND	ND ND ND ND	0.0% 0.0% 0.0% 0.0% Spiked Sample	0 - 30% 0 - 30% 0 - 30% 0 - 30% 0 - 30%	0.9 1.0 1.0 1.2 0.9
Benzene Foluene Ethylbenzene o,m-Xylene o-Xylene Spike Conc. (ug/Kg) Benzene Toluene	ND ND ND ND ND Sample ND	ND ND ND ND ND	0.0% 0.0% 0.0% 0.0% Spiked Sample, 1	0 - 30% 0 - 30% 0 - 30% 0 - 30% 0 - 30% % Recovery	0.9 1.0 1.0 1.2 0.9 Accept Range 39 - 150
Benzene Toluene Ethylbenzene p,m-Xylene	ND ND ND ND ND ND Sample A ND ND	ND ND ND ND ND S0.0 50.0	0.0% 0.0% 0.0% 0.0% Spiked Sample 50.5 50.3	0 - 30% 0 - 30% 0 - 30% 0 - 30% 0 - 30% % Recovery 101% 101%	0.9 1.0 1.0 1.2 0.9 Accept Range 39 - 150 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

QA/QC for Samples 55393-55397, 55410-55411, 55428 and 55431 Comments: Analyst

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Chloride

Parameter		Concentration (mg	/Ka)
Condition:	Intact	Chain of Custody:	10091
Preservative:	Cool	Date Analyzed:	08-04-10
Sample Matrix:	Soil	Date Received:	08-02-10
_ab ID#:	55393	Date Sampled:	08-02-10
Sample ID:	63	Date Reported:	08-04-10
Client:	Envirotech	Project #:	1-02-60001

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Concentration (mg/Kg)

Total Chloride

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Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Nool) Analyst



Chloride

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Total Chloride		. 15	
Parameter	er Concentration (mg/Kg)		
Condition:	Intact	Chain of Custody:	10091
Preservative:	Cool	Date Analyzed:	08-04-10
Sample Matrix:	Soil	Date Received:	08-02-10
Lab ID#:	55394	Date Sampled:	08-02-10
Sample ID:	64	Date Reported:	08-04-10
Client:	Envirotech	Project #:	1-02-60001

Reference:U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983.Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

MOOD Analyst



Chloride

Parameter		Concentration (mg	/Kg)
Condition:	Intact	Chain of Custody:	10091
Preservative:	Cool	Date Analyzed:	08-04-10
Sample Matrix:	Soil	Date Received:	08-02-10
Lab ID#:	55395	Date Sampled:	08-02-10
Sample ID:	65	Date Reported:	08-04-10
Client:	Envirotech	Project #:	1-02-60001

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Analyst

CHAIN OF CUSTODY RECORD

10091

Client:				Pro	oject Name / L	ocatio	on:										ΔΝΙΔΙ΄				TERS				
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					mpler Name:	60	rciak	Do.	295			TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	6										
Client Phone No.:				Clie	ent No.:			-27	7			bo	poq	po	etals	<u>io</u>		H/P		÷	1			ō	act
					1-02-6	ODD	1					leth	Met	/leth	RCRA 8 Metals	Cation / Anion		TCLP with H/P		TPH (418.1)	CHLORIDE			Cool	Sample Intact
Sample No./	Sa	mple	Samp				Sample	No./\	olume	Pres	ervative	З Т	X		RA	lo l	_	à	-	H I	ğ			Sample (du
Identification		Date	Time	,	Lab No.		Matrix		of ainers	HgCl ₂	HCI 3	ΠΡΓ	BT	Ŝ	RC	Cat	BCI	10	PAH	Ч	8_			Sar	Sar
63	B	12/10	<i>ja</i> :4	id g	55393		Sludge Aqueous	đ	02		X	K	X								K			Y	Y
64			14:S	04	55 394	Soil Solid	Sludge Aqueous				X	ĸ	X								X				
65			15.0	20	55395	Soil Solid	Sludge Aqueous				X	x	X								X				
5	4 5 7		15:2	0 g	55396	Soil Solid) Sludge Aqueous				X	X	X								X				
28		L	15:50	.	55397	Solid	Sludge Aqueous	<			X	K	X								X			\bot	7
						Soil Solid	Sludge Aqueous																		
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Client:	Envirotech	Project #:	1-02-60001
Sample ID:	53	Date Reported:	08-05-10
Laboratory Number:	55383	Date Sampled:	08-02-10
Chain of Custody No:	10089	Date Received:	08-02-10
Sample Matrix:	Soil	Date Extracted:	08-03-10
Preservative:	Cool	Date Analyzed:	08-03-10
Condition:	Intact	Analysis Requested:	8015 TPH

· · · · ·		Det.
	Concentration	Limit
Parameter	(mg/Kg)	(mg/Kg)

Gasoline Range (C5 - C10)	0.5	0.2
Diesel Range (C10 - C28)	0.4	0.1
Total Petroleum Hydrocarbons	0.9	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.

Analyst

Review



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

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Client:	Envirotech	Project #:	1-02-60001
Sample ID:	54	Date Reported:	08-05-10
Laboratory Number:	55384	Date Sampled:	08-02-10
Chain of Custody No:	10089	Date Received:	08-02-10
Sample Matrix:	Soil	Date Extracted:	08-03-10
Preservative:	Cool	Date Analyzed:	08-03-10
Condition:	Intact	Analysis Requested:	(8015 TPH

r		Det.
	Concentration	Limit
Parameter	(mg/Kg)	(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: Land Farm 2 Closures

Analyst

Review



Client:	Envirotech	Project #:	1-02-60001
Sample ID:	55	Date Reported:	08-05-10
Laboratory Number:	55385	Date Sampled:	08-02-10
Chain of Custody No:	10089	Date Received:	08-02-10
Sample Matrix:	Soil	Date Extracted:	08-03-10
Preservative:	Cool	Date Analyzed:	08-03-10
Condition:	Intact	Analysis Requested:	8015 TPH

		Det.
	Concentration	Limit
Parameter	(mg/Kg)	(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: Land Farm 2 Closures

Analyst

Review



Client:	Envirotech	Project #:	1-02-60001
Sample ID:	56	Date Reported:	08-05-10
Laboratory Number:	55386	Date Sampled:	08-02-10
Chain of Custody No:	10089	Date Received:	08-02-10
Sample Matrix:	Soil	Date Extracted:	08-03-10
Preservative:	Cool	Date Analyzed:	08-03-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2

Diesel Range (C10 - C28)	,	1.8	0.1
Total Petroleum Hydrocarbons	~	1.8	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.

Analyst

Review



Client:	Envirotech	Project #:	1-02-60001
Sample ID:	57	Date Reported:	08-05-10
Laboratory Number:	55387	Date Sampled:	08-02-10
Chain of Custody No:	10089	Date Received:	08-02-10
Sample Matrix:	Soil	Date Extracted:	08-03-10
Preservative:	Cool	Date Analyzed:	08-03-10
Condition:	Intact	Analysis Requested:	8015 TPH

		Det.
	Concentration	Limit
Parameter	(mg/Kg)	(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.

Analyst

Review



Quality Assurance Report

Client:	QA/QC		Project #:		N/A
Sample ID:	08-03-10 QA/C	2C	Date Reported:		08-05-10
Laboratory Number:	55368		Date Sampled:		N/A
Sample Matrix:	Methylene Chlori	ide	Date Received:		N/A
Preservative:	N/A		Date Analyzed:		08-03-10
Condition:	N/A		Analysis Request	ed:	ТРН
	I-Cal Date	l-Cal RF:	C-Cal RF:	% Difference	Accept. Range
Gasoline Range C5 - C10	08-03-10	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	08-03-10	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Blank Conc. (mg/L - mg/Kg)		Concentration		Detection Lin	<u>iit</u>
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	14.3	14.4	1.0%	0 - 30%	
Diesel Range C10 - C28	16.7	16.8	1.0%	0 - 30%	
And was a substance of the	(the second second				a a cara anala fabina ana a
Spike Conc: (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	14.3	250	273	103%	75 - 125%
Diesel Range C10 - C28	16.7	250	273	103%	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 55382-55387, 55368 and 55377

Analyst

Review



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

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Client	Envirotech		Drainat #	1 02 60001
Client:			Project #:	1-02-60001
Sample ID:	53		Date Reported:	08-05-10
Laboratory Number:	55383		Date Sampled:	08-02-10
Chain of Custody:	10089		Date Received:	08-02-10
Sample Matrix:	Soil		Date Analyzed:	08-03-10
Preservative:	Cool		Date Extracted:	08-03-10
Condition:	Intact		Analysis Requested:	BTEX
Parameter		Concentration (ug/Kg)		Det. Limit (ug/Kg)
Benzene		2.8		0.9
Toluene		ND		1.0
Ethylbenzene		ND		1.0

Total BTEX

o-Xylene

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery	
	Fluorobenzene	103 %	
	1,4-difluorobenzene	99.3 %	
	Bromochlorobenzene	101 %	

1.7

4.5

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: Land Farm 2 Closures

Analyst

A

Review



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Envirotech		Project #:		1-02-60001
Sample ID:	54		Date Reported:		08-05-10
Laboratory Number:	55384		Date Sampled:		08-02-10
Chain of Custody:	10089		Date Received:		08-02-10
Sample Matrix:	Soil		Date Analyzed:		08-03-10
Preservative:	Cool		Date Extracted:		08-03-10
Condition:	Intact		Analysis Requested:		BTEX
			-	Det.	
		Concentration		Limit	
Parameter		(ug/Kg)		(ug/Kg)	
Benzene		ND		0.9	
Toluene		ND		1.0	
Ethylbenzene		ND		1.0	
p,m-Xylene		ND		1.2	
o-Xylene		1.1		0.9	
Total BTEX		1.1			

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery	
	Fluorobenzene	98.6 %	
	1,4-difluorobenzene	104 %	
	Bromochlorobenzene	104 %	

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: Land Farm 2 Closures

Analyst

Review

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EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

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Client:	Envirotech	Project #:	1-02-60001
Sample ID:	55	Date Reported:	08-05-10
Laboratory Number:	55385	Date Sampled:	08-02-10
Chain of Custody:	10089	Date Received:	08-02-10
Sample Matrix:	Soil	Date Analyzed:	08-03-10
Preservative:	Cool	Date Extracted:	08-03-10
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
Benzene	ND	0.9	
Toluene	ND	1.0	
Ethylbenzene	ND	1.0	
p,m-Xylene	ND	1.2	
o-Xylene	ND	0.9	
Total BTEX	ND		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.2 %
	1,4-difluorobenzene	97.7 %
	Bromochlorobenzene	99.3 %

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: Land Farm 2 Closures

Analyst

Review



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

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Client:	Envirotech	Project #:	1-02-60001
Sample ID:	56	Date Reported:	08-05-10
Laboratory Number:	55386	Date Sampled:	08-02-10
Chain of Custody:	10089	Date Received:	08-02-10
Sample Matrix:	Soil	Date Analyzed:	08-03-10
Preservative:	Cool	Date Extracted:	08-03-10
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg))
Benzene	ND	0.9	
Toluene	ND	1.0	
Ethylbenzene	ND	1.0	
p,m-Xylene	ND	1.2	

ND

ND

Total BTEX

o-Xylene

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.7 %
	1,4-difluorobenzene	97.4 %
	Bromochlorobenzene	99.9 %

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.

Analyst

Review



EPA METHOD 8021 **AROMATIC VOLATILE ORGANICS**

....

Client:	Envirotech	Project #:	1-02-60001
Sample ID:	57	Date Reported:	08-05-10
Laboratory Number:	55387	Date Sampled:	08-02-10
Chain of Custody:	10089	Date Received:	08-02-10
Sample Matrix:	Soil	Date Analyzed:	08-03-10
Preservative:	Cool	Date Extracted:	08-03-10
Condition:	Intact	Analysis Requested:	BTEX

		Det.	ļ
	Concentration	Limit	
Parameter	(ug/Kg)	(ug/Kg)	
Benzene	ND	0.9	
Toluene	ND	1.0	
Ethylbenzene	ND	1.0 ~	
p,m-Xylene	ND	1.2	
o-Xylene	ND	0.9	
Total BTEX	ND		

Total BTEX

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery	
	Fluorobenzene	102 %	
	1,4-difluorobenzene	98.3 %	
	Bromochlorobenzene	100 %	

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

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

Analyst

Review



Client:	N/A	F	Project #:	N/	/A
Sample ID:	0803BBLK QA/QC		Date Reported:	08	3-05-10
aboratory Number:	55368	C	Date Sampled:	N/	/A
Sample Matrix:	Soil		Date Received	N/	
Preservative:	N/A		Date Analyzed:		3-03-10
Condition:	N/A	A	Analysis [.]	B	TEX
Calibration and	I-Cal RF:	Č-Čal RF:	%Diff.	Blank	Detect.
Detection Limits (ug/L)		Accept. Rang	e 0 - 15%	Conc	Limit
Benzene	1 3846E+007	1.3874E+007	0.2%	ND	0.1
foluene	9 5430E+006	9.5621E+006	0.2%	ND	0.1
Ethylbenzene	6 7927E+006	6 8063E+006	0.2%	ND	0.1
o,m-Xylene	1.6107E+007	1.6139E+007	0.2%	ND	0.1
o-Xylene	5 4695E+006	5 4805E+006	0.2%	ND	0.1
Duplicate Conc. (ug/Kg) Benzene	Sample 1.7	Dùplicate	(*):***********************************	Accept Range	Detect. Limi 0.9
Benzene Foluene Ethylbenzene o,m-Xylene	tens Cheve ages over the intense and in Cillers in		· · · · · · · · · · · · · · · · · · ·	0 Var 6 - 1,	
e – 19. – Served allen van de la definie – 19. en der einen eine eine der der der Server – Serveder – Server de	1.7 2.7 7.7 31.5	1.9 2.9 7.5 31.2	11.8% 7.4% 2.6% 1.0% 2.6%	0 - 30% 0 - 30% 0 - 30% 0 - 30%	0.9 1.0 1.0 1.2
Benzene Foluene Ethylbenzene o,m-Xylene o-Xylene Spike Conc. (ug/Kg)	1.7 2.7 7.7 31.5	1.9 2.9 7.5 31.2 25.9	11.8% 7.4% 2.6% 1.0% 2.6%	0 - 30% 0 - 30% 0 - 30% 0 - 30% 0 - 30%	0.9 1.0 1.0 1.2 0.9
Benzene Foluene Ethylbenzene o,m-Xylene o-Xylene B pike Conc. (ug/Kg)	1.7 2.7 7.7 31.5 26.6 Sample	1.9 2.9 7.5 31.2 25.9 Amount Spiked	11.8% 7.4% 2.6% 1.0% 2.6% Spiked Sample	0 - 30% 0 - 30% 0 - 30% 0 - 30% 0 - 30%	0.9 1.0 1.0 1.2 0.9
Benzene Foluene Ethylbenzene o,m-Xylene o-Xylene Spike Conc. (ug/Kg) Benzene Foluene	1.7 2.7 7.7 31.5 26.6 Sample 1.7	1.9 2.9 7.5 31.2 25.9 Amount Spiked 50.0	11.8% 7.4% 2.6% 1.0% 2.6% Spiked Sample 51.6	0 - 30% 0 - 30% 0 - 30% 0 - 30% 0 - 30% % Recovery	0.9 1.0 1.2 0.9
Benzene Foluene Ethylbenzene o,m-Xylene o-Xylene	1.7 2.7 7.7 31.5 26.6 Sample 1.7 2.7	1.9 2.9 7.5 31.2 25.9 Amount Spiked 50.0 50.0	11.8% 7.4% 2.6% 1.0% 2.6% Spiked Sample 51.6 50.5	0 - 30% 0 - 30% 0 - 30% 0 - 30% 0 - 30% % Recovery 103% 101%	0.9 1.0 1.2 0.9 Accept Range 39 - 150 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 55382-55387, 55368 and 55377 Analyst Review


Chloride

Total Chloride		5	
Parameter	-	Concentration (mg	/Kg)
Condition:	Intact	Chain of Custody:	10089
Preservative:	Cool	Date Analyzed:	08-04-10
Sample Matrix:	Soil	Date Received:	08-02-10
Lab ID#:	53	Date Sampled:	08-02-10
Sample ID:	55383	Date Reported:	08-04-10
Client:	Envirotech	Project #:	1-02-60001

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Land Farm 2 Closures

Analyst

Review

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Chloride

Client:	Envirotech	Project #:	1-02-60001
Sample ID:	55384	Date Reported:	08-04-10
Lab ID#:	54	Date Sampled:	08-02-10
Sample Matrix:	Soil	Date Received:	08-02-10
Preservative:	Cool	Date Analyzed:	08-04-10
Condition:	Intact	Chain of Custody:	10089

Parameter

Total Chloride

Concentration (mg/Kg)

10

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

DOD) Analyst

Review



Chloride

Parameter		Concentration (mg	/Kg)
Condition:	Intact	Chain of Custody:	10089
Preservative:	Cool	Date Analyzed:	08-04-10
Sample Matrix:	Soil	Date Received:	08-02-10
Lab ID#:	55	Date Sampled:	08-02-10
Sample ID:	55385	Date Reported:	08-04-10
Client:	Envirotech	Project #:	1-02-60001

Total Chloride

15

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

<u>X</u>) Analyst

Review



Chloride

Client:	Envirotech	Project #:	1-02-60001
Sample ID:	55386	Date Reported:	08-04-10
Lab ID#:	56	Date Sampled:	08-02-10
Sample Matrix:	Soil	Date Received:	08-02-10
Preservative:	Cool	Date Analyzed:	08-04-10
Condition:	Intact	Chain of Custody:	10089

Parameter

Concentration (mg/Kg)

Total Chloride

15

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

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 $\mathcal{D}\mathcal{D}$ Analyst

Review



Chloride

Client:	Envirotech	Project #:	1-02-60001
Sample ID:	55387	Date Reported:	08-04-10
Lab ID#:	57	Date Sampled:	08-02-10
Sample Matrix:	Soil	Date Received:	08-02-10
Preservative:	Cool	Date Analyzed:	08-04-10
Condition:	Intact	Chain of Custody:	10089

Parameter

... . . .

Concentration (mg/Kg)

Total Chloride

20

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Analyst

Review

CHAIN OF CUSTODY RECORD

10089

Client:			Project Name / L												YSIS		AME ⁻	TERS					
Envinote	rch		Land Far	mz	Closu	res				• ·	•												
Client Address:			Sampler Name:				•	1	X In	K.	6		[N.					
			Sampler Name: i Reve (Client No.: i - OR	bor	ciá R	RYPS			(Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	s	ļ.										
Client Phone No.:			Client No.:						po	thoc	po	letal	loi		Η̈́Η		₽	ш				0	tact
			1-02	- 60	1001				Meth	(Me	Meth	RCRA 8 Metals	Cation / Anion		TCLP with H/P		TPH (418.1)	CHLORIDE	}			Sample Cool	Sample Intact
Sample No./	Sample	Sample	Lab No.	s	ample	No./Volume	Preser		T	Ц		Å.	tion	5	LP L	Т	÷ H				-	du	du
Identification	Date	Time			Matrix	of Containers	HgCl, HC	3	ТРН	ВТ	8	Ř	ပီ	RCI RCI	P	PAH	ц Н		_	 		<u>s</u>	Ŝ
53	8/2/10	13:00	55383	Soil	Sludge Aqueous	402		X	x	X).			Y	Y
54		13:10	55384	Soil	Sludge Aqueous			X	ĸ	X							L	\mathbf{x}					
55		13:22	55384 55385	Solid	Sludge Aqueous			K	X	x							-	X				\square	
56		13:32	55386 55387	Solid	Sludge Aqueous			X	Л	X								X					
57	2	13:40	55387	Soil	Sludge Aqueous	L		X	X	Х								X					1
				Soil Solid	Sludge Aqueous																		
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Client:	Envirotech	Project #:	1-02-60001	
Sample ID:	47	Date Reported:	09-15-10	
Laboratory Number:	55856	Date Sampled:	09-14-10	
Chain of Custody No:	10352	Date Received:	09-14-10	
Sample Matrix:	Soil	Date Extracted:	09-14-10	
Preservative:	Cool	Date Analyzed:	09-15-10	
Condition:	Intact	Analysis Requested:	8015 TPH	,

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	2.6	0.1
Total Petroleum Hydrocarbons	2.6	

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: Land Farm 2 Unit 5 Closures



Review



Quality Assurance Report

Client:	QA/QC		Project #:		N/A
Sample ID:	09-15-10 QA/0	SC	Date Reported:		09-15-10
Laboratory Number:	55845		Date Sampled:		N/A
Sample Matrix:	Methylene Chlor	ide	Date Received:		N/A
Preservative:	N/A		Date Analyzed:		09-15-10
Condition:	N/A		Analysis Reques	ted:	TPH
	I-Cal Date		C-Calire	% Difference	Accept Range
Gasoline Range C5 - C10	09-15-10	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	09-15-10	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Refer to the production of the second sec	1147-114-01-147-14-14-14-14-14-14-14-14-14-14-14-14-14-	anna 11 an Anna an Anna an Anna 12 an Anna an Anna			781m
Blank Conc: (mg/Lamg/Kg)	$r = r = x_{+}r$	Concentration:	1 16 (13 (T)	Detection	16
Gasoline Range C5 - C10		ND		0.2	
Diesel Range C10 - C28		ND		0.1	
Total Petroleum Hydrocarbons		ND			
Duplicate Conc. (mg/Kg)	se Sample	Duplicate	WDifference	Accept. Range	Đ.
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 Diesel Range C10 - C28	ND	250	255	102%	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 55845-55846, 55849-55851, 55855-55858

Analvst

Review



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Envirotech		Project #:	1-02-60001
Sample ID:	47		Date Reported:	09-15-10
Laboratory Number:	55856		Date Sampled:	09-14-10
Chain of Custody:	10352		Date Received:	09-14-10
Sample Matrix:	Soil		Date Analyzed:	09-15-10
Preservative:	Cool		Date Extracted:	09-14-10
Condition:	Intact		Analysis Requested:	BTEX
			Dilution:	10
		• • • •		Det.
_		Concentration		Limit
Parameter		(ug/Kg)		(ug/Kg)
Benzene		ND		0.9
Toluene		1.3		1.0
Ethylbenzene		ND		1.0
p,m-Xylene		6.2		1.2
o-Xylene		3.1		0.9

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	102 %
	Bromochlorobenzene	106 %

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: Land Farm 2 Unit 5 Closures

Analyst

in

Review



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client: Sample ID: Laboratory Number: Sample Matrix: Preservative: Condition:	N/A 0915BBLK QA/QC 55845 Soil N/A N/A		Project #: Date Reported: Date Sampled: Date Received: Date Analyzed: Analysis:) 	V/A)9-15-10 N/A N/A)9-15-10 3TEX
	#11 ⁻ 194.05-1731102945.#5345.#111111111111111111111111111111111111	CONTRACTOR STATES AND	Dilution:	1	
Calibration, and Detection Limits (ug/L)	I-CaliRF:	C-CallRF Accept	vi - %Diff: ge 0i= 1/5% ↓	Blank Conc	Detect. Limit
Benzene	3.7083E+006	3.7158E+006	0.2%	ND	0.1
Toluene	1.8075E+006	1.8111E+006	0.2%	ND	0.1
Ethylbenzene	1.4413E+006	1.4442E+006	0.2%	ND	0.1
p,m-Xylene	2.8355E+006	2.8411E+006	0.2%	ND	0.1
o-Xylene	9.7261E+005	9.7456E+005	0.2%	ND	0.1
Duplicate (Conc.* (Ug/Kg) Benzene Toluene Ethylbenzene p,m-Xylene o-Xylene	Samplet of ND ND ND ND ND ND	ND ND ND ND ND ND	0.0% 0.0% 0.0% 0.0% 0.0% 0.0%	Accept/Range 0 - 30% 0 - 30% 0 - 30% 0 - 30% 0 - 30%	0.9 1.0 1.0 1.2 0.9
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked/Sample	%Recovery.	AcceptiRange
Benzene	ND	500	493	98.7%	39 - 150
Toluene	ND	500	501	100%	46 - 148
Ethylbenzene	ND	500	498	99.6%	32 - 160
p,m-Xylene	ND	1000	1,000	100%	46 - 148
o-Xylene	ND	500	500	100%	46 - 148
-					

ND - Parameter not detected at the stated detection limit.

Dilution: Spike and spiked sample concentration represent a dilution proportional to sample dilution.

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 55845-55846, 55851-55858 n

Analyst

Review



Chloride

Parameter		Concentration (mg	/Kg)
۰.			
Condition:	Intact	Chain of Custody:	10352
Preservative:	Cool	Date Analyzed:	09-15-10
Sample Matrix:	Soil	Date Received:	09-14-10
_ab ID#:	55856	Date Sampled:	09-14-10
Sample ID:	47	Date Reported:	09-15-10
Client:	Envirotech	Project #:	1-02-60001

Concentration (mg/Kg)

Total Chloride

140

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Land Farm 2 Unit 5 Closures

Analyst

101 Review

CHAIN OF CUSTODY RECORD

Client:		P	Project Name / Location:												YSIS	/ PAR		ERS					
Euvirotea	-h	L	Land Fam? Unit 5 Mosures Sampler Name: <u>Rene Garcia Reyes</u> Client No.:							\mathbf{v}			•										
Client Address:		s	Sampler Name:						X	The second	6							X					
			Danie Garane Paras						ğ	80	826	S											
Client Phone No.:	. <u></u>	ć	lient No.:	Jerc	~ /	7			ğ	bot	po	etal	ion		НЧ		,					ō	act
			1-02-						(Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion		TCLP with H/P		TPH (418.1)	CHLORIDE				Sample Cool	Sample Intact
Sample No./	Sample	Sample			ample	No./Volume Preservati		rvative	l ≥ T	X	1 C	RA	U	_	<u>م</u>		H	ГÖ				np(ar
Identification	Date	Time	Lab No.	N	/latrix	of Containers				BI	١Š	В С Я	Cat	RCI	1 <u>C</u>	PAH	ΤP					Sai	Sai
47	914/10	12:45	55856	Soil Solid	Sludge Aqueous	40Z		K		K								X				Х	X
59	9/14/10	13:15	55851 55857	Solid Soil Solid	Sludge Aqueous	402		F	\succ	X								\checkmark				\times	X
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11

New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson Governor

Jon Goldstein Cabinet Secretary

Jim Noel Deputy Cabinet Secretary Mark Fesmire Division Director Oil Conservation Division



July 6, 2010

Kyle P. Kerr Envirotech, Inc. 5796 US Highway 64 Farmington, New Mexico 87401

RE: Request for Approval to Apply a Successive Lift Envirotech, Inc. Commercial Landfarm #2: Permit NM-1-0011 Location: NW/4 Section 6, Township 26 North, Range 10 West, NMPM San Juan County, New Mexico

Dear Mr. Kerr:

The Oil Conservation Division (OCD) has reviewed Envirotech, Inc.'s (Envirotech) request, dated July 2, 2010 to grant approval to apply an additional six-inch lift to the following cell(s): **Cell 46**.

Based upon the analytical results provided, OCD hereby grants Envirotech approval to apply an additional six-inch lift of contaminated soils to the above referenced landfarm cell(s). Envirotech shall ensure that the application of an additional six-inch lift of contaminated soils to the above referenced landfarm cells *does not exceed the maximum thickness of two feet or 3000 cubic vards per acre limit* as specified in 19.15.36.15 NMAC. The "parameter for cubic yardages of 15,000 or less to be applied in each five (5) acre cell," as stated in the July 2, 2010 request, is not equivalent to the regulatory requirement is identified above. It is OCD's understand, from conversations with Mr. Kyle Kerr, that the thickness of each cell would be measured and confirmed during the next vadose zone sampling event. Please note that with the addition of successive lifts Envirotech must initiate treatment zone monitoring and resume vadose zone monitoring. The vadose zone monitoring depth must be adjusted to reach the 2-3 foot zone below the original native ground surface.

Please be advised that approval of this request does not relieve Envirotech of liability should operations result in pollution of surface water, ground water or the environment. Nor does

Envirotech, Inc. Commercial Landfarm #2 Permit NM-1-0011 July 6, 2010 Page 2 of 2

approval relieve Envirotech of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or <u>brad.a.jones@state.nm.us</u>.

Ş

Sincerely, Brad-A-Jones

Environmental Engineer

BAJ/baj

Attachment: Facility Map (Revision Date: June 24, 2010)

cc: OCD District III Office, Aztec



5796 U.S. HIGHWAY 64, FARMINGTON, NM 87401 505-632-0615

; ;



Mr. Brad Jones New Mexico Oil Conservation District 1220 South St. Francis Drive Santa Fe, New Mexico 87505

RECEIVED OCD 2010 JUL -6 P 1: 19

RE: ENVIROTECH'S LANDFARM #2 DISCONTINUED MAINTENANCE AND ADDITIONAL LIFT FOR CELL 46 IN LAND FARM 2 UNIT 5.

Dear Mr. Jones:

Attached please find analytical documentation supporting our request for discontinued maintenance at Envirotech's Land Farm #2, for cell 46 located near Hilltop, New Mexico. The area being submitted is shown on the attached map, marked by blue crosshatch design as well as the other cells previously approved. As per Envirotech's OCD Rule 711 Permit Approval NM 01-0011 dated April 8, 2000 the cell being requested for discontinued maintenance has passed laboratory analysis of less than 100 ppm TPH, 50 ppb BTEX and 10 ppm Benzene. In addition, Envirotech has sampled for chlorides. As stated in the treatment zone monitoring portion of Envirotech's permit, no cell sampled was larger than five acres. Samples were collected as a five-point composite. Remediation zone layers averaged 12" in depth, results available upon request.

The blue cell 46 has passed analysis for total petroleum hydrocarbons, benzene, toluene, ethylbenzene and total xylenes (see attached laboratory results). As you will notice the BTEX results are in parts per billion, so the result should read .0208. Envirotech hereby requests this cell be granted discontinued maintenance status and approval to apply an additional lift of gualifying material to this cell.

Given the parameter for cubic yardages of 15,000 or less to be applied in each five (5) acre cell, we are happy to provide the following cubic yard amounts in each cell up to this time:

Cell 46: 9,723 cubic yards

Due to the unusually large amounts of contaminated soil Envirotech has accepted recently, our Land Farm #2 is currently under limited space constraints. Therefore, Envirotech respectfully requests expedition of this matter, in order that our Land Farm #2 may continue to serve the Four Corners region without interruption.

Thank you for your consideration in this matter. If you have any questions or require additional information, please do not hesitate to contact our office at (505) 632-0615.

Respectfully submitted,

Envirotech, Inc.

April E. Pohl / Land Farm Administrator apohl@envirotech-inc.com

AEP/Office/Corporate/LF/DC maintenance and added lift/7-2-10

Køte P. Ker**f** Vice President/CHMM <u>kpkerr@envirotech-inc.com</u>





EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

			•
Client:	Envirotech	Project #:	
Sample ID:	46	Date Reported:	04-30-10
Laboratory Number:	53711	Date Sampled.	04-1 5-10
Chain of Custody:	9092	Date Received	04-15 -10
Sample Matrix:	Soil,	Date Analyzed:	. 04-29-10
Preservative:	Cool	Date Extracted:	04-23-10
Condition:	Intact	Analysis Requested:	BTEX -
			•

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	-
, <u>, , , , , , , , , , , , , , , , , , </u>	· ·		
Benzene	ND	0.9	
Toluene	165	· 1.0	
Ethylbenzene	9.4	1.0	
p,m-Xylene	20.4	1.2	
o-Xylene	13.3	0.9	
Total BTEX	208		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter		Percent Recovery
	Fluorobenzene	•	99.6 %
ł	1,4-difluorobenzene		99.2 %
	Bromochlorobenzene	,· ·	98.8 %

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.

Review



EPA METHOD 8021 **AROMATIC VOLATILE ORGANICS**

Client: Sample ID: Laboratory Number: Sample Matrix: Preservative Condition:	N/A 04-29-BTEX QA/Q4 53704 Soil N/A N/A	C	Project #: Date Reported: Date Sampled. Date Received: Date Analyzed: Analysis		N/A 04-30-10 N/A N/A 04-29-10 BTEX
Calibration and	l-CaliRF	LITE BALLER THE PARTY OF THE PARTY OF THE PARTY	%Diff. 19e.0=:15%-1	Blank Conce	Detect
Benzene	2 1496E+006	2.1539E+006	0.2%	ND	0.1
Toluene	1 1328E+006	1 1351E+006	0.2%	ND	0.1
Ethylbenzene	8.0255E+005 2 1971E+006	8.0416E+005	0.2% 0.2%		0.1
p,m-Xylene o-Xylene	2 1971E+006 9.5956E+005	2.2015E+006 9.6149E+005	0.2%	ND	0.1
Duplicate(Conc. (Ug/Kg)	Sample			AcceptiRange	
Benzene	, ND	ND	0.0%	0 - 30%	0.9
Toluene	. 14.0	13.5	3.6%	0 - 30%	1.0
Ethylbenzene	2.4	2.1	12.5%	0 - 30%	1.0
p,m-Xylene o-Xylene	8.2 1.5	8.1 1.3	1.2% 13.3%	0 - 30% 0 - 30%	1.2 0.9
Spike Conc. (ug/Kg)	Sample		Spiked Sample:	-	Accept Range
Benzene	ND	50.0	. 50.6	101%	39 - 150
Toluene	14.0	50.0	• 58.0	90.6%	46 - 148
Ethylbenzene	2.4	50.0	53.5	102%	32 - 160
p,m-Xylene	. 8.2	100	103.8	95.9%	46 - 148
o-Xylene	1.5	50.0	51.9	101%	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 53704 - 53711 and 53877 - 53878.

Analyst

09 -

Review

envirotech Analytical Laboratory

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

t.		• .	•
Client:	Envirotech	Project #:	
Sample ID:	46	Date Reported:	. 04-30-10
Laboratory Number:	53711	Date Sampled:	04-15-10
Chain of Custody No:	9092	Date Received:	04-15-10
Sample Matrix:	Soil	Date Extracted:	04-23-10
Preservative:	Cool	Date Analyzed:	04-29-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	6.8	0.2
Diesel Range (C10 - C28)	80.4	0.1
Total Petroleum Hydrocarbons	87.2	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.

Review



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EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

				•			
Client:	QA/QC		Project #:	٢	N/A		
Sample ID:	04-29-10 QA/0	2c	Date Reported:		04-30-10		
Laboratory Number:	. 53704		Date Sampled:		N/A		
Sample Matrix:	Methylene Chlor	ride	Date Received:	N/A			
Preservative:	N/A		Date Analyzed:	04-29-10			
Condition:	N/A		Analysis Reques	ted:	TPH		
					1945 - 1945 - 1946 - 1946 - 1946 - 1946 - 1946 - 1946 - 1946 - 1946 - 1946 - 1946 - 1946 - 1946 - 1946 - 1946		
	Later I-Call Date				Accept Ran		
Gasoline Range C5 - C10	05-07-07	1.0028E+003	1.0032E+003	0.04%	0 - 15%		
Diesel Range C10 - C28	05-07-07	9.9912E+002	9.9952E+002	0.04%	0 - 15% _.		
Blank Cone. (img/Lamg/Ko		Goncentration		Detection Lin	bit		
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	2% Difference	Accept: Rang			
Gasoline Range C5 - C10	ND	ND	0.0%	0 - 30%			
Diesel Range C10 - C28	230	230	0.0%	0 - 30%			
Dieser Kange 010-020	230	250	0.078	0 - 30,78			
				The second s			
Spike Conc. (mg/Kg)	Sample	Spike/Added	Spike Result	% Recovery	Accept Ran		
Spike Conc. (mg/Kg) Gasoline Range C5 - C10	Sample 🦗 ND	250	Spike Result 255	102%	Accept Ran 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 53704 - 53711 and 53877 - 53878.

Review



Chloride

Client:	Envirotech	Project #:		
Sample ID:	46	Date Reported:	04-30-10	,
Lab ID#:	53711	Date Sampled:	· 04-15-10	· •
Sample Matrix:	Soil	Date Received:	04-15-10	
Preservative:	Cool	Date Analyzed:	04-27-10	
Condition:	Intact	Chain of Custody:	9092	•

Parameter

Concentration (mg/Kg)

Total Chloride		•	5	0	
•	•				
		•			

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

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Landfarm 2 Unit 5 Closures

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(<u>Aristic of Weeter</u> Review

CHAIN OF CUSTODY RECORD

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Client Address:			S	ampler Name:	·	*					()	5	6	[Τ_							
·		_		Révé	60	ircía					TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	S							19			ĺ	
Client Phone No.:			С	lient No.:							Do	tho	poq	letal	nion		Η̈́Η		÷.	ш	K		00	tact	
				1-02-60002					Meth	(Me	Met	RCRA-8 Metals	Cation / Anion		TCLP with H/P		TPH (418.1)	CHLORIDE	Berene		Sample Cool	Sample Intact			
Sample No./	1 1	ample	Sample	Lab No.		ample			H (Ĕ) X	CRA	ation	RCI	L L	PAH	H H		de la	~	dmg	dmg			
Identification		Date	Time			Matrix		ntainers	HgCi, H		<u> </u>	<u> </u>	×	<u> </u>	Ö	Ĕ	Ĭ	à	F	<u></u> <u></u>	\square		Ő	ů	
. 53	4/	15/10	10:00	53704	Solid	Sludge Aqueous	4	foz		$ $ \times	X	X								χ	X		X	X	
<u> </u>		1	10:15	53705	Solid	Sludge Aqueous		1		X	X	$ \chi $								X	X		X	×	
51			10:30	53706	Solid	Sludge Aqueous				X	6	X								X	X		X	X	
50			10:45	53707	Solid	Sludge Aqueous		·		X	X	X								X.	×		X	X	
49			11:00	53708	Solid	Sludge Aqueous				X	X	X						c		X	X	•	X	x	
48			11:15	53709	Solid	Sludge Aqueous				X	X	X								X	X		x	X	
47			11:30	53710	Soil Solid	Sludge Aqueous				X	X	X								X	X		X	X	
46	ļ		11:45	53711	Solid	Sludge Aqueous		-		X	X	, X								X	A		X	X	
					Soil Solid	Sludge Aqueous		•															-		
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New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson Governor

Jon Goldstein Cabinet Secretary

Jim Noel Deputy Cabinet Secretary Mark Fesmire Division Director Oil Conservation Division



June 29, 2010

Kyle P. Kerr Envirotech, Inc. 5796 US Highway 64 Farmington, New Mexico 87401

RE: Request for Approval to Apply a Successive Lift Envirotech, Inc. Commercial Landfarm #2: Permit NM-1-0011 Location: NW/4 Section 6, Township 26 North, Range 10 West, NMPM San Juan County, New Mexico

Dear Mr. Kerr:

The Oil Conservation Division (OCD) has reviewed Envirotech, Inc.'s (Envirotech) request, dated June 24, 2010 to grant approval to apply an additional six-inch lift to the following cells: Cells 48, 49, 50, 51, and 52.

Based upon the analytical results provided, OCD hereby grants Envirotech approval to apply an additional six-inch lift of contaminated soils to the above referenced landfarm cells. Envirotech shall ensure that the application of an additional six-inch lift of contaminated soils to the above referenced landfarm cells *does not exceed the maximum thickness of two feet or 3000 cubic yards per acre limit* as specified in 19.15.36.15 NMAC. The "parameter for cubic yardages of 15,000 or less to be applied in each five (5) acre cell," as stated in the June 24, 2010 request, is not equivalent to the regulatory requirement is identified above. It is OCD's understand, from conversations with Mr. Kyle Kerr, that the thickness of each cell would be measured and confirmed during the next vadose zone sampling event. Please note that with the addition of successive lifts Envirotech must initiate treatment zone monitoring and resume vadose zone monitoring. The vadose zone monitoring depth must be adjusted to reach the 2-3 foot zone below the original native ground surface.

OCD was unable to consider **Cell 46**, as requested in the June 24, 2010 submittal, for approval due to the absence of analytical data.

Envirotech, Inc. Commercial Landfarm #2 Permit NM-1-0011 June 29, 2010 Page 2 of 2

Please be advised that approval of this request does not relieve Envirotech of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve Envirotech of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or <u>brad.a.jones@state.nm.us</u>.

Sincerely Brad A. Jones

Environmental Engineer

BAJ/baj

Attachment: Facility Map (Revision Date: June 23, 2010)

cc: OCD District III Office, Aztec





RECEIVED OCD 2010 JUN 28 P 2: 17

Mr. Brad Jones New Mexico Oil Conservation District 1220 South St. Francis Drive Santa Fe, New Mexico 87505

RE: ENVIROTECH'S LANDFARM #2 DISCONTINUED MAINTENANCE AND ADDITIONAL LIFT FOR CELLS 46, 48, 49, 50, 51 and 52 in Land Farm 2 Unit 5.

Dear Mr. Jones:

Attached please find analytical documentation supporting our request for discontinued maintenance at Envirotech's Land Farm #2, for cells 46, 48, 49, 50, 51 and 52 located near Hilltop, New Mexico. The area being submitted is shown on the attached map, marked by blue crosshatch design. As per Envirotech's OCD Rule 711 Permit Approval NM 01-0011 dated April 8, 2000 all cells being requested for discontinued maintenance have passed laboratory analysis of less than 100 ppm TPH, 50 ppm BTEX and 10 ppm Benzene. In addition, Envirotech has sampled for chlorides. As stated in the treatment zone monitoring portion of Envirotech's permit, no cell sampled was larger than five acres. Samples were collected as a five-point composite. Remediation zone layers averaged 12" in depth, results available upon request.

The blue cells (46, 48, 49, 50, 51 and 52) have passed analysis for total petroleum hydrocarbons, benzene, toluene, ethylbenzene and total xylenes (see attached laboratory results). Envirotech hereby requests these cells be granted discontinued maintenance status and approval to apply an additional lift of qualifying material to these cells.

Given the parameter for cubic yardages of 15,000 or less to be applied in each five (5) acre cell, we are happy to provide the following cubic yard amounts in each cell up to this time:

Cell 46: 9,723 cubic yards Cell 50: 5,477 cubic yards Cell 48: 5,233 cubic yards Cell 51: 7,658 cubic yards Cell 49: 6,459 cubic yards Cell 52: 7,380 cubic yards

Due to the unusually large amounts of contaminated soil Envirotech has accepted recently, our Land Farm #2 is currently under limited space constraints. Therefore, Envirotech respectfully requests expedition of this matter, in order that our Land Farm #2 may continue to serve the Four Corners region without interruption.

Thank you for your consideration in this matter. If you have any questions or require additional information, please do not hesitate to contact our office at (505) 632-0615.

Respectfully submitted,

Envirotech. Inc.

April E. Pohl

April E. PoKI Land Farm Administrator <u>apohl@envirotech-inc.com</u>

AEP/Office/Corporate/LF/DC maintenance and added lift/6-24-10

Kyle P. Ker

Vice President/CHMM kpkerr@envirotech-inc.com





Client:	Envirotech	Project #:	
Sample ID.	52	Date Reported:	04-30-10
Laboratory Number:	53705	Date Sampled:	. 04-15-10
Chain of Custody No:	9092	Date Received:	04-15-10
Sample Matrix:	Soil .	Date Extracted:	04-23-10
Preservative:	Cool	Date Analyzed:	04-29-10 ·
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	81.4	0.1
Total Petroleum Hydrocarbons	81.4	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: Landfarm 2 Unit 5 Closures

Analyst

Review

5796 US Highway 64, Farmington, NM 87401



Client:	Eņvirotech	Project #:	
Sample ID:	51	Date Reported:	04-30-10
Laboratory Number:	53706	Date Sampled:	04-15-10
Chain of Custody No:	9092	Date Received:	04-15-10
Sample Matrix:	Soil	Date Extracted:	04-23-10
Preservative:	Cool	Date Analyzed:	04-29-10 ⁻
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	46.6	0.1
Total Petroleum Hydrocarbons	46.6	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.

Review



Client:	Envirotech	Project #:	
Sample ID:	50	Date Reported:	04-30-10
Laboratory Number:	53707	Date Sampled:	04-15-10
Chain of Custody No:	9092	Date Received:	04-15-10
Sample Matrix:	Soil	Date Extracted:	04-23-10
Preservative:	Cool	Date Analyzed:	04-29-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	23.9	0.1
Total Petroleum Hydrocarbons	23.9	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.

Review



Client:	Envirotech	Project #:	
Sample ID:	49	Date Reported:	04-30-10
Laboratory Number:	53708	Date Sampled:	. 04-15-10
Chain of Custody No:	9092	Date Received:	04-15-10
Sample Matrix:	Soil .	Date Extracted:	04-23-10
Preservative:	Cool	Date Analyzed:	04-29-10
Condition:	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.

Review



Client:	Envirotech	Project #:	•	•
Sample ID:	48	Date Reported:	04-30-10	
Laboratory Number:	53709	Date Sampled:	04-15-10	
Chain of Custody No:	9092	Date Received:	04-15-10	
Sample Matrix:	Soil	Date Extracted:	04-23-10	
Preservative:	Cool	Date Analyzed:	04-29-10	
Condition:	Intact	Analysis Requested:	8015 TPH	
	,			

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	116	0.1
Total Petroleum Hydrocarbons	116	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: Landfarm 2 Unit 5 Closures

Review falvst

5796 US Highway 64, Farmington, NM 87401

Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com



Quality Assurance Report

Client:	QA/QC		Project #:		N/A
Sample ID:	04-29-10 QA/	. DC	Date Reported:		04-30-10
Laboratory Number:	53704	~~	Date Sampled:		⁻ N/A
Sample Matrix:	Methylene Chlo	ride	Date Received:		N/A
Preservative:	N/A		Date Analyzed:		04-29-10
Condition:	N/A		Analysis Reques	ted:	ТРН
	-	_			
	Cal Date		C=CalJRF		Accept Rang
Gasoline Range C5 - C10	05-07-07	1.0028E+003	1.0032E+003	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	9.9912E+002	9.9952E+002	0.04%	0 - 15%
Blank Conc. (mg/L-mg/Kg) stre	Concenticition		Detection Lin	
Gasoline Range C5 - C10	/	ND		0.2	
Diesel Range C10 - C28		ND		0.1	
Total Petroleum Hydrocarbons		ND		0.2	
an a	·			er bes at the state in the state of the stat	•
Duplicate Conc. (mg/Kg).	Sample	Duplicate:	. % Difference	Accept: Range	3
Gasoline Range C5 - C10	ND	ND	· 0.0%	0 - 30%	
Diesel Range C10 - C28	230	230	0.0%	0 - 30%	
				RATE SHORE	
	Sample	SpikerAdded	Spike Result	% Recovery	Accept, Rang
Spike Conc. (mg/Kg)					
Spike Conc. (mg/Kg) Gasoline Range C5 - C10	ND	250	255 481	102% 100%	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 53704 - 53711 and 53877 - 53878.

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EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

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Client:	Envirotech	Project #:		
Sample ID:	52	Date Reported:	04-30-10	
Laboratory Number:	53705	Date Sampled:	04-15-10	
Chain of Custody:	9092	Date Received:	04-15-10	
Sample Matrix:	Soil -	Date Analyzed:	,04-29-10	
Preservative:	Cool	Date Extracted:	04-23-10	
Condition:	Intact	Analysis Requested:	BTEX	

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	-
Benzene	21.5	0.9	
Toluene	11.2	1.0	
Ethylbenzene	2.5	1.0	
p,m-Xylene	12.1	1.2	
o-Xylene	3.6	0.9	
Total BTEX	50.9		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	96.8 %
	1,4-difluorobenzene	96.6 %
	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.

cete Review



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

	. '	x -	
Client:	Envirotech	Project #:	
Sample ID:	51	Date Reported:	04-30-10
Laboratory Number:	53706	Date Sampled:	04-15-10
Chain of Custody:	9092	Date Received:	04-15-10
Sample Matrix:	Soil .	Date Analyzed:	,04-29-10
Preservative:	Cool	Date Extracted:	04-23-10
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
Benzene	11.5	0.9	
Toluene	8.7	1.0	
Ethylbenzene	1.8 .	1.0	
p,m-Xylene	5.3	1.2	
o-Xylene	3.0	0.9	
Total BTEX	30.3	1	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	95.4 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	98.4 %

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.

Sceters Review


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Client:	Envirotech	Project #:		
Sample ID:	50 [`]	Date Reported:	04-30-10	
Laboratory Number:	53707	Date Sampled:	04-15-10	
Chain of Custody:	9092	Date Received:	04-15-10	۰.
Sample Matrix:	Soil ,	Date Analyzed:	04-29-10	
Preservative:	Cool	Date Extracted:	04-23-10	
Condition:	Intact	Analysis Requested:	BTEX	

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
Benzene	12.4	0.9	
Toluene	11.1	1.0	
Ethylbenzene	2.4	1.0	
p,m-Xylene	10.9	1.2	
o-Xylene	. 3.1	0.9	
Total BTEX	39.9	ſ	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.2 %
. .	1,4-difluorobenzene	95.8 %
	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.

Review



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Client:	Envirotech	Project #:	
Sample ID:	49	Date Reported:	04-30-10
Laboratory Number:	53708	Date Sampled:	04-15-10
Chain of Custody:	9092	Date Received:	04-15-10
Sample Matrix:	Soil .	Date Analyzed:	04-29-10
Preservative:	Cool	Date Extracted:	04-23-10
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	· ·
			,
Benzene	33.3	0.9	
Toluene	10.1	1.0	
Ethylbenzene	2.4	1.0	
p,m-Xylene	13.7	1.2	
o-Xylene	3.4	0.9	
Total BTEX	62.9		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	102 %
	1,4-difluorobenzene	97.2 %
	Bromochlorobenzene	99.4 %

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.

Landfarm 2 Unit 5 Closures **Comments:**

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-	. •	•	-
Client:	Envirotech	Project #:	
Sample ID:	48	Date Reported:	04-30-10
Laboratory Number:	53709	Date Sampled:	04-15-10
Chain of Custody:	9092	Date Received:	04-15-10
Sample Matrix:	Soil ,	Date Analyzed:	0,4-29-10
Preservative:	Cool	Date Extracted:	04-23-10
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
Benzene	16.9	0.9	
Toluene	8.6	1.0	
Ethylbenzene	1.2	1.0	
p,m-Xylene	7.5	1.2	
o-Xylene	2.7	0.9	
Total BTEX	36.9		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
L	Fluorobenzene	99.0 %
	1,4-difluorobenzene	103 %
•	Bromochlorobenzene	99.4 %

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.

cete. Mis TL Review



Client: Sample ID: Laboratory Number: Sample Matrix: Preservative: Condition	N/A 24-29-BTEX QA/Q 53704 Soil N/A N/A	C	Project #: Date Reported: Date Sampled: Date Received: Date Analyzed: Analysis:		N/A 04-30-10 N/A N/A 04-29-10 BTEX
Calibration and Detection Limits (ug/L)	i I-CaliRF		%Diff ige 0 = 15%	Blank Conc	Detect
miesterion anno (ugis)			ige of another state	CONS	and the second second second
Benzene	2 1496E+006	2 1539E+006	0.2%	ND	0.1
Toluene	1.1328E+006	1.1351E+006	0.2%	ND	0.1
Ethylbenzene	8.0255E+005	8.0416E+005	0.2%	ND	0.1
p,m-Xylene	2.1971E+006	2.2015E+006	0.2%	ND	0.1
o-Xylene	9 5956E+005	9 6149E+005	0.2%	ND	0.1 .
Duplicate Conc. (ug/Kg) Benzene Toluene Ethylbenzene p,m-Xylene o-Xylene	ND • 14.0 2.4 8.2 1.5	ND 13.5 2.1 8.1 1.3	0.0% . 3.6% 12.5% 1.2% 13.3%	Accept/Range 0 - 30% 0 - 30% 0 - 30% 0 - 30% 0 - 30%	0.9 1.0 1.0 1.2 0.9
Spike Conc. (ug/Kg)	Sample	AmounteSpiked	Spiked Sample 2	% Recovery	AcceptiRange
Benzene	ND	50.0	50.6	101%	39 - 150
Toluene	[′] 14.0	50.0	58.0	90.6%	46 - 148
Ethylbenzene	2.4	50.0	53.5	102%	32 - 160
p,m-Xylene	-8.2	100	103.8	95.9%	46 - 148
o-Xylene	1.5	50.0	51.9	101%	46 - 148
· · · ·					

ND - Parameter not detected at the stated detection limit.

References:

Comments:

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.

QA/QC for Samples 53704 - 53711 and 53877 - 53878.

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All Review



Client:	. Envirotech	Project #:		
Sample ID:	52	Date Reported:	04-30-10	•
Lab ID#:	53705	Date Sampled:	· 04-15-10	
Sample Matrix:	Soil	Date Received:	° 04-15-10	
Preservative:	Cool	Date Analyzed:	04-27-10	
Condition:	Intact	Chain of Custody:	9092	

Parameter

Concentration (mg/Kg)

40

Total Chloride

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Reference: U

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Analvst

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Client:	. Envirotech	Project #:		
Sample ID:	51	Date Reported:	04-30-10	. *
Lab ID#:	53706	Date Sampled:	<u>.</u> ∙04-15-10	
Sample Matrix:	Soil	Date Received:	04-15-10	
Preservative:	Cool	Date Analyzed:	04-27-10	
Condition:	Intact	Chain of Custody:	9092	•

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Parameter

Concentration (mg/Kg)

Total Chloride

40

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Analyst

Review



Client:	Envirotech	Project #:	
Sample ID:	50	Date Reported:	04-30-10
Lab ID#:	53707	Date Sampled:	·04-15-10
Sample Matrix:	Soil	Date Received:	´ 04-15-10
Preservative:	Cool	Date Analyzed:	04-27-10
Condition:	Intact	Chain of Custody:	9092
	•	-	

Parameter

Concentration (mg/Kg)

Total Chloride

65

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

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Client:	_ Envirotech	Project #:	
Sample ID:	49	Date Reported:	04-30-10
Lab ID#:	53708 [.]	Date Sampled:	04-15-10
Sample Matrix:	Soil	Date Received:	[°] 04-15-10
Preservative:	Cool .	Date Analyzed:	04-27-10
Condition:	Intact	Chain of Custody:	9092

Parameter

Concentration (mg/Kg)

5

Total Chloride

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

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Review



Parameter		Concentration (n	na/Ka)
		<i>,</i>	.• *
Condition:	Intact	Chain of Custody:	9092
Preservative:	Cool	Date Analyzed:	04-27-10
Sample Matrix:	Soil	Date Received:	04-15-10
Lab ID#:	53709 [.]	Date Sampled:	04-15-10
Sample ID:	48	Date Reported:	04-30-10
Client:	_ Envirotech	Project #:	

Total Chloride

55

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

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Comments:

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CHAIN OF CUSTODY RECORD

Client: Project Name / Location: ANALYSIS / PARAMETERS Land Falm 2 Unit 5 Closures Envirolach Client Address: Sampler Name: BTEX (Method 8021) VOC (Method 8260) TPH (Method 8015) René García **3CRA 8 Metals** TCLP with H/P Cation / Anion Sample Intact Client Phone No.: Client No.: Sample Cool TPH (418.1) CHLORIDE 1-02-60002 Sample No./ Sample Sample No./Volume Preservative Sample PAH ВĊ Lab No. Containers HgCl, HCl of No. Identification Date Time Matrix 4/15/10 Solid Sludge 402 53704 X 10:00 53 Aqueous Solid Sludge 53705 52 10:15 Х Aqueous Solid Sludge 53706 10:30 51 X Aqueous 60il Sludae 53707 X 10:45 X Solid 50 Aqueous Solid Sludge 53708 49 X 11:00 Aqueous SOP Sludge 53709 48 11:15 X X Solid Aqueous Soil Sludge 11:30 53710 47 X X Aqueous (i) Sludge X 46 X 11:45 53711 X X Solid Aqueous Soil Sludge . Solid Aqueous Soil Sludge Solid Aqueous Relinquished by: (Signature) Date Time Received by: (Signature) Date Time 4/15/10 1-12:50) R 15/10 12:50 Relinguished by: (Signature Received by: (Signature) Relinquished by: (Signature) Received by: (Signature) envirotech Analytical Laboratory 5796 US Highway 64 • Farmington, NM 87401 • 505-632-0615 • lab@envirotech-inc.com

09092



Client:	Envirotech	Project #:	1-02-60002
Sample ID:	Cell 48	Date Reported:	06-17-10
Laboratory Number:	54604	Date Sampled:	06-04-10
Chain of Custody No:	9599	Date Received:	06-04-10
Sample Matrix:	Soil	Date Extracted:	06-12-10
Preservative:	Cool	Date Analyzed:	06-14-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	
Gasoline Range (C5 - C10)	ND	0.2	
Diesel Range (C10 - C28)	27.4	0.1	
Total Petroleum Hydrocarbons	27.4	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: Landfarm 2 Unit 5 Closures

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Analyst

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Quality Assurance Report

Client:	QA/QC		Project #:		N/A
Sample ID:	06-14-10 QA/C	2C	Date Reported:		06-17-10
Laboratory Number:	54602		Date Sampled:	,	N/A
Sample Matrix:	Methylene Chlori	ide	Date Received:		N/A
Preservative:	N/A		Date Analyzed:		06-14-10
Condition:	N/A		Analysis Reques	ted:	TPH
	-		· ····· · · · · · · · · · · · · · · ·		
	I-Cal Date		C-Cal RF	% Difference	Accept. Range
Gasoline Range C5 - C10	05-07-07	9.9960E+002	1.0000E+003	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	9.9960E+002	1.0000E+003	0.04%	0 - 15%
3			, ,		
Blank Conc. (mg/L - mg/Kg)		Concentration		Detection Lim	it
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	128	121	5.5%	0 - 30%	*****
Diesel Range C10 - C28	282	273	3.2%	0 - 30%	
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	128	250	448	119%	75 - 125%
Diesel Range C10 - C28	282	250	590	111%	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 54664, 54602-54604, 54709, 54677-54690 and 54665.

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Analyst



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Client:	Envirotech	Project #:	1-02-60002
Sample ID:	Cell 48	Date Reported:	06-16-10
Laboratory Number:	54604	Date Sampled:	06-04-10
Chain of Custody:	9599	Date Received:	06-04-10 ···
Sample Matrix:	Soil	Date Analyzed:	06-14-10
Preservative:	Cool	Date Extracted:	06-12-10
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
Benzene	ND	0.9	
Toluene	2.2	1.0	
Ethylbenzene	2.6	1.0	
p,m-Xylene	5.4	1.2	•
o-Xylene	5.5	0.9	
Total BTEX	15.7		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	107 %
	1,4-difluorobenzene	. 105 %
	Bromochlorobenzene	103 %

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.

Analyst

Review



Client: .	Envirotech	Project #:	1-02-60002
Sample ID:	Cell 48	Date Reported:	06-17-10
Lab ID#:	54604	Date Sampled:	06-04-10
Sample Matrix:	Soil	Date Received:	06-04-10
Preservative:	Cool	Date Analyzed:	06-14-10
Condition:	Intact	Chain of Custody:	. 9599

Parameter

Concentration (mg/Kg)

60

Total Chloride

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Analyst

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Client	N/A	Project #.	N/A
Sample ID:	0614BBL QA/QC	Date Reported.	06-16-10
Laboratory Number:	54602	Date Sampled:	N/A
Sample Matrix	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	06-14-10
Condition	N/A	Analysis:	BTEX
Calibration and	I-Cal RF C-C	al RF: %Diff BI	ank Detect
and the second	a start and a second start and a second start and		
Detection Limits (ug/L)	Ace	cept. Range 0 - 15% C	onc Limit

Benzene	1 3235E+006	1.3261E+006	0.2%	ND	0.1
Toluene	1 3048E+006	1 3074E+006	0.2%	ND	0.1
Ethylbenzene	1 0800E+006	1.0821E+006	0.2%	ND	· 0.1
p,m-Xylene	· 2 6296E+006	2 6348E+006	0.2%	ND	0.1 、
o-Xylene	9.6184E+005	9 6377E+005	0.2%	ND	0.1

Duplicate Conc. (ug/Kg)	Sample D	uplicate	%Diff.	Accept Range	· Detect. Limit
Benzene	1.9	1.7	10.5%	0 - 30%	0.9
Toluene	19.7	13.9	29.4%	0 - 30%	1.0
Ethylbenzene	43.6	47.7	9.4%	0 - 30%	1.0
p,m-Xylene	292	279	4.5%	0 - 30%	1.2
o-Xylene	188	191	1.5%	0 - 30%	0.9

Spike Conc. (ug/Kg)	Sample Amo	unt Spiked Spik	ed Sample	% Recovery	Accept Range
Benzene	1.9	50.0	46.2	89.1%	39 - 150
Toluene	19.7	50.0	65.0	93.2%	46 - 148
Ethylbenzene	43.6	50.0	110	117%	32 - 160
p,m-Xylene	· 292	100	337	86.1%	46 - 148
o-Xylene	188	50.0	260	109%	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 54664, 54665, 54602-54604, -54680. 54709, 5467 .Analyst Review

CHAIN OF CUSTODY RECORD

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Client:		F	Project Name / L	ocation											ΔΝΔΓ	VSIS			TERS					
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Client Address:		s	Sampler Name:			<u> </u>			2		51	ଚ						[
		ĺ	Kyle (Kyle Cossum					(Method 8015)		BTEX (Method 8021)	VOC (Method 8260)	<u>_</u> 0			0					1			
Client Phone No.:		C	lient No.:	ent No.:						t po	poq	leta	nion		HH		÷.	ш				<u>lo</u>	tact	
			1-02 -	600					Meth		(Me	Met	RCRA 8 Metals	Cation / Anion		TCLP with H/P		TPH (418.1)	CHLORIDE				Sample Cool	Sample Intact
Sample No./	Sample		Lab No.	1	•	No./Volume of) HTT		Ш	ő	CRA	ation	5	ГР	PAH	ц Н]					
Identification	Date	Time		<u> </u>	Matrix	Containers	HgCl ₂	HCI	<u> </u> E		Б	¥	Ĕ	ő	RCI RCI	F	2		5			┝───╊	s	လိ
Cell 47	6-4-10	13:48	54602	Solid	Sludge Aqueous	1/402		-	<u>.</u> 8	$\langle \rangle$	X								X				Y	Y
(ell 53	6-4-10	14:21	54603	Solid	Sludge Aqueous	1/402			/ >	×1×	\langle						ŧ		X					
Cell 48	6-4-10	14:00	54604	Solid	Sludge Aqueous	1/402			$\langle \rangle$		Х								X				T	
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New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson

Jon Goldstein ` Cabinet Secretary

Jim Noel Deputy Cabinet Secretary Mark Fesmire Division Director Oil Conservation Division



March 25, 2010

Kyle P. Kerr Envirotech, Inc. 5796 US Highway 64 Farmington, New Mexico 87401

RE: Request for Approval to Apply a Successive Lift Envirotech, Inc. Commercial Landfarm #2: Permit NM-1-0011 Location: NW/4 Section 6, Township 26 North, Range 10 West, NMPM San Juan County, New Mexico

Dear Mr. Kerr:

The Oil Conservation Division (OCD) has reviewed Envirotech, Inc.'s (Envirotech) request, dated March 12, 2010 to grant approval to apply an additional six-inch lift to the following cells: Cells 29, 30, 31, 35, 36, 37, 38, 42, 43, 44, and 45.

Based upon the analytical results provided, the OCD hereby grants Envirotech approval to apply an additional six-inch lift of contaminated soils to the above referenced landfarm cells. Envirotech shall ensure that the application of an additional six-inch lift of contaminated soils to the above referenced landfarm cells *does not exceed the maximum thickness of two feet or 3000 cubic vards per acre limit* as specified in 19.15.36.15 NMAC. Note, that with the addition of successive lifts Envirotech must initiate treatment zone monitoring and resume vadose zone monitoring. The vadose zone monitoring depth must be adjusted to reach the 2-3 foot zone below the original native ground surface.

Please be advised that approval of this request does not relieve Envirotech of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve Envirotech of its responsibility to comply with any other applicable governmental authority's rules and regulations.



Envirotech, Inc. Commercial Landfarm #2 Permit NM-1-0011 December 1, 2009 Page 2 of 2

If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or <u>brad.a.jones@state.nm.us</u>.

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. . .

Sincerely,

Brad-A. Jones

Environmental Engineer

BAJ/baj

Attachment: Facility Map (Revision Date: March 11, 2010)

cc: OCD District III Office, Aztec

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SCALE. 1=100' FIGURE NO.				REV					
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envirotech

5796 U.S. HIGHWAY 64, FARMINGTON, NM 87401 505-632-0615





Mr. Brad Jones New Mexico Oil Conservation District 1220 South St. Francis Drive Santa Fe, New Mexico 87505

RE: ENVIROTECH'S LANDFARM #2 DISCONTINUED MAINTENANCE AND ADDITIONAL LIFT FOR CELLS 29, 30, 31, 35, 36, 37, 38, 42, 43, 44, 45 IN LAND FARM 2 UNIT 5.

Dear Mr. Jones:

Attached please find analytical documentation supporting our request for discontinued maintenance at Envirotech's Land Farm #2, for cells 29, 30, 31, 35, 36, 37, 38, 42, 43, 43 and 44 located near Hilltop, New Mexico. The area being submitted is shown on the attached map, marked by blue crosshatch design. As per Envirotech's OCD Rule 711 Permit Approval NM 01-0011 dated April 8, 2000 all cells being requested for discontinued maintenance have passed laboratory analysis of less than 100 ppm TPH, 50 ppm BTEX and 10 ppm Benzene. In addition, Envirotech has sampled for chlorides. As stated in the treatment zone monitoring portion of Envirotech's permit, no cell sampled was larger than five acres. Samples were collected as a five-point composite.

The blue cells (29, 30, 31, 35, 36, 37, 38, 42, 43, 43 and 44) have passed analysis for total petroleum hydrocarbons, benzene, toluene, ethylbenzene and total xylenes (see attached laboratory results). Envirotech hereby requests these cells be granted discontinued maintenance status and approval to apply an additional lift of qualifying material to these cells.

Given the parameter for cubic yardages of 15,000 or less to be applied in each five (5) acre cell, we are happy to provide the following cubic yard amounts in each cell up to this time:

Cell 29: 4,759 cubic yards Cell 35: 5,660 cubic yards Cell 38: 7,984 cubic yards Cell 44: 7,924 cubic yards Cell 30: 8,358 cubic yards Cell 36: 6,136 cubic yards Cell 42: 4,931 cubic yards Cell 45: 8,325 cubic yards Cell 31: 6,173 cubic yards Cell 37: 7,867 cubic yards Cell 43: 7,413 cubic yards

Due to the unusually large amounts of contaminated soil Envirotech has accepted recently, our Land Farm #2 is currently under limited space constraints. Therefore, Envirotech respectfully requests expedition of this matter, in order that our Land Farm #2 may continue to serve the Four Corners region without interruption.

Thank you for your consideration in this matter. If you have any questions or require additional information, please do not hesitate to contact our office at (505) 632-0615.

Respectfully submitted,

Envirotech, Inc.

Land Farm Administrator apohl@envirotech-inc.com

Kyté P. Kerr Vice President/CHMM <u>kpkerr@envirotech-inc.com</u>





Client:	Envirotech	Project #:	
Sample ID:	31	Date Reported:	02-23-10
Laboratory Number:	53182	Date Sampled:	02-18-10
Chain of Custody No:	8764	Date Received:	02-18-10
Sample Matrix:	Soil	Date Extracted:	02-19-10
Preservative:	Cool	Date Analyzed:	02-22-10
Condition:	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.

Analyst

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Client:	Envirotech	Project #:	,	
Sample ID:	29	Date Reported:	02-23-10	
Laboratory Number:	53183	Date Sampled:	02-18-10	
Chain of Custody No:	8764	Date Received:	02-18-10	
Sample Matrix:	Soil	Date Extracted:	02-19-10	
Preservative:	Cool	Date Analyzed.	02-22-10	
Condition:	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.

Analyst

Review



Client:	Envirotech	Project #:	
Sample ID:	35	Date Reported:	02-23-10
Laboratory Number:	53184	Date Sampled:	02-18-10
Chain of Custody No:	8764	Date Received:	02-18-10
Sample Matrix:	Soil	Date Extracted:	02-19-10
Preservative:	Cool	Date Analyzed:	02-22-10
Condition:	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.

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Client:	Envirotech	Project #:	
Sample ID:	30	Date Reported:	02-23-10
Laboratory Number:	53185	Date Sampled:	02-18-10
Chain of Custody No:	8764	Date Received:	02-18-10
Sample Matrix:	Soil	Date Extracted:	02-19-10
Preservative:	Cool	Date Analyzed:	02-22-10
Condition:	Intact.	Analysis Requested:	8015 TPH

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.

Analyst

Review



Client:	Envirotech	Project #:	
Sample ID:	43	Date Reported:	02-23-10
Laboratory Number:	53186	Date Sampled:	02-18-10
Chain of Custody No:	8764	Date Received:	02-18-10
Sample Matrix:	Soil	Date Extracted:	02-19-10
Preservative:	Cool	Date Analyzed:	02-22-10
Condition:	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.

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Review



Quality Assurance Report

Client:	QA/QC	,	Project #:		N/A
Sample ID:	02-22-10 QA/C	2C	Date Reported:		02-23-10
Laboratory Number:	53182		Date Sampled:		N/A
Sample Matrix:	Methylene Chlori	ide .	Date Received:	. :	N/A
Preservative:	N/A		Date Analyzed:		02-22-10
Condition:	N/A		Analysis Reques	ted:	ТРН
	I-Cal Date	I-Cal RF:	C-Cal RF:	% Difference	Accept Range
Gasoline Range C5 - C10	05-07-07	9.2263E+002	9.2300E+002	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	9.6742E+002	9.6781E+002	0.04%	0 - 15%
Blank Conc. (mg/L - mg/Kg)		Concentration	ant in the second	Detection Lim	it
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	241	96.4%	75 - 125%
Diesel Range C10 - C28	ND	250	262	105%	75 - 125%
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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 53182 - 53191.

Analyst

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Client:	Envirotech	Project #:	
Sample ID:	31	Date Reported:	02-22-10
Laboratory Number:	53182	Date Sampled:	02-18-10
Chain of Custody:	8764	Date Received	02-18-10
Sample Matrix:	Soil	Date Analyzed:	02-22-10
Preservative:	Cool	Date Extracted:	02-19-10
Condition:	Intact	Analysis Requested.	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
Benzene	ND	0.9	
Toluene	ND	1.0	
Ethylbenzene	ND	1.0	
p,m-Xylene	ND	1.2	
o-Xylene	ND _	0.9	
Total BTEX	, ND		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	94.0 %
	1,4-difluorobenzene	99.0 %
	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: Landfarm 2 Unit 5 Closures

Analyst

Review

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Client:	Envirotech	Project #:	
Sample ID:	29	Date Reported:	02-22-10
Laboratory Number:	53183	Date Sampled:	02-18-10
Chain of Custody:	8764	Date Received:	02-18-10
Sample Matrix:	Soil	Date Analyzed:	02-22-10
Preservative:	Cool	Date Extracted:	02-19-10
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
Benzene	ND	0.9	
Toluene	ND	1.0	
Ethylbenzene	ND	1.0	
p,m-Xylene	ND	1.2	
o-Xylene	ND .	0.9	
Total BTEX	ND		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	91.0 %
	1,4-difluorobenzene	96.0 %
	Bromochlorobenzene	92.0 %

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.

Analyst

mWalter Review



Client:	Envirotech	Project #:	
Sample ID:	<u>3</u> 5	Date Reported:	02-22-10
Laboratory Number:	53184	Date Sampled:	02-18-10
Chain of Custody:	8764	Date Received:	02-18-10
Sample Matrix:	Soil	Date Analyzed.	02-22-10
Preservative:	Cool	Date Extracted:	02-19-10
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
		•	
Benzene	ND	0.9	
Toluene	ND	1.0	
Ethylbenzene	ND ND	1.0	
p,m-Xylene	ND	1.2	
o-Xylene	ND -	0.9	
Total BTEX	. ND		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
· · · · · · · · · · · · · · · · · · ·	Fluorobenzene	93.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	96.0 %

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.

Analyst

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Client:	Envirotech	Project #.		
Sample ID:	30	Date Reported:	02-22-10	
Laboratory Number:	53185	Date Sampled:	02-18-10	
Chain of Custody:	8764	Date Received	02-18-10	
Sample Matrix:	Soil	Date Analyzed:	02-22-10	
Preservative:	Cool	Date Extracted	02-19-10	
Condition:	Intact	Analysis Requested:	BTEX	

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
Benzene	ND	0.9	
Toluene	ND	1.0	
Ethylbenzene	ND	1.0	
p,m-Xylene	ND	1.2	
o-Xylene	ND .	0.9	
Total BTEX	ND		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	93.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	96.0 %

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.

Analyst

mosture m Walters Review



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- Client:	Envirotech	Project #:	
Sample ID:	43	Date Reported:	02-22-10
Laboratory Number:	53186	Date Sampled:	02-18-10
Chain of Custody:	8764	Date Received:	02-18-10
Sample Matrix:	Soil	Date Analyzed:	02-22-10
Preservative:	Cool	Date Extracted:	02-19-10
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
Benzene	. ND	0.9	
Toluene	ND	1.0	
Ethylbenzene	ND	1.0	
p,m-Xylene	ND	1.2	
o-Xylene	ND _	0.9	
Total BTEX	ND		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	91.0 %
	1,4-difluorobenzene	96.0 %
	Bromochlorobenzene	92.0 %

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.

Analyst

raturn Walter Review



Client Sample ID. Laboratory Number: Sample Matrix: Preservative Condition	N/A 02-22-BT QA/QC 53182 Soil N/A N/A		Project #. Date Reported Date Sampled: Date Received: Date Analyzed Analysis:		N/A 02-23-10 N/A N/A 02-22-10 BTEX
Calibration and Detection Limits (ug/L)	II-Cal RE	C-Cal RF: Accept. Ran	ter and the second s	Blank Cone	Detect Limit
Benzene	1 0907E+006	1 0929E+006	0.2%	ND	0.1
Toluene	9.9667E+005	9 9866E+005	0.2%	ND	0.1
Ethylbenzene	8 9937E+005	9 0117E+005	0.2%	ND	0.1
p,m-Xylene	2 2367E+006	2 2412E+006	0.2%	ND	0.1
o-Xylene	8.4808E+005	8.4978E+005	0.2%	ND	0.1
Duplicate Conc. (ug/Kg)	Sample	Duplicate	` %Diff	Accept Range	Defect Limit
Benzene	ND	ND	0.0%	0 - 30%	0.9
Toluene	ND	ND	0.0%	0 - 30%	1.0
Ethylbenzene	ND	ND	0.0%	0 - 30%	1.0
p,m-Xylene	ND	NÐ	0.0%	0 - 30%	1.2
o-Xylene	ND	ND	0.0%	0 - 30%	0.9
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	50.0	49.7	99.4%	39 - 150
Toluene	ND	50.0	47.9	95.8%	46 - 148
	. ND	50.0	48.2	96.4%	32 - 160
Ethylbenzene					
Ethylbenzene o,m-Xylene	ND	100	97.9	97.9%	46 - 148

ND - Parameter not detected at the stated detection limit

References

Method 5030⁶, 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 53182 - 53191.

Analyst

Review



Client:	Envirotech	Project #:	
Sample ID:	31	Date Reported:	02-24-10
Lab ID#:	53182	Date Sampled:	02-18-10
Sample Matrix:	Soil	Date Received:	02-18-10
Preservative:	Cool	Date Analyzed:	02-24-10
Condition:	Intact	Chain of Custody:	8764

Parameter

Concentration (mg/Kg)

Total Chloride

40

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Analyst

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Parameter		Concentration (mg	/Kg)
	maar	chain of outlody.	0104
Condition:	Intact	Chain of Custody:	8764
Preservative:	Cool	Date Analyzed:	02-24-10
Sample Matrix:	Soil	Date Received:	02-18-10
Lab ID#:	53183	Date Sampled:	02-18-10
Sample ID:	29	Date Reported:	02-24-10
Client:	Envirotech	Project #:	

Total Chloride

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Reference:

Analyst

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Date Reported:02-24-10Date Sampled:02-18-10
Date Sampled: 02-18-10
Date Received: 02-18-10
Date Analyzed: 02-24-10
Chain of Custody: 8764

Parameter

Concentration (mg/Kg)

Total Chloride

45

Reference: .

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Landfarm 2 Unit 5 Closures

Analyst

<u>Austhen Waeters</u> Review

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Client:	Envirotech	Project #:	
Sample ID:	30	Date Reported:	02-24-10
Lab ID#:	53185	Date Sampled:	02-18-10
Sample Matrix:	Soil	Date Received:	02-18-10
Preservative:	Cool	Date Analyzed:	02-24-10
Condition:	Intact	Chain of Custody:	8764
Parameter		Concentration (mg	/Kg)
Total Chloride		15	
		-	
Reference:		ethods for Chemical Analysis of Water a The Examination of Water And Waste W	
Comments:	Landfarm 2 Unit 5	Closures	
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Analyst		Mustre ML Review	Jaceters



Client:	Envirotech	Project #:	,
Sample ID:	43	Date Reported:	02-24-10
Lab ID#:	53186	Date Sampled:	02-18-10
Sample Matrix:	Soil	Date Received:	02-18-10
Preservative:	Cool	Date Analyzed:	02-24-10
Condition:	Intact	Chain of Custody:	8764
	. ,		

Parameter

Concentration (mg/Kg)

Total Chloride

15

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Analyst

<u>'Mistry Weelles</u> Review

CHAIN OF CUSTODY RECORD

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Client:			Project Name /	Location	:				ANALYSIS / PARAMETERS													
ENVIRATE	ch		LANDFAIM	2.0	nir 5	Closures	5				-1-		•			<u> </u>						
Client Address:			Sampler Name:						2)	21)	Ô											
			JKIRC Diant No:	hnol					TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	S										
Client Phone No.:		(Client No.:						g	hoc	po	etal	ion		Η̈́Η		Ŧ				- -	act or
			1-02-1	6000	12				leth	Me	Veth	8 Metals	Cation / Anion		TCLP with H/P		TPH (418.1)	CHLORIDE			¢	Sample Intact
Sample No./-	Sample	Sample			ample	No./Volume	Preser	vative	E T	X	U U	RCRA	ion	_	آم ا	–	J H	[O				
Identification	Date	Time	Lab No.) P	Matrix	of Containers	HgCl ₂ HC		I II	BT	9	l Se	Cat	ВĊ	12	PAH	Ъ				Ċ	Sal
31	2-13.0	1030	53182	Solid	Sludge Aqueous	402		0	\checkmark	\checkmark								V				y y
29.		1000	53183	Solid	Sludge Aqueous	1		6 2		V								V				
. 35		1045	53184	Solid	Sludge Aqueous			1	\checkmark	V								V				Ì
30		1015	53185	\$01 Solid	Sludge Aqueous				\checkmark	\checkmark	ł 											
43		1145	53186	50 Solid	Sludge Aqueous			1		\checkmark								\checkmark				
· · ·				Soil Solid	Sludge Aqueous						 					 					•	
		-	alla	Soil Solid	Sludge Aqueous																	
				Soil Solid	Sludge Aqueous																	
, 				Soil Solid	Sludge Aqueous												•					
			•	Soil Solid	Sludge Aqueous																	
Relinquished by: (Signa	ature)				Date 2-18-10	Time 17:00 11:30	Re	- 1/	-	(Sign			X	ļ.						Date		Time <i>13: 0</i> 2
Relinquished by: (Signa	ature).		·	u.		"Ø	Re	Ceive	d by:	(Sign	ature	//	100	<u>unc</u>	·				1	44	10	
Relinquished by: (Signa	ature)						Re	ceive	ed by:	(Sign	ature)					<u> </u>						
			E700 1		V 64 • Farmin		naly	tico	al Lc	ibor	ato	ry	h i.e									



Client:	Envirotech	Project #:	
Sample ID:	44	Date Reported.	02-23-10
Laboratory Number:	53187	Date Sampled:	02-18-10
Chain of Custody No:	8765	Date Received:	02-18-10
Sample Matrix:	Soil	Date Extracted:	02-19-10
Preservative:	Cool	Date Analyzed.	02-22-10
Condition:	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.

Analyst

Mister mulat Review



Client:	Envirotech	Project #:	
Sample ID:	45	Date Reported:	02-23-10
Laboratory Number:	53188	Date Sampled:	02-18-10
Chain of Custody No:	8765	Date Received:	02-18-10
Sample Matrix:	Soil	Date Extracted:	02-19-10
Preservative:	Cool	Date Analyzed:	02-22-10
Condition:	Intact	Analysis Requested:	8015 TPH

Concentration (mg/Kg)	Det. Limit (mg/Kg)
- ND	0.2
ND	0.1
ND	0.2
	(mg/Kg) - ND ND

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.

Analyst	\sim

pristient Review



Client:	Envirotech	Project #:	
Sample ID:	42	Date Reported:	02-23-10
Laboratory Number:	53189	Date Sampled:	02-18-10
Chain of Custody No:	8765	Date Received:	02-18-10
Sample Matrix:	Soil	Date Extracted:	02-19-10
Preservative:	Cool	Date Analyzed:	02-22-10
Condition:	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.

Analyst	\bigcirc	

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Client:	Envirotech	Project #:	
Sample ID:	38	Date Reported:	02-23-10
Laboratory Number:	53190	Date Sampled:	02-18-10
Chain of Custody No:	8765	Date Received:	02-18-10
Sample Matrix:	Soil	Date Extracted:	02-19-10
Preservative:	Cool	Date Analyzed:	02-22-10
Condition:	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.

Analyst	\geq

mestin Review



Client:	Envirotech	Project #:	
Sample ID:	37	Date Reported:	02-23-10
Laboratory Number:	53191	Date Sampled:	02-18-10
Chain of Custody No:	8765	Date Received:	02-18-10
Sample Matrix:	Soil	Date Extracted	02-19-10
Preservative:	Cool	Date Analyzed:	02-22-10
Condition:	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: Landfarm 2 Unit 5 Closures

Analyst

Review

Ph (505) 632-0615 Fr (800) 362-1879 Fx (505) 632-1865 lab@envirotech-inc.com envirotech-inc.com



Quality Assurance Report

Client:	QA/QC		Project #:		N/A
Sample ID:	02-22-10 QA/Q	C	Date Reported:		02-23-10
Laboratory Number:	53182		Date Sampled:		N/A
Sample Matrix:	Methylene Chlori	de	Date Received:		N/A
Preservative:	N/A		Date Analyzed:		02-22-10
Condition:	N/A		Analysis Reques	ted: ·	ТРН
teritarian haran any ana amin'ny faritr'o ana amin'ny tanàna mandritry amin'ny tanàna amin'ny tanàna amin'ny t			'		
	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept. Ränge
Gasoline Range C5 - C10	05-07-07	9.2263E+002	9.2300E+002	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	9.6742E+002	9.6781E+002	0.04%	0 - 15%
					10121
Blank Conc. (mg/L - mg/Kg)	1944 (1951)	Concentration		Detection Lim	it
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	241	96.4%	75 - 125%
Diesel Range C10 - C28	ND	250	262	105%	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 53182 - 53191.

Analyst

muster m Wallers ċ Review



Client:	Envirotech	Project #:	
Sample ID:	· 44	Date Reported:	02-22-10
Laboratory Number:	53187	Date Sampled:	02-18-10
Chain of Custody:	8765	Date Received:	02-18-10
Sample Matrix:	Soil	Date Analyzed:	02-22-10
Preservative:	Cool	Date Extracted:	02-19-10
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
Benzene	ND	0.9	
Toluene	ND	1.0	
Ethylbenzene	ND	1.0	
p,m-Xylene	. ND	1.2	
o-Xylene	ND -	0.9	
Total BTEX	ND		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	93.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	96.0 %

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.

Analyst

/ Mister Mileters Review



Client:	Envirotech	Project #:	
Sample ID:	45	Date Reported:	02-22-10
Laboratory Number:	53188	Date Sampled:	02-18-10
Chain of Custody:	8765	Date Received:	02-18-10
Sample Matrix:	Soil	Date Analyzed:	02-22-10
Preservative:	Cool	Date Extracted:	02-19-10
Condition:	Intact	Analysis Requested	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
Benzene	ND	0.9	
Toluene	ND	1.0	
Ethylbenzene	ND	1.0	
p,m-Xylene	ND	1.2	,
o-Xylene	ND -	0.9	
Total BTEX	ND	- _	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	92.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	94.0 %

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.

Analyst

Ariatin mucede



Client:	Envirotech	Project #:	
Sample ID:	42	Date Reported:	02-22-10
Laboratory Number:	53189	Date Sampled:	02-18-10
Chain of Custody:	8765	Date Received:	02-18-10
Sample Matrix:	Soil	Date Analyzed:	02-22-10
Preservative:	Cool	Date Extracted:	02-19-10
Condition:	Intact	Analysis Requested	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
Benzene	ND	0.9	
Toluene	ND	1.0	
Ethylbenzene	ND	1.0	
p,m-Xylene	ND	1.2	
o-Xylene	ND -	0.9	
Total BTEX	ND		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter a	Percent Recovery
	Fluorobenzene	93.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	96.0 %

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.

Analyst

Joelen Review



Client:	Envirotech	Project #:	
Sample ID:	38	Date Reported.	02-22-10
Laboratory Number:	53190	Date Sampled:	02-18-10
Chain of Custody:	8765	Date Received:	02-18-10
Sample Matrix:	Soil	Date Analyzed:	02-22-10
Preservative:	Cool	Date Extracted.	02-19-10
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
Benzene	ND	0.9	
Toluene	ND	1.0	
Ethylbenzene	ND	1.0	
p,m-Xylene	ND	1.2	
o-Xylene	ND -	0.9	
Total BTEX	ND		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	92.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	94.0 %

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.

Analyst

Mister Weeten Review



Client:	Envirotech	Project #:	
Sample ID:	37	Date Reported:	02-22-10
Laboratory Number:	53191	Date Sampled:	02-18-10
Chain of Custody:	8765	Date Received:	02-18-10
Sample Matrix:	Soil	Date Analyzed:	02-22-10
Preservative:	Cool	Date Extracted:	02-19-10
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
5	·		
Benzene	ND	0.9	
Toluene	ND	1.0	
Ethylbenzene	ND ·	1.0	
p,m-Xylene	ND	1.2	
o-Xylene	ND -	0.9	
Total BTEX	ND		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	92.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	94.0 %

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.

Analys

istum Weete Review



Client: Sample ID: Laboratory Number: Sample Matrix: Preservative: Condition:	N/A 02-22-BT QA/QC 53182 Soil N/A N/A		Project #. Date Reported: Date Sampled. Date Received Date Analyzed: Analysis:		N/A 02-23-10 . N/A N/A 02-22-10 BTEX
Calibration and	I-Cal RF	C-Cal RF		Blank	Detect,
Detection Limits (ug/L)		Accept Ran	ige U - 19%	Conc	Limit
Benzene	1 0907E+006	1 0929E+006	0.2%	ND	0:1
Toluene	9 9667E+005	9.9866E+005	0.2%	ND	0.1
Ethylbenzene	8 9937E+005	9.0117E+005	0.2%	ND	0.1
p,m-Xylene	2 2367E+006	2 2412E+006	0.2%	ND	0.1
o-Xylene	8 4808E+005	8 4978E+005	0.2%	ND	0.1
Duplicate Conc. (ug/Kg) Benzene Toluene Ethylbenzene p,m-Xylene o-Xylene	Sample ND ND ND ND ND ND	Duplicate ND ND ND ND ND	%D)ff. / 0.0% 0.0% 0.0% 0.0% 0.0%	Accept Range 0 - 30% 0 - 30% 0 - 30% 0 - 30% 0 - 30%	0.9 1.0 1.0 1.2 0.9
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	ND	50.0	49.7	99.4%	39 - 150
Toluene	ND	50.0	47.9	95.8%	46 - 148
Ethylbenzene	ND	50.0	48.2	96.4%	32 - 160
p,m-Xylene	ND	100	97.9	97.9%	46 - 148
o-Xylene	· ND	50.0	47.5	95.0%	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 53182 - 53191.

Analyst

m Walter Review



Total Chloride		30	
Parameter	· · · · · · · · · · · · · · · · · · ·	Concentration (mg	/Kg)
· .			
Condition:	Intact	Chain of Custody:	8765
Preservative:	Cool	Date Analyzed:	02-24-10
Sample Matrix:	Soil	Date Received:	02-18-10
Lab ID#:	53187	Date Sampled:	02-18-10 <i>(</i>
Sample ID:	44	Date Reported:	02-24-10
Client:	Envirotech	Project #:	

Reference:

,

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Analyst

m Weeters Review



Client:	Envirotech	Project #:	
Sample ID:	45	Date Reported:	02-24-10
Lab ID#:	53188	Date Sampled:	02-18-10
Sample Matrix:	Soil	Date Received:	02-18-10
Preservative:	Cool	Date Analyzed:	02-24-10
Condition:	Intact	Chain of Custody:	8765

Parameter

Concentration (mg/Kg)

Total Chloride

40

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Analys

huster mulcedes Review



Total Chloride		20	
Parameter		Concentration (mg	ı/Kg)
Condition:	Intact	Chain of Custody:	8765
Preservative:	Cool	Date Analyzed:	02-24-10
Sample Matrix:	Soil	Date Received:	02-18-10
Lab ID#:	53189	Date Sampled:	02-18-10
Sample ID:	42	Date Reported: 02	
Client:	Envirotech	Project #:	

Reference:

U.S.E.P.A., 4500B, "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments:

Analyst

<u>Review</u> letters



Parameter		Concentration (mg	/Kg)
			,
Condition:	Intact	Chain of Custody:	8765
Preservative:	Cool	Date Analyzed:	02-24-10
Sample Matrix:	Soil	Date Received:	02-18-10
Lab ID#:	53190	Date Sampled:	02-18-10
Sample ID:	38	Date Reported:	02-24-10
Client:	Envirotech	Project #:	

Parameter

Total Chloride

10

Reference:

Comments:

U.S.E.P.A., 4500B; "Methods for Chemical Analysis of Water and Wastes", 1983. Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Analyst

n Weters Review



Client:	Envirotech	Project #:	
Sample ID:	37	Date Reported:	02-24-10
⊥ab ID#:	53191	Date Sampled:	02-18-10
Sample Matrix:	Soil	Date Received:	02-18-10
Preservative:	Cool	Date Analyzed:	02-24-10
Condition:	Intact	Chain of Custody:	8765
Parameter		Concentration (mg	/Κα)
Total Chloride		30	,
		- * - *	
	•		
Deference:		othoda for Chamical Apolycia of Water or	nd Wester" 1983
Reference:		ethods for Chemical Analysis of Water ar The Examination of Water And Waste W	
Reference: Comments:	Standard Methods For	The Examination of Water And Waste W	
	Standard Methods For	The Examination of Water And Waste W	
	Standard Methods For	The Examination of Water And Waste W	
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	Standard Methods For	The Examination of Water And Waste W	
	Standard Methods For	The Examination of Water And Waste W	
	Standard Methods For	The Examination of Water And Waste W	
	Standard Methods For	The Examination of Water And Waste W	/ater", 18th ed., 199
Comments:	Standard Methods For	The Examination of Water And Waste W	/ater", 18th ed., 199

CHAIN OF CUSTODY RECORD

Client:		P	roject Name / L	ocation										ANAL	SIS.	/ PAR	AMET	TERS				_	
ENVIROTECH)	AndTAIM	2		Clasure	5						•		. 0.0								
Client Address:		S	ampler Name:						<u></u>	21)	6												
			JKirchn	20					TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	s			•								
Client Phone No.:		С	lient No.:						po	thoc	D D	letal	lion		H/H		F	ш		·		0	tact
,			1-02.	- 6000	2				Meth	(We	Viet	RCRA 8 Metals	Cation / Anion		TCLP with H/P		TPH (418.1)	CHLORIDE				Sample Cool	Sample Intact
Sample No./	Sample	Sample	Lab No.		ample	No./Volume		1	E H	Ш		RA	tion	5	٩ ٦	Т	÷ T					du	du
Identification	Date	Time	Lab 140.		Matrix	of Containers	HgCl ₂ HCI	c	d L	BT	2	8	Sa	RCI	10	PAH	Ē	ㅎ				Sa	Sa
44	2-113-16	1260	63187	Solid	Sludge Aqueous	Y62		0 0	/	/								\checkmark				\mathbf{X}	×
45	2-13-10	125	53188	Solid	Sludge Aqueous				\checkmark	V					•			V				×	V
42	2-18-10	1130	53189	Solid	Sludge Aqueous				V	V					<u></u>			1				×	\checkmark
42	2-18-10	1115	53190	දි බ Solid	Sludge Aqueous				~								-	~				Х	×
31	2-13-10	1199	53191	Solid	Sludge Aqueous	+		F	v	~												×	\checkmark
~			-	Soil Solid	Sludge Aqueous										,				-				
			\$	Soil Solid	Sludge Aqueous												-						
				Soil Solid	Sludge Aqueous								•								-		
		-		Soil Solid	Sludge Aqueous					-													
		•		Soil Solid	Sludge Aqueous																		
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8765



Client:	Envirotech	Project #:	
Sample ID:	36 *	Date Reported:	03-10-10
Laboratory Number:	53293	Date Sampled:	02-25-10
Chain of Custody No:	8833	Date Received:	03 <u>-</u> 08-10
Sample Matrix:	Soil	Date Extracted:	03-08-10
Preservative:	Cool	Date Analyzed:	03-09-10
Condition:	Intact	Analysis Requested:	8015 TPH

		Det.
~ /	Concentration	Limit
Parameter	(mg/Kg)	(mg/Kg)

Gasoline Range (C5 - C10)	ND	0.2
Diesel Range (C10 - C28)	59.5	0.1
Total Petroleum Hydrocarbons	59.5	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: Landfarm 2 Unit 5 5 pt Comp Closure Sample

Analyst

the m Wrot Review



Quality Assurance Report

Client:	QA/QC		Project #:		N/A
Sample ID:	03-09-10 QA/Q	2C	Date Reported:		03-10-10
Laboratory Number:	53289		Date Sampled:		N/A
Sample Matrix:	Methylene Chlori	ide	Date Received:		N/A
Preservative:	N/A		Date Analyzed:	, ,	03-09-10
Condition:	N/A		Analysis Reques	ted:	TPĤ
- 1				A.1	
	I-Cal Date	I-Cal RF;	C-Cal RF:	% Difference	Accept: Range
Gasoline Range C5 - C10	05-07-07	8.3534E+002	8.3567E+002	0.04%	0 - 15%
Diesel Range C10 - C28	05-07-07	8.7194E+002	8.7229E+002	0.04%	0 - 15%
Blank Conc. (mg/L - mg/Kg)		Concentration	a an	Detection Limi	
			<u> </u>		<u>v</u>
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	Ĩ
Gasoline Range C5 - C10	7.3	8.4	15.1%	0 - 30%	án d
-				0 - 30%	
Diesel Range C10 - C28	118	123	3.6%	0 - 30%	
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept. Range
Gasoline Range C5 - C10	7.3	250	244	94.9%	75 - 125%
Diesel Range C10 - C28	118	250	346	94.0%	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 53289 and 53293 - 53301

Ana

) Walter Moth Review

· · · ·



Client:	Envirotech		Project #:		
Sample ID:	36		Date Reported:		03-10-10
Laboratory Number:	53293		Date Sampled:		02-25-10
Chain of Custody:	8833		Date Received:		03-08-10 ´
Sample Matrix:	Soil		Date Analyzed:		03-09-10
Preservative:	Cool		Date Extracted:		03-08-10
Condition:	Intact		Analysis Requested:	•	BTEX
	· · · · · · · · · · · · · · · · · · ·				
~1				Det.	
		Concentration		Limit	
Parameter		(ug/Kg)		(ug/Kg)	
Benzene		ND		0.9	
Toluene		ND		1.0	
Ethylbenźene		ND		1.0	
	••	ND		1.2	
		ND		0.9	
o-Xylene					
0-Aylene	U				

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
· · · · · · · · · · · · · · · · · · ·	Fluorobenzene	93.0 %
	1,4-difluorobenzene	99.5 %
	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: Landfarm 2 Unit 5 5 pt Comp Closure Sample

Analyst

ister m Weters Review



Client:	N/A			Project #:		N/A
Sample ID [.]	03-09-BT QA/	QC	0	ate Reported:		03-10-10
Laboratory Number:	53289			ate Sampled.		N/A
Sample Matrix	Soil			ate Received		N/A
Preservative	N/A			ate Analyzed		03-09-10
Condition.	N/A		Α	nalysis.		BTEX
Calibration and Detection Limit	· I-Cal RF:		al RF cept. Rang	%Diff.	Blank Conc	Detect. Limit
Detection Linit	s (offic)	<u>, , , , , , , , , , , , , , , , , , , </u>	cehr tyang	50-1 0 /0	OUTC :	
Benzene	1.0755E+006		77E+006	0.2%	ND	0.1
Toluene	9 8382E+005		79E+005	0.2%	ND	0.1
Ethylbenzene	8 8806E+005		34E+005	0.2%	ND	0.1
p,m-Xylene	2 2002E+006		7E+006	0.2%	ND	0.1
o-Xylene	8.2736E+005	5 8 290	01E+005	0.2%	- ND	0.1
	Anno 192 1 a casa a sana a					
Duplicate Conc. (ug/Kg) Sample.	Du	plicate	%Diff.	Accept Range	Detect. Limit
Benzene		9.5	9.3	2.1%	0 - 30%	0.9
Toluene		8.6	38.0	1.6%	0 - 30%	1.0
Ethylbenzene		2.5	11.4	8.8%	0 - 30%	1.0
p,m-Xylene		5.8	64.0	2.7%	0 - 30%	1.2
o-Xylene	3	2.5	31.9	1.8%	0 - 30%	0.9
Spike Conc. (ug/i	(g) Sample	Amou	nt Sniked -	Spiked Sample	% Recovery	Accept Range
	.					
Benzene		9.5	50.0	58.1	97.6%	39 - 150
Toluene	3	8.6	50.0	88.0	99.3%	46 - 148
Ethylbenzene	. 1	2.5	50.0	61.8	98.9%	32 - 160
p, m-Xylene	6	5.8	100	165	99.4%	46 - 148
o-Xylene	3	2.5	50.0	82.3	99.8%	46 - 148
ī.						
ND - Parameter not o	detected at the stated detection limit					
	.					
References	Method 5030B, Purge-and-Trap, Tes December 1996. Method 8021B, Aromatic and Haloos					

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 53289 and 53293 - 53301 Analyst

Vistue nulaters Review



	Envirotech	Project #:	
Sample ID:	36	Date Reported:	03-10-10
Lab ID#:	53293	Date Sampled:	02-25-10
Sample Matrix:	Soil	Date Received:	03-08-10
Preservative:	Cool	Date Analyzed:	03-09-10
Condition:	Intact	Chain of Custody:	8833
Parameter		Concentration (mg	/Kg)
⁷ Total Chloride		2	•
		· ·	
			,
Reference:		ethods for Chemical Analysis of Water a The Examination of Water And Waste V	
Comments:	Landfarm 2 Unit 5		

Analyst

<u>'Mristin mucelen</u> Review

CHAIN OF CUSTODY RECORD

Client:		Project Name / Location:							ANALYSIS / PARAMETERS														
Envirotech		Landfarm 2 Unit 5																					
Client Address: Sampler Name:									15)	021)	80)												
J. Kirchner					·					08 PC	82	als	L C		٩								
Client Phone No.:	Client No.:				TPH (Method 8015)	BTEX (Method 8021)	VOC (Method 8260)	RCRA 8 Metals	Cation / Anion		TCLP with H/P		TPH (418.1)	CHLORIDE				Sample Cool	Sample Intact				
Sample No./ Identification	Sample Date	Sample Time	e Lab No.		imple atrix		Preservative		PH (I	3TEX		3CRA	Cation	RCI	CLP	PAH	HH (ЯLO И				Sampl	Sampl
36	0425/10		53293		Sludge Aqueous	Containers	190.2		11		>							\checkmark				4	4
				Soil Solid	Sludge Aqueous			-														5	5
			<u> </u>	Soil Solid	Sludge Aqueous						-												••
	,			Soil Solid	Sludge Aqueous								<u>+</u>										
				Soil Solid	Sludge Aqueous									•									
				Soil Solid	Sludge Aqueous				-														
				Soil Solid	Sludge Aqueous																		
				Soil Solid	Sludge Aqueous																		
				Soil Solid	Sludge Aqueous																	-	
		-	••	Soil Solid	Sludge Aqueous																		
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