

## State of New Mexico Energy, Minerals and Natural Resources Department

SUBMIT 1 COPY TO APPROPRIATE DISTRICT OFFICE AND 1 COPY TO SANTA FE OFFICE

OIL CONSERVATION DIVISION P.O. Box 2088 Santa Fe, New Mexico 87504-2088

PIT REMEDIATION AND CLOSURE REPORT

July bearing with the second with the second	
Operator: Devon Energy Corporation Telephone: (505) 324-0033	
Operator: Devoit Energy Corporation	
Address: 3300 North Butler, Suite 211, Farmington, NM 87401	
Facility Or: N. E. Blanco Unit # 56A Well Name	
Location: Unit or Qtr/Qtr Sec E Sec 34 T 31N R 7W County San Juan	
Pit Type: Separator X Dehydrator Other	
Land Type: BLM X , State , Fee , Other	
Pit Location: Pit dimensions: Length 7 ft, width 7 ft, depth 2 ft (Attach diagram)  Reference: wellhead X other	
Footage from reference: 93 ft	
Direction from reference: 65 Degrees X East North X of West South	
Depth to Ground Water: 210 ft Less than 50 feet (20 points)  (vertical distance from 50 ft to 99 feet (10 points)	
(vertical distance from 50 ft to 99 feet (10 points)  contaminants to seasonal highwater elevation of X Greater than 100 feet (0 points)	0
ground water)	
Wellhead Protection Area: (less than 200 feet from a private  Yes (20 points)	^
domestic water source, or: less than 1000 feet from all other water sources).	0_
Distance to Surface Water:  Less than 200 feet (20 points)	
(Horizontal distance to perennial	10
lakes, ponds, rivers, streams, creeks,  irrigation canals and ditches.)  Greater than 1000 feet (0 points)	10
P:\pits\PrrC@.WK3 RANKING SCORE (TOTAL POINTS):	10

Date Remediation Sta	rted: N/A		Date	e Completed:	
	Excavation	on		Approx. cubic yards	
	Landfarn	ned		Insitu Bioremediation	
	Other _				
			·		
Remediation Method:	On	site	Offsit	e	
(Check all appropriate	2				
sections)					
General Description on bottom where b				wed soils to be clean 3' below	pit
Ground Water Encour	ntered:	No <u>X</u>	Ye	s Depth	
nal Pit: sure Sampling: nultiple samples, ch sample results					
diagram of sample	Sample depth	3' below pit bo	ttom_		
and deputy	Sample date	6/3/97		Sample time	
	Sample Results				
	Benzen	e(ppm)	ND		
			<u>-</u>	_	
	Total B	TEX (PPM)	ND	<del></del>	
	Field H	eadspace (ppm)	202.2		
	TPH	43.8ppn	<u>n</u>	A.	
Ground Water Sample:	Yes	No <u>X</u>	(if ye	es, attach sample results)	
F MY KNOWLEDGE A	ND BELIEF.			DMPLETED TO THE BEST	
/ //_ 4	<i>'</i> σ	PRIN	TED NAME	Jim Abbey	
ate <u>2-27-9</u>	K au			Operations Engineer	

## FIELD PIT SITE ASSESSMENT FORM

GENERAL	Meter: Location: N. E. Blanco Unit # 56A  Operator #: Operator Name: P/L District:  Coordinates: Letter: E Section 34 Township: 31N Range: 7W  Or Latitude Longitude  Pit Type: Dehydrator Location Drip: Line Drip: Other: Sep.  Site Assessment Date: 6-3-97 Arec: Middle Run:
SITE ASSESSMENT	NMOCD Zone:  (From NMOCD  Maps)  Inside  Outside  Outside  Depth to Groundwater  Less Than 50 Feet (20 points)  Forester Than 100 Ft (0 points)  Wellhead Protection Area:  Is it less than 1000 ft from wells, springs, or other sources of fresh water extraction?, or; Is it less than 200 ft from a private domestic water source?  Horizontal Distance to Surface Water Body  Less Than 200 Ft (20 points)  Wellhead Protection Area:  Is it less than 1000 ft from wells, springs, or other sources of fresh water extraction?, or; Is it less than 200 ft from a private domestic water source?  Horizontal Distance to Surface Water Body  Less Than 200 Ft (20 points)  Corecter Than 1000 Ft (10 points)  Name of Surface Water Body  Navajo Lake  (Surface Water Body: Perennial Rivers, Major Wash, Streams, Creeks, irrigation Canals, Ditches, Lakes, Ponds)  Distance to Nearest Ephemeral Stream  (1) < 100'(Navajo Pits Only)  (2) > 100'  10
SKS	TOTAL HAZARD RANKING SCORE: 10 POINTS  Remarks:
REMARKS	

z	ORIGINAL PIT LOCATION  Original Pit: a) Degrees from North 65 Footage from Weilhead 93'  b) Length: 7' Width: 7' Depth: 2'
ORIGINAL PIT LOCATION	Wellhead
	Remarks: Soil Characteristics: 0' - 2' Light reddish-tan, sandy silt, dry, no odor 2' - 5' Brownish-gray sandy clay with some gray to black
	staining, strong odor, wet
(S	5' Hard rock A sample was taken from bottom of pit @ 3.5' where hard rock was encountered.
REMARKS	The OVM gave a reading of 290 ppm.
REM	Another sample was taken from the bottom of the pit @ 5' where hard rock
	was encountered. The OVM gave a reading of 202.2 ppm. This sample was sent to Anaitas, Inc. for DRO/GRO 8015 and BTEX 8020 analysis.
	to Atlando, me. for Sixe, One Service
	Completed Ey:
	Monina D. Rodahl 6-3-97

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Client: Deyon Energy

Environmental Specialist: MDR



### Organic Analysis - Pit Closure -

#### **Devon Energy Corporation**

Project ID:

NEBU #56A

Sample ID:

Btm @ 5'

Lab ID: Sample Matrix: 7018 Soil

Report Date:

06/19/97

Date Sampled:

06/03/97

Date Received: Preservative:

06/04/97 Cool

Condition:

Intact

Total Recoverable Petroleum Hydrocarbo	ons 43.8	28.6
Total Volatile Petroleum Hydrocarbons	ND	59.2
o-Xylene	ND	0.66
m,p-Xylenes	ND	1.32
Ethylbenzene	ND	0.66
Toluene	ND	0.66
Benzene	ND	0.66
Total Aromatic Hydrocarbons	ND	
Target Analyte	Concentration (mg/kg)	Maleerioinaaniis

Quality Control:	Surrogate	Percent Recovery	Acceptance Limits
	Trifluorotoluene	113	81 - 117%
	Trifluorotoluene	102	50 - 150 %
	o-Terphenyl	101	50 - 150%

Reference:

Method 5030, Purge and Trap; Method 8020, Aromatic Recoverable Organics;

Test Methods for Evaluating Solid Wastes, SW-846, United States Environmental Protection Agency, Final Update I, July, 1992.

EPA Method 8015A, modified. "Nonhalogenated Volatile Organics by Gas Chromatography." Test Methods for Evaluating Solid Waste, Physical/ Chemical Methods, SW-846, 3rd Ed, Final Ubdate I, July, 1992. USEPA.

Comments:

## VOLATILE AROMATIC HYDROCARBONS QUALITY CONTROL REPORT

#### **Method Blank Analysis**

Sample Matrix:

Lab ID:

Soil

MB35593

Report Date:

06/19/97

Date Extracted:

06/05/97

Date Analyzed:

06/12/97

Taroa/Analya	্রিকান্ট্রানিট্রা) (কেন্ট্রান্ট্রি)	ingledione finite a
Benzene	ND	0.25
Toluene	ND	0.25
Ethylbenzene	ND	0.25
m,p-Xylenes	ND	0.50
o-Xylene	ND	0.25

ND - Analyte not detected at the stated detection limit.

**Quality Control:** 

Surrogate

Trifluorotoluene

Percent Recovery 116 Acceptance Limits

81-117%

Reference:

Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics;

Test Methods for Evaluating Solid Wastes, SW-846, United States

Environmental Protection Agency, Final Update I, July 1992.

Comments:

Analys

#### **VOLATILE AROMATIC HYDROCARBONS**

#### **Matrix Spike Analysis**

Lab ID:

MB35624Spk

Sample Matrix: Soil

NA

Preservative: Condition:

NA

Report Date:

06/19/97 NA

Date Sampled:

Date Received: Date Extracted:

NA 06/05/97

Date Analyzed:

**97/13/97** 

wrong date?

Target-Analyte	Spike Added. (mg/kg)-	Orginal Cone. (mg/kg).	SpikedSample Cone.(ind/kg)	%(Recovery	Acceptance Limits(%)
Benzene	200	ND	177	88%	39-150
Toluene	200	ND	275	138%	32-160
Ethylbenzene	200	ND	199	100%	46-148
m,p-Xylenes	400	ND	409	102%	NE
o-Xylene	200	ND	245	123%	NE

ND - Analyte not detected at the stated detection limit.

NA - Not applicable or not calculated.

NE - Spike acceptance range not established by the EPA.

**Quality Contro** 

Surrogate Trifluorotoluene % Recovery 102

Acceptance Limits 81 - 117%

Vid Q

Reference:

Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test

Methods for Evaluating Solid Wastes, SW-846, United States Environmental

Protection Agency, September 1986.

Comments:

Quis PhQ\_

#### **VOLATILE AROMATIC HYDROCARBONS**

#### **Duplicate Analysis**

Lab ID:

J. Ja Matri .

Sample Matrix: Preservative:

Condition:

7014 Soil

Cool Intact

Soil

Report Date:

06/16/97

Date Sampled:

06/03/97

Date Received:

Date Extracted:

06/04/97 06/05/97

Date Analyzed:

06/12/97

Target Analyte	(©riginal Conc (mg/(g))	Diplicate Core	/Acceptance Renge (moj/kg)
Benzene	ND	ND	NA
Toluene	ND	ND	NA
Ethylbenzene	ND	ND	NA
m,p-Xylenes	ND	ND	NE
o-Xylene	ND	ND	NE

ND - Analyte not detected at the stated detection limit.

NA - Not applicable or not calculated.

NE - Duplicate acceptance range not established by the EPA.

**Quality Control:** 

<u>Surrogate</u> Trifluorotoluene % Recovery 104 Acceptance Limits

81 - 117%

Reference:

Method 5030, Purge and Trap; Method 8020, Aromatic Volatile Organics; Test

Methods for Evaluating Solid Wastes SW-846, United States Environmental

Protection Agency, Final Update I, July, 1992.

Comments:

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Desing Manager Analyst

Poviou

# QUALITY CONTROL REPORT TOTAL RECOVERABLE PETROLEUM HYDROCARBONS Diesel Range Organics

#### **Method Blank Analysis**

Project ID:

Condition:

NA

Soil

Sample Matrix: Preservative:

NA NA Report Date:

06/13/97

Date Sampled:

NA

Date Received:

NA

Date Extracted:

06/05/97

Date Analyzed:

06/11/97

∉-Sample ID	[4:16][9]	ે ઉછે (સંગ્રહ્નો (છે) (સંગ્રહ્નો (છે)	Delegionalnik
Method Blank	MB35586	ND	20.0

ND- Analyte not detected at the stated detection limit.

**Quality Control:** 

Surrogate

o - Terphenyl

% Recovery

94%

Acceptance Limits

50 - 150%

Reference:

EPA Method 8015A, modified. "Nonhalogenated Volatile Organics by Gas

Chromatography." Test Methods for Evaluating Solid Waste, Physical/

Chemical Methods, SW-846, 3rd Ed, Final Update I, July, 1992. USEPA.

Comments:

Re

Deline Manager

# QUALITY CONTROL REPORT TOTAL RECOVERABLE PETROLEUM HYDROCARBONS Diesel Range Organics

#### Matrix Spike Analysis

Project ID:

Condition:

NA

Report Date:

06/13/97

Sample Matrix:

Soil

Date Sampled:

NA

Preservative:

NA NA Date Received:

NA 06/05/97

Date Extracted:
Date Analyzed:

06/11/97

E LEIGIE	े होताहरू	Ojojerkoje.	ું (છે.પુંગ)	સેંગલ્યાર
	(क्रिक्रिक))	(Ojojerkoje.)	કાર્યું છે.પુંચ	Resovery
MBSPK35592	2,260	ND	2,120	94%

ND- Analyte not detected at the stated detection limit.

Reference:

EPA Method 8015A, modified. "Nonhalogenated Volatile Organics by

Gas Chromatography." <u>Test Methods for Evaluating Solid Waste, Physical/Chemical Methods</u>, SW-846, 3rd Ed, Final Update I, July,

1992. USEPA.

Comments:

Analyst

Review

### QUALITY CONTROL REPORT TOTAL VOLATILE PETROLEUM HYDROCARBONS

#### **Gasoline Range Organics**

#### Method Blank Analysis

Project ID:

NA

Report Date:

06/19/97

Sample Matrix: Soil

Date Sampled:

NA

Preservative:

NA

Date Received:

NA

Condition:

NA

Date Extracted: Date Analyzed:

06/05/97 06/12/97

Sandere.	( <u>Fab</u> (2)	(intelligi)	் <b>யிர்</b> டு)
Method Blank	MB35586	ND	22.5

ND- Analyte not detected at the stated detection limit.

**Quality Control:** 

Surrogate

Trifluorotoluene

% Recovery 103%

Acceptance Limits 50 - 150%

Reference:

Method for the Determination of Gasoline Range Organics,

State of Tennessee, Department of Environment and Conservation, Division

of Underground Storage Tanks.

Comments:

Analyst

# QUALITY CONTROL REPORT TOTAL VOLATILE PETROLEUM HYDROCARBONS

**Gasoline Range Organics** 

#### **Matrix Spike Analysis**

Project ID:

NA

Report Date:

06/19/97

Sample Matrix:

Soil

Date Sampled:

NA

Preservative:

NA

Date Received:

Date Extracted:

NA 06/05/97

Condition:

NA

Date Analyzed

06/12/97

Lapa D	kSpikev:(1696	Oibliakgoie	Spike)@are.	Fegeral
	(019/39)	(ing/ig)	(mg/kg)j	Receivery
MBSPK35593	2,100	. ND	1,760	84%

ND- Analyte not detected at the stated detection limit.

**Quality Control:** 

Surrogate

Percent Recovery

Acceptance Limits

Trifluorotoluene

111%

50 - 150%

Reference:

Method for the Determination of Gasoline Range Organics,

State of Tennessee, Department of Environment and Conservation,

Division of Underground Storage Tanks.

Comments:

Review

# Pit Closure Analysis Analyst Information

### **Devon Energy Corporation**

Report Date:

06/16/97

Lab ID:

7016 - 7019

Parameter	Sample ID	Analyst	Date Extracted	Date Analyzed
BTEX	7016 - 7018	D. Bohemier	06/05/97	06/12/97
				06/13/97
Total Volatile Petroleum Hydrocarbons	7016 - 7018	D. Bohemier	06/05/97	06/12/97
				06/13/97
	7019		06/05/97	06/12/97
				06/13/97
Total Recoverable Petroleum Hydrocarbons	7016 - 7018	D. Bohemier	06/05/97	06/11/97



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Please Fill Out Thoroughly. lusults to Frank McDonald White/Yellow: Analytica Pink: Client Shaded areas for lab use only. COMMENTS ō 1000 METALS Relinquished By: WATER ANALYSES Monina Redald 6-3.92 Minina Redald 6-4-92 **CHAIN OF CUSTODY** 13:41 10:44 | Pimarian Relinquished By: Received By: Company: ORGANIC ANALYSES Date: 1 1 1 1 1 1 1 Cimarron Required Turnaround Time (Prior Authorization Required for Rush) Received By: Sampled By: ०८०४ DROY Company: <del>(100)</del> Custody Seals: Y / N / NA O PE JEVON FILLYCH DRUCH FIRMAN Received intact: Received Cold: Sample Receipt No. Containers: 807 S. CARLTON • FARMINGTON, NM 87401 • (505) 326-2395 Matrix 1.0% Time 10:14 Annual Section 6.3-97 Proj. #: NEBU# 56A PROJECT MANAGER: Date Proj. Name: Sep. Dit Project Information Analytica Lab I.D.: Bym. @ 5' Sample ID Company: Address: Shipped Via: Company: Phone: -Fax: Address: P. O. No: Bill To: