## State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

#### **Release Notification and Corrective Action** 30-039-20331 **OPERATOR** Initial Report Name of Company: Energen Resources, Inc. Contact: Ed Hasely Address: 2010 Afton Place, Farmington, NM 87401 Telephone No: 505-324-4131 Facility Type: Oil/Gas Well Site Facility Name: Jicarilla N #1 Mineral Owner: Jicarilla Surface Owner: Jicarilla Lease No. Jicarilla N LOCATION OF RELEASE Feet from the North/South Line Feet from the East/West Line County Unit Letter Section Township Range 24N 5W 1850 South 1850 West Rio Arriba K 4 Latitude 36.33914 Longitude -107.36852 NATURE OF RELEASE Type of Release: Produced Fluids Volume of Release: Unknown Volume Recovered: 0 bbls Source of Release: Production Pit Tank Date and Hour of Occurrence: Date and Hour of Discovery: Unknown 1/11/10 Was Immediate Notice Given? If YES, To Whom? ☐ Yes ☐ Not Required By Whom? NA Date and Hour: NA If YES, Volume Impacting the Watercourse, NA Was a Watercourse Reached? ☐ Yes 🖾 No If a Watercourse was Impacted, Describe Fully.\* NA Describe Cause of Problem and Remedial Action Taken.\* Soils underneath the tank during the below-grade tank closure were visually impacted. According to the Pit Rule, this is an indication of Describe Area Affected and Cleanup Action Taken.\* Approximately 800 cubic yards of soil were excavated. Samples were collected after excavation and results were acceptable (see attached). The impacted soils were taken to an approved disposal facility. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. OIL CONSERVATION DIVISION Signature: For. CP Approved by District Supervisor: Printed Name: Ed Hasely Approval Date: **Expiration Date:** Title: Sr. Environmental Engineer Conditions of Approval: E-mail Address: ed.hasely@energen.com Attached Phone: 505-324-4131 / 505-330-3584(cell)

\* Attach Additional Sheets If Necessary

NRMD 1010240968

3

Client: Energen	(5	05) 632-0615 U.S. Hwy 64, Far	(800) 362-18	79		Location No: C.O.C. No:	
FIELD REPORT: SPILL CLO LOCATION: NAME: Tilacilla QUAD/UNIT: P SEC: 4 QTR/FOOTAGE: 1050 F52 2105	ル WELL#: TWP: 24ん RNG:5ん	/ PM: \\\ \\	CNTY:RA A	ST:/() m	DATE FIN	D:	
EXCAVATION APPROX: 62 DISPOSAL FACILITY: Smidt 2 LAND USE: Gra Zing CAUSE OF RELEASE: Higher SPILL LOCATED APPROXIMATELY: DEPTH TO GROUNDWATER: 2260' NMOCD RANKING SCORE: 10 SOIL AND EXCAVATION DESCRIPTION CLOSCIPE STD at 1000 Excavated Prior to, Field Chloride Results	Candform LEASE:  Cal  BO FT. 42  NEAREST WATER SO  NMOCD T  Nichel by  Arrival by	MATERIAL  MATERIAL  DURCE: 7/6  THE CLOSURI  CON JICK  Energe	ON METHO RELEASED FROM LA 100' ESTD: Lacilla	DD: (an LAND OW Cond Wheae NEAREST	Clfarm NER: Tix NER:	MATER: 2900'	
	SAMPLE I.D. LAB NO.	WEIGHT (g)	Co Ag:  mL FREON  20 20 20 20 20 20 20	-107° 22 DILUTION 	READING 2/6 09 08 15 15 12 07	CALC. ppm 2/6 36 32 66 60 49 28	
SPILL PERIMETER  A D  Out burden  A D  Out burden	SAMPLE ID	OVM RESULTS FIELD HEAD (ppr O.C O.C O.C O.C O.C O.C AB SAMPLE ANALYSIS	SPACE PID  i)  b  c  d  o  o  o  o	22 2	SPILL F	PROFILE  25'  25'	
TRAVEL NOTES: CALLED OU	Γ:		ONSITE:				



Client:

**Energen Resources** 

Project #:

03022-0163

Sample No.:

1

Date Reported:

1/29/2010

Sample ID:

South Wall

Date Sampled:

1/26/2010 1/26/2010

Sample Matrix: Preservative:

Soil Cool Date Analyzed:
Analysis Needed:

TPH-418.1

Condition:

Cool and Intact

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

**Total Petroleum Hydrocarbons** 

36

5.0

ND = Parameter not detected at the stated detection limit.

References:

Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis

of Water and Waste, USEPA Storet No. 4551, 1978.

Comments:

Jicarilla N #1

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Review

Toni McKnight

Printed

Printed

James McDaniel



Client:

**Energen Resources** 

03022-0163

Sample No.:

Date Reported:

Sample ID:

West Wall

1/29/2010

Sample Matrix: Preservative:

Soil

Date Sampled: 1/26/2010 Date Analyzed:

1/26/2010

Condition:

Cool Cool and Intact Analysis Needed:

Project #:

TPH-418.1

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

**Total Petroleum Hydrocarbons** 

32

5.0

ND = Parameter not detected at the stated detection limit.

References:

Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis

of Water and Waste, USEPA Storet No. 4551, 1978.

Comments:

Jicarilla N #1

Melenight

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Toni McKnight

Printed

James McDaniel



Client:

**Energen Resources** 

Sample No.:

3

03022-0163

Sample ID:

North Wall

1/29/2010

Sample Matrix:

Soil

Date Reported: Date Sampled:

Project #:

1/26/2010

Preservative:

Cool

Date Analyzed: Analysis Needed:

1/26/2010 TPH-418.1

Condition:

Cool and Intact

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

**Total Petroleum Hydrocarbons** 

60

5.0

ND = Parameter not detected at the stated detection limit.

References:

Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis

of Water and Waste, USEPA Storet No. 4551, 1978.

Comments:

Jicarilla N #1

oni Milanett

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Toni McKnight

Printed

James McDaniel



Client:

**Energen Resources** 

03022-0163

Sample No.:

5

Project #:
Date Reported:

4/00/0040

Sample ID:

East Wall

1/29/2010

Sample Matrix:

Soil

Date Sampled:

1/26/2010 1/26/2010

Preservative:

Cool

Date Analyzed:
Analysis Needed:

TPH-418.1

Condition:

Cool and Intact

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

**Total Petroleum Hydrocarbons** 

48

5.0

ND = Parameter not detected at the stated detection limit.

References:

Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis

of Water and Waste, USEPA Storet No. 4551, 1978.

Comments:

Jicarilla N #1

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Review

James McDaniel

Printed

Toni McKnight



Client:

**Energen Resources** 

03022-0163

Sample No.:

4

Project #:
Date Reported:

1/29/2010

Sample ID:

Bottom @ 25'

Date Sampled:

1/26/2010

Sample Matrix:

Soil

Date Analyzed:

1/26/2010

Preservative:

Cool

Analysis Needed:

TPH-418.1

Condition:

Cool and Intact

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

**Total Petroleum Hydrocarbons** 

60

5.0

ND = Parameter not detected at the stated detection limit.

References:

Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis

of Water and Waste, USEPA Storet No. 4551, 1978.

Comments:

Jicarilla N #1

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Toni McKnight

Printed

Review

James McDaniel



Client:

**Energen Resources** 

03022-0163

Sample No.:

6

1/20/2010

Sample ID:

Bottom @ 8'

1/29/2010

Sample Matrix:

Soil

Date Sampled:
Date Analyzed:

Date Reported:

Project #:

1/26/2010 1/26/2010

Preservative:

Cool

Analysis Needed:

TPH-418.1

Condition:

Cool and Intact

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

**Total Petroleum Hydrocarbons** 

28

5.0

ND = Parameter not detected at the stated detection limit.

References:

Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis

of Water and Waste, USEPA Storet No. 4551, 1978.

Comments:

Jicarilla N #1

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Review

Toni McKnight

Printed

James McDaniel



# EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Energen	Project #:	03022-0163
Sample ID:	BGT Bottom	Date Reported:	01-28-10
Laboratory Number:	53007	Date Sampled:	01-26-10
Chain of Custody:	8686	Date Received:	01-26-10
Sample Matrix:	Soil	Date Analyzed:	01-27-10
Preservative:	Cool	Date Extracted:	01-26-10
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	0.0
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	91.0 %
	1,4-difluorobenzene	87.3 %
	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.

Comments:

**BGT Closure / Jicarilla N#1** 

Analyst

Review



**Total Chloride** 

#### Chloride

Client:	Energen	Project #:	03022-0163
Sample ID:	BGT Bottom	Date Reported:	01-28-10
Lab ID#:	53007	Date Sampled:	01-26-10
Sample Matrix:	Soil	Date Received:	01-26-10
Preservative:	Cool	Date Analyzed:	01-27-10
Condition:	Intact	Chain of Custody:	8686

Parameter			

Concentration (mg/Kg)

25

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:

**BGT Closure / Jicarilla N #1** 

Analyst

Review Weeter



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

Client:	Energen	Project #:	03022-0163
Sample ID:	Overburden	Date Reported:	01-28-10
Laboratory Number:	53008	Date Sampled:	01-26-10
Chain of Custody No:	8686	Date Received:	01-26-10
Sample Matrix:	Soil	Date Extracted:	01-26-10
Preservative:	Cool	Date Analyzed:	01-27-10
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	3.6	0.2
Diesel Range (C10 - C28)	52.3	0.1
Total Petroleum Hydrocarbons	55.9	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:

**BGT Closure / Jicarilla N#1** 

Analyst

Review

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



Client:

**Energen Resources** 

Project #:

03022-0163

Sample No.:

Date Reported:

1/29/2010

Sample ID: Sample Matrix: Overburden Pile

1/26/2010

Soil

Date Sampled: Date Analyzed:

1/26/2010

Preservative:

Cool

Analysis Needed:

TPH-418.1

Condition:

Cool and Intact

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

**Total Petroleum Hydrocarbons** 

124

5.0

ND = Parameter not detected at the stated detection limit.

Method 8015

showed 55.9 - acceptable

References:

Method 418.1, Petroleum Hydrocarbons, Total Recoverable, Chemical Analysis

of Water and Waste, USEPA Storet No. 4551, 1978.

Comments:

Jicarilla N #1

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Analyst

Toni McKnight

Printed

Printed

Review

James McDaniel

### **Ed Hasely**

From:

Ed Hasely

Sent:

Monday, January 11, 2010 8:03 AM

To:

'Powell, Brandon, EMNRD'

Cc:

'Dixon Sandoval', Billy Stalcup

Subject:

BGT Closure - Jicarilla N #1- Potential Past Release Notification

Brandon - During the BGT closure on the subject well, impacted soils were discovered under the BGT. The impacted soils are being excavated. I will follow-up w/ a C-141 and a C-144 upon completion of the project. Let me know if you have questions.

#### **Ed Hasely**

#### **Energen Resources Corporation**

From: Ed Hasely

**Sent:** Monday, January 04, 2010 2:33 PM

**To:** 'Powell, Brandon, EMNRD' **Cc:** Dixon Sandoval; Billy Stalcup

Subject: BGT Closure Notification - Jicarilla N #1

Brandon - This is to notify you that Energen will be closing the below grade tank on the following location in the near future. Plans are to set the tank above grade.

Jicarilla N #1 - Unit Letter K, Section 4, Township 24N, Range 5W

#### **Ed Hasely**

## **Energen Resources Corporation**

Sr. Environmental Engineer ed.hasely@energen.com
Office: (505) 324-4131
Cell: (505) 330-3584