

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

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**

30-039-06660

**OPERATOR**

☐ Initial Report ☒ Final Report

<b>Name of Company:</b> Energen Resources, Inc.	<b>Contact:</b> Ed Hasely
<b>Address:</b> 2010 Afton Place, Farmington, NM 87401	<b>Telephone No:</b> 505-324-4131
<b>Facility Name:</b> Jicarilla 96 #6	<b>Facility Type:</b> Oil/Gas Well Site

<b>Surface Owner:</b> Jicarilla	<b>Mineral Owner:</b> Jicarilla	<b>Lease No.</b> Jicarilla 96
---------------------------------	---------------------------------	-------------------------------

**LOCATION OF RELEASE**

<b>Unit Letter</b> M	<b>Section</b> 2	<b>Township</b> 26N	<b>Range</b> 3W	<b>Feet from the</b>	<b>North/South Line</b>	<b>Feet from the</b>	<b>East/West Line</b>	<b>County</b> Rio Arriba
-------------------------	---------------------	------------------------	--------------------	----------------------	-------------------------	----------------------	-----------------------	-----------------------------

**Latitude** 36.51110

**Longitude** -107.11852

**NATURE OF RELEASE**

<b>Type of Release:</b> Produced Fluids	<b>Volume of Release:</b> Unknown	<b>Volume Recovered:</b> 0 bbls
<b>Source of Release:</b> Production Pit Tank	<b>Date and Hour of Occurrence:</b> Unknown	<b>Date and Hour of Discovery:</b> 9/19/12
<b>Was Immediate Notice Given?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	<b>If YES, To Whom?</b> NMOCD – Brandon Powell, Jicarilla EPO – Hobson Sandoval	
<b>By Whom?</b> Ed Hasely	<b>Date and Hour:</b> 9/19/12, 2:40 pm	
<b>Was a Watercourse Reached?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>If YES, Volume Impacting the Watercourse.</b> NA	

**If a Watercourse was Impacted, Describe Fully.\*** NA


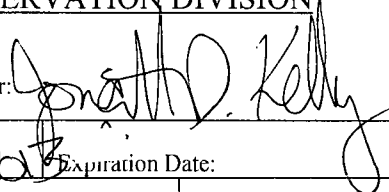
RCVD DEC 6 '12  
OIL CONS. DIV.  
DIST. 3

**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 a release.

**Describe Area Affected and Cleanup Action Taken.\*** Approximately 220 cubic yards of soil were excavated. Samples were collected after excavation and results were acceptable (see attached) except the bottom sample (18 ft) showed 160 ppm TPH. The bottom of the excavation was sprayed with potassium permanganate and the excavation was backfilled with clean soils. 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.

<b>Signature:</b> 	<b>OIL CONSERVATION DIVISION</b>	
<b>Printed Name:</b> Ed Hasely	<b>Approved by District Supervisor:</b> 	
<b>Title:</b> Sr. Environmental Engineer	<b>Approval Date:</b> 3/07/2012	<b>Expiration Date:</b>
<b>E-mail Address:</b> ed.hasely@energen.com	<b>Conditions of Approval:</b>	<b>Attached</b> <input type="checkbox"/>
<b>Date:</b> 12/5/12 <b>Phone:</b> 505-324-4131 / 505-330-3584(cell)		

\* Attach Additional Sheets If Necessary

NSK1306648899

## Ed Hasely

---

**From:** Ed Hasely  
**Sent:** Wednesday, September 19, 2012 2:40 PM  
**To:** 'Kelly, Jonathan, EMNRD'  
**Cc:** 'Hobson Sandoval'; Jason Peace  
**Subject:** Possible Past Release Notification - Jicarilla 96 #6

This is to notify you that impacted soils were discovered under the BGT on the Jicarilla 96 #6 on September 19, 2012. We are proceeding w/ closure per 19.15.29 and 19.15.30.

## Ed Hasely Energen Resources Corporation

---

**From:** Ed Hasely  
**Sent:** Monday, August 27, 2012 2:19 PM  
**To:** 'Kelly, Jonathan, EMNRD'  
**Cc:** 'Hobson Sandoval'; Jason Peace  
**Subject:** BGT Closure Notification - Jicarilla

Jonathan – Energen plans to begin the closure process on the below listed BGT's in the near future. Let me know if you have questions. Thanks.

<b>Jicarilla 96 #5</b> - Unit Letter M, Section 11, Township 26N, Range 3W
<b>Jicarilla 96 #5B</b> - Unit Letter F, Section 11, Township 26N, Range 3W
<b>Jicarilla 96 #6</b> - Unit Letter M, Section 2, Township 26N, Range 3W
<b>Johnson Shear #1</b> - Unit Letter H, Section 3, Township 26N, Range 3W

## Ed Hasely Energen Resources Corporation

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

## Ed Hasely

---

**From:** Powell, Brandon, EMNRD [Brandon.Powell@state.nm.us]  
**Sent:** Wednesday, October 17, 2012 3:08 PM  
**To:** Ed Hasely  
**Subject:** RE: Request for Closure 2 - Jicarilla 96 #6

This will work for us

Thank You  
Brandon Powell  
I & E Supervisor  
New Mexico Oil Conservation  
Office: (505) 334-6178 ext. 116

*"He who wishes to gain knowledge is wiser than he who thinks he has knowledge (unknown)"*

---

**From:** Ed Hasely [mailto:Ed.Hasely@energen.com]  
**Sent:** Wednesday, October 17, 2012 2:52 PM  
**To:** Kelly, Jonathan, EMNRD; Powell, Brandon, EMNRD  
**Subject:** FW: Request for Closure - Jicarilla 96 #6

Is this an acceptable approach to the OCD? Let me know. Thanks.

**Ed Hasely**  
**Energen Resources Corporation**

---

**From:** Hobson Sandoval [mailto:hsandoval\_99@yahoo.com]  
**Sent:** Tuesday, October 16, 2012 7:58 AM  
**To:** Ed Hasely  
**Subject:** Re: Request for Closure - Jicarilla 96 #6

I was there to view soil sampling of Jicarilla 96-6. Excavation to 18 feet is deep. TPH is slightly high: however excavating deeper is a safety concern. Therefore, I recommend you spray bottom of pit with potassium permanganate and then are authorized to back fill. Call me if this is unclear.

Ed Hasely <Ed.Hasely@energen.com> wrote:

This is a request for closure of the excavation beneath a removed BGT on the subject location. Impacted soils were excavated to a depth of approximately 18 feet and 220 cubic yards of dirt were hauled to commercial disposal. Results of the sampling are listed in the table below.

	TPH (8015) - ppm	Benzene – ppm	BTEX – ppm	Chloride - ppm
Sides	3.9	ND	ND	11.2
Bottom	160	ND	1.49	89.5

As you can see, the bottom composite tested over the 100 ppm guideline. We have removed the core of the contamination. Benzene was ND and Total BTEX was extremely low. The majority (134 ppm out of the 160 ppm) of the remaining TPH is in the diesel range (C10-C28) and therefore it is not the lighter ends that travel through the soils easier. Going any deeper will require moving equipment and benching down. For these reasons and the relatively low TPH, we request approval to backfill and close the excavation.

I appreciate your consideration in this matter. Please respond via Email for our records. Thanks.

**Ed Hasely**

**Energen Resources Corporation**

---

**From:** Ed Hasely  
**Sent:** Wednesday, September 19, 2012 2:40 PM  
**To:** 'Kelly, Jonathan, EMNRD'  
**Cc:** 'Hobson Sandoval'; Jason Peace  
**Subject:** Possible Past Release Notification - Jicarilla 96 #6

This is to notify you that impacted soils were discovered under the BGT on the Jicarilla 96 #6 on September 19, 2012. We are proceeding w/ closure per 19.15.29 and 19.15.30.

**Ed Hasely**

**Energen Resources Corporation**

---

**From:** Ed Hasely  
**Sent:** Monday, August 27, 2012 2:19 PM  
**To:** 'Kelly, Jonathan, EMNRD'  
**Cc:** 'Hobson Sandoval'; Jason Peace  
**Subject:** BGT Closure Notification - Jicarilla

Jonathan – Energen plans to begin the closure process on the below listed BGT's in the near future. Let me know if you have questions. Thanks.

<b>Jicarilla 96 #5</b> - Unit Letter M, Section 11, Township 26N, Range 3W
<b>Jicarilla 96 #5B</b> - Unit Letter F, Section 11, Township 26N, Range 3W
<b>Jicarilla 96 #6</b> - Unit Letter M, Section 2, Township 26N, Range 3W
<b>Johnson Shear #1</b> - Unit Letter H, Section 3, Township 26N, Range 3W

## **Ed Hasely**

### **Energen Resources Corporation**

Sr. Environmental Engineer

[ed.hasely@energen.com](mailto:ed.hasely@energen.com)

Office: (505) 324-4131

Cell: (505) 330-3584



EPA METHOD 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons

Client:	Energen Resources	Project #:	03022-0001
Sample ID:	Jic 96 #6 Bottom	Date Reported:	10-10-12
Laboratory Number:	63412	Date Sampled:	10-09-12
Chain of Custody No:	14534	Date Received:	10-09-12
Sample Matrix:	Soil	Date Extracted:	10-10-12
Preservative:	Cool	Date Analyzed:	10-10-12
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	26.0	0.2
Diesel Range (C10 - C28)	134	0.1
Total Petroleum Hydrocarbons	160	

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: Jicarilla BGT



EPA METHOD 8015 Modified  
Nonhalogenated Volatile Organics  
Total Petroleum Hydrocarbons

Client:	Energen Resources	Project #:	03022-0001
Sample ID:	Jic 96 #6 Sides	Date Reported:	10-10-12
Laboratory Number:	63413	Date Sampled:	10-09-12
Chain of Custody No:	14534	Date Received:	10-09-12
Sample Matrix:	Soil	Date Extracted:	10-10-12
Preservative:	Cool	Date Analyzed:	10-10-12
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)	3.9	0.1
Total Petroleum Hydrocarbons	3.9	

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: Jicarilla BGT



EPA METHOD 8021  
AROMATIC VOLATILE ORGANICS

Client:	Energen Resources	Project #:	03022-0001
Sample ID:	Jic 96 #6 Bottom	Date Reported:	10-10-12
Laboratory Number:	63412	Date Sampled:	10-09-12
Chain of Custody:	14534	Date Received:	10-09-12
Sample Matrix:	Soil	Date Analyzed:	10-10-12
Preservative:	Cool	Date Extracted:	10-10-12
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	50

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	10.0
Toluene	14.8	10.0
Ethylbenzene	35.8	10.0
p,m-Xylene	1,030	10.0
o-Xylene	411	10.0
Total BTEX	1,490	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	82.2 %
	1,4-difluorobenzene	86.9 %
	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: Jicarilla BGT





EPA METHOD 8021  
AROMATIC VOLATILE ORGANICS

Client:	Energen Resources	Project #:	03022-0001
Sample ID:	Jic 96 #6 Sides	Date Reported:	10-10-12
Laboratory Number:	63413	Date Sampled:	10-09-12
Chain of Custody:	14534	Date Received:	10-09-12
Sample Matrix:	Soil	Date Analyzed:	10-10-12
Preservative:	Cool	Date Extracted:	10-10-12
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	50

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	10.0
Toluene	ND	10.0
Ethylbenzene	ND	10.0
p,m-Xylene	ND	10.0
o-Xylene	ND	10.0
Total BTEX	ND	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	80.0 %
	1,4-difluorobenzene	91.1 %
	Bromochlorobenzene	81.7 %

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: Jicarilla BGT



## Chloride

Client:	Energen Resources	Project #:	03022-0001
Sample ID:	Jic 96 #6 Bottom	Date Reported:	10-11-12
Lab ID#:	63412	Date Sampled:	10-09-12
Sample Matrix:	Soil	Date Received:	10-09-12
Preservative:	Cool	Date Analyzed:	10-10-12
Condition:	Intact	Chain of Custody:	14534

Parameter	Concentration (mg/Kg)
Total Chloride	89.5

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: Jicarilla BGT



## Chloride

Client:	Energen Resources	Project #:	03022-0001
Sample ID:	Jic 96 # 6 Sides	Date Reported:	10-11-12
Lab ID#:	63413	Date Sampled:	10-09-12
Sample Matrix:	Soil	Date Received:	10-09-12
Preservative:	Cool	Date Analyzed:	10-10-12
Condition:	Intact	Chain of Custody:	14534

Parameter	Concentration (mg/Kg)
-----------	-----------------------

**Total Chloride**

**11.2**

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: **Jicarilla BGT**