

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

30-039-21269

OPERATOR

☐ Initial Report ☒ Final Report

Name of Company: Energen Resources, Inc.	Contact: Ed Hasely
Address: 2010 Afton Place, Farmington, NM 87401	Telephone No: 505-324-4131
Facility Name: Cheney Federal #2A (Tank BGT)	Facility Type: Oil/Gas Well Site

Surface Owner: Federal	Mineral Owner: Federal	Lease No. NMNM046
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LOCATION OF RELEASE

Unit Letter D	Section 17	Township 26N	Range 2W	Feet from the 790	North/South Line North	Feet from the 790	East/West Line West	County Rio Arriba
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Latitude 36.49014

Longitude -107.07921

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: Unknown	Date and Hour of Discovery: 11/26/12
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Brandon Powell – OCD (Email) Mark Kelly – BLM (Email)	
By Whom? Ed Hasely	Date and Hour: 11/26/12; 10 am	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. NA	

If a Watercourse was Impacted, Describe Fully.* NA

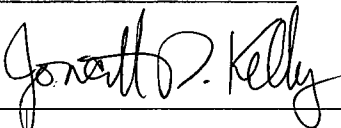
RCVD APR 24 '13
OIL CONS. DIV.
DIST. 3

Describe Cause of Problem and Remedial Action Taken.*

During the below-grade tank closure, soils underneath the tank were visually impacted.

Describe Area Affected and Cleanup Action Taken.* The impacted soils were excavated using a backhoe. Soils were removed to a depth of approximately 6 feet below the tank. Composite samples were collected from the walls and the analyses (attached) shows acceptable results based upon a zero ranking. The depth to groundwater is estimated to be greater than 100 feet base upon cathodic well records. The impacted soils were disposed at a commercial disposal facility and the excavation was backfilled with clean soils.

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.

Signature: 	OIL CONSERVATION DIVISION	
Printed Name: Ed Hasely	Approved by District Supervisor: 	
Title: Sr. Environmental Engineer	Approval Date: 5/2/2013	Expiration Date:
E-mail Address: ed.hasely@energen.com	Conditions of Approval:	Attached ☐
Date: 4/23/12 Phone: 505-324-4131 / 505-330-3584(cell)		

* Attach Additional Sheets If Necessary

nJK13122359A



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

Client:	Energen Resources	Project #:	03022-0001
Sample ID:	Tank BGT Bottom	Date Reported:	12-04-12
Laboratory Number:	63832	Date Sampled:	12-03-12
Chain of Custody No:	14727	Date Received:	12-03-12
Sample Matrix:	Soil	Date Extracted:	12-04-12
Preservative:	Cool	Date Analyzed:	12-04-12
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	23.0	0.2
Diesel Range (C10 - C28)	91.7	0.1
Total Petroleum Hydrocarbons	115	

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: **Cheney Federal #2A**



Chloride

Client:	Energen Resources	Project #:	03022-0001
Sample ID:	Tank BGT Bottom	Date Reported:	12-04-12
Lab ID#:	63832	Date Sampled:	12-03-12
Sample Matrix:	Soil	Date Received:	12-03-12
Preservative:	Cool	Date Analyzed:	12-04-12
Condition:	Intact	Chain of Custody:	14727

Parameter	Concentration (mg/Kg)
Total Chloride	23.2

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: **Cheney Federal #2A**



EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Energen Resources	Project #:	03022-0001
Sample ID:	Tank BGT Bottom	Date Reported:	12-04-12
Laboratory Number:	63832	Date Sampled:	12-03-12
Chain of Custody:	14727	Date Received:	12-03-12
Sample Matrix:	Soil	Date Analyzed:	12-04-12
Preservative:	Cool	Date Extracted:	12-04-12
Condition:	Intact	Analysis Requested:	BTEX
		Dilution:	50

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	10.0
Toluene	11.8	10.0
Ethylbenzene	152	10.0
p,m-Xylene	1,170	10.0
o-Xylene	389	10.0
Total BTEX	1,730	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	82.5 %
	1,4-difluorobenzene	91.7 %
	Bromochlorobenzene	112 %

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: Cheney Federal #2A



EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

Client:	Energen Resources	Project #:	03022-0001
Sample ID:	Tank BGT Sides	Date Reported:	12-04-12
Laboratory Number:	63831	Date Sampled:	12-03-12
Chain of Custody No:	14727	Date Received:	12-03-12
Sample Matrix:	Soil	Date Extracted:	12-04-12
Preservative:	Cool	Date Analyzed:	12-04-12
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)	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: **Cheney Federal #2A**



EPA METHOD 8021
AROMATIC VOLATILE ORGANICS

Client:	Energen Resources	Project #:	03022-0001
Sample ID:	Tank BGT Sides	Date Reported:	12-04-12
Laboratory Number:	63831	Date Sampled:	12-03-12
Chain of Custody:	14727	Date Received:	12-03-12
Sample Matrix:	Soil	Date Analyzed:	12-04-12
Preservative:	Cool	Date Extracted:	12-04-12
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	84.3 %
	1,4-difluorobenzene	93.3 %
	Bromochlorobenzene	97.1 %

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: Cheney Federal #2A



Chloride

Client:	Energen Resources	Project #:	03022-0001
Sample ID:	Tank BGT Sides	Date Reported:	12-04-12
Lab ID#:	63831	Date Sampled:	12-03-12
Sample Matrix:	Soil	Date Received:	12-03-12
Preservative:	Cool	Date Analyzed:	12-04-12
Condition:	Intact	Chain of Custody:	14727

Parameter	Concentration (mg/Kg)
Total Chloride	23.1

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: Cheney Federal #2A

Ed Hasely

From: Ed Hasely
Sent: Monday, November 26, 2012 10:01 AM
To: 'Powell, Brandon, EMNRD'
Cc: 'Kelly, Mark C'
Subject: Possible Past Release Notification

Brandon / Mark – This is to notify you that impacted soils were discovered under the BGTs on the Cheney Federal #2A. We are proceeding w/ excavation and closure per 19.15.29 and 19.15.30.

Ed Hasely
Energen Resources Corporation

From: Ed Hasely
Sent: Monday, November 12, 2012 2:25 PM
To: Kelly, Jonathan, EMNRD
Subject: BGT Closure Notifications

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.

Cheney Federal #2 - Unit Letter M, Section 17, Township 26N, Range 2W

Cheney Federal #2A - Unit Letter D, Section 17, Township 26N, Range 2W
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Ed Hasely
Energen Resources Corporation

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

Ed Hasely

From: Landon, Sherrie [slandon@blm.gov]
Sent: Friday, December 07, 2012 10:35 AM
To: Ed Hasely
Subject: Re: FW: Request for Closure (Cheney Federal #2A)

You have our approval to close the site. I was over at your two Cheney Fed. wells last week. Seems to be a lot of contaminated soil being removed from the 2A. I will check them out again early next week. If I have any questions will get back to you. thanks sherrie

On Fri, Dec 7, 2012 at 7:15 AM, Ed Hasely <Ed.Hasely@energen.com> wrote:

Mark - Thanks for the info.

Sherrie – Can you help me w/ this?

Ed Hasely

Energen Resources Corporation

From: Kelly, Mark [mailto:mkelly@blm.gov]
Sent: Friday, December 07, 2012 7:05 AM
To: Ed Hasely
Cc: Sherrie Landon
Subject: Re: FW: Request for Closure (Cheney Federal #2A)

Ed,

Currently, the point of contact regarding all spills, leaks, discharges or historical contamination on BLM surface is Sherrie Landon and all reports and correspondence should be sent to her attention. If Sherrie is unavailable then I am the 2nd point of contact. Sherrie's email address is slandon@blm.gov, her direct phone number is 564-7707 and her cell phone number is (505) 793-1801.

Thanks,

Mark

On Thu, Dec 6, 2012 at 7:49 AM, Ed Hasely <Ed.Hasely@energen.com> wrote:

Mark – I am not sure who to bother on this issue, but figured I would start w/ you. Just wanted to make sure the BLM is OK w/ the closure of these two below grade tanks. Groundwater is estimated over 100 feet and there is not surface water or water wells nearby and the TPH levels are less than 1000 ppm. Please let me know your thoughts on this or if you want to discuss. The well is located in D – Sec. 17 -26N – 2W down near our Jicarilla operations. Below is email back-and-forths w/ the OCD w/ lab data and details. Thanks.

Or if I need to bother someone else w/ this, please let me know. Thanks.

Ed Hasely

Energen Resources Corporation

From: Kelly, Jonathan, EMNRD [mailto:Jonathan.Kelly@state.nm.us]
Sent: Thursday, December 06, 2012 7:17 AM
To: Ed Hasely
Cc: Powell, Brandon, EMNRD; Perrin, Charlie, EMNRD
Subject: RE: Request for Closure (Cheney Federal #2A)

Based off the depth to groundwater and distance to surface water features, the results listed fall within the closure standard for the site, so the excavations meet the limits. After going over it with Charlie, he has given me the ok to grant closure approval

Jonathan D. Kelly

Compliance Officer

Oil Conservation Division

Energy, Minerals, & Natural Resources

1000 Rio Brazos, Aztec, NM 87410

(505)334-6178 ext 122

jonathan.kelly@state.nm.us

From: Ed Hasely [mailto:Ed.Hasely@energen.com]
Sent: Wednesday, December 05, 2012 4:19 PM

To: Kelly, Jonathan, EMNRD
Subject: RE: Request for Closure

Looking at DeLorme Topo Maps on my computer shows a dotted blue line (indicating an intermittent stream) is over 2000 feet to the east. To the west, the nearest dotted blue line is over 3000 feet away. Thanks for checking into this for me.

Ed Hasely

Energen Resources Corporation

From: Kelly, Jonathan, EMNRD [<mailto:Jonathan.Kelly@state.nm.us>]
Sent: Wednesday, December 05, 2012 4:02 PM
To: Ed Hasely
Subject: RE: Request for Closure

I believe that would be accurate, though do you know the distance to the wash that is a bit west of the location. I know it generally doesn't flow, but from what I can recall from when I inspected them it might be capable of moving enough to be of little concern, but I am thinking that it could likely give your location a ranking of 10, which would allow for 1000 TPH. I will go over it with Charlie in the morning if he is available.

Jonathan D. Kelly

Compliance Officer

Oil Conservation Division

Energy, Minerals, & Natural Resources

1000 Rio Brazos, Aztec, NM 87410

(505)334-6178 ext 122

jonathan.kelly@state.nm.us

From: Ed Hasely [<mailto:Ed.Hasely@energen.com>]
Sent: Wednesday, December 05, 2012 3:57 PM
To: Kelly, Jonathan, EMNRD
Subject: RE: Request for Closure

It has been a while for me on doing a site ranking. Groundwater is estimated greater than 100 feet, there is no surface water within a 1000 feet and no water wells that I am aware of within a 1000 feet. Does that help? If not please let me know exactly what you need. Thanks.

Ed Hasely

Energen Resources Corporation

From: Kelly, Jonathan, EMNRD [<mailto:Jonathan.Kelly@state.nm.us>]
Sent: Wednesday, December 05, 2012 3:51 PM
To: Ed Hasely
Subject: RE: Request for Closure

Ed,

I will run this by Charlie before I can authorize it, since so far all that I have been authorized to approve has been C-144s and C-141s. Also, what is the site ranking for this location?

Jonathan D. Kelly

Compliance Officer

Oil Conservation Division

Energy, Minerals, & Natural Resources

1000 Rio Brazos, Aztec, NM 87410

(505)334-6178 ext 122

jonathan.kelly@state.nm.us

From: Ed Hasely [<mailto:Ed.Hasely@energen.com>]
Sent: Wednesday, December 05, 2012 8:24 AM
To: Kelly, Jonathan, EMNRD
Subject: RE: Request for Closure

Jonathon – Can you make this call or do we need to wait for Brandon to get back? Let me know. Thanks.

Ed Hasely

Energen Resources Corporation

From: Ed Hasely
Sent: Tuesday, December 04, 2012 4:03 PM
To: 'Powell, Brandon, EMNRD'; Kelly, Jonathan, EMNRD
Subject: Request for Closure

The Cheney Federal #2A had two BGT's. We have excavated and properly disposed of over 400 cy of soil between the two BGT's. The Tank BGT excavation is approximately 6 feet deep and the Separator BGT is approximately 16 feet deep. The lab results are detailed below. Groundwater is estimated at greater than 100 feet based upon cathodic well records of the Cheney Federal #1. First water in the cathodic well was 110 feet. The Cheney Federal #2A is located approximately 1700 feet to the south and its elevation is 29 feet higher than the cathodic well. We request approval to close the two excavations due to the chlorides being less than 250, BTEX being less than 50 ppm, and TPH being less than 1000 ppm.

Please let me know if you concur as soon as possible so we can complete the closure process. Thanks.

Ed Hasely

Energen Resources Corporation

From: laboratory [<mailto:laboratory@envirotech-inc.com>]
Sent: Tuesday, December 04, 2012 2:18 PM
To: Ed Hasely
Subject: Cheney Federal #2A

Here are the preliminary results for the Cheney Federal #2A:

<u>Sides</u>	<u>Tank BGT Sides</u> <u>Sep BGT Bottom</u>	<u>Tank BGT Bottom</u>	<u>Sep BGT</u>
Chloride: 31.8 ppm	23.1 ppm	23.2 ppm	24.6 ppm
TPH/8015:			
GRO: ppm	ND 220 ppm	23.0 ppm	196
DRO: ppm	ND 388 ppm	91.7 ppm	378
TPH: ppm	ND 608 ppm	115 ppm	573
BTEX/8021:			
Benzene: ND	ND 40.7 ppb	ND	
Toluene: ppb	ND 98.7 ppb	12 ppb	34.2
Ethlybenzene: 1,640 ppb	ND	152 ppb	460 ppb
P,m-Xylene: 18,890 ppb	ND	1,170 ppb	6,850 ppb
o-Xylene: 4,840 ppb	ND	389 ppb	1,900 ppb
Total BTEX: ppb	ND 25,500 ppb	1,730 ppb	9,240

Please contact our office if you have any questions. Thank you,