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 Department Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office

For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office

27	64
D	

Proposed Alternative Method Permit or Closure Plan Application

Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method Modification to an existing permit Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request Please be advised that approval of this request does not relieve the operator of highlity should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances OGRID # _____ 162928 Operator Energen Resources Address 2010 Afton Place, Farmington, New Mexico 87401 Facility or well name Jicarilla L 3 API Number <u>3003920200</u> OCD Permit Number U/L or Qtr/Qtr E Section 3 Township 24N Range 05W County Rio Arriba Center of Proposed Design Latitude 36 34308 Longitude <u>-107 35441</u> NAD □1927 ⋈ 1983 Surface Owner Federal State Private Tribal Trust or Indian Allotment Pit: Subsection F or G of 19 15 17.11 NMAC Temporary Drilling Workover Permanent Emergency Cavitation P&A Lined Unlined Linertype Thickness mil LLDPE HDPE PVC Other String-Reinforced Closed-loop System: Subsection H of 19 15 17 11 NMAC Type of Operation P&A Drilling a new well Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent) ☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other ☐ Lined ☐ Unlined Liner type Thickness _____mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other __ X Below-grade tank: Subsection 1 of 19 15 17 11 NMAC Volume _____bbl Type of fluid _____Produced Water Tank Construction material Secondary containment with leak detection Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off \square Visible sidewalls and liner \widehat{X} Visible sidewalls only \square Other Liner type Thickness mil HDPE PVC Other

Alternative Method:

Submittal of an exception request is required
Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval

6				
Fencing: Subsection D of 19 15 17 11 NMAC (Applies to permanent pits, temporary pits, and below-grade tanks)				
Chain link, six feet in height, two strands of barbed wire at top (Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)				
Four foot height, four strands of barbed wire evenly spaced between one and four feet				
Alternate Please specify				
Netting: Subsection E of 19 15 17 11 NMAC (Applies to permanent pits and permanent open top tanks)				
Screen Netting Other				
Monthly inspections (If netting or screening is not physically feasible)				
——————————————————————————————————————				
8				
Signs: Subsection C of 19 15 17 11 NMAC				
2" 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers				
Signed in compliance with 19 15 3.103 NMAC				
9.				
Administrative Approvals and Exceptions: Justifications and/or demonstrations of equivalency are required Please refer to 19 15 17 NMAC for guidance				
Please check a box if one or more of the following is requested, if not leave blank:				
Administrative approval(s) Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau of	office for			
consideration of approval Exception(s). Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval				
Exception(s). Requests must be submitted to the Santa Le Environmental Buleau office for consideration of approval				
Siting Criteria (regarding permitting): 19 15 17 10 NMAC Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of accept material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. Siting criteria does not apply to drying the same of the	priate district pproval.			
above-grade tanks associated with a closed-loop system.				
Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search, USGS, Data obtained from nearby wells	☐ Yes ☐ No			
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa	☐ Yes ☐ No			
lake (measured from the ordinary high-water mark) - Topographic map, Visual inspection (certification) of the proposed site				
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application	☐ Yes ☐ No			
(Applies to temporary, emergency, or cavitation pits and below-grade tanks)	□ NA □			
- Visual inspection (certification) of the proposed site, Aerial photo, Satellite image				
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application (Applies to permanent pits)	☐ Yes ☐ No ☐ NA			
- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No			
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application - NM Office of the State Engineer - iWATERS database search, Visual inspection (certification) of the proposed site				
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	☐ Yes ☐ No			
adopted pursuant to NMSA 1978, Section 3-27-3, as amended				
- Written confirmation or verification from the municipality, Written approval obtained from the municipality				
Within 500 feet of a wetland - US Fish and Wildlife Wetland Identification map, Topographic map, Visual inspection (certification) of the proposed site	☐ Yes ☐ No			
Within the area overlying a subsurface mine - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	Yes No			
Within an unstable area	☐ Yes ☐ No			
- Engineering measures incorporated into the design, NM Bureau of Geology & Mineral Resources, USGS, NM Geological Society; Topographic map				
Within a 100-year floodplain - FEMA map	☐ Yes ☐ No			

Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19 15 17 9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are
attached. Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19 15 17 9 NMAC Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19 15 17 9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19 15 17 10 NMAC Design Plan - based upon the appropriate requirements of 19 15 17 11 NMAC
Operating and Maintenance Plan - based upon the appropriate requirements of 19 15 17 12 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19 15 17 9 NMAC and 19 15 17 13 NMAC
Previously Approved Design (attach copy of design) API Number or Permit Number
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19 15 17 9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.
Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19 15 17 9 Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19 15 17 10 NMAC Design Plan - based upon the appropriate requirements of 19 15 17 11 NMAC Operating and Maintenance Plan - based upon the appropriate requirements of 19 15 17 12 NMAC Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19 15 17 9 NMAC and 19 15 17 13 NMAC
Previously Approved Design (attach copy of design) API Number
Previously Approved Operating and Maintenance Plan API Number (Applies only to closed-loop system that use
above ground steel tanks or haul-off bins and propose to implement waste removal for closure)
Permanent Pits Permit Application Checklist: Subsection B of 19 15 17 9 NMAC Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached. Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19 15 17 9 NMAC Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19 15 17 10 NMAC Climatological Factors Assessment Certified Engineering Design Plans - based upon the appropriate requirements of 19 15 17 11 NMAC Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19 15 17 11 NMAC Leak Detection Design - based upon the appropriate requirements of 19 15 17 11 NMAC Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19 15 17 11 NMAC Quality Control/Quality Assurance Construction and Installation Plan Operating and Maintenance Plan - based upon the appropriate requirements of 19 15 17 12 NMAC Fieeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19 15 17 11 NMAC Nuisance or Hazardous Odors, including H ₂ S, Prevention Plan Emergency Response Plan Oil Field Waste Stream Characterization Monitoring and Inspection Plan Erosion Control Plan Erosion Control Plan Erosion Control Plan Closure Plan - based upon the appropriate requirements of Subsection C of 19 15 17 9 NMAC and 19 15 17 13 NMAC
Proposed Closure: 19 15 17 13 NMAC Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.
Type Drilling Workover Emergency Cavitation P&A Permanent Pit X Below-grade Tank Closed-loop System Alternative
Proposed Closure Method X Waste Excavation and Removal Waste Removal (Closed-loop systems only)
On-site Closure Method (Only for temporary pits and closed-loop systems) In-place Burial On-site Trench Burial
Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)
Waste Excavation and Removal Closure Plan Checklist: (19 15 17 13 NMAC) Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached. Protocols and Procedures - based upon the appropriate requirements of 19 15 17 13 NMAC Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19 15 17 13 NMAC Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings) Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19 15 17 13 NMAC Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19 15 17 13 NMAC Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19 15 17 13 NMAC

Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Instructions: Please indentify the facility or facilities for the disposal of liquids, facilities are required.		
Disposal Facility Name	Disposal Facility Permit Number	
Disposal Facility Name		
Will any of the proposed closed-loop system operations and associated activities of Yes (If yes, please provide the information below) \(\subseteq \) No		
Required for impacted areas which will not be used for future service and operation Soil Backfill and Cover Design Specifications based upon the appropriate Re-vegetation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection	e requirements of Subsection H of 19 15 17 13 NMA(n I of 19 15 17 13 NMAC	C
Siting Criteria (regarding on-site closure methods only): 19 15 17 10 NMAC Instructions: Each siting criteria requires a demonstration of compliance in the provided below. Requests regarding changes to certain siting criteria may required considered an exception which must be submitted to the Santa Fe Environmental demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC	re administrative approval from the appropriate distall Bureau office for consideration of approval. Justi	rict office or may be
Ground water is less than 50 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search, USGS, Da	ta obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search, USGS, Da	ta obtained from nearby wells	☐ Yes ☐ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search, USGS, Da	ta obtained from nearby wells	☐ Yes ☐ No ☐ NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other sitake (measured from the ordinary high-water mark) - Topographic map, Visual inspection (certification) of the proposed site	gnificant watercourse or lakebed, sinkhole, or playa	☐ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or churc Visual inspection (certification) of the proposed site, Aerial photo, Satellii		☐ Yes ☐ No
Within 500 horizontal feet of a private, domestic fresh water well or spring that les watering purposes, or within 1000 horizontal feet of any other fresh water well or - NM Office of the State Engineer - iWATERS database, Visual inspection	spring, in existence at the time of initial application	☐ Yes ☐ No
Within incorporated municipal boundaries or within a defined municipal fresh was adopted pursuant to NMSA 1978, Section 3-27-3, as amended - Written confirmation or verification from the municipality, Written appro		☐ Yes ☐ No
Within 500 feet of a wetland - US Fish and Wildlife Wetland Identification map, Topographic map, Visu	ial inspection (certification) of the proposed site	☐ Yes ☐ No
Within the area overlying a subsurface mine - Written confirmation or verification or map from the NM EMNRD-Minin	g and Mineral Division	☐ Yes ☐ No
Within an unstable area - Engineering measures incorporated into the design, NM Bureau of Geolog Society, Topographic map	gy & Mineral Resources, USGS, NM Geological	☐ Yes ☐ No
Within a 100-year floodplain - FEMA map		☐ Yes ☐ No
On-Site Closure Plan Checklist: (19 15 17 13 NMAC) Instructions: Each of the by a check mark in the box, that the documents are attached. Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Construction/Design Plan of Temporary Pit (for in-place burial of a drying Protocols and Procedures - based upon the appropriate requirements of 19 1 Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Disposal Facility Name and Permit Number (for liquids, drilling fluids and Soil Cover Design - based upon the appropriate requirements of Subsection Re-vegetation Plan - based upon the appropriate requirements of Subsection Site Reclamation Plan - based upon the appropriate requirements of Subsection	quirements of 19 15 17 10 NMAC of Subsection F of 19 15 17 13 NMAC appropriate requirements of 19 15 17 11 NMAC pad) - based upon the appropriate requirements of 19 5 17 13 NMAC quirements of Subsection F of 19 15 17 13 NMAC of Subsection F of 19 15.17 13 NMAC drill cuttings or in case on-site closure standards cann H of 19 15 17 13 NMAC of 10 19 15 17 13 NMAC	15 17 11 NMAC

Operator Application Certification: I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief
Name (Print) Title
Signature Date
e-mail address Telephone
OCD Approval: Permit Application (including closure plan) Closure Plan (only) OCD Conditions (see attachment)
OCD Representative Signature: Approval Date: 10/03/2011
Title: Compliance Office OCD Permit Number:
Closure Report (required within 60 days of closure completion): Subsection K of 19 15 17 13 NMAC Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.
Closure Method: Waste Excavation and Removal On-Site Closure Method Alternative Closure Method Waste Removal (Closed-loop systems only) If different from approved plan, please explain
Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized. Disposal Facility Name Disposal Facility Permit Number Disposal Facility Name Disposal Facility Permit Number
Were the closed-loop system operations and associated activities performed on or in areas that will not be used for future service and operations? Yes (If yes, please demonstrate compliance to the items below) No
Required for impacted areas which will not be used for future service and operations Site Reclamation (Photo Documentation) Soil Backfilling and Cover Installation Re-vegetation Application Rates and Seeding Technique
24 Closure Report Attachment Checklist: Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check
mark in the box, that the documents are attached. □ Proof of Closure Notice (surface owner and division) □ Proof of Deed Notice (required for on-site closure) □ Plot Plan (for on-site closures and temporary pits) □ Confirmation Sampling Analytical Results (if applicable) □ Waste Material Sampling Analytical Results (required for on-site closure) □ Disposal Facility Name and Permit Number □ Soil Backfilling and Cover Installation □ Re-vegetation Application Rates and Seeding Technique □ Site Reclamation (Photo Documentation)
On-site Closure Location Latitude Longitude NAD 1927 1983
Operator Closure Certification: I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan
Name (Print) Ed Hasely Title Sr Environmental Engineer
Signature Date 7/29/1
e-mail address ed hasely@energen.com Telephone (505) 324-4131

District!
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

					OPI	ERATOI	R	Initial I	Report Final Report
			Conta		d Hasely				
<u> </u>					05-324-4131				
Facility Name: Jicarilla L #3 Facility Type: Oil/Gas Well Site									
Surface Owi	ier: Tribal			Mineral Ow	ner: Trıba			Lease No.	
		T		LOCAT					
Unit Letter E	Section 3	Township 24N	Range 5W	Feet from the	North/So	uth Line	Feet from the	East/West Lin	e County Rio Arriba
			Lat	itude <u>36.34308</u>	<u> </u>	ongitude_	-107.35441		
				NATU	RE OF F	ELEAS	E		
Type of Relea	se: NO REL	EASE			Volu	me of Relea	ase:	Volume Reco	vered:
Source of Rela	ease:				Date	and Hour	of Occurrence:	Date and Ho	ur of Discovery:
Was Immedia	te Notice G	iven?	/es 🗌 1	No 🗌 Not Requi		S, To Who	om?		
By Whom?						and Hour:			
Was a Water	ourse Reac			,	If YI	S, Volume	Impacting the V	vatercourse.	
			Yes 🔲 1	No					
If a Watercou	rse was Imp	pacted, Descr	ibe Fully.	*		-			
Describe Caus	se of Proble	m and Remed	dial Actio	n Taken.*					
THERE WAS	NO PROBL	EM OR REM	EDIAL A	CTION TAKEN	THIS FORM	1 IS FILLEI	D OUT TO SERV	E AS A COVER	FOR LAB ANALYSES -
ONLY TO SA									
D	A CC	101	-4: 00 -1	-					
Describe Area	Affected a	nd Cleanup A	Action 1a	ken."					
I hereby certify	that the inf	ormation give	n above is	true and complete	to the best	of my know	ledge and underst	and that pursuan	to NMOCD rules and
									s which may endanger the operator of liability
should their or	erations hav	e failed to ade	equately in	vestigate and rem	ediate contai	nination tha	it pose a threat to:	ground water, su	rface water, human health
or the environi	nent In add	lition, NMOC	D acceptai	nce of a C-141 rep	ort does not	relieve the o	operator of respon	sibility for comp	liance with any other
federal, state, o	or local laws	and/or regula	tions				II. GONIGED	U. TION DI	, , , , , , , , , , , , , , , , , , ,
	1 nn	1 1				<u>O</u>	IL CONSER	<u>VATION DI</u>	VISION
Signature	2/1/6	rself							
Printed Name	Ed Hasel	y			Approv	ed by Distri	et Supervisor		
Title	Sr Enviro	onmental Engi	neer		Approv	al Date		Expiration Date	,
E-mail Addres	s <u>ed hasely(</u>	@energen con	1		Conditi	ons of Appr	oval:	A	uttached
Date. 7/29/11	P	hone 505-324	1-4131/5	05-330-3584(cell)					

^{*} Attach Additional Sheets If Necessary



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Parameter		(ug/Kg)		(ug/Kg)	
		Concentration		Det. Limit	
			Dilution:		10
Condition:	Intact		Analysis Requested:		BTEX
Preservative:	Cool		Date Extracted:		03-07-11
Sample Matrix:	Soil		Date Analyzed:		03-08-11
Chain of Custody:	11308		Date Received:		03-07-11
Laboratory Number:	57510		Date Sampled [,]		03-07-11
Sample ID:	Jicanila L3		Date Reported:		03-09-11
Client:	Energen		Project #:		03022-0168

Benzene	1.5	0.9
Toluene	70.9	1.0
Ethylbenzene	28.4	1.0
p,m-Xylene	160	1.2
o-Xylene	49.2	0.9
Total BTEX	310	

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	104 %
	1,4-difluorobenzene	116 %
	Bromochlorobenzene	96.1 %

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:

Jicarilla BGT's

Analyst

eview /



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	Energen	Project #:	03022-0168
Sample ID:	Jicarilla L3	Date Reported:	03-09-11
Laboratory Number:	57510	Date Sampled:	03-07-11
Chain of Custody No:	11308	Date Received:	03-07-11
Sample Matrix:	Soil	Date Extracted:	03-07-11
Preservative:	Cool	Date Analyzed:	03-08-11
Condition:	Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1.1	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	1.1	

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's

Analyst

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

5796 US Highway 64, Farmington, NM 87401



EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client: Energen Project #: 03022-0168 Jicarilla L3 Sample ID: Date Reported: 03/08/11 Laboratory Number: 57510 Date Sampled: 03/07/11 Chain of Custody No: 11308 Date Received: 03/07/11 Date Extracted: 03/08/11 Sample Matrix: Soil Preservative: Cool Date Analyzed: 03/08/11 Condition: Intact Analysis Needed: TPH-418.1

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

Total Petroleum Hydrocarbons

99.9

6.7

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 BGT's

Analyst

Review

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



Chloride

Client: Energen Sample ID: Jicarilla L3 Lab ID#: 57510 Sample Matrix: Soil Cool Preservative: Condition: Intact

Project #: Date Reported: 03/08/11 Date Sampled: 03/07/11 Date Received: 03/07/11 Date Analyzed: 03/08/11 Chain of Custody: 11308

03022-0168

Parameter

Concentration (mg/Kg)

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:

Jicarilla BGT's

Analyst

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

5796 US Highway 64, Farmington, NM 87401



March 1, 2011

Jicarilla Apache Nation **Environmental Protection Office** P.O. Box 507 Dulce, NM 87528

Attn: Mr. Dixon Sandoval, Environmental Specialist

Re: Below Grade Tank Closures Multiple Wells

Dear Sirs:

Energen Resources plans to close the below grade tanks located on the well locations listed below. You are on record as the surface owner where these wells are located. New Mexico Oil Conservation Division (NMOCD) rules require notification to the surface owner of our plans to close the below grade tanks. NMOCD rules and guidelines will be followed. The wells are all located in Rio Arriba County, New Mexico.

Jicarilla L #3 - Unit Letter E, Section 3, Township 24N, Range 5W Jicarilla L #8 - Unit Letter P, Section 33, Township 25N, Range 5W Jicarilla L #11 - Unit Letter G, Section 3, Township 24N, Range 5W

If there are any questions or concerns, please contact me at 505-324-4131. Sincerely, BGT (3) COMPLETE THIS SECTION ON DELIVERY SENDER: COMPLETE THIS SECTION Complete Items 1, 2, and 3. Also complete Agent item 4 if Restricted Delivery is desired. Addres ■ Print your name and address on the reverse Ed Hasely so that we can return the card to you. Date of Deli Sr. Environmental Engineer! Attach this card to the back of the mailpiece, **Energen Resources** or on the front if space permits: Is delivery address different from item 1? 1. Article Addressed to: If YES, enter delivery address below: `□.No Cc: Well Files Correspondence 3. Service Type Certified Mail ☐ Express Mail ☐ Registered ☐ Return Receipt for Merchandise ☐ C.O.D. ☐ Insured Mail 4. Restricted Delivery? (Extra Fee) 2. Article Number 7009 2820 0000 5800 5873 (Transfer from service Energen Resources Corporation, an Entire Form 381.1, February 2004 Domestic Return Receipt

Ed Hasely

From:

Ed Hasely

Sent:

Monday, February 28, 2011 3 11 PM

To:

Powell, Brandon, EMNRD

Cc:

'Dixon Sandoval'

Subject:

BGT Closure Notifications - Jicarilla Wells

Brandon – This is to notify you that Energen plans to close the BGT's on the following locations in the near future.

Jica rilla L #3 - Unit Letter E, Section 3, Township 24N, Range 5W

Jicarilla L #8 - Unit Letter P, Section 33, Township 25N, Range 5W

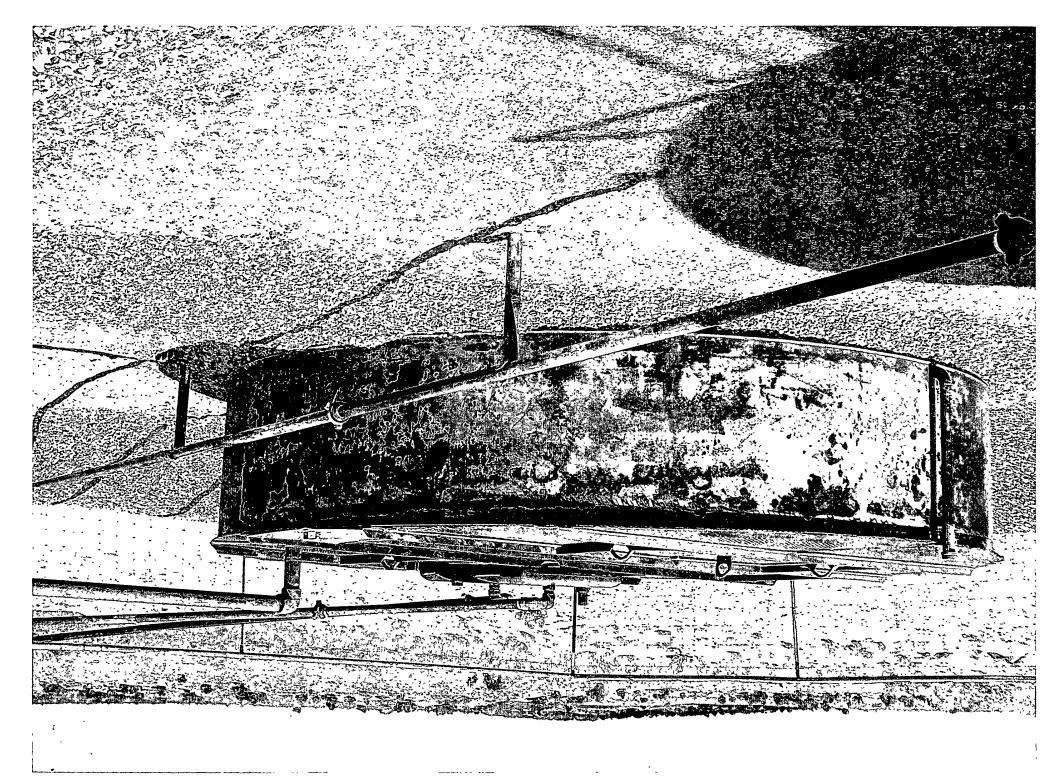
Jicarilla L #11 - Unit Letter G, Section 3, Township 24N, Range 5W

Let me know if you have questions. Thanks.

Ed Hasely

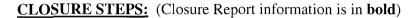
Energen Resources Corporation

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



BELOW-GRADE TANK CLOSURE REPORT

ENERGEN RESOURCES Jicarilla L #3





- (1) Notify the surface owner by certified mail, return receipt requested, of the plans to close the below-grade tank.

 Attached
- (2) Notify the Aztec OCD office (Brandon Powell 334-6178, Ext 15) verbally or by other means at least 72 hours, but not more than one week, prior to the planned closure operation

Attached

- (3) Remove liquids from the below-grade tank Dispose of the liquids and sludge in a division-approved facility No disposal of liquids was required.
- (4) Remove the below-grade tank for re-use in an above-ground setup or for disposal in a division-approved manner. Tank removed.
- (5) Unless the equipment is required for some other purpose, remove any on-site equipment associated with the below-grade tank.

All remaining equipment is required for operations.

- (6) Test the soils beneath the below-grade tank to determine whether a release has occurred.
 - Collect, at a minimum, a five point, composite sample,
 - Composite sample was collected.
 - Collect individual grab samples from any area that is wet, discolored or showing other evidence of a release:

No additional sampling was necessary.

Analyze for BTEX, TPH and chlorides to demonstrate:

- Benzene concentration does not exceed 0.2 mg/kg, as determined by EPA SW-846 methods 8021B or 8260B
- Total BTEX concentration does not exceed 50 mg/kg, as determined by EPA SW-846 methods 8021B or 8260B
- TPH concentration does not exceed 100 mg/kg, as determined by EPA method 418.1
- Chloride concentration does not exceed 250 mg/kg, as determined by EPA method 300 1 or the background concentration, whichever is greater.

Constituent	Limit (mg/kg)	Actual Results (mg/kg)
Benzene	0.2	0.0015
Total BTEX	50.0	0.31
TPH (418.1)	100	99.9
Chlorides	250	100

(7) <u>IF the soil analyses show that the soils meet the concentrations specified in (6) above,</u> backfill the excavation with compacted, non-waste containing, earthen material in a manner that will prevent ponding or erosion. If the area will not be needed for operations, reclaim the area as described in the "RECLAMATION" section

Excavation was backfilled w/ non-waste containing, earthen material in a manner that will prevent ponding and erosion, including one foot on top soil.

(8) IF the soil analyses show that the soils exceed one or more of the concentrations specified in (6) above, notify the Aztec OCD office (Brandon Powell – 334-6178, Ext 15) and proceed per 19 15 3.116 NMAC.

Not applicable.

NOTE If groundwater is encountered at any time during the closure process, the OCD office will be notified and a specific closure plan will be submitted to the Aztec and Santa Fe OCD offices for approval.

Not applicable

FINAL CLOSURE REPORT:

Within 60 days of closure completion, submit a closure report on form C-144, with necessary attachments to document all closure activities including sampling results.

This submittal is the closure report.

RECLAMATION:

If the area is not needed for operations, reclaim the area to a safe and stable condition that blends with the surrounding undisturbed area. Restore the impacted surface area to the condition that existed prior to oil and gas operations by placement of the soil cover, recontour the location and associated areas to a contour that approximates the original contour and blends with the surrounding topography and re-vegetate.

- (A) Construct the soil cover to the site's existing grade and prevent ponding of water and erosion of the cover material. The soil cover shall consist of the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater
- (B) Seed or plant the disturbed areas the first growing season after closing the below-grade tank Drill on the contour whenever practical or by other division-approved methods. The goal is to obtain vegetative cover that equals 70% of the native perennial vegetative cover (un-impacted by overgrazing, fire or other intrusion damaging to native vegetation) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons. During the two successive growing seasons that prove viability, there shall be no artificial irrigation of the vegetation.
 - (C) Repeat seeding or planting until it successfully achieves the required vegetative cover
- (D) If conditions are not favorable for the establishment of vegetation, such as periods of drought, contact the Aztec OCD office to discuss possibly delaying seeding or planting until soil moisture conditions become favorable or using additional techniques such as mulching, fertilizing, irrigating, fencing or other practices
- (E) Notify the Aztec OCD office (Brandon Powell 334-6178, Ext 15) when the area has been seeded or planted <u>and</u> when it successfully achieves re-vegetation

Area is needed for operations. Upon abandonment, seeding will be deferred to the BLM $\!\!/$ Tribal requirements per the BLM $\!\!/$ OCD MOU.