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											
API#	30-0	39-21	484			OPERATO	R	☐ Initia	l Repo	ort	
				-		Ed Hasely					
Address: 2010 Afton Place, Farmington, NM 87401					Felephone No: 5						
Facility Nan	ne: Jicarilla	194 #2A]	Facility Type: Oil/Gas Well Site					
Surface Owner: Jicarilla Mineral Owne			ner:	Jicarilla		Lease No	o. Jicar	rilla 94	4		
				LOCAT	IOI	N OF RELEA	SE				
Unit Letter D	Section 27	Township 27N	Range 3W	Feet from the 990	No No	rth/South Line rth	Feet from the 1190	East/West L West		Count Rio A	
			Lati	tude 36.5488		Longitude	e107.13669				
(D)	n .			NATUI	RE	OF RELEAS					
Type of Relea						Volume of Rele		Volume Re			
Source of Rel						Unknown	of Occurrence:	Date and F 6/11/09	lour of	i Disco	very:
Was Immedia	ate Notice G		res 🛛 N	No 🔲 Not Requi	red	If YES, To Who	om? NA				
By Whom?						Date and Hour:					
Was a Water	course Reac		v 121.	T		If YES, Volume	e Impacting the \				
			Yes 🛭 N					R	CVD J		9 '09
If a Watercon	ırse was Im _l	pacted, Descr	ibe Fully.	* NA					IL CC	MS.	
								_		T.3	
									2727	J	
Describe Cau	f Db.l.	D	J:- A -4:0	- Tales *				<u> </u>			
Describe Cau	se of Froble	m and Keme	uiai Acuoi	n Taken."							
Sampling und is an indicatio			below-gra	ide tank closure sh	owe	d chloride results o	of 290 ppm. Accor	ding to the Pit	Rule, a	ny resi	ult over 250 ppm
				ken.* The chlorice to be greater than					≀ule ha	d set as	s an indication of
а сак. Бери	to water at t	ilis location is	estimateu	to be greater than	100 1	eet. No son excav	ation is recommen	iucu.			
									,		
I hereby certif	y that the inf	formation give	n above is	true and complete	to th	ne best of my know	vledge and unders	tand that pursu	ant to N	MOC	D rules and
regulations all	operators ar	e required to r	eport and/	or file certain relea	ise n	otifications and pe	rform corrective a	ctions for relea	ises wh	ich ma	ny endanger
				of a C-141 report by vestigate and reme							
				nce of a C-141 repo							
federal, state,				·				·	·		
	100	1 1				<u>C</u>	<u> DIL CONSER</u>	<u>VATION I</u>	<u> SIVIC</u>	SION	1
Signature:	2/14	arel)								En.	Charlie
		,			٦,	Approved by Distr	rict Supervisor: 2	a $1/2$	7//	* OT .	Chadie Remin
Printed Name	Ed Hasel	у				-F p	0	mand L) co	v_		
Title:	Sr. Envir	onmental Engi	ineer			Approval Date: (e-19-09	Expiration D	ate:		Sense III
E-mail Addres	ss: <u>ed.hasely(</u>	@energen.con	1	AP	_ (Conditions of App	roval:		Attacl	hed [
Date: 6/17/00	, 1	Phone: 505 22	ν ₄₋₄ 131 / 5	05_330_3584(cell)					ı		

^{*} Attach Additional Sheets If Necessary





June 10, 2009

Client No. 03022-0142

Mr. Bill Stalcup Energen Resources 2010 Afton Place Farmington, NM 87401

Phone: (505) 793-7606

RE:

CONFIRMATION SAMPLING (AND BELOW GRADE TANK CLOSURE

DOCUMENTATION AT THE JICARILLA 94 #2A WELL SITE

Dear Mr. Stalcup,

Enclosed please find the field notes and analytical results for confirmation sampling activities for a release from a broken valve on an above ground storage tank (AST), and below grade tank (BGT) closure activities performed at the Jicarilla 94 #2A well site located in Section 27, Township 27N, Range 3W, Rio Arriba County, New Mexico. Prior to arrival, the area of release had been excavated to approximately 40' x 42' x 16' deep. Upon arrival, Envirotech, Inc. personnel conducted a brief site assessment. Because the site is located on the Jicarilla Apache Indian Reservation, the closure standard was determined to be 100 ppm total petroleum hydrocarbons (TPH) and 100 ppm organic vapors; pursuant to New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills, and Releases. A representative of the Jicarilla Apache Environmental Protection Office was also onsite to observe sampling activities.

Five (5) composite samples were collected from the excavation. One (1) composite sample was collected from each of the four (4) walls, and one (1) composite sample was collected from the bottom of the excavation at 16 feet below ground surface (BGS). The samples were analyzed in the field for TPH using USEPA Method 418.1 and for organic vapors using a Photo Ionization Detector (PID). All of the samples were below the regulatory limit of 100 ppm TPH. The samples from each of the walls were below the regulatory limit of 100 ppm organic vapors; however, the sample from the bottom was above 100 ppm organic vapors. The sample from the bottom was then placed into a four (4) ounce glass jar, capped headspace free, and transported on ice under chain of custody to Envirotech's laboratory to be analyzed for benzene and BTEX using USEPA Method 8021. The sample was below the regulatory limits of 10 ppm benzene and 50 ppm BTEX; therefore, no further excavation was required.

Envirotech, Inc. personnel then collected a five (5)-point composite sample from the BGT pit for spill confirmation. The sample was analyzed in the field for TPH using USEPA Method 418.1, for organic vapors using (PID), and for chlorides. Additionally, the sample was placed into a four (4) ounce glass jar, capped headspace free, and

BET

transported on ice under chain of custody to Envirotech's laboratory to be analyzed for benzene and BTEX using USEPA Method 8021 and for total chloride using USEPA Method 4500. The sample was below the regulatory limits of 100 ppm TPH, 100 ppm organic vapors, 0.2 ppm benzene and 50 ppm BTEX. The sample was below the regulatory limit of 250 ppm total chloride in the field; however, the sample was above the regulatory limit of 250 ppm total chloride using USEPA Method 4500; confirming a release had occurred. Because there is no regulatory closure standard for total chloride, no excavation is required.

Envirotech, Inc. recommends no further action in regards to these incidents. We appreciate the opportunity to be of service. If you have any questions, or require additional information, please contact our office at (505) 632-0615.

Respectfully Submitted,

ENVIROTECH, INC.

Scott Gonzales

Sr. Environmental Technician sgonzales@envirotech-inc.com

Enclosures: Field Notes

Analytical Results

Summary of Analytical Results

Cc: Client File No. 03022

•								
PAGE NO:OF	2-05 -09		(50	5) 632-0615)	9 401	LAT: 13	1ENTAL SPECIALIST: 12.548550° 101.134808°
	FIELD R	EPORT: F	3GT / PI	T CLOS	URE VE	RIFICAT	ION	
	****		Change In the second district					DOT.
	capilla		WELL #:		TEMP PIT:	PERMAN		BGT:
LEGAL ADD: UNIT: 5 QTR/FOOTAGE: 990'	The same of the sa	SEC: Q7	عودوا المسالة الأسمات	TWP: 2.7		RNG: 31	<u>// 1</u>	PM:
QIMPOOTAGE: YYO.		10FWL	CNTY: `i≺	lio Arr	iba	ST: NM		
EXCAVATION APPROX:	~	FT. X		FT. X	•	FT. DEEP	CUBIC YA	RDAGE: 以体
DISPOSAL FACILITY:	NA	·			TION METHO			· · · · · · · · · · · · · · · · · · ·
LAND OWNER:	3 (Carill	ð	API: 300	392148	54	BGT / PIT \	OLUME: \	00 hhls
CONSTRUCTION MATERL					/ITH LEAK D			
LOCATION APPROXIMAT	ELY:				FROM WELL			
DEPTH TO GROUNDWATE	ER:							
TEMPORARY PIT - G		ER 50-100 FE	ET DEEP					
BENZENE ≤ 0.2 mg/kg, E	BTEX ≤ 50 mg/k	g, GRO & DRO	D FRACTIO	N (8015) ≤ 50	0 mg/kg, TPH (4	418.1) ≤ 2500	mg/kg, CHL0	ORIDES ≤ 500 mg/kg
TEMPORARY PIT - GI	ROUNDWAT	FR >100 FFF	L DEED					
BENZENE ≤ 0.2 mg/kg, B				J (8015) < 500) mø/ka TPH (<i>l</i>	118 11 < 2500	mo/ko CHI (ORIDES < 1000 mg/kg
/		g, one a Dre	ricaction	1 (6015) 2 50	7 mg/kg, 1111 (4	110.1) = 2500	ing/kg, CITEC	MIDES 2 1000 mg/kg
✓ PERMANENT PIT OR								
BENZENE ≤ 0.2 mg/kg, I	$3TEX \le 50 \text{ mg/l}$	kg, TPH (418.1)) ≤ 100 mg/kg	g, CHLORIDI	$ES \le 250 \text{ mg/kg}$			
					D 418.1 ANAL	YSIS		
	TIME	SAMPLE I.D.	LAB NO.	WEIGHT (g	mL FREON	DILUTION		CALC. (mg/kg)
	10:30	200 STD			-	14	202	
	Spl. Comp	11:15	2	5	20	 	2	<u> </u>
			3					
			4					
			5					
	L	L	6	<u> </u>		<u> </u>	<u> </u>	
PERIM	IETER	•	FIELD C	HLORIDE	S RESULTS	•	PRO	OFILE
			1	т		·		
			SAMPLE ID	READING	CALC.	30 x 20	OXIO	
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		BLI		PID RESU	LTS	40		
III				PLE ID	RESULTS	1 ?	,	
		(367)	L		(ppm)	1 / /	· ×	×.1
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	1	•				1	_ ~	
1150115	<u> </u>	htoma						
LAB SAMPL		NOTES:						
SAMPLE ID ANALYS BENZEN		-						
BTEX		1					0	
GRO & DF]			ST .			
CHLORID	ES	4						
		TWO BY OFF	CD #		MAIO OBDE	DED		
	1	WORKORD	CK #		WHO ORDE	KEU		~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~



EPA METHOD 418.1 TOTAL PETROLEUM HYDROCARBONS

Client:

Energen

...

Project #:
Date Reported:

03022-0142

Sample No.: Sample ID:

5 point comp

6/2/2009

Sample Matrix:

Soil

Date Sampled: Date Analyzed:

5/12/2009

Preservative:

Cool

Analysis Needed:

5/12/2009 TPH-418.1

Condition:

Cool and Intact

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

Total Petroleum Hydrocarbons

8

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 94 #2A BGT Closure

Instrument calibrated to 200 ppm standard. Zeroed before each sample

Scott Gonzales

Printed

Sherry Auckland

Printed



Field Chloride

Client:

Energen

Sample No.: Sample ID:

1

5 pt Comp

Sample Matrix:

Soil

Preservative:

Cool

Condition:

Cool and Intact

Project #:

03022-0142

Date Reported:

6/3/2009

Date Sampled:

5/12/2009

Date Analyzed:
Analysis Needed:

5/12/2009

Chloride

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

Field Chloride

62

31.0

ND = Parameter not detected at the stated detection limit.

References:

"Standard Methods for the Examination of Water and Wastewater", 18th ed., 1992

Hach Company Quantab Titrators for Chloride

Comments:

Jicarilla 94 #2A

Scott Gonzales

Printed

Sherry Auckland

Printed



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Energen	Project #:	03022-0142
Sample ID:	5pt. Comp. BGT	Date Reported:	05-15-09
Laboratory Number:	50037	Date Sampled:	05-12-09
Chain of Custody:	7049	Date Received:	05-12-09
Sample Matrix:	Soil	Date Analyzed:	05-14-09
Preservative:	Cool	Date Extracted:	05-13-09
Condition:	Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
	, J	(3 3/	
Benzene	21.7	0.9	
Toluene	355	1.0	
Ethylbenzene	67.7	1.0	
p,m-Xylene	762	1.2	
o-Xylene	165	0.9	
Total BTEX	1,370		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	98.0 %
	1,4-difluorobenzene	98.0 %
	Bromochlorobenzene	98.0 %

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:

Jicarilla 94 #2A

Analyst

Review



Chloride

Client: Energen Project #: 03022-0142 Sample ID: 5pt. Comp. BGT Date Reported: 05-19-09 Lab ID#: 50037 Date Sampled: 05-12-09 Sample Matrix: Soil Date Received: 05-12-09 Preservative: Cool Date Analyzed: 05-19-09 Condition: Intact Chain of Custody: 7049

Parameter

Concentration (mg/Kg)

Total Chloride

290

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 94 #2A.

Analyst

Review

Ed Hasely

From: Ed Hasely

Sent: Tuesday, June 16, 2009 3:22 PM

To: 'Powell, Brandon, EMNRD'

Cc: Dixon Sandoval

Subject: FW: Below Grade Tank Closure - Jicarilla 94 #2A - Potential Past Release Notificatioin

Brandon - This note is to notify you that during the below grade tank closure work on this well, a soil sample was analyzed and the chlorides came back at 290 ppm. According to the Pit Rule, chlorides over 250 ppm is an indication of a past release.

Envirotech conducted field screening during the BGT closure work. The sample from below the tank was below the regulatory limit of 250 ppm total chloride in the field, however the sample was slightly above the limit using EPA Method 4500 in the laboratory weeks later. Envirotech's report on the BGT closure work will be submitted w/ the BGT closure report. Mr. Dixon Sandoval (Jicarilla Environmental Protection Office) was onsite for the closure work and agreed that the BGT could be closed.

Please let me know if you have questions. I will be submitting the closure report in the near future.

Ed Hasely

Energen Resources Corporation

From: Ed Hasely

Sent: Monday, May 11, 2009 8:10 AM

To: 'Powell, Brandon, EMNRD'

Cc: Billy Stalcup

Subject: Below Grade Tank Closure Notification - Jicarilla 94 #2A

Brandon - This note is to provide you w/ notification that Energen plans to close the below mentioned below grade tank in the near future. Please let me know if you have any questions. Thanks.

LeaseName	LeaseUserID	AFENumber	Status	County	UserField1	Section	Townsh
JICARILLA 94 2A MV	3129195A		PROD	RIO ARRIBA, NM	D	27	27N

Ed Hasely

Energen Resources Corporation

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

Cell: (505) 330-3584

