District I

P.O. Box 1980, Hobbs, NM

District II

P.O. Drawer DD, Artesia, NM 88211

District III

1000 Rio Brazos Rd, Aztec, NM 87410

State of New Mexico Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION
P.O. Box 2088
Santa Fe, New Mexico 87504-2088



SUBMIT I COPY TO APPROPRIATE DISTRICT OFFICE AND I COPY TO SANTA FE OFFICE

PIT REMEDIATION AND CLOSURE REPORT

Occuptor	Questar Energy	Company Telephone: (505)	326-9195
Operator:	D.O. D 2220	Farmington, NM 87499	
Facility Or: Well Name	Federal A #3E		
Location: Unit or Qtr/C	Qtr Sec P Sec	26 T 30N R 13W County San Jua	<u>in</u>
Pit Type: Separator	Dehydrat	orOtherProduction Tank	
Land Type: BLM	X State_	, Fee, Other	
Pit Location: (Attach diagram)	Pit dimensions: Length	60 ft , width 40 ft , depth 8 ft	
	Reference: wellhead	X other	
	Footage from reference:	150 ft	
	Direction from reference:	25 Degrees X East North X of West South	
Depth to Ground Wat		Less than 50 feet (20 po X 50 ft to 99 feet (10 po	ints)
contaminants to seaso highwater elevation o ground water)	onal	Greater than 100 feet (0 poi	nts) <u>10</u>
Wellhead Protection A	om a private	Yes (20 po	^
domestic water source 1000 feet from all oth	e, or: less than her water sources).	<u>A</u> No (0 pos	
Distance to Surface V (Horizontal distance lakes, ponds, rivers, s	to perennial streams, creeks,	Less than 200 feet (20 pc 200 feet to 1000 feet (10 pc X Greater than 1000 feet (0 po	oints)
irrigation canals and	ditches.)	RANKING SCORE (TOTAL POIN	(TS): <u>10</u>

Date Remediation Started:	1/22/98	Date Completed: 12/4/98
	Excavation	Approx. cubic yards667
	Landfarmed X	Insitu Bioremediation
	Other	
Remediation Method:	Onsite X	Offsite
(Check all appropriate		
sections)		
of 7 feet utilizing U	ntered. A sample wan J.S.E.P.A. protocol and EX analysis. Results 4/98, the landfarm wa	8, the pit was excavated to a depth of 8 feet where s obtained from the west wall of the pit at a depth of sent to On Site Technologies, Ltd. for provided concentrations below NMOCD as tested and provided concentrations below
Ground Water Encountered	od: No X	Yes Depth
Closure Sampling: (if multiple samples, attach sample results	sample location West sample depth 7 f	
locations and denths)	ample date1/26	
S	ample Results	
	Benzene(ppm)	<u>ND</u>
	Total BTEX (PPM)	0.082
	Field Headspace (pp	om) <u>298</u>
	трн16	5.4
Ground Water Sample:	Yes No _	X (if yes, attach sample results)
I HEREBY CERTIFY THAT OF MY KNOWLEDGE ANI	THE INFORMATION ABO D BELIEF.	VE IS TRUE AND COMPLETED TO THE BEST
i .		PRINTED NAME Phil Emig
DATE 1-4-0	0	PRINTED NAMETHIT LIMIS

Form 3160-5 *(December 1989)

1. Type of Well:

2. Name of Operator:

3. Address of Operator:

UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

FORM APPROVED Budget Bureau No. 1004-0135

SF-078231

Federal A #3E

30-045-23890

Expires: September 30, 1990

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill, deepen or reentry to a different reservoir Use 'APPLICATION FOR PERMIT" for such proposals

gas well X

P.O. Box 2330 Farmington, NM 87499

Questar Energy Company

SUBMIT IN TRIPLICATE

oil well

4. Location of Well: (Footage, Sec., T., R., M., or Survey Description)

6. If Indian, Allottee or Tribe Name

5. Lease Designation and Serial No.

7. If Unit or CA, Agmt. Design.:

Field & Pool/Exploratory Area:

8. Well Name and No.:

9. API Well No.:

T f.	!.a D	Sec. 26	T 30 N	R 13 W	Basin Dakota / Basin Fruitland Coal
OI	Unit P Sec. 26	•		11. County or Parish, State: San Juan, New Mexico	
12.	CHE	CK APPROPRIATE BOX	(s) TO INDICATE NAT	JRE OF NOTICE, REPOR	RT, OR OTHER DATA
					OF ACTION
TY	PE OF SUBI	ce of Intent		Abandonment	Change of Plans
		ou or minute		Recompletion	New Construction
	V Cub	sequent Report		Plugging Back	Non-Routine Fracturing
	X Sub	sequent report		Casing Repair	Water Shut-Off
	Cinc	il Abandonment Notice		Altering Casing	Conversion to Injection
		1 Acutico Miles		X Other: Pit Cl	
				(Note: Report re	esults of multiple completion on Well
					Recompletion Report and Log form.) ive pertinent dates, including estimated date of true vertical depths for all markers and zones

other

starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)* The pit associated with the subject well has been closed and replaced with a fiberglass tank.

Details of the closure are attached.

14. I hereby certify that the foregoing is true and correct.			
Signed: Dating	Phil Emig	Title: Senior Operator	Date: 1- 4-00
(This space for Federal or State office use)	<u> </u>		
Approved by Conditions of approval, if any:	Title	Date	

Risk Assessment Questar Energy Company Federal A #3E

Depth to Groundwater 80'
Distance to Water Source >1000'
Distance to Surface Water 7PH Limit (ppm) 1000

The subject pit was located in hard, well cemented sandstone at a depth averaging approximately 8 feet. The initial size of the pit was 20' x 20' x 3' deep. The stained soil was excavated to a final pit size of 60' x 40' x 8' deep (average). Excavated soil amounted to approximately 667 total cubic yards and was landfarmed on location.

On January 22, 1998, Cimarron Environmental Services began excavation of the walls and bottom of the production tank pit. Excavation ceased on January 26, 1998. The pit was excavated to bedrock at a depth of 8 feet where headspace analysis revealed an OVM reading of 206 ppm. The walls showed some staining from approximately 4 feet to 8 feet in an undulating sandy clay layer approximately 1 foot thick. The upper portion of the walls (0 feet to 4 feet) showed no hydrocarbon staining or odor.

Five-point composite samples were taken from the north and east walls due to the length of the walls and extent of the staining. Headspace analysis of the north wall 5-point composite collected at 7 feet showed an OVM level of 594 ppm. A test hole was dug approximately 15 feet from the north wall to a depth of 5 feet where bedrock was encountered. There was no evidence of hydrocarbon staining. A sample was taken from the bottom of the test hole and field headspace analysis was performed. Results were 0.0 ppm. Headspace analysis of the east wall 5-point composite collected at 7 feet showed an OVM level of 920 ppm. Further excavation toward the east was limited due to the placement of the production tank and buried oil pipeline. Three test holes were dug 7 feet to 8 feet deep, to bedrock, on the east/northeast edge of the pit approximately 20 to 30 feet from the center. There was no evidence of hydrocarbon staining in any of the test holes. All three tested 0.0 ppm using the field headspace method.

Excavation of the west wall was limited due to the placement of a security fence around the entire location. The field headspace result was 298 ppm, Total Petroleum Hydrocarbons (TPH) was 16.4 ppm, Benzene was Non-Detect, and Total BTEX was 0.082. No test hole was dug due to the exposure of sandstone approximately 15 feet from the western edge of the pit. This would indicate that the lateral extent to the west is limited to that point.

Questar Energy Company has removed and remediated all soils to practical extent. Based on this information and the physical location of the pit, there is little to no risk to human health or the environment.

Overview of Location and Sampling:	Test Hole #2 Test Hole #1 Test Hole #2	tion : 26	Township: 30 N	Sample # Location OVM Noomp@6 594	3 Ecomp@6' 920 Production Tank Pi	4 W Wall@7' 298	6 Test hole 1	>1000 8 Test hole 3 0	>1000' 9 Test hole 4 0		1000 11 Pit Tank		Comments: 0' - 3' Soil is moist, sandy loarn with gray staining. 4' - 8' There is a clay layer turning into compacted shale and soft sandstone. There is black staining and a strong HC odor down to 8' where bedrock was encountered. Excavation was ilmited on the north and east walls due to a production tank and a security fence. A sample from the west wall 7' was sent to	Pr Profit	South East 5 4 4 Bedrock Bedrock South Sedrock South Sed
	е П	Section :	Township:	of wellhead	deep	deep ,		90. 1000.	×1000'				is moist, sandy syer turning intropersions black stail ock was encourage assumple from A sample from a source of the sample from a source of t	uth :	
	Faderal A # 3 - E		13 W	Pit: Production Tank Pit	Kereleine . 135 1425 51 55	Final Size : 60' x 40' x 8' deep	Yds. Excavarted: 667 cy	Depth to Groundwater:	Nearest Water Source.	NMOCD Ranking Score:	TPH Closure Standard:	i	fs: 0' - 3' Soil here is a clay if andstone. The 5 8' where bedr in the north ark ecurity fence.	Pit Profile : North to South	
	. ocipa	Qued :	Range:	Pit: Prodi		Final Size	Yds. Exca	Depth to	Nearest S	MOCD	TPH Clos		7.4 - 8· 十 - 3· 1 - 3· 3· 3· 3· 3· 3· 3· 3· 3· 3· 3· 3· 3·	Pit Profile	North The Park

Cimarron Oiffeld Services

Page 1 of 1

Environmental Specialist: VC



LAB: (505) 325-1556

ANALYTICAL REPORT

Attn:

Frank McDonald

Date:

3-Feb-98

Company: Cimmaron Oilfield Service

COC No.:

6827

Address:

Sample No.:

17412

P.O. Box 3235

Job No.:

2-1000

City, State: Farmington, NM 87401

Questar Energy - Federal A #3-E

Project Location:

W. Wall @ 7'

Sampled by:

Project Name:

VC

Date:

26-Jan-98 Time:

11:05

Analyzed by: Sample Matrix:

DC Soil GRO Date: DRO Date: 29-Jan-98 29-Jan-98

Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
Gasoline Range Organics (C5 - C9)	1.4	mg/kg	0.5	mg/kg
Diesel Range Organics (C10 - C28)	15	mg/kg	5	mg/kg

ND - Not Detected at Limit of Quantitation

Quality Assurance Report

GRO QC No.: 0554-STD

DRO QC No.: 0555-STD

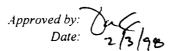
Continuing Calibration Verification

Contanuing	Method	Unit of	True	Analyzed		RPD
Parameter	Blank	Measure	Value	Value	RPD	Limit
Gasoline Range (C5 - C9)	ND	ppb	1,801	1,755	2.6	15%
Diesel Range (C10 - C28)	ND	ppm	200	202	1.1	15%

Matrix Spike

Parameter	1- Percent Recovered	2 - Percent Recovered	Limit	RPD	RPD Limit
Gasoline Range (C5-C9)	75	72	(70-130)	4	20%
Diesel Runge (C10-C28)	95	95	(75-125)	0	20%

Method: SW-846 EPA Method 8015A mod. - Nonhalogenated Volatile Hydrocarbons by Gas Chromatography





LAB: (505) 325-1556

2-Feb-98

6827

17412

2-1000

Date:

COC No.:

Job No.:

Sample No.:

ANALYTICAL REPORT

Frank McDonald Attn:

Company: Cimmaron Oilfield Service

P.O. Box 3235 Address:

City, State: Farmington, NM 87401

Questar Energy - Federal A #3-E

Project Name: W. Wall @ 7' Project Location:

11:05 26-Jan-98 Time: Date: VC Sampled by:

28-Jan-98 Date: DC Analyzed by:

Soil Sample Matrix:

Laboratory Analysis

Parameter		Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
T didinoto:			_	2	ug/kg
Benzene		ND	ug/kg		
		8	ug/kg	4	ug/kg_
Toluene		30	ug/kg	2	ug/kg
Ethylbenzene				4	ug/kg
m,p-Xylene		30	ug/kg		
		14	ug/kg	2	ug/kg
o-Xylene		 			
	TOTAL	82	ug/kg		

ND - Not Detected at Limit of Quantitation

Method - SW-846 EPA Method 8020A Aromatic Volatile Organics by Gas Chromatography



LAB: (505) 325-1556

QUALITY ASSURANCE REPORT

for EPA Method 8020

Internal QC No.: 0559-STD

Surrogate QC No.: 0567-STD

Reference Standard QC No.: 0529/30-QC

Method Blank

Date Analyzed: 28-Jan-98

	I .
Result	Measure
<1.0	ppb
	Result < 1.0

Calibration Check

Calibration Che	CA		T		
Parameter	Unit of Measure	True Value	Analyzed Value	RPD	Limit
0	ppb	60.0	60.1	0	15%
Benzene Toluene	ppb	60.0	59.1	1	15%
Ethylbenzene	ppb	60.0	60.7	1	15%
m,p-Xylene	ppb	120.0	117.2	2	15%
o-Xylene	ppb	60.0	60.8	1	15%

Matrix Spike

- IVIGUIX C	1- Percent	2 - Percent				
Parameter	Recovered	Recovered	Limit	RPD	Limit	
Panzana.	93	91	(39-150)	2	20%	
Benzene Toluene	97	96	(46-148)	1	20%	
Ethylbenzene	92	91	(32-160)	1	20%	
m,p-Xylene	90	89	(35-145)	1	20%	
o-Xylene	97	97	(35-145)	1	20%	

Surrogate Recoveries

Surrogate I			T	S1	S2
	S1 Percent	S2 Percent		Percent	Percent
Laboratory Identification	Recovered	Recovered	Laboratory Identification	Recovered	Recovered
Limit Percent Recovered	(70-130)		Limit Percent Recovered	(70-130)	
17412-6827	105				
77772 002.					
		 			
				7/1/	(De)
				2/3/78	12/2/98

\$1: Flourobenzene

CHAIN OF CUSTODY RECORD

Date: 1/26/98

ON SITE

657 W. Maple • P. O. Box 2606 • Farmington NM 87499 LAB: (505) 325-5667 • FAX: (505) 325-6256

ON dol.		Name	Fresh W. Drugh	Title
P. 1 E. 1311		Compar	Cincilos C	1.14.01d Services
Company	Dept.	Mailing Address	Po. Bur	3235
BOO Address		City, State, Zip	Fermi- Pen	12/16 874 CI
	87401	Telephone No.	NO. 327-4787	Telefax No.
Sampling Location: Frecherical A#3-E			ANALYSIS REQUESTED	QUESTED
		iners	12.0 12.	
Sampler: V. Ciliquez		Numb Conta	1	
SAMPLE IDENTIFICATION	SAMPLE MATRIX PRES.	3\ '13\ 12\ 12\ 13\ 13\ 13\ 13\ 13\ 13\ 13\ 13\ 13\ 13		LAB ID
Farm A # 3-6 6 11 1 67'	-	_		
	T.			
				1.2
Relinquished by: 7	Date/Time 1/21/42 13.30	Received by:		Date/Time (26/10)
Relinquished by:	Date/Time	Received by:		Date/Time
Dolinanishad hv.	Date/Time	Received by:		Date/Time
Method of Shipment:		Rush	24-48 Hours 10 Working Days	Days Special Instructions:
	Date 1/26/12			
(Chefit Signature Must Accompany Apquest)	,	- 1		
*ia ()	Distribution: White - On Site Yellow - LAB	Pink – Sampler	Goldenrod – Client	

Questar Energy Company

Client:

				Overview of Landfarm and Sampling:	: 0	
			-			
Location: Federal A #3E					-	
Quad: P Section:	26			Z Production Tank	ank	
Township: 30N Range: 1	13W				Landfarm #1	#
ـــــا	Sample #	Location	OVM	(
Reference: LF #1: 120' N of wellhead	- ~	Comp. 2	0.0.	Pit Tank		
LF #2. 30 3 00 W of wellhead		Comp. 3	1.5		Surface	
LF #4, 125' S 58° W of wellhead	4	Comp. 4	1.5	Separator	Gladient	
Size:LF #1: 30' x 30' x 2' deep	5					,
LF #2: 40' x 50' x 2' deep	9)	Wellhead	ad
LF #3: 40' x 20' x 2' deep	7					
LF #4: 30' x 60' x 2' deep	»					C
Yds: 667 cubic yards	ი :			4	N	٧
	일;				Landfarm #2 2	
4 5 - Point Composite(s)	=			4		
	12			· ([5]	2
				4	Motor M	
				7# 5# 5# 5	3 5 3	
				Landrarm #4) ທ ກ	
					Landfarm #3	~
Comments: Soil is light brown, moist, sandy soil with	dy soil wit		isible staini	l minimal visible staining and no hydrocarbon odors.		
1 1	s taken.		Technolog	"On Site Technologies Id " for 8015 GRO/DRO analysis	Sis	
A sample from Composite #4 was serie to	Was serif	0 01-010	200	, Etc. 191 (201		
Environmental Specialist : RB						



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 21-Dec-98

Client:

Cimarron Oilfield Service

Work Order:

9812015

Lab ID:

9812015-03A

Matrix: SOIL

Project:

Questar Energy

Client Sample Info: Questar Energy

Client Sample ID: Fed A3E; Composite 4

Collection Date: 12/4/98 10:52:00 AM

COC Record: 5621

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS	S ' ND	W8015		mg/Kg	1	Analyst: HR 12/18/98
T/R Hydrocarbons: C10-C28 GASOLINE RANGE ORGANICS T/R Hydrocarbons: C6-C10		W8015 0.18		mg/Kg	1	Analyst: HR 12/15/98

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

1 of 1

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Page .

CHAIN OF CUSTODY RECORD

Date: __

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ON SITE

Purchase	Purchase Order No.:			Job No.						Name				Title		$\neg \uparrow$
	Name							TR	- 1	Company						
ICE ID	Company	24 Tr. 1			Q	Dept.		∪d	t	Mailing Address	SS					T
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Methor	Method of Shipment			* ***					Rush		24-48 Hours	10 Work	10 Working Days	Special Instructions:	ns:	
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