

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

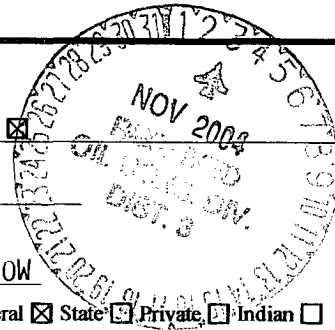
State of New Mexico
Energy Minerals and Natural Resources

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

Form C-144
June 1, 2004
For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☐
Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank ☒



Operator: **Questar E&P** Telephone: **(970) 564-9231** e-mail address: _____
Address: **P.O. Box 1656 Cortez, Colorado 81321**
Facility or well name: **Knauff A1E** API #: **3004524480** U/L or Qtr/Qtr SESE Sec **13** T27N R10W
County: **San Juan** Latitude: **N36.570345** Longitude: **W107.839921** NAD: 1927 ☒ 1983 ☐ Surface Owner Federal ☒ State ☐ Private ☐ Indian ☐

Pit

Type: Drilling ☐ Production ☒ Disposal ☐
Workover ☐ Emergency ☐
Lined ☐ Unlined ☒
Liner type: Synthetic ☐ Thickness _____ mil Clay ☐
Pit Volume **36** bbl (10x10x2)

Below-grade tank

Volume: _____ bbl Type of fluid: _____
Construction material: _____
Double-walled, with leak detection? Yes ☐ If not, explain why not. _____

Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)

Less than 50 feet	(20 points)
50 feet or more, but less than 100 feet	(10 points)
100 feet or more	(0 points)

Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)

Yes	(20 points)
No	(0 points)

Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)

Less than 200 feet	(20 points)
200 feet or more, but less than 1000 feet	(10 points)
1000 feet or more	(0 points)

Ranking Score (Total Points)	0 Points
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If this is a pit closure: (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if you are burying in place) onsite ☐ offsite ☒ If offsite, name of facility **Envirotech LF 2**. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☒ Yes ☐ If yes, show depth below ground surface _____ ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments: **Bedrock encountered at two (2) feet below ground level**

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Date: **X 10/25/04**

Printed Name/Title **X Kirby D. Sanchez - Foreman**

Signature **X Kirby D. Sanchez**

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval: **DEPUTY OIL & GAS INSPECTOR, DIST. 03**
Printed Name/Title

Signature **Denny Faint**

Date: **NOV - 3 2004**

CLIENT: Questar E&P

ENVIROTECH INC.

ENVIRONMENTAL SCIENTISTS & ENGINEERS
5796 U.S. HIGHWAY 64-3014
FARMINGTON, NEW MEXICO 87401
PHONE: (505) 632-0615LOCATION NO: A1EC.O.C. NO: 13188

FIELD REPORT: CLOSURE VERIFICATION

PAGE No: 1 of 1LOCATION: NAME: Knauff WELL #: A1E PIT: Sep

QUAD/UNIT: SEC: TWP: RNG: PM: CNTY: ST:

QTR/FOOTAGE:

CONTRACTOR: EnvirotechDATE STARTED: 10-14-04DATE FINISHED: 10-19-04ENVIRONMENTAL
SPECIALIST: CJCEXCAVATION APPROX. 40 FT. x 42 FT. x 8 FT. DEEP. CUBIC YARDAGE: 280 ydsDISPOSAL FACILITY: Envirotech LF #2 REMEDIATION METHOD: off siteLAND USE: Grass LEASE: FORMATION: NacimientoFIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY 70 FT. E FROM WELLHEAD.DEPTH TO GROUNDWATER: 1000 NEAREST WATER SOURCE: >1000 NEAREST SURFACE WATER: >1000NMDCD RANKING SCORE: 0 NMDCD TPH CLOSURE STD: 5000 PPM

SOIL AND EXCAVATION DESCRIPTION:

Excavated to bed rock; Tan
siltstone/shale; Hauled to Envirotech
Land Farm #2.

CHECK ONE:

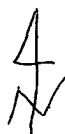
☒ PIT ABANDONED☐ STEEL TANK INSTALLED

FIELD 418.1 CALCULATIONS

TIME	SAMPLE I.D.	LAB No:	WEIGHT (g)	mL. FREON	DILUTION	READING	CALC. ppm

SCALE

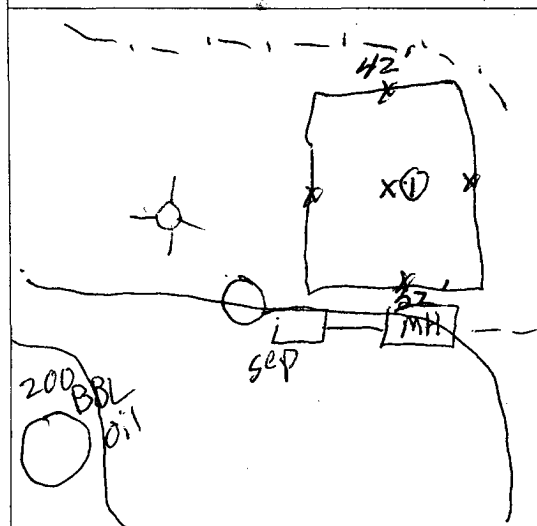
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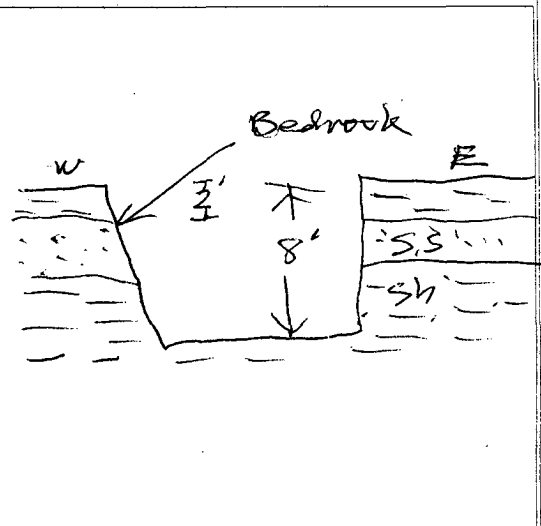
PIT PERIMETER

OVM
RESULTS

PIT PROFILE



SAMPLE ID	FIELD HEADSPACE PID (ppm)
1 8in	750
2 S. Wall	950
3 N. Wall	1000
4 E. Wall	800
5	



SAMPLE ID	ANALYSIS	TIME
6 TM	TPH/BTEX 1515	
5 PM	TPH/BTEX 1608	

TRAVEL NOTES:

CALLOUT: 0800 AMONSITE: 0845 AM

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

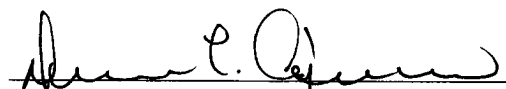
Client:	Questar E & P	Project #:	03074-002
Sample ID:	5 Pt @ 6'	Date Reported:	10-19-04
Laboratory Number:	30973	Date Sampled:	10-14-04
Chain of Custody No:	13188	Date Received:	10-15-04
Sample Matrix:	Soil	Date Extracted:	10-18-04
Preservative:	Cool	Date Analyzed:	10-19-04
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

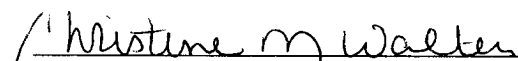
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	23.2	0.2
Diesel Range (C10 - C28)	25.3	0.1
Total Petroleum Hydrocarbons	48.5	0.2

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: **Knauff #A1E.**


Analyst


Review

EPA METHOD 8015 Modified
Nonhalogenated Volatile Organics
Total Petroleum Hydrocarbons

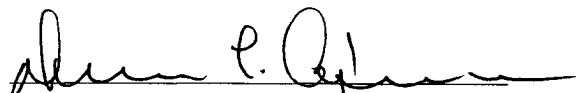
Client:	Questar E & P	Project #:	03074-002
Sample ID:	Btm @ 8'	Date Reported:	10-19-04
Laboratory Number:	30974	Date Sampled:	10-14-04
Chain of Custody No:	13188	Date Received:	10-15-04
Sample Matrix:	Soil	Date Extracted:	10-18-04
Preservative:	Cool	Date Analyzed:	10-19-04
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

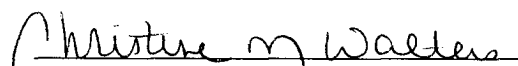
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	1,210	0.2
Diesel Range (C10 - C28)	151	0.1
Total Petroleum Hydrocarbons	1,360	0.2

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: **Knauff #A1E.**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Questar E & P	Project #:	03074-002
Sample ID:	5 Pt @ 6'	Date Reported:	10-19-04
Laboratory Number:	30973	Date Sampled:	10-14-04
Chain of Custody:	13188	Date Received:	10-15-04
Sample Matrix:	Soil	Date Analyzed:	10-19-04
Preservative:	Cool	Date Extracted:	10-18-04
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	222	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	815	2.2
o-Xylene	463	1.0
Total BTEX	1,500	

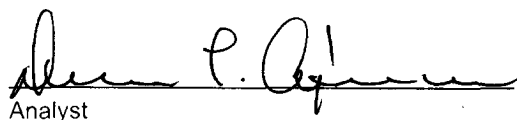
ND - Parameter not detected at the stated detection limit.

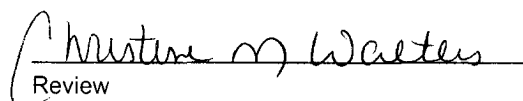
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97 %
	1,4-difluorobenzene	97 %
	Bromochlorobenzene	97 %

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: Knauff #A1E.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Questar E & P	Project #:	03074-002
Sample ID:	Btm @ 8'	Date Reported:	10-19-04
Laboratory Number:	30974	Date Sampled:	10-14-04
Chain of Custody:	13188	Date Received:	10-15-04
Sample Matrix:	Soil	Date Analyzed:	10-19-04
Preservative:	Cool	Date Extracted:	10-18-04
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	ND	1.8
Toluene	2,060	1.7
Ethylbenzene	ND	1.5
p,m-Xylene	2,790	2.2
o-Xylene	1,430	1.0
Total BTEX	6,280	

ND - Parameter not detected at the stated detection limit.

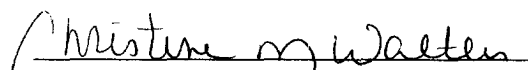
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	Fluorobenzene	97 %
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Comments: Knauff #A1E.


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