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 For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Form C-144

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes \(\subseteq \text{No } \text{X} \)

Type of action: Registration of a pit or below-grade tank \(\subseteq \text{Closure of a pit or below-grade tank } \text{X} \) Telephone: 505.325.6800 e-mail address: vdonaghe@energen.com_ Operator: Energen Resources Corporation Address: 2198 Bloomfield Highway - Farmington, NM 87401 Facility or well name: _Hart Canyon 26 #1S _____ Latitude 36.868056 Longitude -107.845556 NAD: 1927 X 1983 County: San Juan Surface Owner: Federal X State Indian 🔲 Below-grade tank Pit Volume: bbl Type of fluid: Type: Drilling X Production Disposal D Construction material: Double-walled, with leak detection? Yes If not, explain why not. Lined X Unlined Liner type: Synthetic X Thickness 12 mil Clay 0151.3 Pit Volume _5000 __bbl Less than 50 feet (20 points) Depth to ground water (vertical distance from bottom of pit to seasonal 50 feet or more, but less than 100 feet (10 points) high water elevation of ground water.) 100 feet or more (0 points) Yes (20 points) Wellhead protection area: (Less than 200 feet from a private domestic No (0 points) 0 water source, or less than 1000 feet from all other water sources.) Less than 200 feet (20 points) Distance to surface water: (horizontal distance to all wetlands, playas, 200 feet or more, but less than 1000 feet (10 points) irrigation canals, ditches, and perennial and ephemeral watercourses.) 0 1000 feet or more (0 points) 0 Ranking Score (Total Points) 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 ____. (3) Attach a general description of remedial action taken including your are burying in place) onsite X offsite I If offsite, name of facility_ remediation start date and end date. (4) Groundwater encountered: No X Yes I 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: Energen Resources built a lined pit according to "OCD Pit and Below-grade Tank Guidelines", as issued on November 1, 2004. Energen closed this pit in accordance with BLM and "OCD Pit and Below-grade Tank Guidelines". See APD for cut & fill diagram. Please see attachments. Pit was closed 11/29/05. 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 X , a general permit , or an (attached) alternative OCD-approved plan .

Approval: OFFUTY OIL & GAS INSPECTOR, DIST. 49

Date: _01/11/06_

regulations

Printed Name/Title

Printed Name/Title __Doug Thomas

_ Signature

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

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ate:



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Energen	Project #:	03022-001
Sample ID:	11-22-0501	Date Reported:	11-23-05
Chain of Custody:	15148	Date Sampled:	11-22-05
Laboratory Number:	35240	Date Received:	11-22-05
Sample Matrix:	Water	Date Analyzed:	11-23-05
Preservative:	Cool	Analysis Requested:	BTEX
Condition:	Cool & Intact	•	

Parameter	Concentration (ug/L)	Dilution Factor	Det. Limit (ug/L)
Benzene	22.8	4	0.2
Toluene	18.7	1	0.2
Ethylbenzene	1.9	1	0.2
p,m-Xylene	14.1	1	0.2
o-Xylene	4.6	· 1	0.1

Total BTEX 62.1

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	fluorobenzene	99 %
	1,4-difluorobenzene	99 %
	4-bromochlorobenzene	99 %

References:

Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA,

December 1996.

Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using

Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments:

Hart Canyon.

Analyst Certain



CATION / ANION ANALYSIS

Client:	Energen	Project #:	03022-001
Sample ID:	11-22-0501	Date Reported:	11-23-05
Laboratory Number:	35240	Date Sampled:	11-22-05
Chain of Custody:	15148	Date Received:	11-22-05
Sample Matrix:	Water	Date Extracted:	N/A
Preservative:	Cool	Date Analyzed:	11-22-05
Condition:	Cool & Intact	•	

	Analytical			
Parameter	Result	Units		
рН	10.85	s.u.		
Conductivity @ 25° C	3,500	umhos/cm		
Total Dissolved Solids @ 180C	1,880	mg/L		
Total Dissolved Solids (Calc)	1,870	mg/L		
SAR	16.5	ratio		
Total Alkalinity as CaCO3	188	mg/L		
Total Hardness as CaCO3	252	mg/L		
Bicarbonate as HCO3	<0.1	mg/L	0.00	meq/L
Carbonate as CO3	136	mg/L	4.53	meq/L
Hydroxide as OH	52.0	mg/L	3.06	meq/L
Nitrate Nitrogen	0.3	mg/L	0.00	meq/L
Nitrite Nitrogen	0.054	mg/L	0.00	meq/L
Chloride	256	mg/L	7.22	meq/L
Fluoride	1.38	mg/L	0.07	meq/L
Phosphate	1.70	mg/L	0.05	meq/L
Sulfate	790	mg/L	16.45	meq/L
Iron	0.006	mg/L	0.00	meq/L
Calcium	101	mg/L	5.03	meq/L
Magnesium	<0.01	mg/L	0.00	meq/L
Potassium	6.92	mg/L	0.18	meq/L
Sodium	602	mg/L	26.19	meq/L
Cations			31.39	meq/L
Anions			31.39	meq/L
Cation/Anion Difference			0.01%	

Reference: U.S.E.P.A., 600/4-79-020, "Methods for Chemical Analysis of Water and Wastes", 1983.

Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Hart Canyon.

/ Mustine of Walters Analyst Review C. Aguen