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 $122\overline{0~S.~St}~$ Francis Dr , Santa Fe, NM 87505

State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division

1220 South St. Francis Dr.

Is pit or below-grade tank covered by a "general plan"? Yes \sum No \oxedex

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

Form C-144

June 1, 2004

Santa Fe, NM 87505 Pit or Below-Grade Tank Registration or Closure

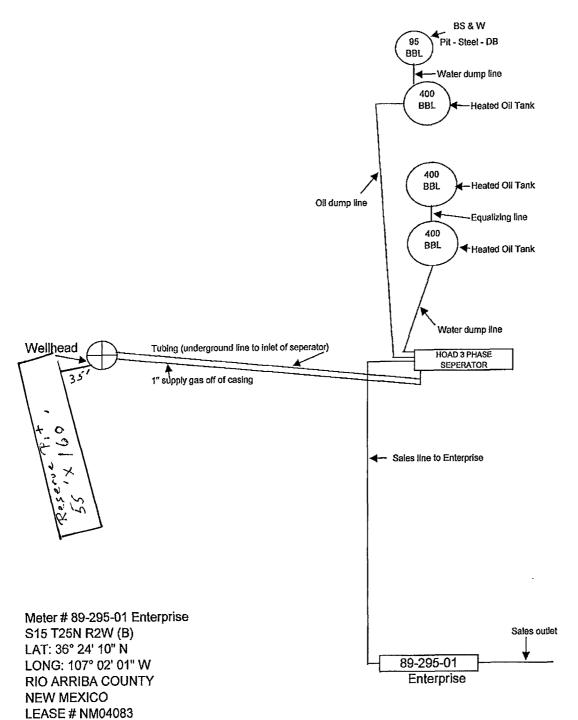
Type of action: Registration of a pit of	or below-grade tank 🔲 Closure of a pit or below-gra	ade tank 🔼	
Operator: _McElvain Oil & Gas Properties, Inc			
Address1050 17th Street, Suite 1800, Denver, CO 80265			
Facility or well name: _Howard 43-15 #1AAP1#:30-0	039-29700U/L or Qtr/QtrNWNESec15_	T25N R _2W	
County: _Rio Arriba Latitude36 24' 10" N			
Surface Owner: Federal 🛛 State 🗌 Private 🔲 Indian 🗍			
Pit	Below-grade tank		

Type: Drilling ☑ Production ☐ Disposal ☐	Volumebbl Type of fluid:		
Workover	Construction material	-	
Lined Unlined	Double-walled, with leak detection? Yes If no	t, explain why not.	
Liner type Synthetic Thickness 12 mil Clay			
Pit Volume 4400_bbl			
Double to a series of control of the	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) 0	
	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.)	INO	(o points)	
Distance to surface water: (horizontal distance to all wetlands, playas,	Less than 200 feet	(20 points)	
irrigation canals, ditches, and perennial and ephemeral watercourses.)	200 feet or more, but less than 1000 feet	(10 points)	
inigation canais, theries, and perennal and epitemeral watercourses.)	1000 feet or more	(0 points) 0	
	Ranking Score (Total Points)		
Year I do a constant of the co			
If this is a pit closure: (1) Attach a diagram of the facility showing the pit's	, , , , , , , , , , , , , , , , , , , ,	·	
your are burying in place) onsite \(\square\) offsite \(\square\) If offsite, name of facility_	. (3) Attach a general of		
remediation start date and end date. (4) Groundwater encountered: No 🛛 Y	es If yes, show depth below ground surface	ft. Carlo attach sample results	
(5) Attach soil sample results and a diagram of sample locations and excavat	ions	3 kg ft land attach sample results	
Additional Comments:	/;	DEOCH P	
	/8	TIEUEIVED 5	
The soils tested clean and no remediation was required.			
S OIL CONS DIV DIST 2 8			
The pit was closed on 9/7/2007			
The pit was closed on 9///2007			
202 PZ 25 25 26 26 26 26 26 26 26 26 26 26 26 26 26			
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 \(\mathbb{\infty}\), a general permit \(\propto\), or an (attached) alternative OCD-approved plan \(\propto\).			
$igcap_{\bullet}$			
Date: 10/04/2007			
Printed Name/TitleDeborah Powell/Eng Tech Supervisor Signature Xwl_ / C MW			
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, District #3 Deputy Oil & Gas Inspector, District #3 OCT 17 2007			

McElvain Oil & Gas Properties, Inc.

Howard Federal 43-15 #1A





4 ...

API # 30-039-29700



August 29, 2007

Project No. 06039-005

Mr. Art Merrick McElvain Oil & Gas P.O. Box 2596 Farmington, NM 87499

Phone (505) 325-5220 Fax (505) 325-6090

RE: DRILL PIT SAMPLES TAKEN FROM THE BADGER 14 #1A AND HOWARD 43-15 #1A WELL SITES, RIO ARRIBA COUNTY, NEW MEXICO

Dear Mr. Merrick,

Attached please find the results from the drill pit samples taken from the Badger 14 #1A and Howard 43-15 #1A well sites, Rio Arriba County, New Mexico. Samples were analyzed at Envirotech's Laboratory for TPH using USEPA Method 8015, Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) using USEPA Method 8021, and Chlorides. The samples were taken on August 16, 2007.

BADGER 14 #1A

Badger 14 #1A well site was ranked as a 1000 ppm closure for total petroleum hydrocarbon (TPH) as per the NMOCD ranking guidelines. Two (2) composite samples were collected, one (1) from inside the liner of the drill pit and one (1) from the area that the liner had been comprised. In the area where the liner had been comprised the sample was below the regulatory limit for both TPH and BTEX; see *Appendix A, Analytical Results*.



HOWARD 43-15 #1A

Howard 43-15 #1A well site was ranked as a 100 ppm closure for TPH as per the NMOCD ranking guidelines. One (1) composite sample was collected in the area where the drill pit liner had been comprised. In the area where the liner had been comprised the sample was above the regulatory limit for TPH; see *Appendix A, Analytical Results*.

RECOMMENDATIONS

Sampling activities at the Badger 14 #1A and Howard 43-15 #1A well sites have been completed. Envirotech recommends that both drill pits have all liquids removed and the pits be closed in accordance with current NMOCD regulations. At the Howard 43-15 #1A Envirotech recommends that proper release notification (C-141) be made to the NMOCD and closure be completed in accordance with current NMOCD regulations.

We appreciate the opportunity to be of service. If you have any questions please do not hesitate to contact our office at (505) 632-0615.

Sincerely,

ENVIROTECH, INC.

Nicole Hayworth

Environmental Scientist

nhayworth@envirotech-inc.com

cc: Client File 06039

Attachment: Appendix A, Analytical Results



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	P	roject #:	N	√A
Sample ID:	08-21-BTEX QA/Q	C D	ate Reported:	C	8-21-07
Laboratory Number:	42766	D	ate Sampled:	١	N/A
Sample Matrix:	Soil	D	ate Received:	١	N/A
Preservative:	N/A	D	ate Analyzed:	C	8-21-07
Condition:	N/A	А	nalysis:	E	BTEX
Calibration and Detection Limits (ug/L)	1-Galira	G Gal RE → Accept Rang	· · · · · · · · · · · · · · · · · · ·	⊲Blank Gonc	د Detect. Limit
Benzene	1.0667E+008	1.0689E+008	0.2%	ND	0.1
Toluene	8.7915E+007	8.8091E+007	0.2%	ND	0.1
Ethylbenzene	6.6303E+007	6.6436E+007	0.2%	ND	0.1
p,m-Xylene	1.2576E+008	1.2601E+008	0.2%	ND	0.1
o-Xylene	6.0226E+007	6.0347E+007	0.2%	ND	0.1
Duplicate Conc ((00/Kg))	Sample	of account of the first of the	eder - Brig fin Till Krimer, för Øderformårine Ørg standt y Landstraff		Detect Limit
Benzene Toluene Ethylbenzene p,m-Xylene	3.3 10.9 8.0 46.6 6.2	3.3 10.8 8.0 46.5 6.2	0.0% 0.9% 0.0% 0.2% 0.0%	AcceptaRange	0.9 1.0 1.0 1.2 0.9
Duplicate Conc. (ug/Kg) Benzene Toluene Ethylbenzene p,m-Xylene o-Xylene	3.3 10.9 8.0 46.6 6.2	3.3 10.8 8.0 46.5	0.0% 0.9% 0.0% 0.2% 0.0%	0 - 30% 0 - 30% 0 - 30% 0 - 30% 0 - 30%	0.9 1.0 1.0 1.2
Benzene Toluene Ethylbenzene p,m-Xylene o-Xylene	3.3 10.9 8.0 46.6 6.2	3.3 10.8 8.0 46.5 6.2	0.0% 0.9% 0.0% 0.2% 0.0%	0 - 30% 0 - 30% 0 - 30% 0 - 30% 0 - 30%	0.9 1.0 1.0 1.2 0.9
Benzene Toluene Ethylbenzene p,m-Xylene o-Xylene Spike:Conc: (ug/Kg)	3.3 10.9 8.0 46.6 6.2 Sample	3.3 10.8 8.0 46.5 6.2	0.0% 0.9% 0.0% 0.2% 0.0%	0 - 30% 0 - 30% 0 - 30% 0 - 30% 0 - 30%	0.9 1.0 1.0 1.2 0.9
Benzene Toluene Ethylbenzene p,m-Xylene o-Xylene Spike Conc (ug/Kg)	3.3 10.9 8.0 46.6 6.2 Sample	3.3 10.8 8.0 46.5 6.2	0.0% 0.9% 0.0% 0.2% 0.0% Spiked Sample	0 - 30% 0 - 30% 0 - 30% 0 - 30% 0 - 30%	0.9 1.0 1.0 1.2 0.9 *Accept:Range.** 39 - 150 46 - 148
Benzene Toluene Ethylbenzene p,m-Xylene o-Xylene Spike:Conc:(ug/kg)	3.3 10.9 8.0 46.6 6.2 Sample 3.3 10.9	3.3 10.8 8.0 46.5 6.2 Amount/Spiked	0.0% 0.9% 0.0% 0.2% 0.0% Spiked Sample 53.2 60.8	0 - 30% 0 - 30% 0 - 30% 0 - 30% 0 - 30%	0.9 1.0 1.0 1.2 0.9

ND - Parameter not detected at the stated detection limit.

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:

QA/QC for Samples 42766 - 42768, 42770 , 42772 - 42775, 42787 - 42788

st 🖊 I F



EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Client:	McElvain Oil & Gas	Project #:	06039-005
Sample ID:	Howard Torn Liner	Date Reported:	08-21-07
Laboratory Number:	42768	Date Sampled:	08-16-07
Chain of Custody No:	3220	Date Received:	08-16-07
Sample Matrix:	Soil	Date Extracted:	08-20-07
Preservative:	Cool	Date Analyzed:	08-21-07
Condition:	Cool & Intact	Analysis Requested:	8015 TPH

Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)	
Gasoline Range (C5 - C10)	ND	0.2	
Diesel Range (C10 - C28)	193	0.1	
Total Petroleum Hydrocarbons	193	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:

Badger 14 #1A & Howard 43-15 #1A

Analyst

Mister Daetes Review



EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	McElvain Oil & Gas	Project #:	06039-005
Sample ID:	Howard Torn Liner	Date Reported:	08-21-07
Laboratory Number:	42768	Date Sampled:	08-16-07
Chain of Custody:	3220	Date Received:	08-16-07
Sample Matrix:	Soil	Date Analyzed:	08-21-07
Preservative:	Cool	Date Extracted:	08-20-07
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)	
Benzene	ND	0.9	
Toluene	3.4	1.0	
Ethylbenzene	1.2	1.0	
p,m-Xylene	10.4	1.2	
o-Xylene	2.9	0.9	
Total BTEX	17.9		

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
1	Bromochlorobenzene	99.0 %

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:

Badger 14 #1A & Howard 43-15 #1A

Analyst P. Oglem

Christin of Walters



Chloride

Client: McElvain Oil & Gas Project #: 06039-005 Sample ID: Howard Torn Liner Date Reported: 08-21-07 Lab ID#: 42768 Date Sampled: 08-16-07 Date Received: Sample Matrix: Soil 08-16-07 Date Analyzed: 08-20-07 Preservative: Cool Chain of Custody: Condition: Cool and Intact 3220

Parameter Concentration (mg/Kg)

Total Chloride 1,700

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

Comments: Badger 14 #1A & Howard 43-15 #1A

Analyst Review Review