

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

Form C-144  
June 1, 2004

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

**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: **MURCHISON OIL AND GAS, INC.** Telephone: **505-628-3932** e-mail address: **tommyfolsom@valornet.com**

Address: **1100 Mira Vista Blvd., Plano, TX 75093-4698**

Elevation: **3,579'**

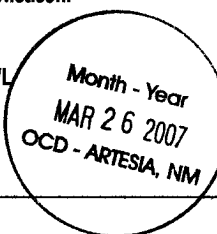
Facility or well name: **Bob Cat Fed. Com. No. 1**

API #: **30-015-34993**

U/L M Sec 11 T17S R28E, 107' FNL, 704' FWL

County: **Eddy** Latitude **N** Longitude **W** NAD: 1927 ☐ 1983 ☐

Surface Owner: **State X**



**Pit**

Type: **Drilling X**

Lined **X**

Liner type: Synthetic **X** Thickness: **12ml HDPE Liner**

Pit Volume: **2000 bbl. (Approximately)**

**Below-grade tank N/A**

Volume: **N/A bbl** Type of fluid: **N/A**

Construction material: **N/A**

Double-walled, with leak detection? ☐ If not, explain why not.

Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of groundwater). Groundwater elevation well shows groundwater at 55 feet for the Puma State No. 1 at a surface elevation of 3,592'. The Bob Cat sets at an elevation of 3,678', 86' higher in the immediate vicinity with a water depth > 55 feet.	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) (0 points)	<b>0 pts.</b>
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes No <b>X</b>	(20 points) (0 points)	<b>0 pts.</b>
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points). (10 points) (0 points)	<b>0 pts.</b>
	<b>Ranking Score (Total Points)</b>		<b>0 pts.</b>

**If this is a pit closure:** (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. **Digital photos shall be submitted for before and after remediation activity in final report.** (2) Indicate disposal location: **Insitu on location** If offsite, name of facility: **N/A** (4) Groundwater encountered: No **X** Yes

If yes, show depth below ground surface. (5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments: **Please refer to attached letter for detailed "Closure Plan" information and survey well record of groundwater elevation in the immediate vicinity. Operator proposes to implement a traditional insitu burial on location predicated on the above presented evidence. For purposes of continuity, all materials shall be submitted as part of the final closure report.**

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 ☐.

Date: **21 March 2007**

Printed Name/Title: **Tommy W. Folsom, Production Manager**

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 groundwater 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:

Printed Name/Title:

Signature

Date:

**3/26/07**

Mr. Tommy W. Folsom  
Production Manager  
MURCHISON OIL AND GAS, INC.  
PO Box 627  
Carlsbad, NM 88221-0627



21 March 2007

Mr. Mike Bratcher  
OIL CONSERVATION DIVISION  
1301 West Grand Avenue  
Artesia, NM 88210

Re: Bob Cat Federal Com. No.1 Pit Closure Documents

Dear Mr. Bratcher:

Pursuant to the State of New Mexico regulatory requirements for permanent closure of drilling pits, enclosed herewith is the completed Form C-144, digital photos of existing pit (final report), sample location diagram (final report) and additional information constituting the "Closure Plan" for closure of the Murchison Oil and Gas, Inc., hereinafter "Murchison", Bob Cat Fed. Com. No. 1 drilling pit (API No. 30-015-34993) located in U/L M S11 T17S, R28E, 107' FSL and 704 FWL of Eddy County, New Mexico.

Remediation of the Murchison, hereinafter "Bob Cat", drilling pit is targeted to begin 29 March 2007 with completion expected by 19 April 2007, permitting weather and the occurrence of unexpected conditions not within the Operator's control do not create delays nor exacerbate the proposed schedule in any way. Murchison intends to maintain its commitment to environmental health and safety and fully comply with the Regulatory Performa of the State of New Mexico, OCD regarding this disposal action and permanent closure of the Bob Cat drilling pit.

Potential, temporary contamination from the Bob Cat drilling pit site, should any exist, resulted solely from oil and gas production activities. Potential contaminates of concern are typical mid to high-level concentrations of brines, typical polymers (such as xanthium gum and starch) and in general, drilling mud and fluids remaining upon completion of said drilling operations.

Area land use is primarily ranching with domestic pasturage and oil and gas production activities. The Murchison Bob Cat drilling pit is located in a section wherein groundwater depth to surface data is found at 55'+ documented by the groundwater well survey conducted for the Puma State No. 1. The Puma is located at an elevation of 3,592'. Immediately adjacent to this location the Bob Cat sets at an elevation of 3,678', 86 feet higher and slightly up on a hill. Further, the Mud Cat State No. 1 has the same relationship with the Puma regarding groundwater trends. Due to the fact that this groundwater elevation trend has been documented by previous field efforts within this specific vicinity and found to be consistent, Murchison intends to employ a traditional insitu burial at the Bob Cat. In the event water is encountered all operations will cease and the Operator shall immediately notify New Mexico, OCD.

This compliance action shall strictly apply the State of New Mexico, OCD standards, i.e. clean-up level for the Bob Cat drilling pit shall meet the less than 100ppm of TPH, ND for BTEX and the less than 250ppm of chlorides unless approved otherwise and substantiated by background information documented to be higher than the above cited indices.

Backfilling of the Bob Cat drilling pit shall be commensurate with existing topography and terrain relief features (contouring) so as to return it to its "near-as" previous condition, including a contour for moisture accumulation which prevents abnormal or unsustainable water impoundment resulting in erosive actions.

#### CLOSURE PLAN

Prior to commencement of closure activities, Murchison contractor will contact One-Call for line spot clearance confirming the State of New Mexico, OCD is in agreement with the proposed "Closure Plan" for removal of approximately 2,000 bbl. of liquid followed by the removal of all fines (drill cuttings) assuming these fines have sufficiently dried allowing for maneuverability of heavy equipment in the pit area, enabling *insitu* burial application to take place and final closure of the pit occur.

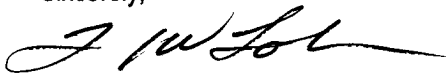
Environmental health and safety regulations mandate control of pit volumes at all times. Thus, the liquid material was pumped off as needed and properly disposed of during active drilling operations. Water accumulated since this time is either due to liquid material not completely hauled from actual drilling operations or rain. This water has subsequently been hauled from the location and properly disposed of pursuant to OCD Regulatory Performa.

- ❖ Contractor shall mobilize to Bob Cat Fed. Com. No. 1 drilling pit site located in Section 11, Township 17S and Range 28E of Eddy County, New Mexico.
- ❖ No remediation activity shall occur off the existing pad or already disturbed areas as authorized by the APD and approved Best Management Practices (BMP's). Murchison shall consider weather conditions and necessary equipment positioning to provide a clear area for adequate staging for site control and safety compliance, ensuring operations shall be compliant with New Mexico, OCD Regulatory Performa.
- ❖ The Bob Cat Fed. Com. No. 1 drilling pit is currently lined with a 12ml HDPE liner, which shall be removed by heavy equipment and disposed of with the drilling fines *insitu* pursuant to New Mexico, OCD requirements. *Insitu* actions provide for the encasement of all drilling pit contents in a 20 ml HDPE liner capped with a 20 ml HDPE liner.
- ❖ Once the burial trench/pit has been dug to sufficient dimensions to ensure proper placement of the pit contents, the track hoe shall begin to deposit pit materials within the secured "container" until all pit material has been placed within it. This 20ml HDPE liner "container" shall not be permanently sealed until after the pit bottom has been sampled and approved for closure by the State of New Mexico, OCD.
- ❖ Prior to initiation of backfilling, the Operator shall take appropriate samples of the pit area to ensure compliance with OCD Standards for remediation of possible TPH, ND for BTEX and levels of less than 250ppm of chlorides. However if levels at the bottom of the drilling pit test too high, a background set of samples shall be obtained for testing from the immediate vicinity and compared to those of the pit bottom. Simultaneously, more soil shall be removed from the "hot spots". Once completed, new data acquisition shall occur and sample results determine whether or not compliance has been reached in order to begin backfilling. No backfilling shall begin without authorization by the State of New Mexico, OCD.

- ❖ Backfilling of the Bob Cat Fed. Com. No. 1 drilling pit shall be commensurate with existing topography and terrain relief features (contouring) so as to return it to its "near-as" previous condition, including a contour for moisture accumulation which prevents abnormal or unsustainable water impoundment resulting in erosive actions.
- ❖ The "Closure Plan" shall include a final report providing lab analysis of the backfill material, digital project photos and evidentiary narrative to support the completed disposition of the reclaimed Bob Cat Fed. Com. No. 1 drilling pit site.

Should you have questions, please call 505-628-3932 (office) or 505-706-0667 (cell).

Sincerely,



Tommy W. Folsom  
Production Manager

cc: State of New Mexico, OCD, Form C-144