

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

RECEIVED  
JUL 18 2006  
OCD-MEDIA

21 June 2006

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

Re: Mustang 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, sample location diagram and additional information constituting the "Closure Plan" for closure of the Murchison Oil and Gas, Inc., hereinafter "Murchison", Mustang Federal Com. No. 1 drilling pit (API No. ~~30-015-34475~~) located in U/L A S21 T18S, R29E of Eddy County, New Mexico.

#### INTRODUCTION

Remediation of the Murchison, hereinafter Mustang No. 1, drilling pit is targeted to begin 29 June 2006 with completion expected by 21 July 2006, permitting weather and the occurrence of unexpected conditions not within the Operator's control do not create delays or 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 Mustang No. 1 drilling pit.

Potential, temporary contamination from the Mustang No. 1 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 Mustang No. 1 drilling pit is located in a Section wherein groundwater depth to surface data has been established by a groundwater survey well drilled by White Drilling Company, Inc. showing the total depth of the well at 75 feet which was dry.

Consequently, *insitu* disposal is herewith the preferred choice for the Mustang No. 1 drilling pit closure. It is the belief of Murchison that compliant environmental performance and reduction of liability in this area pursuant to New Mexico; OCD regulations can be achieved with *insitu* disposal predicated on the evidentiary data heretofore presented. Further, should future Regulatory Performa mandate additional action or should the Operator choose to take additional action, the *insitu* option, in this case, (1) limits the environmental impact in general, (2) allows the operator/government immediate access to said liability, (3) contains said material within the Operator's lease boundary and (4) in the event evidence of water is

discovered during the digging of the *insitu* pit, all actions would cease and the State would be immediately notified.

Murchison intends to engage in *insitu* disposal upon approval from the New Mexico, OCD. This compliance action shall strictly apply the State of New Mexico, OCD standards, i.e. clean-up level for the Mustang No. 1 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.

#### **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 2,500 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 to 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 Mustang No. 1 drilling pit site located in Section 21, Township 18S and Range 29E 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 Mustang 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 12 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 12ml 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 Mustang 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 Mustang No. 1 drilling pit site.

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

Sincerely,

A handwritten signature in black ink, appearing to read 'Tommy W. Folsom', written in a cursive style.

Tommy W. Folsom  
Production Manager

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

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: **MURCHISON OIL AND GAS, INC.** Telephone: **505-628-3932** e-mail address: **tommyfolsom@valornet.com**  
Address: **PO Box 627, 406 N. Guadalupe, Suite B, Carlsbad, NM 88221-0627**  
Facility or well name: **Mustang Federal Com. No. 1** API #: **30-015-34475** U/L A Sec 21 T18S R29E, 960' FNL, 990' FEL  
County: **Eddy** Latitude N Longitude W NAD: 1927 ☐ 1983 ☐  
Surface Owner: Federal ☒

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**Pit**

Type: **Drilling** ☒

Lined ☒

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

Pit Volume: **2500 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.) Total depth of groundwater elevation survey well at 75.0 feet, no groundwater found.

Less than 50 feet

(20 points)

50 feet or more, but less than 100 feet

(10 points)

**0 pts.**

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)

**0 pts.**

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)

**0 pts.**

1000 feet or more

(0 points)

**Ranking Score (Total Points)**

**0 pts.**

**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 (final report).** (2) Indicate disposal location: **Insitu** If offsite, name of facility: **N/A** (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: **Please refer to the attached letter for detailed "Closure Plan" information, digital photos, sample location diagram and groundwater well survey data. 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 ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Date: **21 June 2006**

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:

**AUG 03 2006**

File Number: \_\_\_\_\_

NEW MEXICO OFFICE OF THE STATE ENGINEER  
WELL RECORD

RECEIVED  
JUL 18 2006  
OCCUPATION

1. OWNER OF WELL

Name: Murchison Oil and Gas, Inc. Work Phone: \_\_\_\_\_  
Contact: Tommy Folsom Home Phone: \_\_\_\_\_  
Address: P.O. Box 627  
406 N. Guadalupe, Suite B  
City: Carlsbad State: NM Zip: 88221-0627

2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

A. 1/4 1/4 1/4 Section: 21 Township: 18S Range: 29E N.M.P.M.  
in Eddy County.

B. X = \_\_\_\_\_ feet, Y = \_\_\_\_\_ feet, N.M. Coordinate System  
Zone in the \_\_\_\_\_ Grant.  
U.S.G.S. Quad Map \_\_\_\_\_

C. Latitude: 32 d 44 m 16.0 s Longitude: 104 d 04 m 27.8 s

D. East \_\_\_\_\_ (m), North \_\_\_\_\_ (m), UTM Zone 13, NAD \_\_\_\_\_ (27 or 83)

E. Tract No. \_\_\_\_\_, Map No. \_\_\_\_\_ of the \_\_\_\_\_ Hydrographic Survey

F. Lot No. \_\_\_\_\_, Block No. \_\_\_\_\_ of Unit/Tract \_\_\_\_\_ of the  
\_\_\_\_\_ Subdivision recorded in \_\_\_\_\_ County.

G. Other: 960' FNL and 990' FEL/API #30-015-34475

H. Give State Engineer File Number if existing well: \_\_\_\_\_

I. On land owned by (required): Murchison Oil and Gas, Inc. - Mustang Federal Com. #1

3. DRILLING CONTRACTOR

License Number: WD-1456

Name: White Drilling Company, Inc. Work Phone: 325-893-2950  
Agent: John W. White Home Phone: 325-893-2950  
Mailing Address: P.O. Box 906  
City: Clyde State: TX Zip: 79510

4. DRILLING RECORD Mustang Federal Com. #1

Drilling began: 5/08/06; Completed: 5/09/06; Type tools: Air Rotary;  
Size of hole: 6 1/8 in.; Total depth of well: 75.0 ft.;  
Completed well is: shallow (shallow, artesian);  
Depth to water upon completion of well: Dry ft.

File Number: \_\_\_\_\_

Trn Number: \_\_\_\_\_

Form: wr-20

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File Number: \_\_\_\_\_

NEW MEXICO OFFICE OF THE STATE ENGINEER  
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA - Mustang Federal Com. #1

Depth in Feet		Thickness	Description of	Estimated Yield
From	To	in feet	water-bearing formation	(GPM)
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
2.0	Sch. 40	4.0	0.0	60.0	60.0	_____	_____	_____
2.0	.020	4.0	60.0	70.0	10.0	_____	60.0	70.0
_____	_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____	_____

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole	Sacks	Cubic Feet	Method of Placement
From	To	Diameter	of mud	of Cement	
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

8. PLUGGING RECORD

Plugging Contractor: White Drilling Company, Inc.  
Address: P.O. Box 906  
Plugging Method: Hand Mix  
Date Well Plugged: 5/09/06

Plugging approved by: \_\_\_\_\_  
State Engineer Representative

	No. Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
1	0.0	10.0	2.304 cement
2	10.0	70.0	29 sacks bentonite pellets
3	_____	_____	_____
4	_____	_____	_____
5	_____	_____	_____

File Number: \_\_\_\_\_ Trn Number: \_\_\_\_\_

Form: wr-20 page 2 of 4

File Number:

NEW MEXICO OFFICE OF THE STATE ENGINEER  
WELL RECORD

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9. LOG OF HOLE - Mustang Federal Com. #1

[illegible]

File Number:

Form: wr-20

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Trn Number:

File Number: \_\_\_\_\_

NEW MEXICO OFFICE OF THE STATE ENGINEER  
WELL RECORD

10. ADDITIONAL STATEMENTS OR EXPLANATIONS: - Mustang Federal Com. #1

All casing pulled and boring was plugged the next day.

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

  
Driller

5/18/06  
(mm/dd/year)

=====

FOR STATE ENGINEER USE ONLY

Quad \_\_\_\_\_; FWL \_\_\_\_\_; FSL \_\_\_\_\_; Use \_\_\_\_\_; Location No. \_\_\_\_\_

Trn Number: \_\_\_\_\_