JUL 1 8 2006

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

21 June 2006

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

Re: Quail State 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", Quail State Com. No. 1 drilling pit (API No. 30-015-34261) located in U/L P S8 T17S, R28E of Eddy County, New Mexico.

### INTRODUCTION

Remediation of the Murchison, hereinafter Quail State No. 1, drilling pit is targeted to begin 28 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 Quail State No. 1 drilling pit.

Potential, temporary contamination from the Quail State 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 Quail State 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 70 feet and the well was dry upon completion.

Consequently, *insitu* disposal is herewith the preferred choice for the Quail State 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 Quail State No. 1 drilling pit shall meet the less than 100ppm of TPH, ND for BTEX and the less than 250 ppm 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 2,400 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 Quail State No. 1 drilling pit site located in Section 8, 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 Quail State 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 inistu 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 Quail State 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 Quail State No. 1 drilling pit site.

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

Sincerely,

Time folk

Tommy W. Folsom Production Manager

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

<u>District I</u> 1625 N. French Dr., Hobbs, NM 88240 District II 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

June 1, 2004

| 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 \( \subseteq \text{Closure of a pit or below-}\)   | grade tank X  |
|---|--|---|
| Operator: Murchison Oil and Gas, inc.  Telepho  | ne: 505-628-3932 e-mail address: tom   | myfolsom@valornet.@MECEIVED   |
| Address: PO Box 627, 406 N. Guadalupe, Suite B, Carlsbad, NM 882  |  |   |
| Facility or well name: Quail State Unit No. 1 API #: 30-01:   |  | JUL 1 8 2006<br>L, 660' FEL   |
| •   | de N Longitude W NAD: 192  | 7   1983  |
| Surface Owner: State X  |  |   |
| Pit   | Below-grade tank N/A   |   |
| Type: Drilling X  | Volume: N/A bbl Type of fluid: N/A   |   |
| Lined X   | Construction material: N/A   |   |
| Liner type: Synthetic X Thickness: 12ml HDPE Liner  | Double-walled, with leak detection?  | explain why not.  |
| Pit Volume: 2400 bbl. (Approximately)   |  |   |
| Depth to ground water (vertical distance from bottom of pit to seasonal   | Less than 50 feet  | (20 points)   |
| high water elevation of groundwater.) Groundwater well survey   | 50 feet or more, but less than 100 feet  | (10 points) <b>0 pts.</b>   |
| data to total depth of well at 70 feet indicates no water.  | 100 feet or more   | (0 points)  |
| Wellhead protection area: (Less than 200 feet from a private domestic   | Yes  | (20 points)   |
| water source, or less than 1000 feet from all other water sources.)   | No   | (0 points) <b>0 pts.</b>  |
|   | 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) <b>0 pts.</b>   |
| irrigation canals, ditches, and perennial and ephemeral watercourses.)  | 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 piremediation activity (final report). (2) Indicate disposal location: Insit below ground surface ft. and attach sample results. (5) Attach soil samp Additional Comments: Please refer to the attached letter for detailed groundwater survey well. For purposes of continuity, all materials | u. If offsite, name of facility: N/A (4) Groundwarder results and a diagram of sample locations and excursions are considered as a constant of the constant of | exter encountered: No X Yes If yes, show depth<br>exactions.  The location diagram and well log record of |
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|   |  |   |
| I hereby certify that the information above is true and complete to the be-<br>been/will be constructed or closed according to NMOCD guidelines $\mathbf{X}$ , a  |  |   |
| Date: 21 June 2006  | 1 101  |   |
| Printed Name/Title: Tommy W. Folsom, Production Manager   | Signature / Work   |   |
| Your certification and NMOCD approval of this application/closure does otherwise endanger public health or the environment. Nor does it relieve regulations.  |  |   |
| Approval:   | 000  | AUG 0 3 2006  |
| Printed Name/Title:   | Signature  | Date:   |
|   | ale M  |   |

File Number:

## NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

JUL 1 8 2006

### 9. LOG OF HOLE - Quail State Com. #1

| Depth in    | feet<br>To  | Thickness<br>in feet | Color and Type of Material Encountered   |
|-------------|-------------|----------------------|--|
| 0.0         | 3.0         | 3.0                  | Reddish brown sandy clay.  |
| 3.0         | 8.0         | 5.0                  | Reddish brown sand w/limestone gravel.   |
| 8.0         | 12.0        | 4.0                  | Limestone.   |
| 12.0        | 16.0        | 4.0                  | Reddish brown shale.   |
| 16.0        | 20.0        | 4.0                  | Light reddish brown shale & gray shale.  |
| 20.0        | 40.0        | 20.0                 | Reddish brown silty shale.   |
| 40.0        | 45.0        | 5.0                  | Pinkish brown silty shale.   |
| 45.0        | 47.0        | 2.0                  | Limestone.   |
| 47.0        | 54.0        | 7.0                  | Reddish brown silty shale.   |
| 54.0        | 57.0        | 3.0                  | Limestone w/shale thin layers.   |
| 57.0        | 62.0        | 5.0                  | Reddish brown shale.   |
| 62.0        | 64.0        | 2.0                  | Limestone.   |
| 64.0        | 66.0        | 2.0                  | Reddish brown shale.   |
| 66.0        | 68.0        | 2.0                  | Limestone.   |
| 68.0        | 70.0        | 2.0                  | Reddish brown shale.   |
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# NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

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