

RECEIVED

JUL 18 2006

UCC-ARTESIA

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

30-015-34206

26 May 2006

Mr. Van Barton
OIL CONSERVATION DIVISION
1301 West Grand Avenue
Artesia, NM 88210

Re: Mud Cat State Com. No. 1 Amended Form C-144

Dear Mr. Barton:

Enclosed please find the following documents for your review:

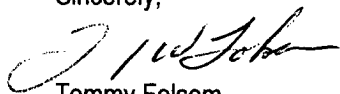
1. Amended Form C-144
2. Well Record of Groundwater Elevation Survey
3. Insitu Pit Solidification Procedure

Pursuant to our meeting of 04 April 2006, Murchison Oil and Gas, Inc. herewith submits the groundwater elevation survey for the Mud Cat State Com. No. 1 completed on 18 May 2006 for the purpose of determining the vertical distance from the bottom of the pit to the seasonal high water elevation of groundwater. White Drilling Company, Inc. conducted the well boring and determined depth to water upon completion of the well to be at 42.0 feet. Subsequently, the survey well has been plugged and abandoned.

Due to the presence of groundwater at the above cited elevation (see attached well record), Murchison Oil and Gas, Inc. now propose to implement a solidification process utilizing Certified Kiln Dust (CKD) and dispose of the drilling fines *insitu*. The process utilized in this disposal method is attached. The *insitu* pit containing the solidified material will be lined with 12 ml and capped with 20 ml HDPE liner. All other applicable actions associated with the closure of the Mud Cat State Com. No. 1 as delineated in the original closure plan pursuant to the State of New Mexico, OCD Rule 50 shall remain. Form C-144 has also been amended to reflect this particular data. Please review your recent decision regarding the disposal disposition for the Mud Cat State Com. No. 1 based on the above information.

Murchison Oil and Gas, Inc. hereby requests approval for CKD solidification with *insitu* disposal on location. Should you have questions please contact me at 505-706-0667. Thank you for your consideration.

Sincerely,



Tommy Folsom
Production Manager

Enclosed: Amended Closure Plan, Amended C-144, Groundwater Survey Well Data, CKD Process

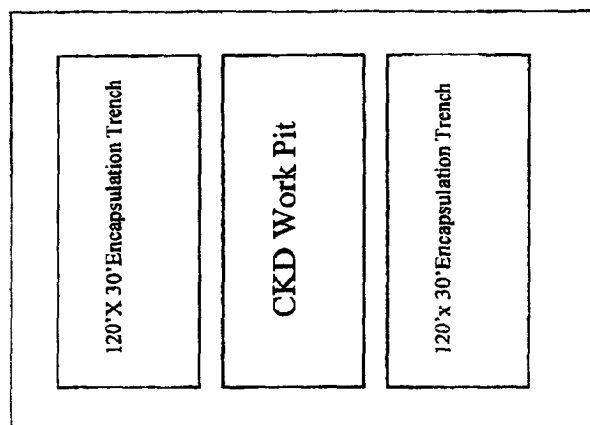
DESERT OILFIELD CONSTRUCTION INC.**Reserve Pit Solidification Procedure**

RECEIVED

JUL 18 2006

OULDAIR

1. Diagram of deep burial trench(s) is provided with application for closure (form C-144)



Reserve pit 150' x 150'

2. **Solidification of Cuttings:**

(A) The cuttings will be mixed with a track hoe. Contents will be lifted and dropped so as to create a stirring process. This process will continue until CKD and pit contents are thoroughly bonded.

(B) The solidification material will be Cement Kiln Dust (CKD).

(C) CKD to pit contents ratio will be 1 yard of pit contents to 240 lbs. of CKD or 1,000 cubic yards of pit contents to 120 tons of CKD. Pit contents will be measured to determine actual volume (length x width x depth /27). CKD is weighed and delivered to the site in 40,000 lb increments.

A 1,200 cubic yard work pit will be constructed inside the original reserve pit beside the encapsulation /solidification trench. One thousand cubic yards of pit contents will be placed in the work trench along with six 20 ton loads of CKD to begin mixing process.

(D) Fresh water may be introduced to initiate the bonding process of CKD and pit contents.

(E) In order to assure proper mixing, all CKD is precisely weighed before delivery and pit construction is measured to pre-determined need depending on exact volume of pit contents.

3. Each stage being mixed will be sampled prior to transferring the slurry to the deep trench as follows:

(A) One sample of the slurry will be taken at the beginning of the transference and stored in a closed container.

- (B) One sample of the slurry will be taken at the beginning of the transference and stored in an open container.
 - (C) One sample of the slurry will be taken at the end of the transference and stored in a closed container.
 - (D) One sample of the slurry will be taken at the end of the transference and stored in an open container.
4. All samples will be stored in environmentally approved containers.
 5. All samples and associated paperwork will be delivered to the OCD office within 3 working days of closure.

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

RECEIVED

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 ☒

JUL 18 2006

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

Elevation: 3,579'

Facility or well name: Mudcat State Com. No. 1 API #: 30-015-34206 U/L or Qtr/Qtr Lot P Sec 11 T17S R28E, 1,450 FSL, 1,620 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: 2400 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.

RECEIVED
JUN 14 2006
N.M. STATE

Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of groundwater.) See bore drilling results attached.	Less than 50 feet	(20 points)	20 pts.
	50 feet or more, but less than 100 feet	(10 points)	
	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 X	(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)	10 pts.
	1000 feet or more	(0 points)	
	Ranking Score (Total Points)		30 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 before and after remediation activity. (2) Indicate disposal location: CKD solidification insitu on location. If offsite, name of facility: N/A (4) Groundwater encountered: No Yes X
If yes, show depth below ground surface 42 ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments: Please refer to attached survey well record of groundwater elevation in the immediate vicinity. Operator now proposes to implement a CKD solidification process and dispose of it insitu on location.

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: 07 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

AUG 03 2006
Date:

RECEIVED

JUL 18 2006

MUDCAT STATE COM.

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORDRECEIVED
JUL 18 2006
MUDCAT STATE COM.

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: 11 Township: 17S Range: 28E 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 50 m 46.0 s Longitude: 104 d 08 m 29.8 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: 1300' FSL and 810' FEL/API #30-015-34206

H. Give State Engineer File Number if existing well: _____

I. On land owned by (required): Murchison Oil and Gas, Inc. - Mudcat State 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 Mudcat State 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: 60.0 ft.;
Completed well is: shallow (shallow, artesian);
Depth to water upon completion of well: 42.0 ft.

File Number: _____

Form: wr-20

page 1 of 4

Trn Number: _____

File Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA - Mudcat State Com. #1

Depth in Feet		Thickness	Description of	Estimated Yield
From	To	in feet	water-bearing formation	(GPM)
42.0	56.0	14.0	Reddish brown sandy clay w/limestone	

6. RECORD OF CASING

Diameter	Pounds	Threads	Depth in Feet		Length	Type of Shoe	Perforations	
(inches)	per ft.	per in.	Top	Bottom	(feet)		From	To

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	60.0	17 sacks bentonite pellets
3			
4			
5			

File Number: _____ Trn Number: _____

Form: wr-20 page 2 of 4

OCU-ARTESIA

RECEIVED
JUN 14 1966
U.S. AIR FORCE

