JUL 1 8 2006

ODD-NATESIA

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

26 June 2006

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

Re: Puma 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", Puma No. 1 drilling pit (API No. 30-015-34461) located in U/L B S11 T17S, R28E of Eddy County, New Mexico.

Remediation of the Murchison, hereinafter Puma No. 1, drilling pit is targeted to begin 30 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 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 Puma No. 1 drilling pit.

Potential, temporary contamination from the Puma 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 Puma 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 57.0 feet and depth to water upon completion at 54.9 feet. Murchison Oil and Gas, Inc. has elected to use Certified Kiln Dust (CKD) solidification depositing the material into a 12 ml HDPE lined insitu pit on location capped with a 20 ml HDPE liner. The process utilized in this disposal method is attached.

Murchison intends to engage in CKD solidification, *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 Puma 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.

Backfilling of the Puma 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.

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, Groundwater Survey Well Data, CKD Process

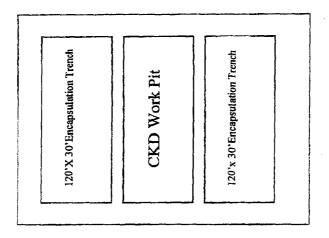
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## DESERT OILFIELD CONSTRUCTION INC.

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Reserve Pit Solidification Procedure

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



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 vards 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 <u>closed</u> 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 Pio Progras Read Artes, NM 87410 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.

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

	y-Grade Tank Registration or Closure ank covered by a "general plan"? Yes ☐ No ☐	
	r below-grade tank \( \subseteq \text{Closure of a pit or below-grade} \)	de tank X
Operator: MURCHISON OIL AND GAS, INC.  Telephone	: 505-628-3932 e-mail address: tommyf	olsom@valornet.com RECEIVED
Address: PO Box 627, 406 N. Guadalupe, Suite B, Carlsbad, NM 8822	1-0627 Elevation: 3,579'	MEGELVED
Facility or well name: Puma No. 1 API #: 30-015-34461	U/L B Sec 14 T17S R28E, 660' FNL, 1,980' FEL	JUL 1 8 2006
County: <b>Eddy</b> Latitude	N Longitude W NAD: 1927 [	1983 - OOU ANTEON
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?	plain why not.
Pit Volume: 2500 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 elevation well shows	50 feet or more, but less than 100 feet	(10 points) <b>0 pts.</b>
groundwater at 54.9 feet	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 X	(0 points) 0 pts.
	Less than 200 feet	(20 points)
1	200 feet or more, but less than 1000 feet	(10 points) / 0 pts.
Ilhead protection area: (Less than 200 feet from a private domestic	1000 feet or more	(0 points)
	Ranking Score (Total Points)	/0 pts.
	The state of the s	-
	Di-Mal	
If this is a pit closure: (1) Attach a diagram of the facility showing the pit's	•	
remediation activity (in final report). (2) Indicate disposal location: CKI		•
encountered: No Yes X If yes, show depth below ground surface 54.9 ft.	and attach sample results. (5) Attach soil sample res	uits and a diagram of sample locations and
excavations.	ours Plan" information divital photos completes	
Additional Comments: Please refer to attached letter for detailed "Close		•
groundwater elevation in the immediate vicinity. Operator proposes	·	spose of it insitu on location. For purposes
of continuity, all materials shall be submitted as part of the final close	иге герогт.	
I hereby certify that the information above is true and complete to the best been/will be constructed or closed according to NMOCD guidelines X, a		
	general permit, or an (attached) attendance GOD	approved plan
Date: 26 June 2006	Signature Justob	
· · · · · · · · · · · · · · · · · · ·		
Your certification and NMOCD approval of this application/closure does not otherwise endanger public health or the environment. Nor does it relieve the regulations.	not renewe the operator of hability should the contents the operator of its responsibility for compliance with a	of the pit or tank contaminate groundwater or ny other federal, state, or local laws and/or
Approval:	/00	AUG 0 3 2006
Printed Name/Title:	Signature CO	Date:

File	Number:	
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### NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

RECEIVED

11 1 Q 200C

	JUL 1 8 2006
1. OWNER OF WELL	OCD-ARTROIN
Name: Murchison Oil and Gas, Inc.	
Contact: Tommy Folsom Address: P.O. Box 627	Home Phone:
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 k	known)
A1/41/4 Section: 14	
B. X =feet, Y =	
Zone in the U.S.G.S. Quad Map	Grant.
U.S.G.S. Quad Map	
C. Latitude: <u>32</u> d <u>50</u> m <u>27.7</u> s Long:	
D. East (m), North (m), I	UTM Zone 13, NAD (27 or 83)
E. Tract No, Map No of the	Hydrographic Survey
F. Lot No, Block Noof Unit/Trac	of the
Subdivision recorded i	
H. Give State Engineer File Number if existing we I. On land owned by (required): Murchison Oil and 3. DRILLING CONTRACTOR	
License Number: WD-1456	
Name: White Drilling Company, Inc.	
Agent: John W. White	Home Phone: 325-893-2950
Mailing Address: P.O. Box 906	<del></del>
City: Clyde	State: TX Zip: 79510
4. DRILLING RECORD Puma #1  Drilling began: 5/08/06 ; Completed: 5/09/06  Size of hole: 6 1/8 in.; Total depth of well: 57  Completed well is: shallow (shallow, and Depth to water upon completion of well: 54.9	7.0 ft.; rtesian);
File Number:	Trn Number:
Form: wr-20 page 1 of 4	Tan Manusca.

File	Number:	

# NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

<del>-</del>		water-	Description of water-bearing formation Reddish brown clayey sand				Estimated Yield (GPM)	
. RECORD	OF CASI	:NG						
	er Pour s) per	nds Threads ft. per in.	Depth Top	in Feet Bottom	Length (feet)	Туре о		Perforations From To
. RECORD	OF MUDI	OING AND CEM	ENTING					
Depth From		Hole S Diameter o		Cubic Fee of Cement	_	Method c	f Placem	ent
			<del>- 1</del>					
. PLUGGII	NG RECOR							
Pluggir	ng Contra	ctor: White Dr	illing Co	mpany, Inc.				
		ress: P.O. Box						
		thod: Hand Mix gged: 5/09/06	<u>K</u>					
Date	MEII PIU	gged: <u>3/09/00</u>						
Date								
	approve	d by:		State E	ngineer Re	nresent	ative	
	g approve	d by:		State E	ngineer Re	presenta	ative	
	approve	d by:		State E	ngineer Re	presenta	ative	
		d by:				present	ative	
	No	. Depth in Fee Top Botto	et Cubi m	ic Feet of (		present	ative	
	No 1 <b>0.0</b>	. Depth in Fee Top Botto ) 10.0	et Cubi m <b>2.30</b>	ic Feet of C	Cement	present	ative	
	No 1 0.0 2 10	. Depth in Fee Top Botto 1 10.0 .0 57.0	et Cubi m 2.30 16 s	ic Feet of C 4 cement acks bentoni	cement ite pellets	presenta	ative	
	1 0.0 2 10 3	. Depth in Fee Top Botto 0 10.0 .0 57.0	et Cubi m 2.30 16 s	Lc Feet of C 4 cement acks bentoni	Cement ite pellets	presenta	ative	
	No 1 0.0 2 10	. Depth in Fee Top Botto  10.0 57.0	et Cubi m 	Lo Feet of C 4 cement acks bentoni	cement ite pellets	present	ative	
	No 1 <u>0.0</u> 2 <u>10</u> 3	. Depth in Fee Top Botto 0 10.0 .0 57.0	et Cubi m 	Lo Feet of C 4 cement acks bentoni	cement ite pellets	presenta	ative	
	No 1 <u>0.0</u> 2 <u>10</u> 3	. Depth in Fee Top Botto  10.0 57.0	et Cubi m 	Lo Feet of C 4 cement acks bentoni	cement ite pellets	present	ative	
	No 1 <u>0.0</u> 2 <u>10</u> 3	. Depth in Fee Top Botto  10.0 57.0	et Cubi m 	Lo Feet of C 4 cement acks bentoni	cement ite pellets	presenta	ative	
	No 1 0.0 2 10 3 4 5	. Depth in Fee Top Botto  10.0 57.0	et Cubi m 	Lo Feet of C 4 cement acks bentoni	cement ite pellets	present	ative	

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## NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

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JUL 1 8 2006

### 9.LOG OF HOLE - Puma #1

UCU-MATERIA

	DLE - PUIIIA		TERM
Depth i		Thickness	Color and Type of Material Encountered
From	To	in feet	
0.0	5.0	5.0	Caliche.
5.0	13.0	8.0	Light brown sand & caliche.
13.0	15.0	2.0	Tan sand & caliche.
15.0	26.0	11.0	Reddish brown sand & caliche.
26.0	30.0	4.0	Reddish brown sand & limestone gravel.
30.0	38.0	8.0	Reddish brown silty shale.
38.0	40.0	2.0	Gray silty shale.
40.0	50.0	10.0	Gray limestone.
50.0	53.0	3.0	Gray limestone & thin layers of clay.
53.0	57.0	4.0	Reddish brown clayey sand. Wet @ 55.0
***************************************	-		
- 14.			
-			

File	Number:		Trn Number:	
	Form. wr-20	mage 3 of 4		

File	Number:		

## NEW MEXICO OFFICE OF THE STATE ENGINEER WELL RECORD

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	<del></del>	<u>.</u>				
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11010.		$\sim$			-11	
				<del></del>	5/18/06 m/dd/year)	
		Driller		( π	m/dd/year)	
				•		
====	=======	========		======	=======================================	====
		FOR	STATE ENG	SINEER US	SE ONLY	
Quad	; FWL _	;FSL	;Use	;Loca	tion No.	
e Numbe	r.				Trn Number.	
	n: wr-20		nage 4 of	4	Trn Number:	