2 -	•						
	RECEIVED 1301	il Cons. DIV-D	ist 2				
•	Form 3160-3 NOV 0 9 2005 Arte.	NOV 0 9 2005 Artesia, NW 88210					
	DEPARTMENT OF THE	INTERIOR	5. Lease Serial NM 344				
	BUREAU OF LAND MAI APPLICATION FOR PERMIT TO		6. If Indian, Allotee or Tribe Name				
	la. Type of work: DRILL REENT	7 If Unit or CA	7 If Unit or CA Agreement, Name and No.				
	lb. Type of Well: Oil Well Gas Well Other	Single Zone Mult	iple Zone 8. Lease Name a MUSTAN	and Well No. NG FED COM #1			
	2. Name of Operator MURCHISON OIL & GAS, INC.	15363	9. API Well Na. 30 - 0	15-3:4475			
	3a. Address 1100 MIRA VISTA BLVD. PLANO, TX. 75093-4698	3b. Phone No. (include area code) (972) 931-0700	10. Field and Pool				
	4. Location of Well (Report location clearly and in accordance with a At surface 946 5660 ; FNL & 990' FEL flore a	my state requirements.") Ettached SN date 7/28/0	11. Sec., T. R. M.	or Blk and Survey or Area			
	At proposed prod. zone 14. Distance in miles and direction from nearest town or post office* 21 MILES SE OF ARTESIA, NM.	(<u>2</u>	AH 12. County or Pari EDDY				
	15. Distance from proposed* location to nearest property or lease line, fr. (Also to nearest drig, unit line, if any) 660'	16. No. of acres in lease 240	17. Spacing Unit dedicated to t 320 AC.	this well			
	18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 11400'	20. BLM/BIA Bond No. on file				
	21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3507' GL	22. Approximate date work will sta 10/01/2005	art* 23. Estimated dur 40 DAY				
		······································					
	 The following, completed in accordance with the requirements of Onsho Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office). 	4. Bond to cover t Item 20 above). Lands, the 5. Operator certific	he operations unless covered by cation specific information and/or plan				
	25. Signature Michael augusty	Name (Printed/Typed) MICHAEL S. DAU	· · · · · · · · · · · · · · · · · · ·	Date 06/29/2005			
	Title VICE PRESIDENT OPERATIONS						
	Approved by (Signative James Stovall	Name (Printed/Typed)	ames Stovall	Date NOV 0 8 2005			
Ν., 4	Title FIELD MANAGER Application approval does not warrant or certify that the applicant hold		ONHLOBAD FIELD OFFICE				
pa	Application approval does not warrant or certify that the applicant hold conduct operations thereon. Conditions of approval, if any, are attached.	ts in the subject lease which would PPROVAL FC					
	Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.						
	*(Instructions on page 2)	Approval Subject to General Requirements And Special Stipulations					
	JUN 30'015		NTTACHED Vitness Surface	Casing			
	BLM ROSWELL, NM		Capitan Controller	-			

•										
* *					State	of Ne	w Mexico			
V DISTRICT I 1625 N. FRENCH DR., HOBBS, NM 86240			Energy, Minerals and Natural Resources Department Form C~102							
DISTRICT II			OIL	CON	SERV	ATI	ON DIVIS	ION Submi	Revised J t to Appropriate D	UNE 10, 2003 istrict Office
1301 W. GRAND AVENUE, ARTESIA, NM 88210 1220 SOUTH ST. FRANCIS DR.							e – 4 Copies e – 3 Copies			
DISTRICT III 1000 Rio Brazos R	d., Aztec, N	M 87410		Santa	Fe, N	ew M	exico 87505			
DISTRICT IV 1220 S. ST. FRANCIS DI		NM 87505			AND	ACREA	GE DEDICATI		🗆 AMENDI	ED REPORT
API	Number		Pool Code TURKEY TRACK		Pool Name MORROW					
Property Code			Property Name			Well Number				
OGRID No	•		MUSTANG FEDERAL COM.			<u> </u>	Elevation			
	015363		MURCHISON OIL & GAS, INC.					3496'		
					Surfa	ce Loca	ation			
UL or lot No.	Section	Township	Range	Lot Idn	Feet fro		North/South line	Feet from the	East/West line	County
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							rent From Sur			
UL or lot No.	Section	Township	Range	Lot Idn	Feet fro	om the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint o	r Infill Co	nsolidation (Code Or	der No.					
320	INF	ILL								
NO ALLO	WABLE W	ILL BE AS	SSIGNED	TO THIS	COMPLE	TION U	NTIL ALL INTER	ESTS HAVE BE	EN CONSOLIDA	TED
		ORAN	ION-STAN	DARD UN	IT HAS	BEEN	APPROVED BY 1	THE DIVISION		
								1 OPERATO	R CERTIFICAT	ION
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				<u></u>	<u> </u>	-3495.0'-	<u>600'</u>	Signature	1.5 0 100-1-0	
						3453.0	5491.2		S. DAUGHERT	Y
	1				i.	· •		Printed Name V.P. OPE		
			SPAC	NE UN	IT			Title	MITONS	
	SPACING UNIT				7/28 Date	/2005				
	:				<u></u>			SURVEYO	R CERTIFICAT	ION
	1	GE	EODETIC C		ES				that the well location	
			NAD 2	/ NME				actual surveys	s plotted from field made by me or	under my
	1		Y=6321 X=5797						that the same is best of my belief.	
LAT.=32*44'14.91" N JULY 14, 2005										
			AT.=32 44 NG.=104*(-			Date Surveyed Signature & S		DEL
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			í			1		Certificato No.	GARY KROSOF	12641
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LOCATION VERIFICATION MAP



SCALE: 1'' = 2000'



CONTOUR INTERVAL: ILLINOIS CAMP NE, N.M. - 10'



VIA FEDERAL EXPRESS

June 29, 2005

United States Department of the Interior Bureau of Land Management Roswell District Office 2909 West Second Street Roswell, New Mexico 88201 Attn: Linda Askawik

Re: Application for Permit to Drill Murchison Oil & Gas, Inc. Mustang Federal Com #1 Eddy County, New Mexico Lease No. NM-34461

Gentlemen:

Murchison Oil & Gas, Inc. "MOGI" respectfully requests permission to drill our Mustang Federal Com #1 located 660' FNL and 990' FEL of Section 21, T18S, R29E, Eddy County, New Mexico, Federal Lease No. NM-34461. The proposed well will be drilled to a TD of approximately 11400' (TVD). The location and work area have been staked. It is approximately 21 miles SE of Artesia, NM.

In accordance with requirements stipulated in Federal Onshore Oil and Gas Order No. 1 under 43 CFR 3162.1, our Application for Permission to Drill and supporting evidence is hereby submitted.

- I. Application for Permit to Drill:
 - 1. Form 3160-3, Application for Permit to Drill.
 - 2. Form C-102 Location and Acreage Dedication Plat certified by Gary Eidson Registered Land Surveyor No. 12641 in the State of New Mexico, dated 6/22/2005.
 - 3. The elevation of the unprepared ground is 3507 feet above sea level.
 - 4. The geologic name of the surface formation is Permian Rustler.
 - 5. Rotary drilling equipment will be utilized to drill the well to TD 11400' (TVD), and run casing. This equipment will then be rigged down and the well will be completed with a pulling unit.
 - 6. Proposed total depth is 11400' TVD.

7. Estimated tops of important geologic markers. (KDB EST @ 3524')

Yates	1040' TVD
Queen	1985' TVD
Grayburg	2332' TVD
San Andres	2748' TVD
First Bone Spring Sd	6536' TVD
Second Bone Spring Sd	7596' TVD
Third Bone Spring Sd	8238' TVD
Wolfcamp	8539' TVD
Cisco	9663' TVD
Canyon	9887' TVD
Strawn	10086' TVD
Atoka	10432' TVD
Atoka "Pay"	10602' TVD
Morrow "A"	11077' TVD
Morrow "C"	11202' TVD
Morrow "D"	11310' TVD
Base Penn.	11334' TVD
Total Depth	11400'

8. Estimated depths at which anticipated water, oil, gas or other mineral bearing formations are expected to be encountered:

Primary Objective:	Morrow	11077' TVD
Secondary Objectives:	Strawn	10086' TVD

9. The proposed casing program is as follows:

See CUA

Surface: 13-3/8" OD 48# H40 ST&C casing set at 490

1st Intermediate: 9-5/8" OD 47# N80 ST&C casing from 0 to 3000'

Production Casing: 5-1/2" OD 17# S-95 & L-80 LT&C from surface to 11400'

- 10. Casing setting depth and cementing program:
 - A. 13-3/8" surface casing set at 400', or the top of the Rustler Anhydrite, in 17-1/2" hole. Circulate cement with 350 sx of Class C cement with additives.

If cement does not circulate, a temperature survey will be run to find the TOC and then finish cementing to surface through 1" using Class C with 2% CaCl₂.

B. 9-5/8" 1st intermediate casing set at 3000' in 12-1/4" hole. Circulate cement with 1000 sxs Class C with additives. If hole conditions dictate, a DV tool may be run to ensure that the intermediate string is cemented to surface.

If cement does not circulate, a temperature survey will be run to find the TOC and then finish cementing to surface through 1" using Class C with 2% CaCl₂.

- C. 5-1/2" Production Casing will be set if warranted from surface to TD in a 8-3/4" hole. Cement with 600 sx of Class "H" with additives.
- 11. Pressure Control Equipment
 - 0' 400' None
 - 400' 3000' 13-3/8" 3000# ram type preventers with one set blind rams and one set pipe rams.
 - 3000' 11400' 11" 5000# ram type preventers with one set blind rams and one set pipe rams and a 3000# annular type preventer. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system. Rotating head below 6000'. See attached Sketch of BOP Equipment.

A kelly cock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor.

After setting the 9-5/8" casing, the blowout preventers and related control equipment shall be pressure tested to 5000 psi and 3000 psi respectively. Any equipment failing to test satisfactorily shall be repaired or replaced. Results of the BOP test will be recorded in the Driller's Log.

The BOP's will be maintained ready for use until drilling operations are completed.

BOP drills will be conducted as necessary to assure that equipment is operational and each crew is properly trained to carry out emergency duties.

Accumulator shall maintain a pressure capacity reserve at all times to provide for the close-open-

close sequence of the blind and pipe rams of the hydraulic preventers.

- 12. Mud Program:
 - 0 400' Fresh water/native mud. Wt. 8.4 ppg, vis 32-34 sec, Lime for pH control. Paper for seepage. Lost circulation may be encountered.
 - 400' 3000' Fresh water 8.4 ppg, vis 28-29 sec. Add 10# brine as make-up to avoid excessive washouts in salt stringers. Caustic for pH control. Paper for seepage. Lost circulation may be encountered.
 - 3000' 8500' Fresh water. Wt. 8.4 ppg, vis 28-29 sec, caustic for pH control. Paper for seepage.
 - 8500' 10400' Cut brine. Wt. 9.2 9.4 ppg, vis 28-29 sec, caustic for pH control.

10400' – 11400' Mud up with an XCD Polymer mud system with the following characteristics: Wt. 10.0, Vis 32-40 sec, WL 6-8cc.

Mud system monitoring equipment with derrick floor indicators and visual/audio alarms shall be installed and operative prior to drilling into the Wolfcamp formation. This equipment will remain in use until the production casing is run and cemented. Monitoring equipment shall consist of the following:

- 1) A recording pit level indicator.
- 2) A pit volume totalizer.
- 3) A flowline sensor.
- 13. Testing, Logging and Coring Program.
 - A. Testing program: None.
 - B. Mud logging program: Two man unit from 3000' to TD.
 - C. Electric logging program: CNL/LDT/CAL/GR, DLL/CAL/GR.
 - D. Coring program: Possible sidewall rotary cores.

- 14. No abnormal temperatures, or H2S gas are anticipated. Adequate flare lines will be installed off the mud/gas separator where gas may be flared safely.
- 15. Anticipated starting date is October 1, 2005. It should take approximately 40 days to drill the well and another 10 days to complete.
- 16. A statement accepting responsibility for operations is attached.
- 17. The Multi-Point Surface Use & Operation Plan is attached.
- 18. If the Bureau of Land Management needs additional information to evaluate this application, please advise.

Very truly yours, livna W

Michael S. Daugherty / Vice President, Operations

MSD/cb/MustangFdCm#1-BLM-APTD

Attachments

UNITED STATES DEPARTMENT OF THE INTERIOR Bureau of Land Management Roswell Field Office 2909 West Second Street Roswell, New Mexico 88201-1287

Statement Accepting Responsibility for Operations

Operator Name: Street or Box: City, State: Zip Code: MURCHISON OIL & GAS, INC. 1100 MIRA VISTA BLVD. PLANO, TX. 75093-4698

The undersigned accepts all applicable terms, conditions, stipulations, and restrictions concerning operations conducted on the leased land or portion thereof, as described below:

Lease No.: NM-34461

Legal Description of Land:

NE/4 SECTION 21, T18S, R29E

Formation (s) (if applicable): FROM THE SURFACE DOWN TO 11400'

Bond Coverage (State if individually bonded or another's bond): PERSONAL STATEWIDE BOND

Authorized Signature:

BLM Bond File No.: NM2163

MURCHISON OIL & GAS, INC.

Title: MICHAEL S. DAUGHERTY VICE PRESIDENT OPERATIONS

Date: 6/29/2005

Flowline Fill Line. 0 0 õ õ O 0 Q lly dril 3000 PSI Pipe RAMS 5000 PJI <u>.</u>, Blind RAMS 5000 PSE Chok. DNILING Speel MANI Xill Lint •..• 13 5/4" 3000 psi WP Flan Slip- On CASING HEAd MURCHISON OIL & GAS, INC. MUSTANG FEDERAL COM #1 660' FNL & 990' FEL EDDY CO., NM.



660' FNL & 990' FEL EDDY CO., NM.

CONDITIONS OF APPROVAL - DRILLING

 Operator's Name:
 Murchison Oil & Gas, Inc.

 Well Name & No.
 Mustang Federal Com #1

 Location:
 JLO

 Edd
 FNL, 990' FEL, Section 21, T. 18 S., R. 29 E., Eddy County, New Mexico

 Lease:
 LUC

 SM difference
 Sale

 I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County in sufficient time for a representative to witness:

- A. Well spud
- B. Cementing casing: 13-3/8 inch 9-5/8 inch 5-1/2 inch liner
- C. BOP tests

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

3. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.

4. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

5. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.

II. CASING:

1. The <u>13-3/8 inch</u> surface casing shall be set at <u>approximately 250 feet or 25 feet into the top of the</u> <u>Rustler and circulate cement to the surface</u>. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

2. The minimum required fill of cement behind the <u>9-5/8</u> inch first intermediate casing is to be circulated to the surface.

3. The minimum required fill of cement behind the <u>5-1/2</u> inch production casing is to reach at least 500 feet above the top of the uppermost hydrocarbon productive interval.

III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the <u>13-3/8</u> inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 3000 psi.

3. Minimum working pressure of the blowout preventer and related equipment (BOPE) below the 9-5/8 inch

intermediate casing shall be 5000 psi.

- 5. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
- The tests shall be done by an independent service company.
- The results of the test shall be reported to the appropriate BLM office.
- Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
- Testing must be done in a safe workman-like manner. Hard line connections shall be required.

IV. DRILLING MUD:

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Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

- Recording pit level indicator to indicate volume gains and losses.
- Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips.
- Flow-sensor on the flow-line to warn of abnormal mud returns from the well.

07/07/5004 acs

MURCHISON OIL & GAS, INC. MURCHISON PROPERTIES, INC.

VIA CERTIFIED MAIL

December 5, 2005

State of New Mexico Oil Conservation Division – District II 1301 W. Grand Avenue Artesia, NM. 88210 DEC _ 9 2005

RE: NMOCD Rule 19.15.3.104 Mustang Fed Com #1 Eddy Co., NM.

Ladies and Gentlemen:

Murchison Oil and Gas, Inc. ("MOGI") in compliance with NMOCD Rule 19.15.3.104(E) 2 requests that it be permitted to operate the Mustang Fed Com #1 to be located 900' FNL and 990' FEL of Section 21, T18S, R29E in Eddy Co., NM. The N/2 of Section 21 is the designated Proration Unit and currently has a producing well the Empire Federal 21A in the NW/4 which is operated by Sabre Operating Inc. MOGI has an agreement with Sabre granting it the right to operate the Mustang Fed Com #1. MOGI has already applied for an APD with the BLM and has received its approval. Please contact me if you need further information. Thank you for your assistance in this matter.

Very truly yours,

MURCHISON OIL & GAS, INC.

INMAUS I/UUG Michael S. Daugherty

Vice President Operations

MSD/ct/MustangFC#1-NMOCD-Rule104

1100 MIRA VISTA BLVD., PLANO, TX 75093-4698 PHONE (972) 931-0700 FAX (972) 931-0701

940-696-8070

2003

J.D. MURCHISON INTERESTS, INC.

MURCHISON OIL & GAS, INC. MURCHISON PROPERTIES, INC.

November 17, 2005

OPERATIONS SHARING AGREEMENT

Murchison Oil & Gas, Inc. (MOGI) and Sabre Operating Inc. hereby agree that MOGI may drill, complete, produce and otherwise operate the Mustang Federal Com #1 well at a location of 900' FNL & 990' FEL of Section 21, Township 18 South, Range 29 East, which is in the NE/4 of Section 21 of Eddy County, New Mexico. The proration unit for the Mustang Federal Com #1 will be the N/2 of Section 21.

Sabre Operating currently operates the Empire Federal 21A, API # 30015237760 located in the NW/4 of Section 21 which is in the proration unit of our Mustang well. The parties further agree that MOGI will spud its well prior to March 1, 2006 or this agreement is null and void.

AGREED by Ron Jackson on behalf of Sabre Operating Inc.

Title:

AGREED by Michael S. Daugherty on behalf of Murchison Oil & Gas, Inc.

Title: Vice President Operations

1100 MIRA VISTA BLVD., PLANO, TX 75093-4698 PHONE (972) 931-0700 FAX (972) 931-0701

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