

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-8161 Fax:(575) 393-0720

District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720

District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170

District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form C-101
August 1, 2011
Permit 174127

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address MURCHISON OIL & GAS INC 1100 Mira Vista Blvd. Plano, TX 75093		2. OGRID Number 15363
4. Property Code 40159		3. API Number 30-025-41436
5. Property Name Bettis 20 State Com		6. Well No. 002H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
P	20	24S	33E	P	200	S	940	E	Lea

8. Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet From	N/S Line	Feet From	E/W Line	County
A	20	24S	33E	A	330	N	940	E	Lea

9. Pool Information

TRIPLE X;BONE SPRING, WEST	96674
----------------------------	-------

Additional Well Information

11. Work Type New Well	12. Well Type OIL	13. Cable/Rotary	14. Lease Type State	15. Ground Level Elevation 3531
16. Multiple N	17. Proposed Depth 15650	18. Formation Bone Spring	19. Contractor	20. Spud Date 4/15/2014
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

☐ We will be using a closed-loop system in lieu of lined pits

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surf	16	13.375	54.5	1200	600	0
Int1	12.25	9.625	40	5100	1700	0
Prod	8.5	7	26	10500	1000	4000
Liner1	6.125	4.5	11.6	15650	600	10400

Casing/Cement Program: Additional Comments

Cement with 100% excess and circulate to surface on surface and intermediate casing. Cement 100% excess on production casing to bring TOC to 4,000' MD. Cement liner with 25% excess to bring TOC to 10,400' MD.
--

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
Annular	5000	5000	Schaffer
Double Ram	5000	5000	Schaffer

23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify I have complied with 19.15.14.9 (A) NMAC <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input type="checkbox"/> if applicable. Signature: _____ Printed Name: Electronically filed by Michael Daugherty Title: COO Email Address: ccottrell@dmii.com Date: 9/30/2013	OIL CONSERVATION DIVISION Approved By: Paul Kautz Title: Geologist Approved Date: 10/4/2013 Conditions of Approval Attached
Phone: 972-931-0700	Expiration Date: 10/4/2015

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (505) 393-6161 Fax: (505) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone: (505) 748-1283 Fax: (505) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number		² Pool Code 96674	³ Pool Name Triple X; Bone Spring, West
⁴ Property Code	⁵ Property Name BETTIS 20 STATE COM		⁶ Well Number 2H
⁷ OGRID No. 15363	⁸ Operator Name MURCHISON OIL & GAS, INC.		⁹ Elevation 3531.1

¹⁰ Surface Location

U.L. or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
P	20	24 S	33 E		200	SOUTH	940	EAST	LEA

¹¹ Bottom Hole Location If Different From Surface

U.L. or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
A	20	24 S	33 E		330	NORTH	940	EAST	LEA

¹² Dedicated Acres 160	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
--------------------------------------	-------------------------------	----------------------------------	-------------------------

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

<p>N89°45'12"E 2643.92 FT</p> <p>NW CORNER SEC. 20 LAT. = 32°12'37.530"N LONG. = 103°36'10.354"W</p> <p>DNF</p> <p>NE CORNER SEC. 20 LAT. = 32°12'37.404"N LONG. = 103°35'08.838"W</p> <p>940'</p> <p>330'</p> <p>BOTTOM OF HOLE</p> <p>BOTTOM OF HOLE LAT. = 32°12'34.163"N LONG. = 103°35'19.777"W</p> <p>W QUARTER CORNER SEC. 20 LAT. = 32°12'11.408"N LONG. = 103°36'10.330"W</p> <p>E QUARTER CORNER SEC. 20 LAT. = 32°12'11.327"N LONG. = 103°35'08.807"W</p> <p>NOTE: LATITUDE AND LONGITUDE COORDINATES ARE SHOWN USING THE NORTH AMERICAN DATUM OF 1983 (NAD83). LISTED NEW MEXICO STATE PLANE EAST COORDINATES ARE GRID (NAD83). BASIS OF BEARING AND DISTANCES USED ARE NEW MEXICO STATE PLANE EAST COORDINATES MODIFIED TO THE SURFACE.</p> <p>BETTIS "20" STATE COM #2H ELEV. = 3531.1' LAT. = 32°11'47.195"N (NAD83) LONG. = 103°35'19.732"W</p> <p>SURFACE LOCATION</p> <p>200'</p> <p>940'</p> <p>SW CORNER SEC. 20 LAT. = 32°11'45.309"N LONG. = 103°36'10.293"W</p> <p>S QUARTER CORNER SEC. 20 LAT. = 32°11'45.238"N LONG. = 103°35'39.571"W</p> <p>SE CORNER SEC. 20 LAT. = 32°11'45.204"N LONG. = 103°35'08.794"W</p> <p>S89°45'52"W 2640.44 FT</p> <p>S89°40'45"W 2645.20 FT</p> <p>N00°26'01"W 2640.36 FT</p> <p>N00°27'28"W 2637.87 FT</p> <p>S00°25'16"E 2634.92 FT</p> <p>S00°25'22"E 2640.40 FT</p>		<p>¹⁷ OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest or to a voluntary pooling agreement or a compulsory pooling order heretofore entered in the division.</p> <p><i>Michael S. Daugherty</i> 9/30/13 Signature Date</p> <p>Michael S. Daugherty Printed Name</p> <p>mdaugherty@jdmii.com E-mail Address</p> <p>¹⁸ SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>SEPTEMBER 30, 2013 Date of Survey</p> <p><i>Frank J. Taramillo</i> Signature and Seal of Professional Surveyor</p> <p>Certificate Number: FRANK J. TARAMILLO, PLS 12797 SURVEY NO. 2317A</p>
---	--	--

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-8181 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-8178 Fax:(505) 334-8170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form APD Comments
Permit 174127

PERMIT COMMENTS

Operator Name and Address: MURCHISON OIL & GAS INC [15363] 1100 Mira Vista Blvd. Plano, TX 75093		API Number: 30-025-41436
		Well: Bettis 20 State Com #002H

Created By	Comment	Comment Date
------------	---------	--------------

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

Form APD Conditions
Permit 174127

PERMIT CONDITIONS OF APPROVAL

Operator Name and Address: MURCHISON OIL & GAS INC [15363] 1100 Mira Vista Blvd. Plano, TX 75093		API Number: 30-025-41436
		Well: Bettis 20 State Com #002H
OCD Reviewer	Condition	
pkautz	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string	
pkautz	Surface casing must be set 25' below top of Rustler Anhydrite in order to seal off protectable water	
DMULL	Will require a directional survey with the C-104	
DMULL	Pit construction and closure must satisfy all requirements of your approved plan, O.C.D. Rule 19.15.2.50, and the Pit and Below-Grade Tank Guidelines	