

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER

CONFIDENTIAL

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

2. Name of Operator **MALLON OIL COMPANY** *Black Hills*
Contact: ART CHILDERS
E-Mail: artchilder@bhep.com

3a. Address
350 INDIANA STREET, SUITE 400
GOLDEN, CO 80401

3b. Phone No. (include area code)
Ph: 505.382.9100

5. Lease Serial No.
MDA 701-98-0013

6. If Indian, Allottee or Tribe Name
JICARILLA APACHE

7. If Unit or CA Agreement, Name and No.

8. Lease Name and Well No.
JIC 29-02-17 43

9. API Well No.
3003929316

10. Field and Pool, or Exploratory
EAST BLANCO PICTURED CLIFFS

4. Location of Well (Report location clearly and in accordance with any State requirements.)

At surface **SWSE 640FSL 2230FEL**

At proposed prod. zone

11. Sec., T., R., M., or Blk. and Survey or Area

Sec 17 T29N R2W Mer NMP

14. Distance in miles and direction from nearest town or post office*
57 MILES EAST OF BLOOMFIELD, NM

12. County or Parish
RIO ARRIBA

13. State
NM

15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)
2230' - LEASE LINE

16. No. of Acres in Lease
10240.00

17. Spacing Unit dedicated to this well
160.00 SE/4

18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.
2800' - JIC 29-02-20 #1

19. Proposed Depth
4000 MD

20. BLM/BIA Bond No. on file
1318288

21. Elevations (Show whether DF, KB, RT, GL, etc.)
7200 GL

22. Approximate date work will start
08/12/2004

23. Estimated duration
45-60 DAYS

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature
(Electronic Submission)

Name (Printed/Typed)
KATHY L. SCHNEEBECK (AGENT) Ph: 303.820.4480

Date
07/13/2004

Title
AGENT

Approved by (Signature)

Name (Printed/Typed)

Date

Title

Office

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

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.

Additional Operator Remarks (see next page)

Electronic Submission #32961 verified by the BLM Well Information System
For MALLON OIL COMPANY, sent to the Rio Puerco
Committed to AFMSS for processing by ANGIE MEDINA-JONES on 07/16/2004 ()

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

DISTRICT I
1625 N. French Dr., Hobbs, N.M. 88240

DISTRICT II
811 South First, Artesia, N.M. 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 15, 2000

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-039-29316		*Pool Code 72400	*Pool Name E Blanco FC
*Property Code 27472	*Property Name JICARILLA 29-02-17		*Well Number 43
*GRID No. 013925	*Operator Name MALLON OIL CO.		*Elevation 7200'

10 Surface Location

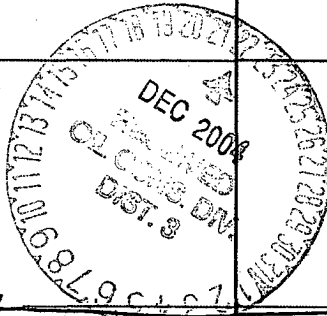
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	17	29-N	2-W		640	SOUTH	2230	EAST	RIO ARriba

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
12 Dedicated Acres					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

16

		SEC. CORNER FD. MKD STONE W/ P+C "LS 8894"	
		17	
LAT.=36-43-10 N. (NAD 83) LONG.=107-03-54 W (NAD 83)		2230'	
SEC. CORNER FD. MKD STONE W/ P+C "LS 8894"		SEC. CORNER FD. MKD STONE W/ P+C "LS 8894"	

17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Kathy L. Schneebeck
Signature

Kathy L. Schneebeck
Printed Name

Agent for Mallon Oil Company
Title

July 13, 2004
Date

18 SURVEYOR CERTIFICATION

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.

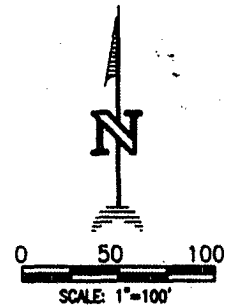
DECEMBER 22, 2003
Date of Survey

DAVID A. JOHNSON
Signature and Seal of Professional Surveyor

REGISTERED PROFESSIONAL SURVEYOR
14827

Certificate No. 14827

NOTE:



ELEV. A-A'	C	F 9.4	C/L
7230			
7220			
7210			
7200			
7190			
7180			
7170			

Additional Operator Remarks:

Please find attached in two Adobe files:

- 1) Cover Letter, New Mexico APD form, Drilling Program, Casing Design, BOP 2M Diagram, Surface Use Plan, Table 1 Nearby Wells, and Table 2 - Plant List
- 2) Survey Plat, Well Pad Layout, Rig Layout, Cut and Fill, Prelim. Survey for Access Road and Pipelines, Access Road Map, Area Map

The Cultural Resources Report will be submitted shortly under separate cover by Velarde Energy Services. Please contact David Banko or Kathy Schneebeck at 303-870-4480, or at david@banko1.com or kathys@banko1.com, respectively, if you have any questions.

Mallon Oil Company
Jicarilla 29-02-17 43
640' FSL 2,230' FEL (SW/4 SE/4)
Sec. 17 T29N R2W
Rio Arriba County, New Mexico
Lease: MDA 701-98-0013 Tract 1

CONFIDENTIAL

DRILLING PROGRAM
(Per Rule 320)

This Application for Permit to Drill (APD) was initiated under the NOS process as stated in Onshore Order No. 1 and supporting Bureau of Land Management (BLM) documents. This NOS process includes an onsite meeting which was held on May 27, 2004 as determined by Bureau of Land Management (BLM), Bureau of Indian Affairs (BIA) and Jicarilla Oil & Gas Administration (JOGA), and at which time the specific concerns of Mallon Oil Company (Mallon), BLM, BIA and JOGA were discussed.

MALLON RESPECTFULLY REQUESTS THAT ALL INFORMATION REGARDING THIS WELL BE KEPT CONFIDENTIAL.

SURFACE FORMATION - San Jose

GROUND ELEVATION - 7,200'

ESTIMATED FORMATION TOPS - (Water, oil, gas and

San Jose	Surface	Sandstone, shales
Nacimientos	1,977'	Sandstone, shales
Ojo Alamo	3,185'	Sandstone, shales
Fruitland	3,611'	Sandstone, shales
Pictured Cliffs	3,700'	Sandstone, shales
Lewis	3,808'	Sandstone, shales

TOTAL DEPTH 4,000'

Estimated fm tops:

T_{sj} — 0

T_n — 2370'

T_{oa} — 2930'

T_k — 3440'

T_f — 3510'

T_{pc} — 3550'

Estimated depths of anticipated fresh water, oil, or gas:

Tertiary

San Jose	surface	Gas	H ₂ O
Nacimientos	1,977'	Gas	H ₂ O
Ojo Alamo	3,185'	Gas	H ₂ O
Fruitland	3,611'	Gas	
Pictured Cliffs	3,700'	Gas	

CASING PROGRAM

Depth	Hole Diameter	Casing Diameter	Casing Weight and Grade	Cement
0' – 250'	12-1/4"	8-5/8"	J-55 24# ST&C New	To surface (±175 sxs Class B)
0' – T.D.	7-7/8"	5-1/2"	J-55 15.5# LT&C New	TD to surface (±630 sxs lite or 65:35 poz and ±270 sxs 50:50 poz)*

* Actual cement volume to be determined by caliper log.

Yields: Class B yield = 1.18 ft³/sx
 65:35 Poz yield = 1.62 ft³/sx
 50:50 Poz yield = 1.26 ft³/sx

All fresh water and prospectively valuable minerals encountered during drilling, will be recorded by depth and protected.

PRESSURE CONTROL

BOPs and choke manifold will be installed and pressure tested before drilling out under surface casing (subsequent pressure test will be performed whenever pressure seals are broken), and then will be checked daily as to mechanical operating condition. BOP's will be pressure tested at least once every 30 days. Ram type preventors and related pressure control equipment will be pressure tested to 1,000 psi. Annular type preventor will be pressure tested to 50% of the rated working pressure, not to exceed 1,000 psi. All casing strings will be pressure tested to 0.22 psi/ft. or 1,000 psi, whichever is greater, not to exceed 70% of internal yield.

BOP to be either double gate rams or an annular preventor as per Onshore Order No. 2.

Statement on Accumulator System and Location of Hydraulic Controls

The drilling rig has not yet been selected for this well. Selection will take place after approval of this application. Manual and/or hydraulic controls will be in compliance with Onshore Order No. 2 for 2M systems.

A remote accumulator will be used. Pressures, capacities, location of remote hydraulic and manual controls will be identified at the time of the BLM supervised BOP test.

MUD PROGRAM

0' -	250'	Fresh water – M.W. 8.5 ppg, Vis 30-33
250' -	TD	Fresh water - Low solids non-dispersed
		M.W. 8.5 – 9.2 ppg
		Vis – 28 – 50 sec
		W.L. 15cc or less

Sufficient mud materials to maintain mud properties, control lost circulation and to contain "kick" will be available at wellsite.

AUXILIARY EQUIPMENT

- A) A Kelly cock will be kept in the drill string at all times
- B) Inside BOP or stab-in valve (available on rig floor)
- C) Mud monitoring will be visually observed

LOGGING, CORING, TESTING PROGRAM

- A) Logging: DIL- CNL-FDC-GR - TD - BSC (GR to surface)
Sonic (BSC to TD)
- B) Coring: None
- C) Testing: Possible DST – None anticipated. Drill stem tests may be run on shows of interest

ABNORMAL CONDITIONS

- A) Pressures: No abnormal conditions are anticipated
Bottom hole pressure gradient – 0.31 psi/ft
- B) Temperatures: No abnormal conditions are anticipated
- C) H₂S: None is anticipated.
- D) Estimated bottomhole pressure: 1,240 psi

ANTICIPATED START DATE

August 13, 2004

COMPLETION

The location pad will be of sufficient size to accommodate all completion activities and equipment. A string of 2-3/8" J-55 4.7#/ft tubing will be run for a flowing string. A Sundry Notice will be submitted with a revised completion program if warranted.

2-M SYSTEM

MALLON OIL COMPANY

ANNULAR PREVENTOR MAY BE SUBSTITUTED FOR DOUBLE GATE PREVENTORS
BOP PRESSURE TEST TO 1,000 PSI

