• Form 3160-3 (August 1999)

# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

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

BUREAU OF LAND	<ol> <li>Lease Serial No. MDA 701-98-0013</li> </ol>		
APPLICATION FOR PERMIT	6. If Indian, Allottee or Tribe N JICARILLA APACHE	lame	
1a. Type of Work: 🛮 DRILL 🔲 REENTER	CONFIDENTIAL	7. If Unit or CA Agreement, Na	ame and No.
1b. Type of Well: Oil Well Gas Well Otl		8. Lease Name and Well No. JIC 29-02-31 14	
2. Name of Operator -MALLON OIL COMPANY Black Hills	ART CHILDERS E-Mail: artchilder@bhep.com	9. API Well No. 30039 293	17
3a. Address 350 INDIANA STREET, SUITE 400 GOLDEN, CO 80401	3b. Phone No. (include area code) Ph: 505.382.9100	10. Field and Pool, or Explorate EAST BLANCO PICTU	ory RED CLIFFS
4. Location of Well (Report location clearly and in accord	ance with any State requirements.*)	11. Sec., T., R., M., or Blk. and	I Survey or Area
At surface NENE 430FNL 880FEL At proposed prod. zone		Sec 31 T29N R2W Mei	r NMP
14. Distance in miles and direction from nearest town or post 57 MILES EAST OF BLOOMFIELD, NM	office*	12. County or Parish RIO ARRIBA	13. State NM
<ol> <li>Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)</li> <li>430' - LEASE</li> </ol>	16. No. of Acres in Lease 10240.00	17. Spacing Unit dedicated to t	his well
<ol> <li>Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.</li> <li>2,550' - JIC 29-02-29 1</li> </ol>	19. Proposed Depth 4000 MD	20. BLM/BIA Bond No. on file 1318288	;
<ol> <li>Elevations (Show whether DF, KB, RT, GL, etc.</li> <li>7068 GL</li> </ol>	22. Approximate date work will start 08/16/2004	23. Estimated duration 45-60 DAYS	
	24. Attachments		
The following, completed in accordance with the requirements of	of Onshore Oil and Gas Order No. 1, shall be attached to	his form:	
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest Sys SUPO shall be filed with the appropriate Forest Service Of</li> </ol>	Item 20 above).  5. Operator certification	ns unless covered by an existing b	·
25. Signature (Electronic Submission)	Name (Printed/Typed) KATHY L. SCHNEEBECK Ph: 303.820.	4480	Date 07/15/2004
Title AGENT			
Approved by (Signature)	Name (Printed/Typed)		Date 12/21/04
Acting Field Manager - M	Office Unanal		
Application approval does not warrant or certify the applicant hoperations thereon.  Conditions of approval, if any, are attached.	ones regar or equitable title to those rights in the subject is	ase which would entitle the applic	cant to conduct
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, States any false, fictitious or fraudulent statements or representa	make it a crime for any person knowingly and willfully to tions as to any matter within its jurisdiction.	make to any department or agend	cy of the United

Additional Operator Remarks (see next page)

Electronic Submission #33065 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 ()

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

DISTRICT II 1301 W. Grand Ave., Artesia, N.M. 88210

DISTRICT III 1000 Rio Brazos Rd., Aztec, N.M. 87410 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 June 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

DISTRICT IV 1220 South St. Francis Dr., Santa Fe, NM 67506

☐ AMENDED REPORT

,	1	8 D	name Vana				* Well No	mber	
317	*Pool Code 72400		East Bl	Lanco; E	*Pool Picture	Name ed Cliffs	7 <del>-</del>		
WELL	LOCATION	AND	ACREAGE	DEDICA	ATION	PLAT			

<sup>10</sup> Surface Location

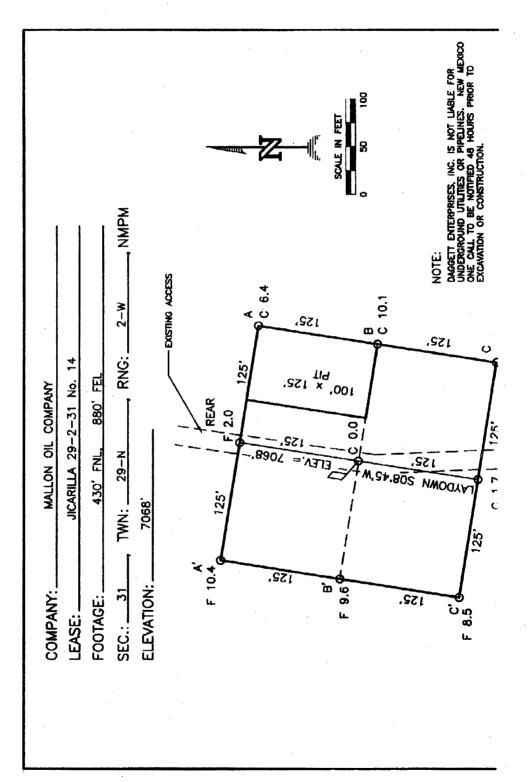
UL or lot no.	Section Township 31 29-N	Range Lot Idn 2-W	Feet from the 430	North/South line NORTH	Feet from the 880	East/West line EAST	RIO ARRIBA
		11 Bottom Hole	Location 1	f Different Fro	om Surface		
UL or lot no.	Section Township	Range Lot idn	Feet from the	North/South line	Feet from the	Rast/West line	County
,						,	

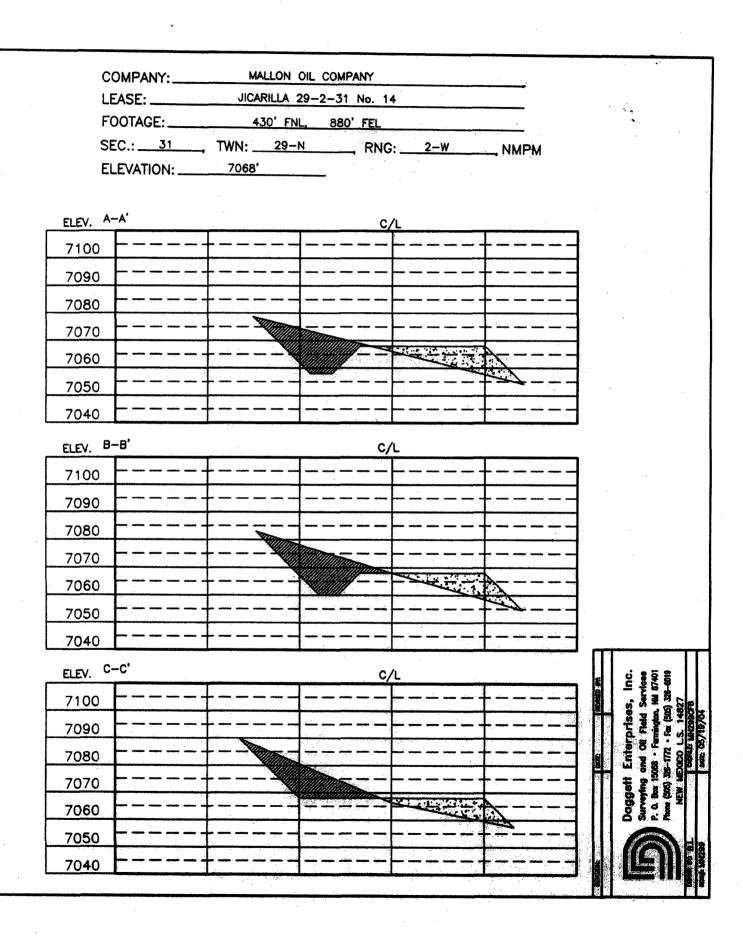
UL or lot no. Section Township Range Lot Idn Feet from the North/South line Feet from the East/West line County

12 Dedicated Acres 12 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

	OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION							
SEC. CORNER FD. 2 1/2" BC. U.S.G.L.O. 1917 LOT 1	N 89-13-08 W  LAT. 36'41'17"N LONG. 107'04'42"W	5239.2' (M) (NAD 83) (NAD 83)	FD. MARKED STONE 880'	17 OPERATOR CERTIFICATION  I hereby certify that the terrematices contained herein is true and complete to the best of my knowledge and belief				
LOT 2	3	0 18 28 21 27 0 18 0 18 0 18 0 18 0 18 0 18 0 18 0 18	5201.8' (C)	Kardy & Schnubeck Signature Kathy L. Schneebeck Printed Name Agent for Mallon Oil Company Title July 15, 2004 Date				
LOT 3	·		N 00-48-40 W	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 to true and correct to the best of my boling.  Date of Same  Signature and Same				
LOT 4	ę	RECOR	CALC'D CORNER SITION FROM SURVEY DS, STONE & REBAR D BY CONSTRUCTION	Signature and Self of Foliation Superport				





Mallon Oil Company **Jicarilla 29-02-31 14** 430' FNL 880' FEL (NE/4 NE/4) Sec. 31 T29N R2W Rio Arriba County, New Mexico

Rio Arriba County, New Mexico Lease: MDA 701-98-0013 Tract 2

### **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** - 7,068'

ESTIMATED FORMATION TOPS	<ul> <li>(Water.</li> </ul>	oil. 2	as and/or o	other min	eral-bearing	g formations)

San Jose	Surface	Sandstone, shales & siltstones
Nacimiento	1,977'	Sandstone, shales & siltstones \ Water bearing
Ojo Alamo	3,185'	Sandstone, shales & siltstones
Fruitland	3,611'	Sandstone, shales & siltstones
Pictured Cliffs	3,700'	Sandstone, shales & siltstones Est mated to ps.
Lewis	3,808'	Sandstone, shales & siltstones Sandstone, shales & siltstones Sandstone, shales & siltstones Sandstone, shales & siltstones
TOTAL DEPTH	4,000'	naciminto -2220
Estimated depths of and Tertiary	ticipated fresh	water, oil, or gas:  Ojo Alamo - 3000/  Kirtland - 3360'
San Jose	surface	Gas Cantle 1 770 1
Nacimiento	1,977'	Gas Gas Frustland - 33501
Ojo Alamo	3,185'	Gas Protured aiffr - 34401
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)*

<sup>\*</sup> Actual cement volume to be determined by caliper log.

Yields:

Class B yield =  $1.18 \text{ ft}^3/\text{sx}$ 65:35 Poz yield =  $1.62 \text{ ft}^3/\text{sx}$ 

 $50.50 \text{ Poz yield} = 1.26 \text{ ft}^3/\text{sx}$ 

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

C)

### LOGGING, CORING, TESTING PROGRAM

A) Logging: DIL-CNL-FDC-GR - TD - BSC (GR to surface)

Sonic (BSC to TD)

B) Coring: None

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)  $H_2S$ : None is anticipated.

D) Estimated bottomhole pressure: 1,240 psi

### **ANTICIPATED START DATE**

August 16, 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

