Form 3160-3				SUBMIT IN TRIPLIC	ATE	FORM APPROVED		
(July 1992)	UNITE		(Other instructions on		OMB NO. 1004-0136			
	DEPARTMENT OF THE INTERIOR					Expires February 28, 1995		
	BUREAU OF LAI	ND MANAGEMENT				5. LEASE DESIGNATION AND SERIAL NO		
	APPLICATION FOR PERMIT TO DRILL OR DEEPEN					MDA 701-98-0013 Tract 4		
1a TYPE OF WORK					\neg	6. IF INDIAN, ALLOTTEE OR TRIBE NAME		
	Drill	Deepen				Jicarilla Apache		
b. TYPE OF WELL			_		l	7. UNIT AGREEMENT NAME 7.		
Oil Well	Gas Well X Other	S	Single Zone	Multiple Zone		N/A $24 u$		
2 NAME OF OPERA	Mallon Oil Company	13925				8 FARM OR LEASE NAME, WELL NO Jicarilla 30-03-33 No 1		
3 ADDRESS AND TE				84567°	_	9. ABI WELL NO. 039-775		
	P.O. Box 2797	(070)000 0400	19	$\mathcal{A} \cap \mathcal{A}$				
	Durango, Colorado ((970)382-9100		48	<u> 42</u>	10. FIELD AND POOL, OR WILDCAT		
	ELL (Report location clearly and in accorda	nce with any State requirem	ents.") / 🌅	FEB 2004		East Blanco Pictured Cliffs		
Al surface	870'FNL and 1975' FEL (NV	V/4 NE/4) Unit B	1:3	2004	$\overline{\sim}$	11. SEC., T., R., M., OR BLK. ND SURVEY OR AREA		
Al proposed prod. zon	·	VIT INCIT) OILL	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1.0	ㅋ	Sec 33, T30N-R3W		
Vi proposed prod. 2011	10			JIM S. DIV	_ 7	1/2		
14 DISTANCE IN MI	LES AND DIRECTION FROM NEAREST	OWN OR POST OFFICE *		- 63	- 3	12. COUNTY OR PARISH 13 STATE		
	65 Miles East of Bloomfield,		1664.		10%	Rio Arriba NM		
15 DISTANCE FROM			NO OF ACRES	SIN LEASE de	17- NO.	OF ACRES ASSIGNED		
LOCATION TO NEAR	REST 1000'		200		THIS	SWELL .		
PROPERTY OR LEAS			39,360	West Mind and the		160 NEM		
(Also to nearest drig	unit line, if any)							
18 DISTANCE FROM	M PROPOSED LOCATION*		PROPOSED D	EPTH	20. RO	TARY OR CABLE TOOLS		
TO NEAREST WELL,	, DRILLING, COMPLETED,	3000'				Rotary		
OR APPLIED FOR, O	N THIS LEASE, FT.		4000'			•		
21 ELEVATIONS (SE	HOW WHETHER DF, RT, GR, Etc.) η		APPROX.DATE W		•			
23.	PR	OPOSED CASING AN	D CEMENTIN	NG PROGRAM				
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FO	ООТ	SETTING DEPTI	н	QUANTITY OF CEMENT		
12 1/4"	8 5/8"	24#		250'		175 sx circ. To surface		
7 7/8"	5 1/2"	15.5#		4000'		900 sx to circ. To surface		
								
		L						
casing will be consistent with in the following Drilling Program Exhibit I: Dr Exhibit II: Si		uctive, the well will be to programs as per o E: E: E:	e plugged a on-shore Oil xhibit C: (xhibit D: I	and abandoned	in a r No. s Map out	nanner 1 are outlined		
	oads and Pipelines			Environmental A				
	ESCRIBE PROPOSED PROGRAM: If pro					~ ~~		
	ectionally, give pertinent days on subsurface					,		
24.	echorally, give perment days on subsurface	locations and measured an	na true ventical de	eptns. Give blowout pr	eventer	program, ir any		
SIGNED:		TITLE: F	ngineering	Manager		DATE 06/10/03		
	obert Blaylock		gocinig	anagoi		OATE 00/10/03		
(This space for Feder	ral or State office use)							
PERMIT NO				APPROVAL D	ATE			
Application approval	does not warrant or certify that the applica	nt holds legal or equitable titl	le to those rights	in the subject lease w	hich wo	uld entitle the applicant to conduct		
operations thereon.								
CONDITIONS OF AF	PPROVAL, IF ANY:							
APPROVED BY	/s/ David R. Sitzler	Acting Assis	tant Fie	ld Manage	r	FEB 5 2004		

*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes 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.

DISTRICT I 1825 N. French Dr., Hobbs, N.M. 88240

State of New Mexico Energy, Minerals & Natural Resources Department

Form C-102 Revised August 15, 2000

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

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

OIL CONSERVATION DIVISION 2040 South Pacheco Santa Fe, NM 87505

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

☐ AMENDED REPORT

2040 South Pacheco, Santa Fe, NM 87505

		W	ELL LO	CATION	I AND ACI	REAGE DEDI	CATION	PLAT		
30-03	Number 9- Z	1595	1	*Pool Code 2400	9	F. Blanc	Pool 1	Vame		
⁶ Property Code ⁸ Property Name									* We	ll Number
24709 JICARILLA 30-3-33										1
OGRID No). 				⁸ Operator				Elevation	
13925	5				MALLON OIL					103'
[·	T =			¹⁰ Surface					
UL or lot no.	Section 33	Township 30-N	Range 3-W	Lot Idn	Feet from the 870	North/South line	Feet from 1975	EAS	t/West line	RIO ARRIBA
		1 30 11		om Hole		f Different Fr	L			INO ANNIBA
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line			t/West line	County
	<u> </u>				Y 11			<u> </u>		
Dedicated Acre	_		¹³ Joint or	Infill	¹⁶ Consolidation	Code	¹⁸ Order No.	•		
1 le	0									
NO ALLOW	ABLE W					ON UNTIL ALL EEN APPROVED			BEEN CO	NSOLIDATED
) FD. 2 1/2" BC			S 89-3	6-51 W		CALC'D	COR			
1917 GLO			522	9.2'	870,	FND	P&C			RTIFICATION ion contained herein
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							belief	1	.	
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		LONG.=10	46-24 N. 17-09-11	(NAD 83) W (NAD 8	3)		-s/	ature	/	· · · · · · · · · · · · · · · · · · ·
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				JJ			≥ 18	SHDVEY	ישט מחי	RTIFICATION
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					V As I	S A		under my office	Mission and t	hat the same is true
				1	FEB 2004		CO and con	Toct Charles	MEX	
- ,					14 17 830	(L)		139-37	3-54.B/	03
				100		v a	Date	Sign and seal	1827)	a surveyor:
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						FD. MAR ST	KED	1 Scate Number	4827	
				- 1		ST ST	ONE II	HEAVE NUMBER		

DRILLING PROGRAM

(Per Rule 320)

Mallon Oil Company Lease: Jicarilla 30-3-33 No. 1

870' FNL and 1975' FEL (NW/NE) Unit B

Sec. 33, T30N- R-3W

Rio Arriba County, New Mexico

LEASE NUMBER: MDA 701-98-0013 Tract 4

1. Geologic name of surface formation: San Jose

2. Estimated tops of important geologic markers:

San Jose		Surface
Nacimiento	2633'	Sandstone, shales & siltstones
Ojo Alamo	3063'	Sandstone, shales & siltstones
Kirtland	3391'	Sandstone, shales & siltstones
Fruitland	3501'	Sandstone, shales & siltstones
Pictured Cliffs	3693'	Sandstone, shales & siltstones
Lewis	3805'	Sandstone, shales & siltstones
Total Depth	4000'	Sandstone, shales & siltstones

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

San Jose	1333'	Gas
Nacimiento	2633'	Gas
Ojo Alamo	3063'	Gas
Fruitland	3601'	Gas
Pictured Cliffs	3793'	Gas

No other formations are expected to produce oil, gas, or fresh water in measurable quantities. The surface fresh water sands will be protected by setting 8-5/8" casing at 250' and circulating cement back to surface.

4. Proposed casing program:

Hole Size	Interval	Casing OD	Casing weight, grade, and thread		
12-1/4"	250'	8-5/8"	24 lb/ft, K55, ST&C		
7-7/8"	4000'	5-1/2"	15.5 lb/ft, K55, LT&C		

Cement program:

8-5/8" surface casing:

Cemented to surface with 175 sks Class B, or Type III cement containing 2% CaCl, 0.25 lb/sk Cello Seal, slurry to be mixed at 15.6 lb/gal, yield 1.18 cu

ft/sk. Circulate cement to surface. 100% excess.

5-1/2" production casing:

1170 sks 50/50 POZ, containing 6- 1/4 lb/sk Gilsonite, .3% Fluid loss,

3% KCl mixed at 13.7 lb/gal, 1.26 cu ft/sk, 30% excess. Circulate cement to

surface.

5. Minimum specifications for pressure control (2M System):

The blowout preventor equipment (BOP) to be used on this well will consist of a double ram type preventor with a rating of 2000 PSIG working pressure. The unit will be hydraulically operated and the ram type preventor will be equipped with one set of blind rams and one set of pipe rams. The BOP will be nippled up on the 8 5/8" surface casing and in continuous use until production casing has been cemented or the well abandoned. The BOP, choke manifold, and accessory equipment will be tested to a pressure of 600 PSIG before drilling out of the surface casing. The pipe rams and blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. A 2" kill line and 2" choke line will be connected to the BOP stack below the bottom set of rams, as shown on Exhibit 1. The drilling spool in Exhibit 1 is optional depending on the drilling rig selected for this well. Other accessories to the BOP equipment will include a Kelly cock, floor safety valve, choke lines, and choke manifold with two chokes all with a minimum pressure rating of 2000 PSIG.

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 2,000 psi systems.

6. Types and characteristics of the proposed mud system:

The well will be drilled to TD with a combination of fresh water and fresh water polymer mud system. The applicable depths and properties of this system are as follows:

<u>Depth</u>	Type	Weight (ppg)	Viscosity (sec)	Water loss (cc)
0-250'	FW	± 8.5	30-33	NC
250' - TD	FW (Gel po	lymer) ± 9.0	32-35	10 - 20 cc

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

7. Auxiliary well control and monitoring equipment:

- A. A kelly cock will be kept in the drill string at all times.
- B. A full-opening drill pipe stabbing valve (inside BOP) with proper drill pipe connections will be on the rig floor at all times.
- C. The drilling fluids systems will be visually monitored at all times.

8. Testing, logging, and coring program:

Drill stem tests:

None Anticipated

Logging:

TD to surface casing, GR, CNL - FDC, DLL, MSFL

Coring: None planned

9. Abnormal conditions, pressures, temperatures, and potential hazards:

No abnormal pressures or temperatures are anticipated. The proposed mud program will be modified to control excess pressure if abnormal pressures are encountered. The estimated bottom-hole pressure (BHP) is 1240' psig.