Form 3160,3 (July 1991)	cons. comm	JACH, OGRID 190. ROPERTY NO.	1-000	IPLICATE*	FORM APP OMB NO. 1	PROVED	
P.O. BOX	1980 Ur	POOL CODE 3	sic	de)	Expires: Febru	ary 28, 1995	
H0523, N	ATAS INITINIO		0 (1)	ي ا	. LEASE DESIGNATION	AND SERIAL NO.	
ADDLI	OATION FOR	EHF. DATE <u> </u>	175		NM-052		
APPLI	6. IF INDIAN, ALLOTTER OR TRIBE NAME NA						
DRI		7. UNIT AGREEMENT I	EMAN				
b. Tipe of Well		DEEDEN CO			NA	•.	
	ELL OTHER	No. 3//	EINGLE DONE	<u> </u>	6. FARM OR LEASE HAME, WI	-TL [)	
Mallon Oil (Company 🔗	2, 0		-	Mallon 34	Federal	
3. ADDRESS AND TELEPHONE NO.	56 Carlobad	NIM OOD TO	1505\ 005 4		13		
4. LOCATION OF WELL (R	eport location clearly and	in accordance with any	(505) 885-4 State requirements.*)		Delaware		
	*.				11. BEC., T., R., M., OR AND SURVEY OR A	BLK. BEA	
At proposed prod. son	• 1980' FSL, 19	80' FWL (NE'SW) Unit K	A parameter	Sec. 34, T	100 D24E	
14. DISTANCE IN MILES .			CR*	 -	12. COUNTY OR PARISE	1 93-K34E	
35 miles SW	of Hobbs, New				Lea	NM	
LOCATION TO NEAREST PROPERTY OR LEASE I			NO. OF ACRES IN LEASE	17. NO. OF TO THIS	ACRES ASSIGNED		
18. DISTANCE FROM PROF	g. unit line, if any) 1	980'	640 PROPOSED DEPTH		40		
TO NEAREST WELL, D	RILLING, COMPLETED, IB LEASE, FT. 1	320'	6300'	20. ROTARY	OR CABLE TOOLS ROTE	- ,	
21. ELEVATIONS (Show who 3680 GR		Capita	n Controlled Water B	lasin .	22. APPROX. DATE W	ORK WILL START®	
23.		PROPOSED CASING AI	ND CEMENTING PROGRAM	<u> </u> 4	12/3	50/ 54	
SIZE OF HOLE	GRADE, STZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	1	QUANTITY OF CEME	NT	
25"	20	0.25	40'	Redi-	Mix to sur		
14-3/4	9-5/8	36#	1500'		700 sx Lite, 200 GRCU		
8-3/4	5-1/2	14 & 15.5#:	TD; mare	800 s	x Lite, 20	0 sx Class	
formation nonproduct consistent Oil & Gas Drilling I Surface Us Exhibit #1 Exhibit "I Exhibit "I	for oil. If tive, the well with Federa Order #1 are Program se and Operat Decation Of the Control of the Contro	productive, l will be pl l regulation outlined in ing Plan Preventor E and Elevati	the followin equipment on Plat	g will ndoned progra g atta Exhi	be cement in a mann ms as per chments:	ed. If er Onshore Well Site Layout	
nd (Exhibit "(C" - Planned	Access Roads	 Quaral Rocal em 	ents and	. :	Facilities	
(EXHIBIT "(:-!")" - One Mile	Padius Man	- Special Supulsio Attached	78			
		_	क्षावरहरूप्यक्षात्र्यः ata on present productive zone :	and neonessal -	ione amplication = · · · ·		
deepen directionally, give perturbations	inent data on subsurface location	ons and measured and true ven	ical depths. Give blowout preven	nter program, if	any.	proposal is to drill or	
Lin.	ve (VIII)		Production Super	intender	nt nin 11	/29/94	
Duane C	Winkler ral or State office use)				DATE		
PERMIT NO.	rat or State omca use)		Commission of the Commission o	en granda. Agam			
	not warrant or certify that the se	policant holds legal or equipable	title to those rights in the subject	Éasa mhich na	aid entitle the annitone to	madest mantions the	
CONDITIONS OF APPROVA			or many rights are the policy of the	WILLIAM WOO	er evere en ubblicant to t	where obecomes merco.	
	L IF ANY:	•	Adrian and	• • • •			
/CV \	L IF ANY:	1	Adra Manages		· •		
APPROVED BY	ott Jours	TITLE	AREA MANAGER	· · · · · · · · · · · · · · · · · · ·	DATE _/- 5 -9	5	

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DRILLING PROGRAM

Attached to Form 3160-3
Mallon Oil Company
Mallon "34" Federal No. 13
1980 FSL, 1980 FWL, Sec.34 T19S R34E
Lea County, New Mexico

Lease Number: NM-052

- Geologic Name of Surface Formation is : Quaternary Alluvium
- 2. Estimated Tops of Important Geologic Markers

Quaternary Alluvium Surface Rustler 1590 Top of Salt 1720 Base of Salt 3326 Yates 3513 Seven Rivers 3821 Queen 4516 Delaware 5800 Total Depth 6300

3. The Estimated Depths of Anticipated Fresh water, Oil or Gas:

Quaternary Alluvium	300'	Fresh Water.
Yates	3513'	Oil
Queen	4516'	Oil
Delaware	5800'	Oil

No other formations are expected to give up Oil, Gas, or Fresh Water in measurable quantities. The surface fresh water sands will be protected by setting 9 5/8" csg at 1500' and circulating cement back to surface. Potash will be protected by setting 5 1/2" csg at total depth and circulating cement back to 1300' from surface.

4. Proposed Casing Program:

Hole Size	Interval	<u>Csg OD</u>	Csg weight grade, Jt,, Type Cond
25"	0-40'	20"	Conductor, 0.25" wall thickness
14 3/4"	0-1500'	9 5/8"	36# K-55 STC
8 3/4"	0-5300	5 1/2"	14# K-55 STC
	5300-TD	5 1/2"	15.5# K-55 STC

Cement Program:

20" Conductor csg: Cemente

Cemented with ready-mix to surface

9 5/8" Surface csg:

Cemented to Surface with 700 sx Pacesetter Lite

6.00% Gel (Bentonite)+0.25 lb/sk Cello-Seal

105.% Fresh Water

5 1/2" Production csg.

Cemented with 800 sacks Pacesetter Lite (C) 6.00% Gel (Bentonite)+0.25 lb/sk Cello-Seal 5.00% Salt+105.00% Fresh Water, This cement

slurry is designed to bring TOC to 1300'.

5. Minimum Specifications for Pressure Control:

The blowout preventer equipment (BOP) shown in Exhibit #1 will consist of a double ram type (3000psi WP) preventer. The unit will be hydraulically operated and the ram type preventer will be equipped with blind rams on top and drill pipe rams on bttom. The BOP will be nippled up on the 9-5/8" surface csg and used continuosly until TD is reached. BOP and accessory equipment will be tested to 1000 psi before drilling out of surface casing. Pipe 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 included in the drilling spool located below the ram-type BOP. Other accessories to the BOP equipment will include a kelly cock and floor safety valve and choke lines and choke manifold with 3000 psi WP rating.

6. Types and Characteristics of the Proposed Mud System:

The well will be drilled to TD with a combination of brine, cut brine, and polymer/KCL mud system. The applicable depths and properties of this system are as follows:

Depth	Туре	Weight	Viscosity	Waterloss
		(ppg)	(sec)	(cc)
0-40	Fresh Water (spud)	8.5	40-45	N.C.
0-1500	F.W. (Gel/Lime)	8.5-9.0	32-36	N.C.
1500-7	ΓD Brine Water	10.0	32-34	10-12cc

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept at the wellsite at all times.

- 7. Auxiliary Well Contol 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

None Anticipated

Logging:

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

Coring:

None Planned

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9. Abnormal Conditions, Pressures, Temperatures, & 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 temperature (BHT) at TD is 150 F and estimated maximum bottom-hole pressure (BHP) is 2800 psig. No hydrogen sulfide or other hazardous gases or fluids have been encountered, reported or are known to exist at this depth in this area. No major loss circulation zones have been reported in offsetting wells.

Anticipated starting date: December 10, 1994
 Anticipated completion of Drilling operations: Expected duration of 3 weeks.

MINIMUM BLOWOUT PREVENTER REQUIREMENTS

3.000 psi Working Pressure

3 MWP

STACK REQUIREMENTS

No.	Item	Min. I.O.	Min. Nominal	
1	Flowline			
2	Fill up line			2*
3	Drilling nipple			
5	Two single or one dual hy operated rams			
6a	Orilling spool with 2" min 3" min choke line outlets			
65	2" min. kill line and 3" m outlets in ram. (Alternate			
7	Valve	Gate □ Plug □	3-1/8*	
8	Gate valve—power opera	3-1/8"		
9	Line to choke manifold			3-
10	Valves	Gate 🗆 Plug 🗅	2-1/16"	
11	Check valve		2-1/16"	
12	Casing head			
13	Valve	Gate [] Plug []	1-13/16*	
14	Pressure gauge with nee	edle valve		
15	Kill line to rig mud pump	manifold	1	2.

3 2
BLIND RAMS
S PIPE RAMS ORILLING ORILLING
SPOOL 7 3 9 CASING HEAD 2 4

CONFIGURATION A

	OP	TIONAL	
16	Flanged valve	1-13/16"	

CONTRACTOR'S OPTION TO FURNISH:

- All equipment and connections above bradenhead or casinghead, Working pressure of preventers to be 3,000 psi, minimum.
- Automatic accumulator (80 gallon, minimum) capable of closing BOP in 30 seconds or less and, holding them closedagainst full rated working pressure.
- 3.80P controls, to be located near drillers position.
- 4. Kelly equipped with Kelly cock.
- Inside blowout prevventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
- Kelly saver-sub equipped with rubber casing protector at all times.
- 7.Plug type blowout preventer tester.
- Extra set pipe rams to fit drill pipe in use on location at all times.
- 9. Type RX ring gaskets in place of Type R.

MEC TO FURNISH:

- 1.Bradenhead or casinghead and side valves.
- 2. Wear bushing, if required.

GENERAL NOTES:

- Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
- 2.All connections, vaives, fittings; piping, etc., subject to well or pump pressure must be flanged (suitable clamp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through chome. Vaives must be full opening and suitable for high pressure mud service.
- Controls to be of standard design and each marked, showing opening and closing position.
- 4. Chokes will be positioned so as not to hamper or delay changing of choke beans. Replaceable parts for adjustable choke, other bean sizes, retainers, and choke wrenches to be conveniently located for immediate use.
- All valves to be equipped with handwheels or handles ready for immediate use.
- 6. Choke lines must be suitably anchored.

- 7. Handwheels and extensions to be connected and ready for use.
- Valves adjacent to drilling spool to be kept open. Use outside valves except for emergency.
- 9.All seamless steel control piping (3000 psi working pressure) to have flexible joints to avoid stress. Hoses will be permitted.
- Casinghead connections shall not be used except in case of emergency.
- 11.Do not use kill line for routine fill-up operations.

Exhibit 1

DISTRICT I P.O. Box 1980, Hobbs, NM 88240

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102 Revised February 10, 1994 Instruction on back

Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT II P.O. Drawer DD. Artesia, NM 88210

1000 Rio Brazos Rd., Aztec, NM 87410

API Number

DISTRICT III

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

Pool Code

API	Number		[Pool Code			Pool Name		·
	5-329	315	37	584	1	priheast	Lea	Solowood	-0
Property	Property Name MALLON 34 FEDERAL			Well N		Number 3			
OGRID N			···	·	Operator Ne	me		Eleva	····
1392	5	<u> </u>		N	MALLON OIL			368	0,
UL or lot No.	Section	Township	Range	Lot Idn	Surface Lo	North/South line	T =		
К	34	195	34E		1980	SOUTH	Feet from the	East/West line WEST	County LEA
	<u></u>	1	1 Bottom	Hole Loc	<u> </u>	erent From Sur	<u> </u>	11231	LLA
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
									
Dedicated Acres	Joint o	r Infill Co	nsolidation (Code Or	der No.				
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NO ALLO	WADLE W	OR A N	ION-STAN	DARD UN	IT HAS BEEN	UNTIL ALL INTER APPROVED BY	RESTS HAVE BE THE DIVISION	EN CONSOLIDA	TED
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	!				İ		contained herein best of my know	is true and comple	its to the
	!			į				2 /	3/1
	1				!		Chiane	1 Mins	llen
	+			 	+		Signature	(P: 1). 11	
	1				!		Printed Name	<u>C Winkle</u>	
	!						Production	~ Superin	Hender
	ì				1		Title //- 2	8-94	
	!				i		Date	0 / ([]
			/ /				SURVEYO	R CERTIFICAT	ION
	را	/					I hereby certify	that the well location	on shown
	1	3680.3'	3681.5°				actual surveys	s plotted from field made by me or s	
	1980'	 9			1		correct to the	TIAH ILLE Jame is	true and
	7	3677.9 [,]	J _{3680.2} ,	Ž	1		A NOWER	BER 21, 1994	
	1	1			ļ		Date Spriveyed	100.	
	+		/†		. — — — + -		Professional	Surveyor	
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	1			Exhibi	t "A"		/w.o. New	11997941111-19	90

Certificate No.

676

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JOHN W. WEST,

RONALD J. EIDSON,

OFFICE