Form 3160-3	· · · · · · · · · · · · · · · · · · ·		SUBMI)- Hobbs	FORM APPROVED OMB NO. 1004-0136	
(July 1992)		UNI ED STAT	EJ	er instructions c. reverse side)	Expires: February 28, 19	95
	DEPAR	TMENT OF TH	E INTERIOR		5. LEASE DESIGNATION AND SERIAL N	10.
	BURE	AU OF LAND MAN	AGEMENT		NM 87268	
Λ	DDI ICATION		O DRILL OR D	EEDEN	6. IF INDIAN, ALLOTTEE OR TRIBE NA	MF
la. TYPE OF WORK			U DRILL UR D	EEFEN	7. UNIT AGREEMENT NAME	
	DRILL	DEEPEN				
b. TYPE OF WELL	GAS		SINGLE X	MULTIPLE	8. FARM OR LEASE NAME, WELL NO.	
2. NAME OF OPERAT		THER	ZONE			. 1
<u>MERIDIAN O</u>	IL INC.				9. API WELL NO.	
3. ADDRESS AND TEL		TV 70710 1010	010		UNASSIGNED	
	1810, Midland, LL (Report location clearly and			688-6943	WEST RED TANK DELAW	JARF
At surface 660' FNL &	330' FWL		· · · · · · · · · · · · · · · · · · ·			
At proposed prod.	zone	11.15	<u>٦</u>		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA	
SAME AS SU		Unit]	<u>ر</u>	· · · · · · · · · · · · · · · · · · ·	SEC. 24, T22S, R32E	
14. DISTANCE IN MIL 28 MILES W	ES AND DIRECTION FROM NEA	rest town or post office	•		12. COUNTY OR PARISH 13. STAT	E
15. DISTANCE FROM LOCATION TO NE	PROPOSED*		16. NO. OF ACRES IN LEASE	17. NO. OI	F ACRES ASSIGNED	
DRODEDWY OD I D			280	το τηι	s well 40	
 DISTANCE FROM TO NEAREST WEI 	PROPOSED LOCATION*		19. PROPOSED DEPTH		RY OR CABLE TOOLS	
OR APPLIED FOR,	ON THIS LEASE, FT. N ow whether DF, RT, GR, etc.)	/A 1ST WELL	10,100'	ROT	<u>ARY y</u>	
3733'	ow whether DF , KI , OK , etc.)				22. APPCOX. DATE WORK WILL STAP	₹ T*
23.		BODORED CARL				·······
			G AND CEMENTING PROGE			
<u>size of hold</u>	E GRADE, SIZE OF C	ASING WEIGHT PER FC	ot setting def 850'	m 800 SX	<u>QJANTITY OF CEMENT</u>	<u> </u>
1/4"	8 5/8"	28#/32#	4600'		SXS 'C' <u>CIRC</u>	
7 7/8"	5 1/2"	17#	10,100'		YC 'U' TOC 04400' I	1-
	1	OPER. OGRID	NO. 76485	dere view	NO MANACOMEN	
NO HYDROGE	EN SULETDE	PROPERTY NO)1K5978	- Contraction	- 1 🤎 (AUDE)	
NOT IN DES	SIGNATED POTASH	AREADOL CODE	51699	- 136	Charles 1	
			2/2/1/05	(<u> </u>	JANOS DOD	
CONTACT PE		WIEEFARSTE	MATO		JANUS	
	919-000		225-32.34	Ľ \	6 N.M. JP	•
NOTICE OF	STAKING SUBMIT	ED ON DECEMBER	20, 1994.		O'ST ST A	
				No. of Street,	Carlsbad, New	
N ABOVE SPACE D seepen directionally, g	ESCRIBE PROPOSED PROG	RAM: If proposal is to dee e locations and measured and	pen, give data on present produ true vertical depths. Give blow	active zone and proposition of the proposition of the property of the program of the property of the	sed new productive zone. If proposal is to	drill or
	<i>(</i>					
4.		\frown				
	Luu	<u> </u>	TLE REGULATORY AS	SSISTANT	<u>DATE 1/3/95</u>	
(This space for Fe	ederal or State office use)				APPROVAL SUBJE	7 10
PERMIT NO.			APPROVAL DATE_		GENERAL REQUIR	
	does not warrant or certify that the s	pplicant holds legal or equitable titl		hich would entitle the one	icant to conduct operations AleconstiPULA	
CONDITIONS OF A	APPROVAL, IF ANY:	/		and a ship	ATTACHED	
	1.1/1 1 1	1/	acting and and	878)	· · · · · ·	
APPROVED BY	15/ Nolanda	_//ean		NET M	1/20/95	Ń
		*See Instr	uctions On Reverse Side		_ DATE	`
Title 18 U.S.C fictitious or frame	 Section 1001, makes it a udulent statements or representation 	crime for any person known	wingly and willfully to ma within its jurisdiction	ke to any departme	nt or ageness of the United States and	y false,
	canonio or repres		within his jutisticiton.		• • •	

District 1 PO Box 1980, Hobbs, District II PO Drawer DD, Artest District III 1000 Rio Brazos Rd., A District IV PO Box 2088, Santa Fo	a, NM 88211-0719 Nziec, NM 87410		OILC	Minerals & 1 ONSER PO	New Me Natural Resour VATION Box 2088 NM 8750	rc es Departm DIVISI }			In Appropr Stat Fe	Form C-102 February 21, 1994 Instructions on back iate District Office e Lease - 4 Copies e Lease - 3 Copies ENDED REPORT
	W	ELL LC	CATION	NAND	ACREAC	e ded	ICATIO	N PLAT		
30 D29	wumber -32849	5	Pool Cod	÷		West		Pool Name nk Delavy	are	
Property Code 16508		:	⁵ Property Name CHECKERBDARD *24* FEDERAL					1		Well Number
'ogrid №. 26485			' Operator Name MERIDIAN DIL INC.						* Elevation 3733	
		`.		¹⁰ Surf	ace Local	ion				
UL or lot no. See		Range	Lot Idn	Feet from	the North	/South line	Feet from	the East/W	Vest line	County
D 5	t 55,2	35 E		660		IRTH	330		EST	LEA
		¹¹ Bot	tom Hole	e Locatio	on If Diff	erent Fr	om Surfa	ace		
ULorlotno. See Same as S		Range	Lot Idn	Feet from t	he North	South line	Feet from	the East/W	fest line	County
¹¹ Dedicated Acres ¹³ Joint or Infill ¹⁴ Consolidation Code ¹⁵ Order No. 40										
find.						fred.	t hereby rue un Signate Don Printes Reg Title <u>P</u> Date 18SU I hereby was plo me or u and cor	y certify that the d complete to the d complete to the d complete to the under willing d / 95 URVEYOR certify that the the from field no nder my supervise rect to the best of DECEM	information best of my ams SSISTE CERT	IFICATION shown on this plat surveys made by t the same is true



OPERATORS NAME:	Meridian Oil Inc.	
LEASE NAME AND WELL NO .:	Checkerboard '24' Federal No. 1	
LOCATION:	660' FNL & 330' FWL, Sec. 24, T22S, R32E	
FIELD NAME:	West Red Tank Delaware	
COUNTY:	Lea County, NM	
LEASE NUMBER:	NM 87268	

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The following information is to supplement BLM form 3160-3 Application for permit to drill in accordance with Onshore Oil and Gas Order No. 1:

9 - POINT DRILLING PLAN

1. Name and estimated tops of important geologic formation/marker horizons.

FORMATION	<u>DEPTH</u>
Rustler	970'
T/Salt-B/Salt	1100'-4500'
Delaware Sandstone	4850'
Bone Spring, LS/Sandstone	8730'

2. Estimated depths at which the top and bottom of formations potentially containing usable water, oil, gas, or prospectively valuable deposits of other minerals are expected to be encountered and the operator's plans for protecting such resources.

Delaware

4850'-8550' (Oil)

3. The operator's minimum specifications for Blowout Preventer (BOP) and related equipment to be used and schematic diagrams thereof showing sizes, pressure ratings, and the testing procedures and testing frequency. BOP and BOP - related equipment (BOPE) schematics shall include schematics of choke manifold equipment. Accumulator systems and remote controls shall be utilized.

13 5/8" 1.5M psi WP BOP w/rotating head to be installed on the 13 3/8" csg. Test to 750 psi before drilling the 13 3/8" casing shoe.

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11" 3M BOP stack to be installed on the 8 5/8" casing. The BOP stack will consist of one blind ram BOP, one pipe ram BOP, and a rotating head. Tested to 3000 psi before driling the 8 5/8" casing shoe.

- 4. The proposed casing program including size, grade, weights, type of thread and coupling, and the setting depth of each string and its condition (new or acceptably reconditioned). For exploratory wells, or for wells as otherwise specified by the authorized officer, the operator shall include the minimum design factors for tensions, burst, and collapse that are incorporated into the casing design. In cases where tapered casing strings are utilized, the operator shall also include and/or setting depths of each portion.
 - 17 1/2" hole, 13 3/8" H-40 48# STC csg set @ 850'
 - 12 1/4" hole, 3200' 8 5/8" 28# K-55 BTC, 1400' 8 5/8" 32# K-55 LTC csg
 @ 4600' *****

7 7/8" hole, 9000' 5 1/2" 17# K-55 LTC csg & 1150' 5 1/2" 17# N-80 LTC set @ 10,100'

**** SPECS: 8 5/8" K-55 BTC - ID=8.017", DRIFT=7.892", BURST=3390 PSI, COLLAPSE=1880 PSI, AND TENSION=43700 lbs.

- 5. The amount and type(s) of cement, including anticipated additives to be used in setting each casing string, shall be described. If stage cementing techniques are to be employed, the setting depth of the stage collars and amount and type of cement, including additives, and preflush amounts to be used in each stage, shall be given. The expected linear fill-up of each cemented string, or each stage when utilizing stage-cementing techniques, shall also be given.
 - a. 13 3/8" csg: Cmt w/600 sxs Class 'C' + 4% gel + 2% CaCl2 + 1/4 pps Flocele, tail w/200 sxs Class 'C' + 2% CaCl2 + 1/4 pps Flocele. Circ to surface.
 - b. 8 5/8" csg: Cmt (2 Stages), DV Tool @ +/- 2500'. Stage 1: Lead w/600 sxs Class 'C' + 9 pps salt + 5 pps Gilsonite + 1 pps Econolite + 1/4 pps Flocele, tail w/250 sxs Class 'C' + 2 % CaCl2.
 Stage 2: Lead w/500 sxs Class 'C' Lite + 9 pps salt + 1/4 pps Flocele, tail w/200 sxs Class 'C' + 2% CaCl2. Circ to surface.

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- c. 5 1/2" csg: Cmt first stage w/600 sxs Class 'H' 50/50 Poz + 2% gel + .6% Halad-9 + 3 pps KCL + 1/4 pps Flocele, displace to seal plug. Cmt second statge: 500 sxs Class 'H' Lite + .4% Halad-9. Tail w/100 sxs Class 'H' neat. Bring TOC to +/- 4400'.
- 6. The anticipated characteristics, additives, use, and testing of drilling mud to be employed, along with the types and quantities of mud products to be maintained, shall be given. When air or gas drilling is proposed, the operator shall submit the following specific information:

Mud Program: 0-850' fresh water, gel and lime system 850'-4600' Brine, MW 10.0-10.1 4600'-9900' Fresh Water, MW 8.3-8.5 9900'-10,100' FW/Bentonite/Drispac, MW 8.4-8.6

- 7. The anticipated testing, logging, and coring procedures to be used, including drill stem testing procedures, equipment, and safety measures.
 - a. DST Program: None
 - b. Core: None
 - c. Mud Logging: Two-man unit 4600' to TD.

d.	Logs to be run:	LDT/GR/CAL: TD:ICP CR to surface	
		DIL/SFL/GR: TD-ICP	i :
		BHC Sonic: TD-ICP	(<i>1</i>)
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8. The expected bottom-hole pressure and any anticipated abnormal pressures, temperatures or potential hazards that are expected to be encountered, such as lost circulation zones and hydrogen sulfide. The operator's plans for mitigating such hazards shall be discussed. Should the potential to encounter hydrogen sulfide exist, the mitigation procedures shall comply with the provisions of Onshore Oil and Gas Order No. 6.

No abnormal pressures are anticipated. Bottom hole pressures at TD expected to be 4300 psi. Bottom hole temperature 140° F. There is no anticipated Hydrogen Sulfide in this known drilling area

9. Any other facets of the proposed operation which the operator wishes for BLM to consider in reviewing the application.

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Anticipated drilling time expected to be 18 days from surface to TD.

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