

UNITED STATES DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY South Central Region P. O. Box 26124 Albuquerque, New Mexico 87125

JUL 2 2 1981

Getty 011 Company P. O. Box 730 Hobbs, New Mexico 88240

Gentlemen:

Your Application for Permit to Drill well No. 1 North Bilbrey 7 Federal in the NW4SE4 sec. 7, T. 21 S., R. 32 E., N.M.P.M. Lea County, New Mexico, lease NM-22809, to a depth of 14,500 feet to test the Morrow formation in the Oil-Potash area, is hereby approved, as amended by stipulations attached to the application.

One copy of the application is returned herewith. Please notify the Supervisory Petroleum Engineering Technician, Geological Survey, Hobbs, New Mexico, in sufficient time for a representative to witness all cementing operations.

Sincerely yours,

(ORIG. SGD.) GENE F. DANIEL

Deputy Conservation Manager 011 and Gas

Enclosure

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cc: UNMOCD, Hobbs (2) (w/enclosures)

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20-025-27603 Form approved. Burgent N. 42-B1425

(May 1963)		ED STATES	רודידו			structions on se side)		
	DEPARTMENT	OF THE IN	HER	IUR			5. LEASE DESIGNAT	ION AND SERIAL NO.
	GEOLO	GICAL SURVE	Y				NM-22809	·
APPLICATION	V FOR PERMIT	O DRILL, D	EEPE	N, OR	PLUC	BACK	6. IF INDIAN, ALLOT	TEE OR TRIBE NAME
		DEEPEN	IF		plug e		7. UNIT AGREEMEN	T NAME
	AS X OTHER		'sr zo	CLE	MU. ZON		S. FARM OR LEASE	NAMB
WELL W 2. NAME OF OPERATOR	ELL A OTHER	11-71081	20		20.5		North Bilt	rey 7 Federal
Getty Oil Co	ompany						9. WELL NO.	
3. ADDRESS OF OPERATOR	U.S. 37		: 17				1 1	
P. O. Box 73	BO Hobbs, New 3	exico 8824	0				10. FIELD AND POOL	L, OR WILDCAT
4. LOCATION OF WELL (R At surface	eport location clearly and	in accordance with	any S	tate requir	ements.*)		North Bilt	rey Prospect
Unit	Letter J, 2080	FSL and 198	0 FE	L, Sec	tion 7	,	11. SEC., T., B., M., AND SURVEY OF	
T21S, R32E At proposed prod. zone							Sec. 7, T2	21S, R32E
14. DISTANCE IN MILES	AND DIRECTION FROM NEAD	REST TOWN OR POST	OFFICE	*			12. COUNTY OR PAR	ISH 13. STATE
30 miles west	of Eunice, Nev	Mexico					Lea	NM
15. DISTANCE FROM PROPO LOCATION TO NEARES	DSED*		16. NO	OF ACRES	IN LEASE		OF ACRES ASSIGNED HIS WELL	<u> </u>
PROPERTY OR LEASE I (Also to nearest drig	LINE, FT. 10	80	4	80		1	20	
18. DISTANCE FROM PROT	OSED LOCATION*		19. PR	POSED DEF	тн	20. ROT/	ARY OR CABLE TOOLS	
TO NEAREST WELL, D OR APPLIED FOR, ON TH			1	4500		Ro	otary	
21. ELEVATIONS (Show wh	ether DF, RT, GR, etc.)						22. APPROX. DATE	WORK WILL START*
3640.2 GR						July 1	.8, 1981	
23.	Η	PROPOSED CASIN	G AND	CEMENT	ING PRO	GRAM	-	
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FO	от	SETTI	NG DEPTH		QUANTITY OF CE	MENT
26	20	94		5	0			ULATE
17 1/2	13 3/8	48		110	0		DO sks CIRCUL	ATE
12 1/4	9 5/8	36		450	0	120	00 skscircula	18
8 1/2	7	¹ 26 ,2	9 '	1250	0	160	00 sks	
6 1/8	5	15		1450	0	50	00 sks	

SUBMIT IN TRIPLICATE

- The subject well will be drilled with fresh water to 1100 feet, from 1100 to 12500 with brine and brackish water of sufficient weight and gel additives to control formation pressures and condition the hole. The mud will be a 10-13 ppg inverted oil base mud from 12500 to 14500 to minimize formation damage.
- 2. The pump and plug method will be used in cementing all strings of casing. The 13 3/8", 9 5/8", and 7" strings will be cemented to the surface. The 5" liner will be cemented from top to bottom (12200-14500).
- 3. See attachment for BOP Program.

IN ABOVE SPACE SUSCEIBLE PROFESSED PROGRAM : If proposal is to deepen or plug back, give data on present productive zone and pro	posed new productive
ome. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical d	lepths. Give blowout
preventer program, if any.	

SHENED - Dare R. Crockett	TITLE Area Superintendent DATE 7/2/81	
(This space for Federal or State office use) PERMIT NO	APPROVAL DATE 7-22-81	
APPROVED EN <u>Gene</u> 7. Samuel CONDITIONS DE APTROVAL IF ANY: USE FRESH SUIZE ALE	TITLE WATEN DAIling FLUID FROM TO 1100 FEGT.	

NEY LICKED DELICONSERVATION FORMERS WELL LERATION AND ARREAGE DEDICATION FLAT

Firm Supervedent (1997) Menske

All distances must be from the outer boundaries of the Section

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21-6		south ur	e om a	-i teet in	mitte i i 1	line
und Level Elev.			Fort			Dedicated Acreage:
3723.1						A 144
	he acreage dedice					the plat below. thereof (both as to working
Interest a 3 If more th dated by 0	ind royalty). ian one lease of c communitization,	different ownersh unitization, force	ip is dedicate -pooling. etc?	d to the well, ha	ve the interests	of all owners been consoli-
	is "no!" list the	owners and tract				
No allowa	•					ommunitization, unitization, en approved by the Commis-
	j		······································	1		CERTIFICATION
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	1					y certify that the information con- herein is true and complete to the
	1				best of	my knowledge and belief
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			↔ X	HERSCHEL L. JONES 3640	shown i notes o under m is true knowled	, on this plat was plotted from field if actual surveys made by me u- ly supervision, and that the same and correct to the best of me
		-	Ŷ.	HERSCHEL L. JONES	shown i notes o under m is true knowled	on this plat was plotted from field if actual surveys made by me u- ly supervision, and that the same and correct to the best of me lige and belief

ADDITIONAL INFORMATION FOR "APPLICATION FOR PERMIT TO DRILL" GETTY OIL COMPANY NORTH BILBREY "7" FEDERAL WELL NO. 1

- 1. The geologic name of the surface formation is Typic Torripsamment.
- 2. The estimated tops of important geologic markers are as follows:

FORMATION	DEPTH FROM SURFACE	DEPTH SUBSEA
Delaware	4450	- 810
Bone Springs	8300	- 4660
Wolfcamp	10000	- 6360
Strawn	12725	- 9085
Atoka	12950	- 9310
Morrow Clastics	13900	- 10260
Barnett	14450	- 10810

3. The estimated depths at which anticipated water and oil could be encountered are:

Depth

50' - 500' Possible small volume of fresh water. 4450' - 8300' Delaware - Possible oil 8300' - 8475' Bone Springs - Possible oil 10000' - 12725' Wolfcamp - Possible Oil 12950' - 13590' Atoka - Possible gas 13900' - 14450' Morrow Clastics - Possible gas

4. The proposed casing program is as follows:

Size	Grade	Thread	Wt.	Top	Bottom	Length
20"	н-40	8rd ST&C	94#	Surface	50'	50 '
13 3/8"	H-40	8rd ST&C	48#	Surface	1100'	1100'
9 5/8"	K- 55	8rd ST&C	36#	Surface	3000'	3000'
9 5/8"	S-80	8rd ST&C	36#	3000'	4500'	1500'
7"	S-9 5	8rd LT&C	26#	Surface	1000'	1000'
7"	N-80	8rd LT&C	26# "	1000'	9500 '	8500 '
7"	S-95	8rd LT&C	26 #29#	9500'	12500'	3000 '
5"	N-80	FL-4S	15#	12200'	14500'	2300'

5. The minimum specifications for pressure control equipment to be used - see Figure I. The BOP stack will be tested to 5000 psi.

- 6. The drilling fluid from surface to 12,500' will be brine of sufficient gel to condition hole for logging and running casing. From 12,500 to 14,500, the mud will be a 10-13 ppg low solids low fluid loss inverted oil base mud with additives to help prevent damage to the sensitive Atoka and Morrow sands.
- 7. The auxilliary equipment to be used is as follows:
 - 1. Kelly cocks
 - 2. Monitoring equipment on the mud system.
 - 3. Sub on the floor with a full opening value to be stabbed into drill pipe when the Kelly is not in the string.
- 8. There are anticipated two drill stem tests and (3) cores to be cut. The DST's and cores are estimated as follows:

FORMATION	DEPTH	ESTIMATED NO. DST	ESTIMATED FT. CORE
Delaware	4450 - 4500	_	_
		-	_
Bone Springs	8300 - 8475	· 1	-
Wolfcamp	10000 -12725	Ţ	-
Atoka	12950 -13590	-	-
Morrow Clastics	13900 -14450	-	120'

The logging program is as follows:

TYPE LOG

Run #1	BHC-Sonic-GR, CNL-FDC, DLL/MSFL	12,500' - 4,500'
Run #2	BHC-Sonic-GR, CNL-FDC, DIL/MSFL	14,500' - 12,500'
	or RXO, HDT, NGT	

- 9. High pressure may be encountered in the Atoka of \pm 8700 psi. No abnormal temperatures or hydrogen sulfide gas are expected.
- 10. The expected starting date is July 18, 1981. It is anticipated that this well should be drilled and completed in 95 days.

Page Four

(3) EXISTING WELLS

A. Exhibit "D" shows wells within a one mile radius of the proposed well.

(4) LOCATION OF PROPOSED FACILITIES

A. If the well is productive, the tank battery and flowline will be located on the well pad and no additional disturbance will occur.

(5) TYPE OF WATER SUPPLY

A. Water for drilling will be trucked to the well site from Eunice, New Mexico or Hobbs, New Mexico, over existing and proposed roads as shown on Exhibits "A" and "B".

(6) SOURCE OF CONSTRUCTION MATERIALS

A. Caliche for surfacing the road and well pad will be obtained from a caliche pit located in the SW 1/4 NE 1/4, Section 32, T21S, R32E, NMPM, Lea County, NM.

(7) METHOD OF HANDLING WASTE DISPOSAL

A. Drill cuttings will be disposed of in the drilling pits.

B. Drilling fluids will be allowed to evaporate in the drilling pits until the pits are dry. Any inverted oil base mud remaining after operations will be truck transported to another location for use in drilling.

C. Water produced during tests will be disposed of in the drilling pits.

D. Current laws and regulations pertaining to the disposal of human waste will be complied with.

E. Trash will be disposed of in a trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind.

F. All trash and debris will be buried or removed from the well site within (30) days after finishing completion operations.

(8) ANCILLARY FACILITIES

A. None required.

(9) WELLSITE LAYOUT

A. Exhibit "C" shows the relative location and dimensions of the well pad and filled up to 3' on the right side to level the wellsite.

B. The reserve pit will be plastic lined.

C. The pad and pit area have been staked and flagged.

(10) PLANS FOR RESTORATION OF THE SURFACE

A. After completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and location cleaned of all trash and junk.

B. Any unguarded pits containing fluid will be fenced until they are filled.

C. Any special rehabilitation and revegetation requirements of the surface management agency will be complied with and accomplished as soon as possible. All pits will be filled and levelled within 90 days of completion or abandonment of the well.

(11) OTHER INFORMATION

A. <u>Topography</u>: The land surface is arid and gently rolling hills and small valleys. Elevation at the wellsite is 3640.2.

B. Soil: The topsoil is sandy loams.

C. <u>Flora and Fauna</u>: This area is sparcely covered by sagebrush, yucca glauca, scattered cacti and native grasses. Wildlife in the area is mainly rabbits, rattlesnakes and coyotes.

- D. Ponds and Streams: There are no rivers, streams, lakes or ponds in the area.
- E. Residences and other Structures: There are no residences in the area.
- F. Archeological, Historical, and Cultural Sites: Will be avoided in this area.
- G. Land Use: Grazing.
- H. Surface Ownership: Wellsite and proposed new road are on Federal Surface.

(12) OPERATOR'S REPRESENTATIVE

The field representative responsible for assuring compliance with the approved surface use and operations plan is:

Dale R. Crockett Getty Oil Company P.O. Box 730 Hobbs, New Mexico 88240 Office Phone: 505-397-3571 Home Phone: 505-393-6326

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