Form 9-331 C (May 1963)	江西	1.0.C.D. CC	PY	SUBMIT IN (Other instr		E. 50-015-13354 Form approved. Budget Bureau No. 42-R1425.
	LI	TED STATE	S	reverse		LC-029390-A
	DEPARTMEN	T OF THE	INTER	IOR		5. LEASE DESIGNATION AND SEBIAL NO.
•	GEOLO	DGICAL SURV	'EY			-NM-28015
APPLICATIO	n for permit	to drill,	DEEPE	N, OR PLUG	BACK	6. IF INDIAN, ALLOTTER OR TRIBE NAME
DR b. TYPE OF WELL	ILL X	DEEPEN		PLUG BA	ACK 🗌	7. UNIT AGREEMENT NAME
WELL V	AS VELL X OTHER		SIN ZON	E X ZONE		8. FARM OR LEASE NAME
2. NAME OF OPERATOR GULF OIL CO	RPORATION					<u>Keohane Etal "B" Federal</u> 9. WELL NO.
3. ADDRESS OF OPERATOR						1
4. LOCATION OF WELL (F At surface	70, Hobbs, NM leport location clearly and					10. FIELD AND POOL, OB WILDCAT North Slugart Atoka North Shugart Morrow
	80' FSL & 2310'	FEL, Sect	ion 28	-18S-31E		AND SURVEY OR AREA
At proposed prod. zon	ae				J.L.	Sec. 28-185-31E
14. DISTANCE IN MILES	AND DIRECTION FROM NEA	REST TOWN OR POS	T OFFICE		· · ·	12. COUNTY OR PARISH 13. STATE
						Eddy
15. DISTANCE FROM PROP LOCATION TO NEARES			16. NO.	OF ACRES IN LEASE		OF ACRES ASSIGNED
PROPERTY OR LEASE (Also to nearest dr)	LINE, FT.			320	10 1	HIS WELL 320
18. DISTANCE FROM PROP			19. PRO:	POSED DEPTH	20. ROT.	ARY OR CABLE TOOLS
OR APPLIED FOR, ON TH	IIS LEASE, FT.			12,100'		Rotary
21. ELEVATIONS (Show wh						22. APPROX. DATE WORK WILL START*
3605 .1'	GL					
20.	1	PROPOSED CASI	NG AND	CEMENTING PROG	RAM	
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER H	TOOT	SETTING DEPTH		QUANTITY OF CEMENT
<u> 175'' </u>	13-3/8"	48#		650'	700 :	sacks-circ
121	9-5/8"	40#		<u>4650'</u>		sacks-circ
8-3/4"	7''	26排		12,100'	500 \$	sacks-TOC @ 9000
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Mud Program		- 650 '		h water spud	mud	
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BOP: See D	rawing #4 attac	hed		RECEIVED	RE	CEIVED
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Gas is not	dedicated		ļ	MAY 23 1980	nøi	HEULUGICAL SURVEY
	dedicated			• • •	NDL NDL	ESIA, NEW MEXICO
				O. C. D.	MI/1	
				ARTESIA, OFFICE		
		.				· · · · ·
zone. If proposal is to preventer program, if an	drill or deepen directions	proposal is to dee ally, give pertinen	pen or plu t data on	g back, give data on subsurface locations :	present prod and measure	luctive zone and proposed new productive d and true vertical depths. Give blowout
24.	5	A				
SIGNED	Mand	TI'	rle	Area Product:	ion Mgr	DATE _4-16-80
(This space for Fede	ral or State office use)					
PERMIT NO				PPROVAL DATE	5-11	30 · · · ·
•			A.			
APPROVED BY			rLic			DATE
CONDITIONS OF APPROV	AL, IF ANY :					

1/

*See Instructions On Reverse Side

N.M.O.C.D. COPY

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Form C-102 Supersedes C-128 Effective 1-1-65

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	All distances must be	from the outer boundaries	of the Section	
Gulf Oil Cor		Lease	1 "B" Federal	Well No.
Unit Letter Section J 28	18 South	Honge 31 East	County Eddy	
Actual Footage Location of Well: 1980 feet from the	South line and	2310	Fact	
Ground Level Elev. Producti	oka-Morrow	Fool North Shug		ine Dedicated Acreage:
I. Outline the acreage de				5/2-320 Acres
2. If more than one leas interest and royalty).				
3. If more than one lease dated by communitization	of different ownership is on, unitization, force-pooli	dedicated to the well, ng. etc?	have the interests of ARTESIA, C	alt owners been consoli- DFFICE
X Yes No	If answer is "yes," type o	f consolidation <u>Co</u>	ommunitization	
If answer is "no," list this form if necessary.).	the owners and tract desc	riptions which have a	ctually been consolidation	ited. (Use reverse side of
No allowable will be as.	igned to the well until all	interests have been	consulidated (by your	
forced-pooling, or otherw sion.	ise) or until a non-standar	d unit, eliminating suc	ch interests, has been	approved by the Commis-
1		· · · · · · · · · · · · · · · · · · ·		CERTIFICATION
1		-	> I hereby c	ertify that the information con-
· · · · · · · · · · · · · · · · · · ·		i i		ein is true and complete to the knowledgeand belief.
i 1				C. Under
		ECEIVED	N mmer	
1		APR 2 8 1980	Position	ANDERSON
	U <u>. Ş</u> .	GEULUGICAL SUDUCE	Area Company	Production Manager
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Operator			the suter boundaries of t	he Section	
Gulf Oil	Corporation			"B" Federal Co	well No.
Unit Letter Secti	on Township 28 18 Si	outh	Range	County	
Actual Footage Location o		Juli	31 East	Eddy	
	from the South	line and 2	.310 feet	from the East	line
Ground Lyvel Elev: 3605.1	Producing Formation Atoka-Morrow	Po	North Shugart	Atoka Dec	licated Acreage: '
			North Shugart	hachure marks on the p	320 Acr
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No allowable wi forced-pooling, o sion.	ll be assigned to the v r otherwise) or until a 1 1	vell until all in non-standard u	terests have been co nit, eliminating such		roved by the Commi RTIFICATION
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PLEG. P Dente With States	07. 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		2310'	shown on this y notes af actua under my super	
108				Heytstered Frotes and/or Land Surve	skonal Engineer

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United States Department of the Interior

GEOLOGICAL SURVEY

P. O. Drawer U Artesia, New Mexico 88210 MAY 2 3 1980

RECEIVED

O. C. D. ARTESIA, OFFICE

May 22, 1980

Gulf Oil Corporation P. O. Box 670 Hobbs, New Mexico 88240 GULF OIL CORPORATION Keohane Etal "B" Fed No. 1 1980 FSL 2310 FEL Sec. 28 T.18S R.31E Eddy Qounty Lease No. LC-029390-A

Gentlemen:

Above Data Required on Well Sign

Your APPLICATION FOR PERMIT TO DRILL the above-described well to a depth of 12,100 feet to test the Morrow is hereby approved subject to compliance with the OIL AND GAS OPERATING REGULATIONS (30 CFR 221) and the following conditions:

- 1. Drilling operations authorized are subject to compliance with the attached General Requirements for Oil and Gas Operations on Federal Leases, dated July 1, 1978.
- 2. Prior to commencing construction of road, pad, or other associated developments, operator will provide the dirt contractor with a copy of the Surface Use Plan and these Conditions of Approval including the attached General Requirements.
- 3. All access roads will be limited to a 12 foot wide driving surface, excluding turnarounds. Surface disturbance associated with road construction will be limited to 20 feet in width.
- 4. Submit a Daily Report of Operations from spud date until the well is completed and the Well Completion Report (form 9-330) is filed. The report should not be less than 8" x 5" in size and each page should identify the well.
- 5. All permanent above-ground structures and equipment shall be painted in accordance with the attached Painting Guidelines. The color used should simulate Sandstone Brown (Federal Standard No. 595A, color 20318 or 30318).
- 6. Before drilling below the 9-5/8" casing, the blowout preventer assembly will consist of a minimum of one annular type and two ram type preventers.
- 7. A kelly cock will be installed and maintained in operable condition.

- 8. After setting the 9-5/8" casing string and before drilling into the Wolfcamp formation, the blowout preventers and related control equipment shall be pressure tested to rated working pressures by an independent service company. Any equipment failing to test satisfactorily shall be repaired or replaced. This office should be notified in sufficient time for a representative to witness the tests and shall be furnished a copy of the pressure test report.
- 9. Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be installed and operating before drilling into the Wolfcamp formation and used until production casing is run and cemented. Monitoring equipment shall consist of the following:
 - (1) A recording pit level indicator to determine pit volume gains and losses.
 - (2) A mud volume measuring device for accurately determining mud volume necessary to fill the hole on trips.
 - (3) A flow sensor on the flow-line to warn of any abnormal mud returns from the well.
- 10. Notify the Survey by telephone 24 hours prior to spudding well.
- 11. Special Stipulations: Use two track ranch road for access to location. This road to be upgraded north to main lease road.
- 12. Cement behind the 13-3/8" casing must be circulated.
- 13. Please have anyone contacting the Survey in regard to this well to identify the well with all of the information required above for the well sign.

Sincerely yours,

(Orig. Sgd.) GEORGE H. STEWART

George H. Stewart Acting District Engineer



A prenute reducer and regulator must be provided for operating the Hydrit preventer. When requested, a second pressure reducer shell be available to limit operating fluid pressures to rem preventer. Guid Legion No. 33 hydraulia cit, on equivalent or better, is to be used as the fluid to approve the inversal equipment.

The close manifold, choice flow line, relief line, and choke lines are to be supported by metal stands and adequately anchored. The choke flow line, relief line, and choke lines shall be constructed a straight as possible and without sharp bends. Easy and safe access is to be maintained to the choke manifold. If decread necessary, wall ways and staltways shall be erected in and around the choke manifold. All values are to be selected for operation in the presence of oil, gas, and ditiling fluids. The choke flow line values and relief line values connected to the ditiling spool and all ram type proventers must be squipped with stam extensions, universal joints if needed, and hand wheels which are to extend beyond the edge of the derrick substructure. All other values are to be equipped with hondies.

* To include denick floor mountaid controls.

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Gulf Oil Exploration and Production Company

R. C. Anderson PRODUCTION MANAGER, HOBBS AREA April 14, 1980

RECEIVEM

P. O. Box 670

Hobbs, NM 88240

U. S. Geological Survey P. O. Box 1157 Hobbs, New Mexico 88240 APR 17 1980

U. S. GEOLOGICAL SURVEY HOBBS, NEW MEXICO

Gentlemen:

The following is Gulf Oil Corporation's plan for surface restoration associated with the drilling of our Keohane etal "B" Federal Com #1 to be located 1980 feet from the South line and 2310 feet from the East line of Section 28, Township 18 South, Range 31 East, Eddy County, New Mexico.

After completion of drilling and/or completion operations, all equipment and other material not needed for operations will be removed. Pits will be filled and the location cleaned of all trash and junk to leave the well site in as aesthetically pleasing condition as possible. Any unguarded pits containing fluids will be fenced until they are filled.

After abandonment of the well, surface restoration will be in accordance with the agreement with the surface owner. Pits will be filled and the location will be cleaned. The pit area, well and pad and all unneeded access roads will be ripped to promote revegetation. Rehabilitation should be accomplished within ninety (90) days after abandonment.

Very truly yours,

Unand

Notary Publicic HEW MEXICO

Lea County, New Mexico My Commission Expires 3-21-8 10000000000

C. HEESS

Cor R. C. ANDERSON

RLV/jr

Subscribed	and	sworn	to	before	me	this	162	day	of _	Marel	, 19 80	-
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U.S. GEULUGICAL SURVEY ARTESIA, NEW MEXICO



Gulf Oil Exploration and Production Company

R. C. Anderson PRODUCTION MANAGER, HOBBS AREA

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April 14, 1980

P. O. Box 670 Hobbs. NM 88240

Application for Permit to Drill

Keohane etal "B"

Federal Com Well No. 1

Eddy County, New Mexico

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APR 1 7 1980

U.S. GEULUGICAL SURVEY ARTESIA, NEW MEXICO

U. S. G. S. P. O. Drawer U Artesia, NM 88210

Gentlemen:

We are submitting the information requested in NTL-6 which should accompany Application for Permit to Drill.

Well: Keohane etal "B" Federal Com #1

- 1. Location: 1980' FSL & 2310' FEL Section 28, T-18-S, R-38-E, Eddy Co., New Meixco.
- 2. Elevation of Unprepared Ground: 3605.1' GL
- 3. Geologic Name of Surface Formation: Quarternary alluvium.
- 4. Type Drilling Tools: Rotary.
- 5. Proposed Drilling Depth: 12,100'.
- 6. Estimated Tops of Geologic Markers: Barnett 12,000', Wolfcamp 9770', Strawn 10,750', Atoka 11,150', Morrow 11,700'.
- 7. Estimated Depths at which Anticipated Gas of Oil-Bearing Formations Expected:
 - A. Atoka section 11,150-11,250' may produce gas.
 - B. Morrow section 11,700-12,000' may produce gas.
- 8. Casing Program and Setting Depths:

	Size	Weight	Grade	Setting Depth
Surface	13-3/8"	48#	H-40	650
Intermediate	9-5/8"	40#	K-55	4,650
Production	7"	23# & 26#	S-95, K-55 & N-80	12,100

(continued)



- 9. Casing Setting Depth and Cementing Program:
 - a. Surface casing will be set at 650' cemented with 700 sacks Class "C" neat with 2% CaCl₂.
 - b. Intermediate casing will be set at 4650' and cemented with 1500 sacks light weight cement with 1/4 Flocele and 300 sacks Class "H" neat with 2% CaCl₂. Estimated top of cement to 13-3/8" surface casing.
 - c. Production casing will be set at 12,100' and cemented with adequate volume of Class "H" cement with 1.0% CFR-2 and .5% Halad-9 to bring cement top to approximately 9000' or above Wolfcamp formation. NOTE: Volume of cement to be determined after running caliper log at total depth.
- 10. <u>Pressure Control Equipment</u>: The minimum specifications for pressure control equipment can be seen on the attached Drawing No. 4 of Gulf's blowout preventer hook-up for 5000 psi working pressure.
- 11. <u>Circulating Media</u>: 0-650' fresh water spud mud; 620-10,900' brine water; 11,100-12,100' saltwater polymer with the following properties: viscosity 34-38 sec., water loss 5 cc's or less, weight 10-10.8 ppg. Heavier weight mud will be used if required by well conditions.
- 12. Testing, Logging and Coring Programs:
 - a. Formation testing may be done at any depth where samples, drilling rate or log information indicate a possible show of oil or gas.
 - b. Open-hole logs will be run prior to running casing at total depth.
 - c. Coring is not planned.
- 13. <u>Abnormal Pressure of Temperature and Hydrogen Sulfide Gas</u>: We do not anticipate any abnormal pressure or temperature; however, the following equipment will be installed while nippling up on intermediate casing for pressure control and detection; remote-controlled adjustable choke on flow manifold, drilling separator with gas vent line to burn pit, pit level sensors, flowline sensors and remote control BOP as shown on Drawing No. 4.

The presence of hydrogen sulfide gas is not anticipated.

- 14. Anticipated Starting Date: Drilling operations should start May 15, 1980.
- 15. Other Facets of the Proposed Operation: None

R. C. ANDERSON Area Production Manager

By: Olmand

RLV/jr Attachment Gulf Oil Exploration and Production Company

R. C. Anderson PRODUCTION MANAGER, HOBBS AREA

April 14, 1980

P. O. Box 670 Hobbs. NM 88240

Surface Development Plan Keohane etal "B" Federal Com Well No. 1 Eddy County, New Mexico

U. S. G. S. Drawer U Artesia, NM 88210

Gentlemen:

The surface use and operations plan for the proposed Keohane etal "B" Federal Com Well No. 1 are as follows:

- 1. Existing Roads:
 - A. Exhibit "A" is a portion of a general highway map showing the location of the proposed well as staked. Go 5.8 miles east of Loco Hills, New Mexico, on U.S. Highway 82, turn south on State Highway 31 (potash mine road) 7 miles, and staked location is approximately 3300' east of blacktop highway. The legal location of the proposed well is 1980' FSL & 2310' FEL Sec. 28, T-18-S, R-31-E, Eddy County, New Mexico.
 - B. Exhibit "B" is a plat showing all existing roads within a one-mile radius of the wellsite, as well as the planned access road (3300' of caliche road of Highway 31 west to location).
- 2. Planned Access Roads:
 - A. <u>Length and Width</u>: Required new road will be 270' long, 12' wide, north off of existing road to southeast corner of pad. Exhibit "B" shows new road.
 - B. Turnouts: None required.
 - C. Culverts: None required.
 - D. Cuts and Fills: 2' cut FN & 2' fill to south.
 - E. <u>Gates, Cattleguards</u>: Replace gate with cattleguard in existing road 600' from proposed location.
- 3. Location of Existing Wells:
 - A. The proposed well is a deep-test exploration well, with the nearest deep production being Amoco's Greenwood Unit #10-east offset of proposed well. A number of shallow wells are producing in the area, and Exhibit "B" shows the location of all wells within a one-mile radius of the proposed location.



4. Tank Batteries, Production Facilities and Lease Pipelines:

There are no tank batteries, production facilities or lease pipelines on this Unit operated or owned by Gulf Oil Corporation. If production is encountered, the tank battery and other required producing equipment will be located on the well pad. All production lines will be constructed on the well pad, on top of the ground. Refer to Exhibit "D".

5. Water Supply:

Water for drilling will be purchased from a supplier and transported by truck to the wellsite over the existing and proposed roads shown in Exhibits "A" and "B".

6. Source of Construction Materials:

Caliche will be obtained from an existing pit in the NW½ NE½ Sec. 29, T-18-S, R-31-E and purchased from B. L. M. by the contractor. Construction material will be hauled over existing roads to the proposed new drillsite. Please refer to Exhibit "B" for location of pit and haul roads.

7. Methods 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 pits are dry.
- C. Water produced during tests will be disposed of in the drilling pits. Oil produced during tests will be stored in test tanks until sold.
- D. Current laws and regulations pertaining to the disposal of human waste will be complied with.
- E. Trash, waste paper, sacks, garbage and junk will be burned or buried in a separate trash pit and covered with a minimum of 24 inches of dirt. All waste material will be contained to prevent scattering by the wind. Location of trash pit is shown in Exhibit "C".
- F. All trash and debris will be buried or removed from the wellsite within 30 days after finishing drilling an/or completion operations.
- 8. Ancillary Facilities: None required.
- 9. Wellsite Layout:

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- A. Exhibit "B" shows the relative location and dimensions of the well pad, mud pits, reserve pit, trash pit, burn pit, and location of major rig components.
- B. Only 2' cut & 2' fill of the wellsite will be required.
- C. The reserve pit will be plastic-lined.
- D. The wellsite and pad area has been staked.

10. Plans for Restoration of Surface:

- A. After completion of drilling and/or 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 to leave the wellsite in as aesthetically pleasing condition as possible.
- B. Any ungraded pits containing fluids will be fenced until they are filled.
- C. After abandonment, any special rehabilitation and/or revegetation requirements of the surface management agency will be complied with and accomplished as expeditiously as possible. All pits should be filled and levelled within 90 days after abandonment.

11. Other Information:

- A. <u>Topography</u>: The wellsite is located in a reasonably level area among low rolling sand hills.
- B. Soil: Soil is sandy underlain by caliche.
- C. <u>Flora and Fauna</u>: The vegetative cover is generally sparse and consists of shinnery oak, sandsage and perennial native range grasses. Wildlife in area is that typical of semi-arid desert land and includes coyotes, rabbits, rodents, reptiles, dove and quail.
- D. Ponds and Streams: There are no rivers, streams, lakes or ponds in the area.
- E. <u>Residences and Other Structures</u>: Nearest occupied dwelling is a ranch house 1½ miles west of wellsite. There are no known water wells in the near vicinity of the wellsite.
- F. Land Use: Grazing and hunting in season constitute present land use.
- G. Surface Ownership: Wellsite is on Federal surface.

12. Operator's Representative: Gulf Oil Exploration and Production Company A Division of Gulf Oil Corporation P. O. Box 670, Hobbs, NM 88240 Telephone 393-4121 Area Production Manager, R. C. Anderson

13. Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions which presently exist; that the statements made in this plan are, to the best of my know-ledge, true and correct; and that the work associated with the operations proposed herein will be performed by Gulf Oil Corporation and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Date: 4-16.70

Area Production Manager

RLV/jr Attachments





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Existing Roads ==

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