N. M. O. C. COPY SUBMIT IN TR CATE.

(Other instructures on reverse side)

UNITED STATES DEPARTMENT OF THE INTERIOR

30-015-22093

DEFARIMENT OF THE INTERIOR					5. LEASE DESIGNATION AND SERIAL NO.				
GEOLOGICAL SURVEY					LC - 02879	33−C			
APPLICATION	V FOR PERMIT	O DRILL, I	DEEPE	N, OR PL	UG BA	ACK	6. IF INDIAN, ALLOT	TEE OR TRIBE N.	AME
1a. TYPE OF WORK									
DRI	ILL XX	DEEPEN		PLU	IG BACI	< □	7. UNIT AGREEMENT	NAME	
b. TYPE OF WELL	AS 🗂		SII	NGLE [MULTIPLI				
WELL A W	TELL OTHER			NE	ZONE	° X	8. FARM OR LEASE Burch "C"	NAME	
2. NAME OF OPERATOR	0:1 0								
	rican Oil Compa	ny of lexas	<u></u>				9. WELL NO.		
3. ADDRESS OF OPERATOR		N M		00055		_	40 10. FIELD AND POOI		
	6 Loco Hills					D_			
At surface	FNL and 330' FN	In accordance with	manys 77 T	T 17C D 0	18.*) 10.E	سد	Grayburg-Ja		
330	FINE and 330° FI	Ar 26c.	23 , i	- APR K- S	7 ^{9E} 1077		11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA		
At proposed prod. zon	1e			AII II I	1011		Sec. 23, T-	-17S, R-2	9E
14. DISTANCE IN MILES	AND DIRECTION FROM NEAR	EST TOWN OR POS	T OFFICE	· 0. C	:. C.		12. COUNTY OR PARI	SH 13. STATE	·
4 Mile	es West of Loco	Hills		ARTESIA,	OFFICE		Eddy	New Me	xico
15. DISTANCE FROM PROPO LOCATION TO NEAREST	osed* r		16. NO	. OF ACRES IN L	LEASE		F ACRES ASSIGNED		
PROPERTY OR LEASE I (Also to nearest drlg	ZINE, FT. g. unit line, if any)	330'		1115			40		
18. DISTANCE FROM PROP			19. PR	OPOSED DEPTH		20. ROTA	RY OR CABLE TOOLS		
OR APPLIED FOR, ON TH		80 0'		3525'			Rotary		
21. ELEVATIONS (Show wh							22. APPROX. DATE		ART*
	3590' GI	₹					March 25,	1977	
23.	F	ROPOSED CASI	NG AND	CEMENTING	PROGRAM	1			
SIZE OF HOLE	SIZE OF CASING	WEIGHT PER F	T00	SETTING DE	РТН .	QUANTITY OF CEMENT			
12-1/4"	8-5/8"	24#		360' Circula		Circulate			
7-7/8"	5-1/2"	14#		3525'			350 sacks		
	l		ı		ı				
We propose to	drill this we	11 to 3525	land	l complete	in th	e Grav	burg and Sar	Andres	
Me hinhose co	Janin onis we	.11 60 3323	. uno	Comprete	. 111 611	c uray	rbury and Sar	i miures.	

All zones indicating porosity will be acidized or sand fraced.

Mud Program: Water and native mud will be used, and approximately 100' from T.D. RECEIVED we will mud up to get the hole in shape to log.

3000# blowout preventer will be used in the drilling of this well FEB $1.5\,1977$

U.S. GEOLOGICAL SURVEY ARTESIA, NEW MEXICO

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

signed Sendell Naubins	District Engineer	_{рать} <u>February</u> 9, 1977
(This space for Federal or State office use)		
A APPROVED BY CONDITIONS OF APPROVAL, IF ANY: APPROVE ARE NOT CO EXPIRES	APPROVAL MONE APPROV	DATE
	See Instructions On Reverse Side	

W MEXICO OIL CONSERVATION COMMI ON WELL LOCATION AND ACREAGE DEDICATION PLAT

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

All distances must be from the outer boundaries of the Section. Operator Well No. Burch C GENERAL AMERICAN OIL COMPANY OF TEXAS Section Range Unit Letter "D" 17 South 29 East Eddy Actual Footage Location of Well: 330 North feet from the feet from the line and line Ground Level Elev. Producing Formation Dedicated Acreage: 40 Grayburg & San Andres Grayburg-Jackson 3590.0 Acres 1. Outline the acreage dedicated to the subject well by colored pencil or hachure mates on the plat below. 2. If more than one lease is dedicated to the well, outline each and identify the ownership If more than one lease is deuterness interest and royalty).
 If more than one lease of different ownership is dedicated to the well, have the interests of 197 or the communitization, unitization, force-pooling, etc? both as to working FEB 1 51 197 gwners been consoli-If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.). No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commis-CERTIFICATION 330 I hereby certify that the information contained hereIn Is true and complete to the best of my knowledge and belief. Lendell Hawkins Position Engineer Company American Oil Co. of Te General February 9, 1977 I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief. Date Surveyed February 8, 1977 Registered Professional Engil and/or Land Surveyor

1320 1650

1980

2000

1500

DRILLING PROGNOSIS

- I. <u>OBJECTIVE</u>: Drill 4 infill wells in the Grayburg Jackson Field, Eddy County, New Mexico. These wells will continue the infill pattern on 20 acre spacing as already established. These wells will be approximately 3200'-3600' deep.
- II. LOCATION: These wells will be located in Sections 23, Township 17 South, Range 29 East and Section 19 and 30 of Township 17 South, Range 30 East, Eddy County, New Mexico.

III. PROJECTED TOTAL DEPTH, HOLE SIZE, SLOPE TEST:

- A. 12-1/4" hole to the top of the salt to accomodate 8-5/8" surface casing. (Approximately 350'-500').
- B. 7-7/8" hole to approximately 3200'-3600' to accommodate 5-1/2" production casing.
- C. Estimated drilling time 6-7 days per well.
- D. Slope test will be run on each bit trip or 500' intervals.
- E. If any coring or drill stem testing is done pipe will be strapped out of hole prior to coring or testing.

IV. DRILLING CONTRACTOR:

- A. Contractor: W.E.K. Drilling Company, Inc. (Probable)
- B. Type Contract: Footage
- C. Contract Depth: 3200'-3600'
- V. MUD PROGRAM: Probably will be furnished by Mudco or IMC.

Interval	Type Mud Fresh & Salt Water Salt Mud	<u>Weight</u>	<u>Viscosity</u>	Water Less
0'-3400'		9-10	28 - 30	NC
3400'-3600'		10-11	36 - 38	NC
(Will mud up	200' from T.D.)			

VI: TYPICAL GEOLOGICAL TOPS FOR WELL IN SECTION 24-17S-29E: (Middle of Unit Area)

Tops	Vertical Depth	Subsea
Queen	1880'	+1715'
Loco Hills	2340 '	+1255'
Main Metex	2450 '	+1145'
San Andres	2585 '	+1010'
Lovington	2690 '	+ 905'
Jackson Pays	28 70'	+ 725'
Lower San Andres Pay	3150'	+ 445'
Keely Pay	3330'	+ 265'
Sub-Keely Pay	3450 '	+ 145'

VII: SAMPLES:

A. 10' Samples from 2200' to T.D. or as directed by Company Representative.

VIII: CORES AND DRILL STEM TESTS:

A. At the present time no cores or drill stem tests are planned.

IX: LOGS:

A. Proposed logging program will be a Sidewall Neutron, Gamma Ray, Caliper from O'-T.D.

X: CASING AND TUBING PROGRAM:

- A. Surface: 8-5/8" 20-23# range 2 casing to be set approximately (350'-500') and cemented with 100 sacks Class "C" cement with 2% CaCl.
- B. Production: 5-1/2" K-55 15.5# ST&C casing will be run.

Cementing of production casing will be with Class "H" cement with 1/4# flocel, 3/4 of 1% CFR-2, 5# salt, 10# sand per sack.

XI: SAFETY PROGRAM:

Blowout preventers will be used as well as close observation by company personnel to assure the well is safely drilled.

XII: THIRD PARTY SERVICES:

Surveying: Dirtwork:

Jones & Company and John West Engineering

Jabo Rowland and Sweatt Construction

Cementing:

Halliburton and B.J.

Logging: Drilling Mud:

Dresser Atlas Mudco and IMC

Water Trucking: I & W and Caprock

SURFACE USE PLAN

GENERAL AMERICAN OIL COMPANY OF TEXAS, WELL: BURCH "C" #40 LEASE: LC-028793-c EDDY COUNTY, NEW MEXICO

The subject well is located approximately 22 miles East of Artesia, New Mexico on the North side of Highway U.S. 82. The following is a discussion of pertinent information concerning possible effect, which the proposed drilling of the well may have on the environment of the well and road sites and surrounding acreage. A copy will be posted on the derrick floor so that all contractors and sub-contractors will be aware of all items of this plan.

- AERIAL ROAD MAP Exhibit "A" is a portion of the Artesia, Quadrangle Map #106 1. and Maljamar Quadrangle Map #107 showing well site in relation to U. S. Highway 82. Access road, which is shown on Exhibit "B" exits the highway about 22 miles East of Artesia, New Mexico.
- LOCATION OF EXISTING WELLS The location of existing wells in the immediate 2. area of the proposed well is shown on Exhibit "B".
- PROPOSED WELL MAT AND IMMEDIATE AREA Refer to Exhibit "C" for direction 3. orientation and road access.
 - MAT SIZE 140' x 180'.
 - SURFACED Will be topped with 6" of caliche, bladed, watered, and compacted. Caliche to be purchased from B.L.M. by dirt contractor.
 - RESERVE PIT 60' x 70' pit unlined, joining mat to North.
 - CUT & FILL Location is basically flat except for small sand dunes. No fill will be needed except existing sand dunes leveled and topped with caliche.
 - DRILL SITE LAYOUT Exhibit "C" shows the location and layout including position of the Rig, Mud Tanks, Reserve Pits, Pipe Racks, etc. The Rig will be errected with the V-Door to the East.

f. SETTING AND ENVIRONMENT

- (1) Terrain Low rolling sand hills.
- (2) Soil Sandy Soil.
- (3) Vegetation Sparse vegetation, being mostly mesquite, shennery, weeds, and other semi-desert plants with some grass.
- (4) Surface Use Grazing.
- (5) Other Drillsite which is in sandy semi-arid desert country, is in a low environmental risk area. The total effect of drilling and producing this and other wells in this area would be very minimal.

q. DISTANCES TO

- (1) Ponds and Streams There are no surface waters within 3/4 mile.
- (2) Water Wells There are no water wells within 1/2 mile.
- (3) Residences and Building There are no residences or buildings within 1/2 mile.
- (4) Arroyos, Canyons, Hills, etc. Outside of small sand dunes there are no surface features.
- h. WELL SIGN Sign identifying and locating proposed well will be maintained at the drill site commencing with the spudding of the well.
- i. OPEN PITS All pits containing mud or other liquids will be guarded.

4. ROADS

- a. <u>EXISTING ROADS</u> All existing roads within the immediate area of well site are shown on Exhibit "B".
- b. PLANNED ROADS Planned access road will require less than 1,000 feet of new road that is 12 feet wide. The road will be surfaced with caliche. The proposed road is colored blue and a suggested route to the location is colored red on Exhibit "B". Little improvement will be required on existing access road.
- c. <u>FENCES</u>, <u>GATES AND CATTLE GUARDS</u> Will be maintained as General American already operates several hundred wells in the immediate area.
- 5. TANK BATTERY If production is encountered no additional battery will be required as sufficient facilities are already on the lease.

6. LEASE - PIPELINES

- a. EXISTING All existing pipelines are shown on Exhibit "B".
- b. <u>PLANNED</u> If production is encountered, flowline will consist of about 800' of 2" steel line on top of ground shown in orange on Exhibit "B".
- 7. WASTE DISPOSAL Barrel trash containers will be in accessible locations within the drill site area during the drilling and completion operations. A waste disposal pit will be deep enough to handle waste and will be covered with a minimum of 2 feet of top soil. See Exhibit "C" for pit location. If well is productive, maintenance waste will be placed in special trash cans and hauled away periodically. Any produced water will be disposed of through the currently existing S.W.D. system.
- 8. WATER SUPPLY Water supply to drill this well will be furnished through a steel line already laid through the drilling area.

Location of the water line is shown on Exhibit "B".

- 9. ARCHAEOLOGICAL RESOURCES None were observed.
- 10. RESTORATION OF SURFACE If well is productive, pits will be backfilled and leveled as soon as practical. Upon final abandonment of well, well site will be leveled and cleaned, with land returned as near as possible to original condition.
- 11. OPERATOR'S REPRESENTATIVES Field personnel who can be contacted concerning compliance of this surface use plan are as follows:

DRILLING AND PRODUCTION

Lendell Hawkins
P. O. Box 416
Loco Hills, New Mexico 88255
Office Phone: 505 677-2481
Home Phone: 505 677-2277

Fred Starkey P. O. Box 416

Loco Hills, New Mexico 88255 Office Phone: 505 677-2481 Home Phone: 505 746-9397

12. CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions as they actually exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the proposed work performed by General American Oil Company and its Contractors and Sub-Contractors will conform to this plan.

0R

DATE

A onder Hawkins, District Engineer

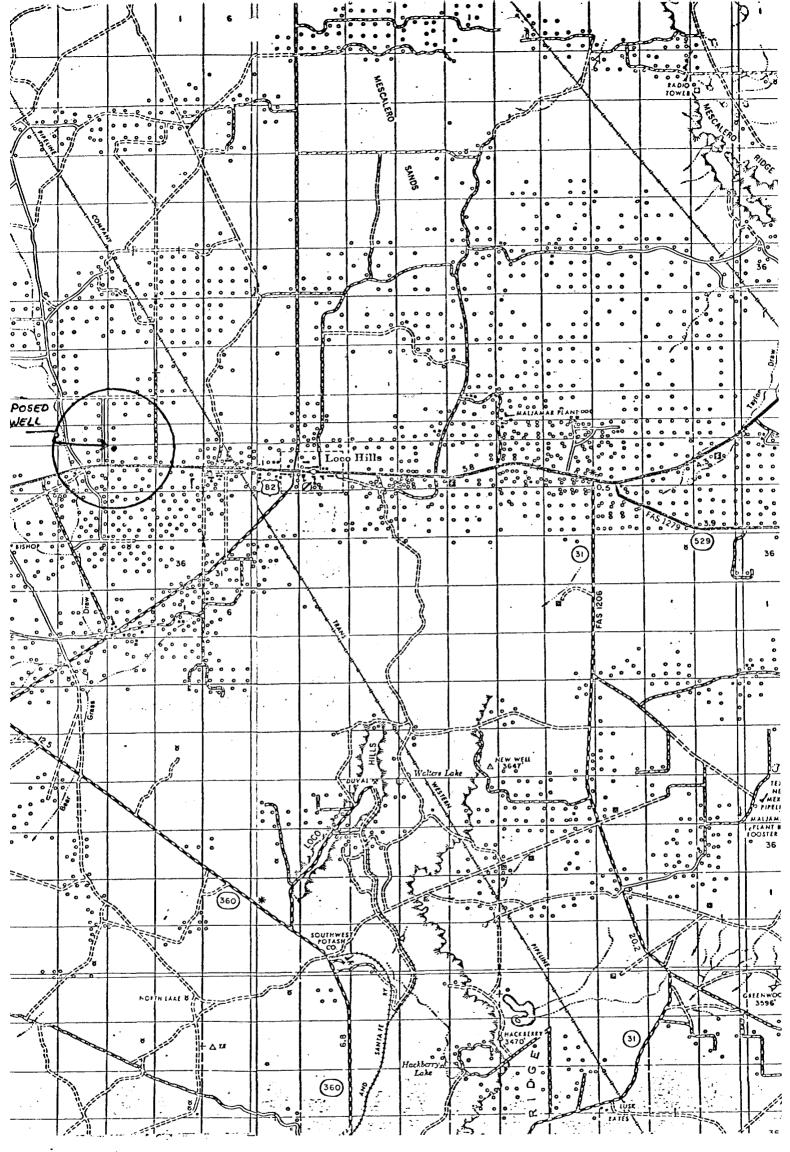


EXHIBIT "A"

SCALE: 1" = 2 MILES

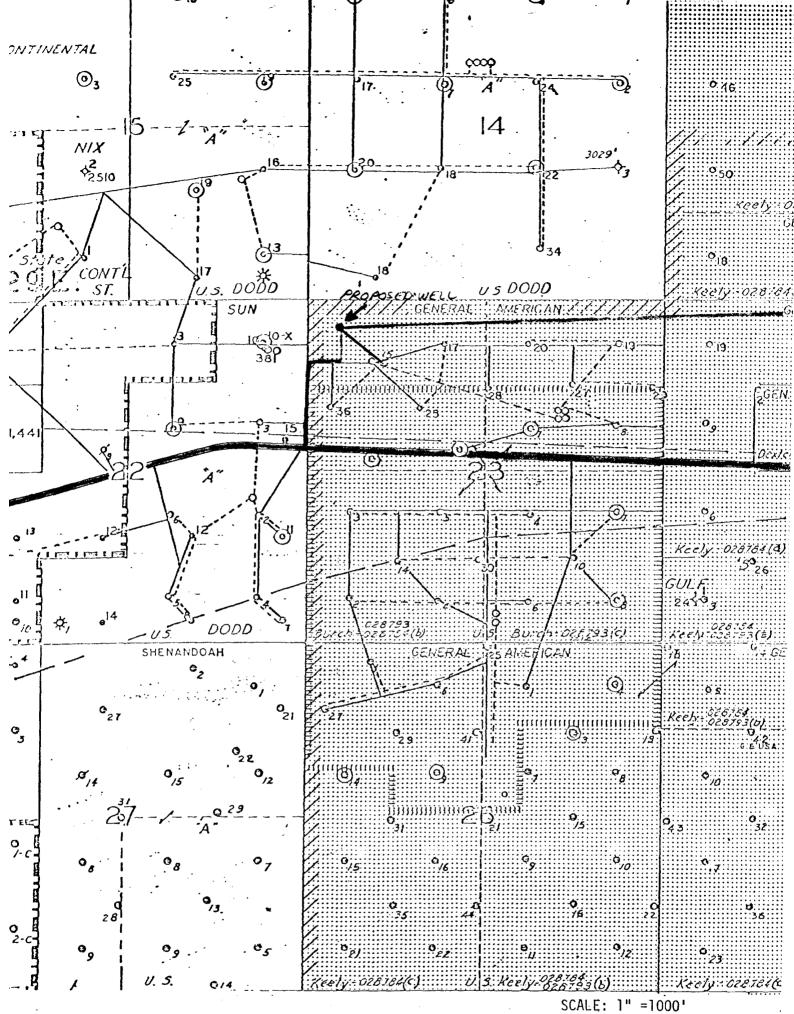


EXHIBIT "B"

GENERAL AMERICAN OIL COMPANY OF TEXAS

BURCH "C" #40 (Section 23-Township 17 South-Range 29 East)

• OIL WELLS

INJECTION WELLS
 FXISTING ROADS

- EXISTING ROADS - EXISTING FLOWLINES

. NEW PROPOSED ROADS (APPX. 800')

NEW PROPOSED FLOWLINE (APPX. 800' OF 2" STEEL ON TOP OF GROUND.)

- WATER SUPPLY LINE

SUGGESTED ROUTE TO LOCATION IS EAST OF ARTESIA TO HI-WAY MARKER 128. (ON STATE HI-WAY 82 EAST.) CONTINUE EAST .4 MILE. TURN NORTH AND GO APPX. .5 MILE. LOCATION WILL BE TO THE EAST OF ROAD.

ILS HT-WAY 83

