

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK

DRILL ☒DEEPEN ☐PLUG BACK ☐

b. TYPE OF WELL

OIL
WELL ☒GAS
WELL ☐OTHER ☐SINGLE
ZONE ☒MULTIPLE
ZONE ☐

2. NAME OF OPERATOR

Belco Petroleum Corporation

3. ADDRESS OF OPERATOR

10,000 Old Katy Road, Houston, Texas 77055

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*

At surface 1909' FSL & 2051' FWL

At proposed prod. zone
Same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*

9 miles NE of Caprock, N.M.

15. DISTANCE FROM PROPOSED*

LOCATION TO NEAREST
PROPERTY OR LEASE LINE, FT.
(Also to nearest drg. unit line, if any)

599'

18. DISTANCE FROM PROPOSED LOCATION*
TO NEAREST WELL, DRILLING, COMPLETED,
OR APPLIED FOR, ON THIS LEASE, FT.

1251'

16. NO. OF ACRES IN LEASE

320.48

19. PROPOSED DEPTH

4500'

17. NO. OF ACRES ASSIGNED
TO THIS WELL

80 acres

20. ROTARY OR CABLE TOOLS

Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)

4243 GR

22. APPROX. DATE WORK WILL START*

1-10-80

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12-1/4"	8-5/8"	24# K55	2200'	700 sx Light + 300 sx Class "C"
7-7/8"	5-1/2"	15.5# K55	4500'	150 sx Class "C" 50/50 Poz

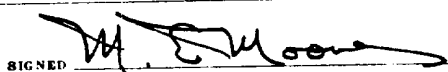
Replacement Well for Federal 31#2

1. The formation @ surface is Quaternary Alluvium Sand.
2. Estimated formation top: San Andres 3470'.
3. Oil in San Andres.
4. Casing Design: Casing as shown above.
5. BOP Program: 1 BOP 3000#, 1 pipe ram, 1 blind ram. Tested upon installation & periodically tested: operated daily. (See attached schematic)
6. Mud Program: 0-2200'-fresh; 2200'-4400'-brine, 10.0; 4000'-4500', salt, gel, and starch at 10.0.
7. Auxiliary: Lower Kelly cock valve; choke manifold, drill sting safety valve on floor.
8. Drill stem testings as required; logging: GRDL, DLL.
9. No known hazards.
10. Anticipated start up 1-1-80.

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 blow-out preventer program, if any.

24.

SIGNED

District
Engineer

DATE 1-2-80

(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

APPROVED BY

TITLE

CONDITIONS OF APPROVAL, IF ANY:

APPROVED
AS AMENDED

DATE JAN 04 1980

ACTING DISTRICT ENGINEER

*See Instructions On Reverse Side

RECEIVED

2451 11/11/79
11/11/79 11/11/79

RECEIVED

JAN 8 1980

OIL CONSERVATION DIV

**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form 1-1-1
Supersedes 1-1-1
Effective 1-1-1

All distances must be from the outer boundaries of the Section

Operator BELCO PETROLEUM CORPORATION			Lease FEDERAL 31		Well No. 2
Tract Letter	Section 31	Township T-9-S	Range R-33-E	County LEA	
Actual Plot Location of Well:					
1909'	feet from the SOUTH	line and	2051'	feet from the WEST	line
Ground Level Elev. 4243'	Producing Formation		Pool	Dedicated Acreage	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

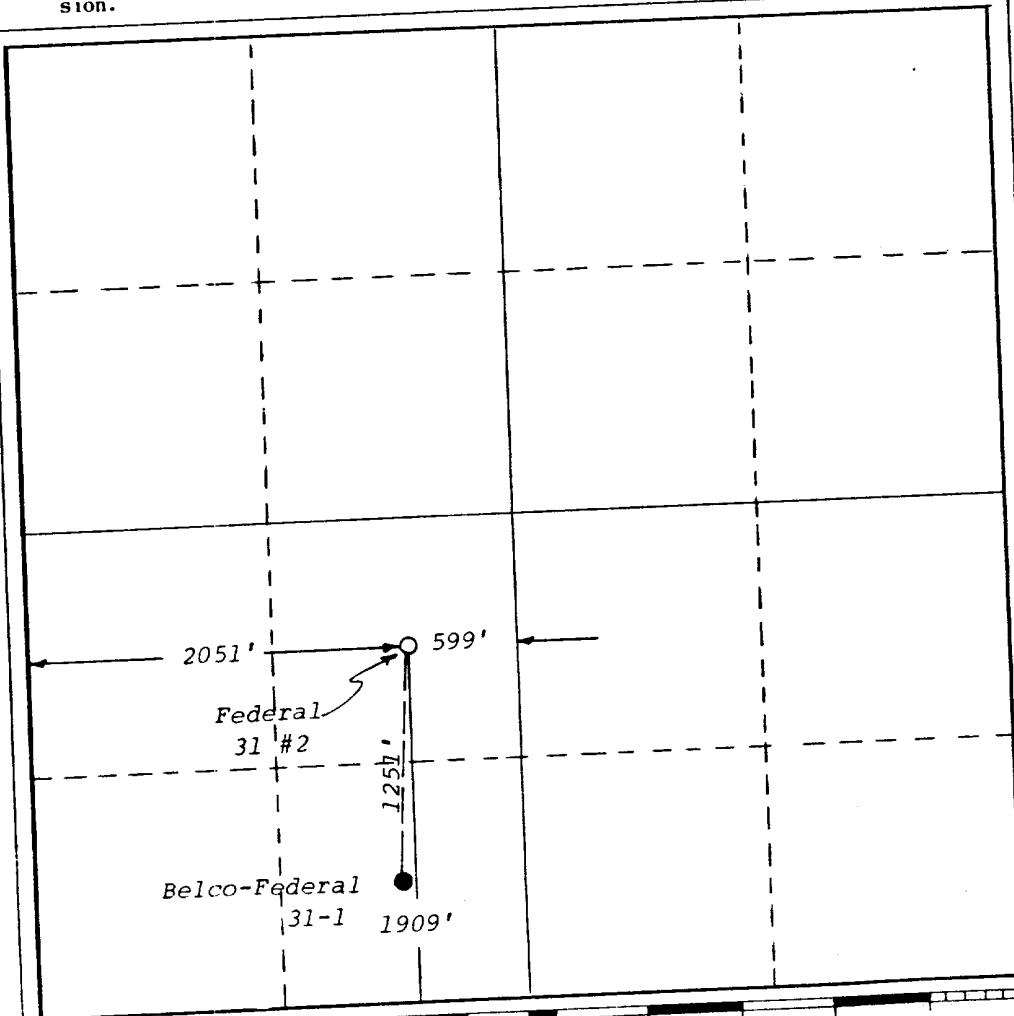
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

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 Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Name

Position

Company

Date

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.

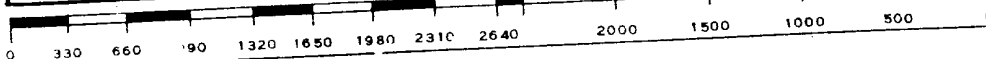
Date Surveyed

January 2, 1980

Registered Professional Engineer and/or Licensed Surveyor

Gay D. Boswell
Certificate No.

6689



Belco Petroleum Corporation
Federal 31 #2Y
Sec. 31, T-9-S, R-33-E, Lea County, New Mexico

3/13/80	Set bottom hole press bomb in SN @ 4100'.
3/14/80	SI.
3/15/80	SI.
3/16/80	SI.
3/17/80	SI.
3/18/80	SI.

3/18/80
3/18/80
3/18/80

Belco Petroleum Corporation

Federal 31 #2Y

1909' FSL, 2051' FWL, Sec. 31, T-9-S, R-33-E, Lea County, New Mexico

2/25/80 WOCR

2/26/80 WOCR

2/27/80 MI DA&S pulling unit.

2/28/80 Circ hole w/2% KCL. Report #1. MIRU DA&S pulling unit. Weld on bell nipple. Install BOP. PU & RIH w/4-3/4" bit, csg scraper & DC's on 136 jts 2-7/8" tbg to 4298'. SDFN.

2/29/80 TIH w/tbg. Report #2. Circ hole w/2% KCL. POH. RUGO. Run CBL-CCL from 4310-2700'. Good bonding across San Andres. TIH w/2-7/8" tbg. Swab FL to 2000'. POH. RU & perf San Andres w/2 SPF from 4206-4228' (44 holes). SDFN.

3/1/80 Swbg. Report #3. TIH w/2-7/8" tbg & RTTS. Spot 200 gal 15% acid HCL across perfs. PU & set pkr @ 4100'. Acidize San Andres w/3000 gal CRA-35 in 2 equal stages, sep by 500 gal 2% KCL & 150 gal gelled KCL block w/50/50 TLC-80 & TBA-110. Broke down @ 1/4 BPM @ 2600#. AIR 1-3/4 BPM @ 2400#. Had 200# incr w/block on perfs. Max press 2600#. 5 min ISI 2300#. 15 min SI 2100#. 127 BLW to rec. SI 60 min. Swbd & flwd 5 hrs. Rec 40 BLW. 87 BLW to rec.

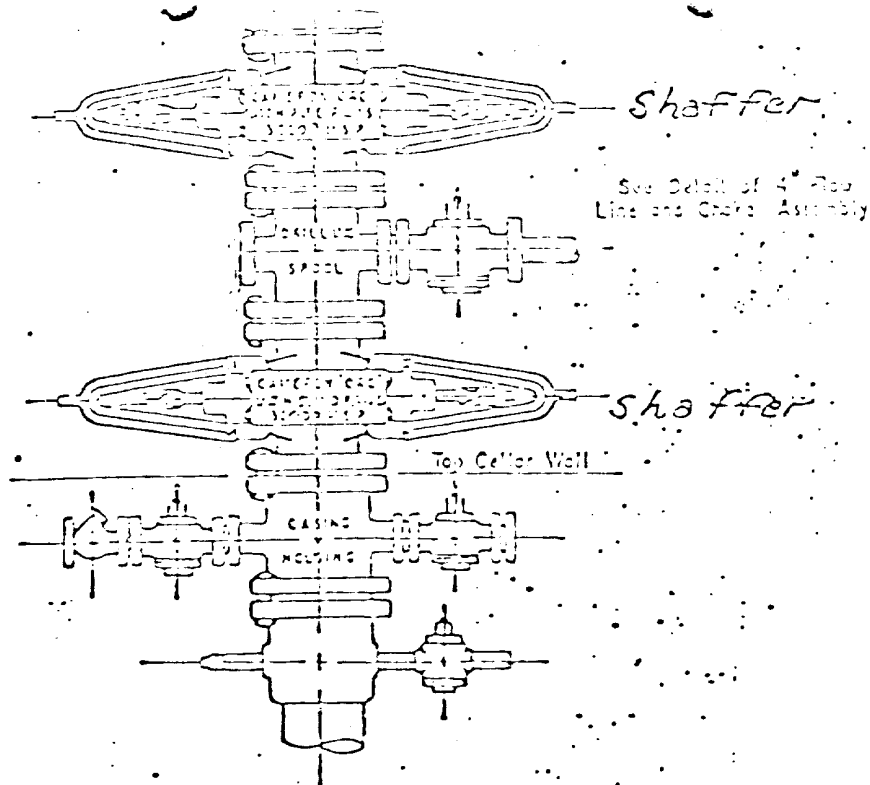
3/2/80 SD for Sunday. Report #4. RU & swbd 8 hrs. Rec 15 BLW & 3 BO. 72 BLW to rec. IFL 2500'. FFL 3500'. Swb rate last 4 hrs 1/2 BFPH w/trace of oil. SD for Sunday.

3/3/80 Swabbing. Report #4. SD for Sunday.

3/4/80 Swbg. Report #6. 13 hr SITP 50#. Bled down. RU & swbd 9 hrs, rec 6 BO & 12 BLW 60 BLW to rec. IFL 2800', FFL 3800'. Rate 1 BFPH, 40% oil last 7 hrs.

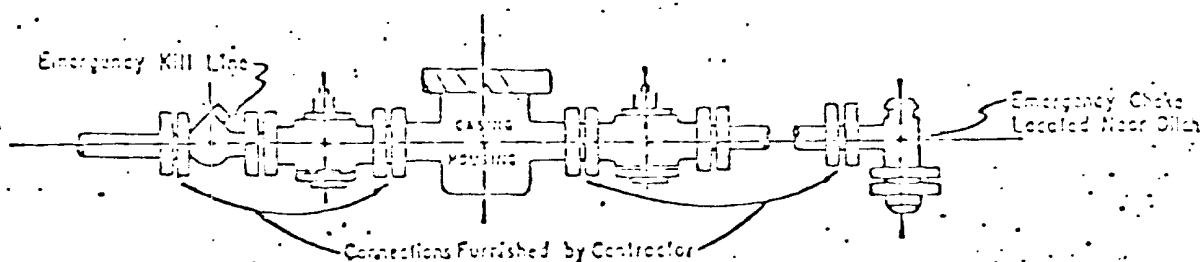
3/5/80 Swbg. Report #7. IFL 3500'. FFL 3800'. RU & swbd 9 hrs. Rec 2 BO & 2 BLW. No gas, 58 BLW to rec.

3/6/80 Swbg. Report #8. RU & swbd 9 hrs, rec 4 BO & 1 BLW. 56 BLW to rec. SDFN.



3000 PSI WORKING PRESSURE
BLOWOUT PREVENTER HOOK-UP

1500
Series 900 Flanges or Better



3000 PSI WORKING PRESSURE
KILL, CHOKES, AND FILL CONNECTIONS
API Series 900 Flanges or Better

DETAIL OF 4" FLOW LINE - CHOKES ASSEMBLY

Minimum assembly for 3000 PSI working pressure will consist of three preventers. The bottom and middle preventers may be 1500 PSI.

BELCO PETROLEUM CORP

Proposed Well

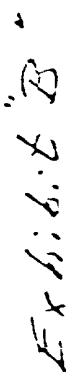
BOP Schematic

Exhibit "E"

Federal 31-2A

1980' FSL, 1980' FWL

Sec 31, T9S, R33E, L2C, AM



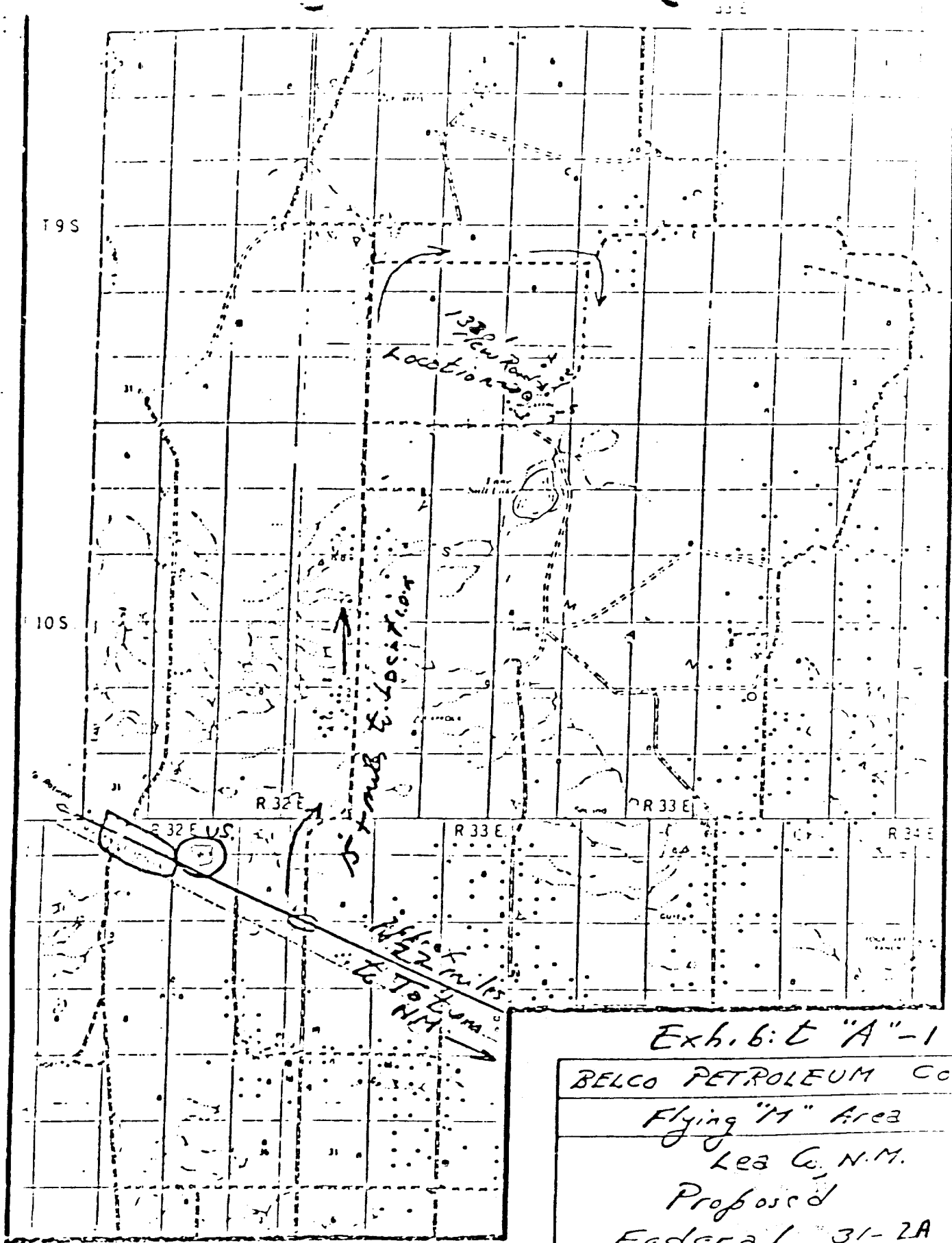


Exhibit "A"-1

BELCO PETROLEUM CORP.

Flying "M" Area

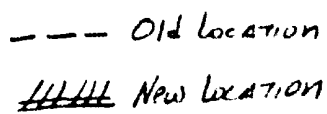
Lea Co., N.M.

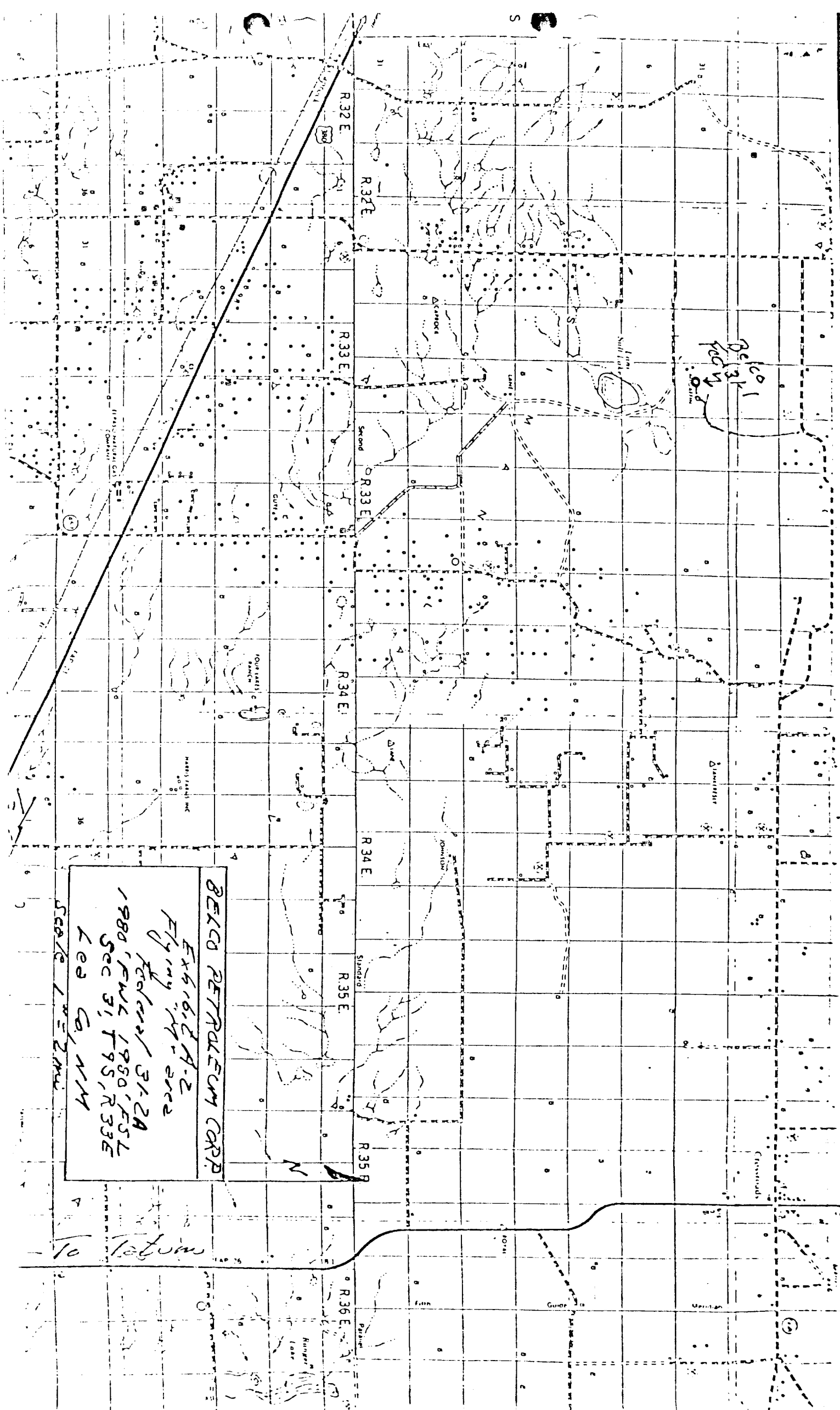
Proposed

Federal 31-2A
NE SW Sec 32, T. 9 S., R. 33 E.

SCALE: 1" = 2 mi

Lea Co., Minn







SURFACE USE PLAN
BELCO PETROLEUM CORPORATION
Federal 31 Well No. 1A
1980' FSL, 1980' FWL, Sec. 31, T9S, R33E
Lea County, New Mexico
Lease: New Mexico 11333

The proposed wellsite is approximately 27 air miles northwest of Tatum, New Mexico, and can be reached by exiting from U.S. Highway 380 approximately 22 miles NW of Tatum, as shown on Exhibit "A"-1. Travel then 15+ miles northeast to the location, as shown on Exhibit "A"-1, "A"-2, and Exhibit "B", and "C", via access roads.

EXISTING ROADS: Access and existing roads are shown on Exhibit "A"-1, "A"-2, "B" and "C". In addition Exhibit "B" and "C" illustrate proximity access. Exhibit "C" is the 1973 Lane Salt Lake USGS topographic quadrangle to a scale of 1:24,000; Exhibit "B", scale 1" = 1000' is a detailed well location plat.

PROPOSED ROAD: Access to the location pad will be from an existing oil field road to the Coastal Fed. Gonzales 1-J well. This existing road is 1330' east of the proposed Belco 31-2. Belco proposes to build a 12' wide caliche road, 1330' long from the Coastal 1-J well, center flagged for archeology.

Cut and Fill: Anticipating some compacted caliche to level the pad and possible minor fill to level the pad.

Culverts: None required.

Cattleguards, Gates, etc.: None expected.

EXISTING WELLS: This proposed oil well is located within the existing Flying "M" in Andres Pool, as shown on Exhibits "B", and "C".

PRODUCTION, GATHERING, TREATING AND STORAGE FACILITIES:

Tank Battery: Tank battery site, as shown on Exhibit "D", in the event of a successful well.

WATER SUPPLY: Belco plans to acquire water from commercial services available to the area.

SOURCE OF CONSTRUCTION MATERIALS: Caliche for construction of the new entry road and for surfacing the proposed wellsite pad will be obtained from commercial services who will utilize existing open supplies in the area; several pits are shown on Exhibit "C".

METHODS OF HANDLING WASTE DISPOSAL:

Drill cuttings will be disposed of in the drilling pits.

Drilling fluids will be allowed to evaporate in the drilling pits until pits are dry.

Any produced water will be collected in tanks until hauled away. Any oil produced during tests will be stored in test tanks until sold.

Trash containers will be provided around the drilling rig during drilling and completion procedures. Trash, waste paper, garbage, and junk will be buried in a separate trash pit, as shown on Exhibit "D", and covered with a minimum of 27 inches of dirt.

ANCILLARY FACILITIES: No camps, airstrips, etc. will be constructed.

WELLSITE LAYOUT: Exhibit "D" shows the dimensions and the relative locations of the well pad, mud pits, reserve pit, and trash pit with respect to the well.

Mat Size: 160' x 215'; approximately 200' x 200', flagged out for archaeological survey.

Cut and Fill: The proposed drillsite pad will be leveled and filled as needed.

Surfaced: The base will be surface by six inches of compact caliche.

Pit: 100' x 80' pit lined with plastic

Cleared Buffer Area: No buffer area is to be cleared; however, area around well mat may be used for turn-around and/or storage.

0. PLAN FOR RESTORATION OF THE SURFACE: 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 as soon as practical or buried with at least 24" of cover. Any unguarded pits containing fluids will be fenced until they are filled. After abandonment of the well, the well pad and all needed access roads will be ripped to promote revegetation.

1. OTHER INFORMATION:

Topography: Land surface consists of low relief, caliche topography.

Soil: Thin with caliche.

Vegetation: Thin grasses, some sage, yucca, and thistle.

Wildlife: None observed.

Ponds and Streams: No fresh water in vicinity of the location.

Residences and Other Structures: The McGuffin Ranch buildings are located approximately 1/2 mile to the west.

Water Wells: A few water wells are located in the general area.

Land Use: Miscellaneous grazing.

Surface Ownership: The surface of the W/2E/2 and the W/2 Sec. 31 are owned by Margaret McGuffin, Caprock, N.M.; an agreement of damage and restoration is in progress and will be reached, between Belco and Ms McGuffin, documentation of which will be supplied upon request.

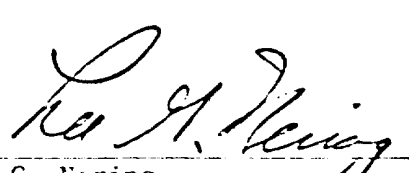
Well Sign: Sign identifying and locating well will be maintained at drillsite commencing with the spudding of the well.

12. OPERATOR'S REPRESENTATIVE: Field personnel who can be contacted concerning compliance of this Surface Use Plan consists of:

Gene Moore, 411 Petroleum Building, Midland, Texas 79701 - Phone (915) 683-6366.

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 plat are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by BELCO PETROLEUM CORPORATION and its contractors and sub-contractors in conformity with this Plan and the terms and conditions under which it is approved. A copy of this Plan will be posted at the wellsite during the drilling of the well for reference by all contractors and sub-contractors.


Lee G. Nering
Administrative Geologist
BELCO PETROLEUM CORPORATION
Houston, Texas

A G R E E M E N T

THIS AGREEMENT DATED this 6th day of August, 1979, by and between MARGARET MCGUFFIN, whose address is P. O. Box 334, Caprock, New Mexico and BELCO PETROLEUM CORPORATION (BELCO), the address of such corporation being 411 Petroleum Building, Midland, Texas 79701

W I T N E S S E T H :

Margaret McGuffin owns the surface of and conducts ranching operations on certain lands in Lea County, New Mexico, and minerals therein are owned by third parties.

BELCO is interested in entering onto the said lands for the purpose of exploring, developing and producing hydrocarbons in the form of oil and gas therein contained.

Margaret McGuffin is willing to permit BELCO to have access to such land for the drilling of their proposed wells: the Federal #31-2, Federal #31-3 and proposed Belco well on farmout acreage from Warren American Oil Company in the SW/4 of Section 32 for a total consideration of Four Thousand Fifty and No/100 Dollars (\$4,050.00), subject to the terms and conditions hereinafter contained:

NOW, THEREFORE, the parties agree as follows:

1. Belco agrees, by executing this instrument to pay Margaret McGuffin the above mentioned consideration only in the following manner: \$1,350.00 at the time Belco commences drilling operations on that particular well, for each of the three proposed wells described above.

2. Margaret McGuffin, as surface lessee, by executing this instrument, hereby gives and grants BELCO PETROLEUM CORPORATION her permission insofar as she has the right to do so, to conduct all of their operations on her land or on lands which she has leased from the State of New Mexico or on lands that she owns from the United States of America, insofar as the lands cover ~~the~~ E/2 W/2 and the W/2 E/2 of Section 31 and SW/4 of Section 32, both sections in T9S, R33E, Lea County, New Mexico. This includes allowing BELCO PETROLEUM CORPORATION to make new roads as necessary to and from said lands described above, to make surface locations as necessary for exploring, developing and producing oil and or gas therein contained

for the drilling of the three above proposed wells, including pipeline right-of-ways ~~and the right of way~~ *to the road* *in the*

3. BELCO shall conduct its operations in a prudent manner and in conformity with all current and future laws and regulations of the United States of America and the State of New Mexico. It agrees to protect, defend and hold harmless Margaret McGuffin from any claims or demands of whatsoever nature that may be asserted against Margaret McGuffin as a result of BELCO's operations.

to section → 4. In the event of a dry hole on these lands, BELCO agrees to restore the surface of the land as near as possible to its original condition in keeping with government rules and regulations.

5. This agreement shall be binding upon BELCO, its successors and assigns, and may only be assigned with the prior written consent of Margaret McGuffin, which consent shall not be unreasonably withheld.

IN WITNESS WHEREOF, the parties have affixed their signatures hereto.

WITNESS:

R. M. Ribala

MARGARET MCGUFFIN

BY: *Margaret McGuffin*

WITNESS:

[Signature]

BELCO PETROLEUM CORPORATION

BY: *[Signature]*
D. B. Martin, Vice President

THE STATE OF NEW MEXICO

COUNTY OF CHAVES

The foregoing instrument was acknowledged before me this 13th day of August, 1979, by MARGARET MCGUFFIN.

My Commission Expires:

12-8-82

Randy M. Ribala
Notary Public in and for Chaves
County, New Mexico

THE STATE OF TEXAS

COUNTY OF HARRIS

BEFORE ME, the undersigned, a Notary Public in and for said County and State, on this day personally appeared D. B. MARTIN, known to me to be the person and office whose name is subscribed to the foregoing instrument and acknowledged to me that the same was the act of the said BELCO PETROLEUM CORPORATION, a corporation, and that he executed the same as the act of such corporation for the purposes and consideration therein expressed, and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 24 day of August, 1979.

My Commission Expires:

5-31-81

Rebecca W. Yarbrough
Notary Public in and for Harris
County, Texas

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