

DONNELL & BERGER
CONSULTING GEOLOGISTS
PHONE 4-8875 236 CAPITOL BLDG.
MIDLAND, TEXAS

C. H. SWEET - REQUEST FOR SPECIAL PERMIT TO DRILL

1315 feet North of the South line and 5 feet West
of the East line of Section 23, Township 18 South,
Range 37 East, Lea County, New Mexico.

Ex 761
Case 488

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The requested location 1315 feet North of the South line and 5 feet West of the East line of Section 23, Township 18 South, Range 37 East, Lea County, New Mexico is situated on the Southwest flank of the Northwest-Southeast trending, Hobbs Anticline. The accompanying plat is a detail contour map of the immediate area, contoured on the top of the San Andres.

A well drilled at a normal location on the 40 acre tract of the Northeast quarter of the Southeast quarter of the Southeast quarter of Section 23 would anticipate the San Andres formation at a sea level datum of -560. Since the dip of the western flank of the Hobbs structure is relatively steep a well drilled at the proposed location will encounter the San Andres at a sea level datum of approximately -535 or some 25 feet above the expected San Andres at a normal location. (See plat)

It was originally believed that the oil-water contact for the uppermost Hobbs producing zone in this area was at a sea level datum of -510. The basis for this belief was established in the Shell #1 State Sloan "E", a well drilled 990 feet North of the Sweet #1-A Shell State. The Shell #1 State Sloan "E" encountered the top of the San Andres formation at a sea level datum of -510 and after a penetration of 30 feet, the first test taken in this formation encountered water. Subsequent drilling in the area and a detailed study of the Hobbs porous zones, now show that a 30 foot penetration of the San Andres will encounter a second porous zone which is known to carry water at a sea level datum of -427 in the Sweet #1-A Shell State. The lack of water in the upper Hobbs zone at a sea level datum of -513 was established with the completion of the Sweet #3-A Shell State. This well completed at a total depth of 4191 (-513) in the upper San Andres zone, found no water in a section acidized from 4183 to 4191. It therefore can be concluded that the water found in the Shell #1 State Sloan "E" came from a lower porous zone and that the water-oil contact in the uppermost porous zone in this section of the Hobbs Pool has not been established.

The Hobbs Pool has long been known as an excellent water drive field and while present drilling has found no water in the upper zone, it is useless to ignore the fact that water can be expected in this zone by any well located structurally lower than wells now producing. Since the upper porous zone of the Hobbs field in this area has a thickness of only 8 to 12 feet, 25 feet of structural relief could easily be the difference between a commercial producing well and a dry hole.

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In view of the facts that:

(1) While no definite water has been found in the Hobbs upper porous zone in this section of the field - it is certain that since Hobbs is a prime example of a water drive field, water will be encountered in this zone at some lower point on structure.

(2) Due to the steep dip of the western flank of the Hobbs structure a well drilled at the proposed location will be some 25 feet higher and much less likely to encounter water in the upper zone than a well drilled at a normal location on the 40 acre subdivision in question. (See Plat)

(3) Requests for similar locations have been granted in the past. (See Samedan #4-C on plat)

It is urgently requested that a special permit be granted to drill a well to test the upper San Andres porous zone on the 40 acres comprising the NE/4 of the SE/4 of the SE/4 Section 23, Township 18 South, Range 37 East at a location of 1315 feet from the south line and 5 feet west of the east line of said Section 23.

DONNELL & BERGER

By: 
W. R. Donnell

C. MELVIN NEAL
W. D. GIRAND, JR.

KERMIT E. NASH
W. D. GIRAND, SR.

NEAL & GIRAND
LAWYERS
NEAL BUILDING
HOBBS, NEW MEXICO

TELEPHONES:
3-5171 3-5172
P. O. BOX 1326

January 22, 1953

Oil Conservation Commission,
Mabry Hall,
Santa Fe, New Mexico.

Attention: Nancy Royal

Dear Nancy:

I am enclosing herewith application of C. H. Sweet for authority to establish an unorthodox location as I discussed with you and Mr. Graham yesterday.

This application was given Case No. 487 in the preliminary notices you were preparing.

As soon as my engineering data is received, I propose to file an amended application.

Thanking you for your consideration and favors in this matter, I am

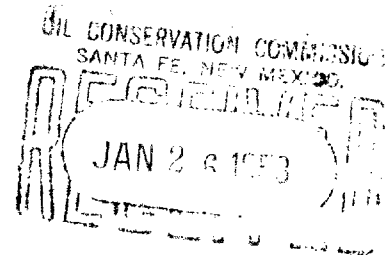
Very truly yours,

NEAL & GIRAND,

BY:



G/cl
Encls.



OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

March 3, 1953

Mr. John A. Woodward
Amerada Petroleum Corporation
Beacon Building
Box 2040
Tulsa, Oklahoma

Re: Testimony in Case No. 487
(C. H. Sweet's application
to drill an unorthodox
location).

Dear Mr. Woodward:

During the regularly scheduled hearing of the Oil Conservation Commission on February 17, 1953, you were called to testify in the above captioned case.

It was our understanding that you would mail a copy of your testimony to the Court Reporter, Miss Ada Dearnley, Box 1302, Albuquerque, New Mexico, and in order to expedite the filing of the transcripts in this case your cooperation will be appreciated.

Very truly yours,

W. B. Macey
Chief Engineer

lh
cc: Miss Ada Dearnley

C
O
P
Y

C. MELVIN NEAL
W. D. GIRAND, JR.

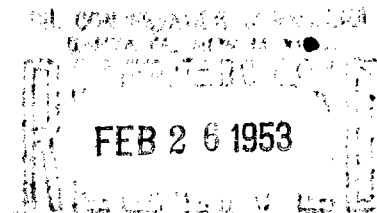
KERMIT E. NASH
W. D. GIRAND, SR.

NEAL & GIRAND

LAWYERS
NEAL BUILDING
HOBBS, NEW MEXICO

TELEPHONES:
3-5171 3-5172
P. O. Box 1326

February 23, 1953



Oil Conservation Commission,
Santa Fe, New Mexico.

Attention: Mr. R. R. Spurrier

Gentlemen:

Confirming my phone conversation of this date, please consider this letter our request for an indefinite continuance of Case No. 487, being the application of C. H. Sweet for permission to drill an unorthodox well in the SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 23, Township 18 South, Range 37 East, N.M.P.M., Lea County, New Mexico.

We are waiting on further performance of another well in the area before determining whether we wish to continue to prosecute this application as amended at the hearing.

Very truly yours,

NEAL & GIRAND,

BY: 

G/cl

cc: Mr. C. H. Sweet, Hobbs, New Mexico
cc: Mr. W. D. Donnell, 236 Capitol Bldg., Midland, Texas.
cc: Samedan Oil Company, Hobbs, New Mexico.
cc: Continental Oil Company, Hobbs, New Mexico.
cc: Skelly Oil Company, Hobbs, New Mexico.
cc: Stanolind Oil & Gas Company, Hobbs, New Mexico.
cc: Shell Oil Company, Hobbs, New Mexico.
cc: Amerada Petroleum Corporation, Hobbs, New Mexico.

C. MELVIN NEAL
W. D. GIRAND, JR.

KERMIT E. NASH
W. D. GIRAND, SR.

NEAL & GIRAND
LAWYERS
NEAL BUILDING
HOBBS, NEW MEXICO

January 26, 1953

TELEPHONES:
3-5171 3-5172
P. O. BOX 1326

Oil Conservation Commission,
Santa Fe, New Mexico.

Attention: Nancy Royal

Dear Nancy:

I am here enclosing Amended Application in Cause No. 487. We have notified the companies set out in Paragraph 4 of the application, furnishing them with a copy of the application and requesting their consent to be sent direct to the Commission.

Please file this Amended Application.

Very truly yours,

NEAL & GIRAND,

BY:



G/cl
Encls.

