

Case # 145

Drawer D
Monument, New Mexico
April 22, 1958

New Mexico Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

*Grant
for hearing
late May*

Re: Application to Dually Complete Amerada H.C. Posey "A" #4, East Caprock Devonian Pool, Lea County, New Mexico in such a manner to permit disposal of salt water in the Devonian Formation and oil production from the Pennsylvanian Formation.

Gentlemen:

By this letter of application Amerada Petroleum Corporation wishes to state the following:

Elvis:
↓
Make Amerada Amend at hearing

- A. That the Amerada Petroleum Corporation H.C. Posey "A" #4, located in the NW/4 of the NE/4 of Section 14, Township 12 ~~NS~~, Range 3 ~~SE~~, was completed as an oil well at a total depth of 11,255' in the Devonian Formation on June 19, 1953. The well was deepened an additional 15' to a total depth of 11,270' on March 18, 1958. The attached plat shows the location of this well along with the location of all offset wells.
- B. That oil production from the Amerada H.C. Posey "A" #4 has declined such that further operation is considered economically infeasible.
- C. That the Pennsylvanian formation in the Amerada H.C. Posey "A" #4 was proven productive by drill stem tests through the interval 8406' to 8748' while drilling.
- D. That the Dewey Lake Formation, which is now being used for disposal of the East Caprock-Devonian Pool produced water, has proven inadequate for the disposal of the current volume of produced water.
- E. That no other formation above the Devonian is suitable for disposal of salt water.
- F. That Amerada Petroleum Corporation wishes to dually complete the H.C. Posey "A" #4, a depleted Devonian oil well, in such a manner to permit production of oil from the Pennsylvanian Formation and the disposal of salt water into the Devonian Formation. The proposed dual completion will be done in the following manner:

Case of appl. sent to F. O. B. 5-12-58

1. Deepen well an additional 100 feet from 11,270' to 11,370'.
2. Set Baker Model "D" Production Packer at approximately 8800'.
3. Selectively perforate Pennsylvanian interval 8406' to 8748', acidize, and test.
4. Run a Brown DS-3 packer on 2" tubing with a 2-1/2" connecting string to lower packer and set at approximately 8300'.
5. Salt water will be injected as follows: down casing-tubing annulus to upper packer, through 2-1/2" tubing between upper and lower packer, thence down 5-1/2" casing below lower packer to disposal interval. Oil will be produced through 2" tubing string to surface. Attached schematic diagram shows equipment installation and production disposal methods.

G. That the manner and method of the proposed dual completion is both mechanically feasible and practical.

Therefore, Amerada Petroleum Corporation requests that the oil conservation Commission set a certain day on which this application may be heard and after said hearing grant permission to dually complete the subject well as an oil-salt water disposal well in the manner proposed in this application.

Respectfully submitted,

AMERADA PETROLEUM CORPORATION

D. C. Capps
D. C. Capps
District Superintendent

DCC/HCK/vh

cc: Shell Oil Company
Box 845, Roswell, New Mexico

Skelly Oil Company
Box 38, Hobbs, New Mexico

Texas Pacific Coal & Oil Co.
Box 1688, Hobbs, New Mexico

The Texas Company
Box 1270, Midland, Texas

Union Oil Company
1801 Gila Drive, Hobbs, N.M.
c/o A.T. Mannon

CLASS OF SERVICE

This is a fast message unless its deferred character is indicated by the proper symbol.

WESTERN UNION TELEGRAM

W. P. MARSHALL, PRESIDENT

SYMBOLS

DL=Day Letter

NL=Night Letter

LT=International Letter Telegram

1201

The filing time shown in the date line on domestic telegrams is STANDARD TIME at point of origin. Time of receipt is STANDARD TIME at point of destination

LA 195 DC269

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1958 JUN 2 PM 3 05

D MDA188 PD=MIDLAND TEX 2 352PMC=

ELVIS UTZ, NEW MEXICO OIL CONSERVATION COMM=
MABREY BLDG SANTA FE NMEX=

CONFIRMING OUR TELEPHONE CONVERSATION TODAY ON AMERADA=
POSEY A=4, THE ESTIMATED MAXIMUM BHP IN THE PENNSYLVANIAN
OIL ZONE IS 3050 PSI THE ESTIMATED MINIMUM HYDROSTATIC
PRESSURE OPPOSITE OIL PRODUCING ZONE IS 3110 PSI=
AMERADA PETROLEUM CORP BY O C MCBRYDE JR=

=A=4 3050 3110=

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

GOVERNOR

EDWIN L. MECHEM
CHAIRMAN

New Mexico

OIL CONSERVATION COMMISSION

LAND COMMISSIONER, MURRAY E. MORGAN
MEMBER

STATE GEOLOGIST, A.L. PORTER JR.
SECRETARY DIRECTOR



P. O. BOX 2045
HOBBS, NEW MEXICO

May 19, 1958

File Case #1452

Mr. Elvis Utz
Oil Conservation Commission
Box 871
Santa Fe, New Mexico

Re: Case #1452, H. C.
Posey "A" #4-A,
NE/4 NE/4, Sec. 14,
T12S, R32E.

Dear Elvis:

Amerada's application for an oil, S.W.D., Dual completion is on the docket for May 28, 1958.

As I am maintaining a file on all oil-oil dual completions, and S.W.D. wells, I would appreciate a set of the exhibits on the above case, for this file. They plan to produce oil from the Pennsylvanian and inject salt water into the Devonian.

I am primarily interested in the downhole mechanics of this installation.

Any help shall be greatly appreciated.

Yours very truly,

OIL CONSERVATION COMMISSION

Eric F. Engbrecht
Oil & Gas Inspector

EFE/eb

GRARIDGE CORPORATION

BOX 752

BRECKENRIDGE, TEXAS

May 8, 1958

Service Pipe Line Company
1628 19th Street
Lubbock, Texas

ATTENTION: Mr. C. E. Wilson

Dear Mr. Wilson:

Attached is schematic proposal for LACT unit for use in the North Caprock Queen Unit of Lea and Chaves County, New Mexico. We believe this installation will conform to the specifications as discussed in your office on April 18. Features that are perhaps not clearly shown on the drawing are as follows:

1. Clean oil from treater will enter 600 barrel cone bottom settling tank through deck connection and enter tank through 4" perforated downcomer to center of cone bottom. Oil in this tank will be monitored continuously by an Instruments Incorporated Model 1728-CIE explosion proof monitor. Intake to monitor is 6' above edge of cone and discharge is 2' above edge of cone. Oil overflow from settling tank to 500 barrel surge tank will be from the 17' level on the settling tank to deck inlet and through 4" perforated downcomer to bottom tank. Installed in this line will be a 4" fail closed diaphragm valve activated by a control circuit in monitor and, or, by a high fluid level control in surge tank. Tied into the same circuit to be activated when monitor gives indication of bad oil existing in settling tank will be a 50 barrel an hour circulating pump drawing suction from center of cone bottom of settling tank. Bottom of settling tank will be pumped off periodically as needed by time clock operation of the 50 barrel an hour pump. Should oil fail to go to pipe line for any reason settling tank will fill to 19' level and bypass to 3 additional 500' barrel oil storage tanks.

Oil will go to your pipe line pump and sampler from regular pipe line connection on 500 barrel surge tank. Oil will then go to meter skid unit. It will go through 3" gas eliminator, 3" strainer, two 2" A.O. Smith Model S-12 meters, temperature compensated with ticket printer, complete with valve arrangement so that either one or both meters can be used or bypassed completely. Oil will then go through your back pressure valve and to the 10 barrel plastic

MAY 8, 1958

coated atmospheric meter prover. It is assumed that when the meter prover is used, the oil will gravity on out.

2. The meters will have a maximum capacity of 171 barrels per hour or 4104 barrels per day. We understand that these meters for best results should operate at a constant rate of about 140 to 150 barrels per hour so your pipe line pump will need to be sized accordingly. This should handle our expected maximum capacity of 2500 BPD in about 16 hours. If you foresee necessity for shutting your pump in for long periods each day, we might need to increase meter capacity, pipe line pump capacity, and surge tank capacity.

3. Should meters fail, you will note that system is arranged so that normal pipe line runs from all tanks can be made.

4. On skid mounted unit a 3" nipple 3' long with victaulic couplings will be put in line which can be removed for you to install your back pressure valve, or, if you prefer you can specify the type back pressure valve you want and we will have it installed at factory and billed to you.

5. Attached is quotation from National Tank Company which gives most of specifications.

Should you need additional information about any of the equipment or method of operation, please feel free to call on us or Mr. W. R. Willis with the National Tank Co., Box 1316, Wichita Falls, Texas.

The only articles that might delay installation are the meters which have a six-week delivery. Please advise us as soon as possible if the equipment meets your approval or of any necessary changes so that we may assemble all information for an Oil Conservation Commission hearing the latter part of this month.

Very truly yours,

GRARIDGE CORPORATION



T. A. Ford
Manager of Production

TAF:gl

Attach

cc: Service Pipe Line Co.
Box 671
Lovington, New Mexico
Attn: Mr. Dodson

P.S. Hearing is schedule for May 28, 1958

SERVICE PIPE LINE COMPANY

Lovington, New Mexico
May 17, 1958

Graridge Corporation
Box 752
Breckenridge, Texas

Attn: Mr. T. A. Ford

Dear Mr. Ford:

We have received your schematic proposal for the LACT unit to be used on the North Caprock Queen Unit, Lea County, New Mexico. We have given your proposal careful consideration and find that the arrangement of equipment and method of operation is satisfactory to Service Pipe Line Company. It is assumed that a draw-off will be provided on the 500 bbl. surge tank (primary pipe line tank) to allow disposal of any bottom build up that might occur.

We appreciate, and accept your offer to have a back pressure valve factory installed. We want to use a 3" cast steel, 300 lb. WP, Charles Wheatley Stream Flo check valve with external counter balance arm and weights to hold 10 psi back pressure (weights adjustable). The type connection can be either victaulic or ASA 150 RF flanges, which ever is consistent with your fabrication. Billing for this valve should be mailed to Service Pipe Line Company, Box 1088, Lovington, New Mexico.

We intend to install a Roper gear pump that will conform to the recommended meter through-put.

Sincerely yours,

J. C. Dotson
J. C. Dotson

Lovington District Superintendent

cc: C. E. Wilson

| ROUTE TO: | DATE CHECKED |
|-----------|--------------|
| CLARK | |
| REAUGH | |
| FORD X | |
| ELLIOTT | |
| EVANOFF | |
| WICK | |
| WALKER | |
| FERREL | |