

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
COMMISSION OF THE STATE OF NEW
MEXICO FOR THE PURPOSE OF
CONSIDERING:

CASE NO. 1275
Order No. R-1029

IN THE MATTER OF THE APPLICATION OF
SHELL OIL COMPANY FOR PERMISSION TO
INSTALL CENTRALIZED PRODUCTION TEST
FACILITIES AND AUTOMATIC CUSTODY
TRANSFER EQUIPMENT IN THE CARSON
UNIT AREA AND ON SEVEN SEPARATE LEASES
IN THE BISTI-LOWER GALLUP OIL POOL,
SAN JUAN COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a. m. on July 17, 1957, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 7th day of August, 1957, the Commission, a quorum being present, having considered the application and the evidence adduced, and being fully advised in the premises,

FINDS:

- (1) That due notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Shell Oil Company, is the unit operator of the Carson Unit Area. Further that the applicant is the operator of the following described oil and gas leases:

PHILLIPS NO. 2 LEASE

TOWNSHIP 25 NORTH, RANGE 12 WEST, NMPM

Section 4: Lots 1, 2 and S/2 NE/4
Section 9: N/2
Section 10: SW/4 and E/2
Section 15: All
Section 22: N/2 and SE/4
Section 27: W/2

CASE NO. 1275
Order No. R-1029

MUDGE NO. 1 LEASE

TOWNSHIP 25 NORTH, RANGE 11 WEST, NMPM
Section 26: W/2
Section 27: S/2
Section 34: All

MUDGE NO. 2 LEASE

TOWNSHIP 25 NORTH, RANGE 11 WEST, NMPM
Section 4: SW/4
Section 9: W/2
Section 16: All

MUDGE NO. 4 LEASE

TOWNSHIP 25 NORTH, RANGE 12 WEST, NMPM
Section 21: All
Section 28: All
Section 33: All
Section 34: All

ANDERSON LEASE

TOWNSHIP 25 NORTH, RANGE 11 WEST, NMPM
Section 9: SE/4
Section 15: NW/4

MOHR ASSIGNMENT LEASE

TOWNSHIP 25 NORTH, RANGE 11 WEST, NMPM
Section 22: NW/4

MIMS LEASE

TOWNSHIP 25 NORTH, RANGE 12 WEST, NMPM
Section 3: Lots 1, 2, 3 and 4, S/2 N/2, and SE/4

All in San Juan County, New Mexico.

(3) That the applicant proposes to install centralized production test facilities in the Carson Unit Area and on each of the above described leases whereby production from the individual wells will be tested periodically and the oil measured by means of positive displacement meters.

(4) That the applicant also proposes to install automatic custody transfer equipment in the Carson Unit Area and on each of the above described leases whereby

the oil production will be automatically tested for temperature, gravity, basic sediment and water, treated if necessary, and then measured by means of positive displacement meters as it passes into the pipeline.

(5) That the applicant seeks permission to produce more than eight wells into the above described central production test facilities and the automatic custody transfer stations.

(6) That the applicant proposes to commingle production from the participating area of the Carson Unit Area with production from wells outside the participating area of said unit, and to determine the individual well production by means of periodic production tests.

(7) That positive displacement meters provide an accurate and reliable means for measuring oil and that their use should be permitted.

(8) That previous use of automatic custody transfer equipment, similar to that proposed by the applicant, has shown that such equipment is a reliable and economic means of transferring the custody of oil and that the use of such equipment should be permitted.

(9) That the production of more than eight wells into a central production test station and into an automatic custody transfer system should be permitted provided that each well in each of the several systems can be periodically tested, and provided that each of the positive displacement flow meters is periodically checked for accuracy.

(10) That each of the several systems should be so equipped as to prevent the undue waste of oil or gas in the event of malfunction or line break.

(11) That the applicant should not be permitted to commingle oil production from the participating area of the Carson Unit with oil production from outside the participating area, until the latter production has been measured in tanks or metered constantly by means of positive displacement meters.

IT IS THEREFORE ORDERED:

(1) That the applicant, Shell Oil Company, be and the same is hereby authorized to install central production test facilities and automatic custody transfer equipment on each of the following described leases and unit areas utilizing positive displacement meters for the measurement of oil from all wells in the Bisti-Lower Gallup Oil Pool and all extensions thereto, located on each of the said leases and unit areas:

PHILLIPS NO. 2 LEASE

TOWNSHIP 25 NORTH, RANGE 12 WEST, NMPM
Section 4: Lots 1, 2 and S/2 NE/4

PHILLIPS NO. 2 LEASE (continued)

TOWNSHIP 25 NORTH, RANGE 12 WEST, NMPM

Section 9: N/2
Section 10: SW/4 and E/2
Section 15: All
Section 22: N/2 and SE/4
Section 27: W/2

MUDGE NO. 1 LEASE

TOWNSHIP 25 NORTH, RANGE 11 WEST, NMPM

Section 26: W/2
Section 27: S/2
Section 34: All

MUDGE NO. 2 LEASE

TOWNSHIP 25 NORTH, RANGE 11 WEST, NMPM

Section 4: SW/4
Section 9: W/2
Section 16: All

MUDGE NO. 4 LEASE

TOWNSHIP 25 NORTH, RANGE 12 WEST, NMPM

Section 21: All
Section 28: All
Section 33: All
Section 34: All

ANDERSON LEASE

TOWNSHIP 25 NORTH, RANGE 11 WEST, NMPM

Section 9: SE/4
Section 15: NW/4

MOHR ASSIGNMENT LEASE

TOWNSHIP 25 NORTH, RANGE 11 WEST, NMPM

Section 22: NW/4

MIMS LEASE

TOWNSHIP 25 NORTH, RANGE 12 WEST, NMPM

Section 3: Lots 1, 2, 3 and 4, S/2 N/2, and SE/4

of the pipe line company taking the production from said lease, that lease automatic custody transfer equipment should be installed thereon for a more efficient operation of said tank battery.

4. That additional expense will be incurred and loss of efficiency result unless tank batteries are consolidated and lease automatic custody transfer equipment installed.

WHEREFORE, applicant prays for the following relief:

1. That an order be issued creating an exception to Rule 309 of the Commission Rules and Regulations by permitting applicant to consolidate all tank batteries situated on leases in Lea County within the North Caprock Queen Unit Area into one central tank battery at a location of Unit Operator's choice, now proposed to be on NE 1/4 of NE 1/4, Section 6, 13-S, 32-E, N.M.P.M.

2. That an order be issued permitting the applicant to install lease automatic custody transfer equipment at such consolidated tank battery which may be set up under orders requested in Paragraph 1.

3. That the Commission set this matter down for regular hearing on the earliest possible date and that notice for such hearing be published as by law required and that after hearing, the Commission issue its regular order permitting the relief requested, in paragraphs 1 and 2 of this prayer.

DONE at Breckenridge, Texas, this the 26th day of April, 1958.

Respectfully submitted,

GRARIDGE CORPORATION

By



R. L. Elliott
Attorney for Applicant

BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO.

IN THE MATTER OF THE APPLICATION OF GRARIDGE CORPORATION FOR AN ORDER AUTHORIZING THE CONSOLIDATION OF MULTIPLE TANK BATTERIES AS AN EXCEPTION TO RULE 309 OF THE COMMISSION RULES AND REGULATIONS, ON THE LANDS AND LEASES INCLUDED IN THE NORTH CAPROCK QUEEN UNIT, EMBRACING 2887 ACRES, MORE OR LESS, IN TOWNSHIP 12 SOUTH, RANGE 31 EAST, TOWNSHIP 12 SOUTH, RANGE 32 EAST, AND TOWNSHIP 13 SOUTH, RANGE 32 EAST, N.M.P.M., CHAVES AND LEA COUNTIES, NEW MEXICO, AND FURTHER FOR AN ORDER AUTHORIZING THE INSTALLATION AND USE OF LEASE AUTOMATIC CUSTODY TRANSFER EQUIPMENT ON THE TANK BATTERIES SO CONSOLIDATED.

NO. _____

APPLICATION

Comes now applicant, Graridge Corporation, by its attorney, and states:

1. Applicant is the operator of properties situated within the Unit Area known as the North Caprock Queen Unit in Township 12 South, Range 31 East, Township 12 South, Range 32 East, and Township 13 South, Range 32 East, N.M.P.M., Chaves and Lea Counties, New Mexico, which Unit was duly approved by Commission Order No. R-1145, dated April 3, 1958, reference to said Commission Order being here made and further reference being made to the Unit Agreement itself for the purpose of determining the exact description of the leases involved therein.

2. That said water flood project being conducted under the terms and provisions of said Unit Agreement has caused an increase in the producing capacity of certain wells in the Unit Area to a point that additional tank batteries will have to be set to take care of the increased production, unless there is a consolidation of numerous tank batteries at some central point within the Unit Area; that such central location for the consolidated tank battery is proposed to be on the NE 1/4 of the NE 1/4 of Section 6, T 13 S, R 32 E, N.M.P.M., Lea County, New Mexico.

3. Upon consolidation of the tank battery as set out in paragraph 2, it has been determined by this applicant as well as the district gauger

of the pipe line company taking the production from said lease, that lease automatic custody transfer equipment should be installed thereon for a more efficient operation of said tank battery.

4. That additional expense will be incurred and loss of efficiency result unless tank batteries are consolidated and lease automatic custody transfer equipment installed.

WHEREFORE, applicant prays for the following relief:

1. That an order be issued creating an exception to Rule 309 of the Commission Rules and Regulations by permitting applicant to consolidate all tank batteries situated on leases in Lea County within the North Caprock Queen Unit Area into one central tank battery at a location of Unit Operator's choice, now proposed to be on NE 1/4 of NE 1/4, Section 6, 13-S, 32-E, N.M.P.M.

2. That an order be issued permitting the applicant to install lease automatic custody transfer equipment at such consolidated tank battery which may be set up under orders requested in Paragraph 1.

3. That the Commission set this matter down for regular hearing on the earliest possible date and that notice for such hearing be published as by law required and that after hearing, the Commission issue its regular order permitting the relief requested, in paragraphs 1 and 2 of this prayer.

DONE at Breckenridge, Texas, this the 26th day of April, 1958.

Respectfully submitted,

GRARIDGE CORPORATION

By 
R. L. Elliott
Attorney for Applicant

GRARIDGE CORPORATION

BOX 752

BRECKENRIDGE, TEXAS

May 8, 1958

Service Pipe Line Company
1628 19th Street
Lubbock, Texas

ATTENTION: Mr. C. E. Wilson

BEFORE EXAMINER UTZ OIL CONSERVATION COMMISSION <i>Graridge</i> EXHIBIT NO. <u>4</u> CASE NO. <u>1989</u>

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:gi

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
Lovington District Superintendent

cc: C. E. Wilson

ROUTE TO:	DATE CHECKED
CLARK	
REAUGH	
FORD	X
ELLIOTT	
NOFF	
WALKER	
ERRILL	
ELR FOR FILE	X

BEFORE EXHIBIT PUTZ
OIL CONSERVATION DIVISION
EXHIBIT 5
CASE NO. 1499.