

Case Number.

4255

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Application

Transcripts.

Small Exhibits

ETC.

dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMMS BLDG. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO



BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Roswell, New Mexico  
November 19, 1969

REGULAR HEARING

-----  
IN THE MATTER OF: )

Application of Kincaid & Watson )  
Drilling Company for a unit )  
agreement, Eddy County, New Mexico. )

) Case No. 4254

Application of Kincaid & Watson )  
Drilling Company for a waterflood )  
project, Eddy County, New Mexico. )

) Case No. 4255

-----  
BEFORE: A. L. Porter, Examiner.

TRANSCRIPT OF HEARING

MR. PORTER: Case 4254.

MR. HATCH: Case 4254. Application of Kincaid & Watson Drilling Company for a unit agreement, Eddy County, New Mexico.

Are you planning on combining 4255?

MR. HINKLE: Yes.

MR. HATCH: Shall we call Case 4255 to save time?

MR. PORTER: Mr. Hinkle, before we get under way with that case, I would like to have just a moment here.

We will take about a five-minute recess.

(Whereupon, a short recess was taken.)

MR. PORTER: The hearing will come to order, please.

MR. HINKLE: Case No. 4254 has just been called, which is the application of Kincaid & Watson for approval of unit agreement. The next case, 4255, is a companion case in that it's an application of approval for a waterflood project which is co-extensive with the unit agreement.

I would like to move at this time that Case No. 4255 be consolidated with Case 4254 for purposes of

taking testimony.

MR. PORTER: Cases 4254 and 4255 will be consolidated for the purpose of taking testimony.

MR. HINKLE: We have one witness, Mr. Robert Fitting.

(Witness sworn.)

(Whereupon, Applicant's Exhibits 1 through 3 were marked for identification.)

ROBERT FITTING

called as a witness, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. HINKLE:

Q State your name and your residence.

A My name is Robert D. Fitting. I live in Midland, Texas. I am a consulting petroleum engineer and geologist.

Q You are a graduate petroleum engineer?

A Yes, sir, from Stanford University.

Q Have you previously testified before the New Mexico Oil Conservation Commission?

A Yes, sir, I have.

Q Your qualifications as an engineer are a

matter of record with the Commission?

A Yes, sir.

MR. PORTER: The Commission accepts the witness as qualified.

Q (By Mr. Hinkle) Are you familiar with the application of Kincaid and Watson Drilling Company in Cases 4254 and 4255?

A Yes, sir, I am.

Q What is Kincaid and Watson Drilling Company seeking to accomplish with these applications?

A They are seeking to waterflood the northern part of the East Red Lake Queen Field.

Q And also for approval of the waterflood project?

A Approval of the waterflood project and also a unit agreement for the area.

Q Have you made a study of this area?

A Yes, sir, I have. The East Red Lake Queen Field is separated in two parts. There is a northern part that is separated from the southern part by two wells shown on Exhibit 1, the map.

They are Kincaid and Watson labeled Leonard Wells, that are certainly dry holes. The producing

wells to the north appear to be in the same separate reservoir.

Q Have you prepared or has there been prepared under your direction certain exhibits for introduction in this case?

A Yes, sir, there has. Exhibit 1 is an area map of the Red Lake East Field Area showing the unit outline with the proposed injection wells, the initial injection wells in red and the three additional wells that will be placed on injection shown as dashed triangles.

The unit outline is shown as well as the other wells drilled to the Queen Sand within a radius of two and one half miles from the center of the unit.

Q You made mention of the fact that the portion which is in the proposed unit area is separated from the other portion of the Red Lake Pool.

A Yes, sir.

Q Will you explain that?

A We made a study on Exhibit 2, which is a book of the material presented to the Commission on this hearing. On page thirty-one is a structure map of

the Queen horizon and it has very little characteristics other than being a monocline of limited area.

We attempted a net pay correlation and it was impossible with the information that we had to determine an equitable distribution of pay earth from the electric logs or from the sample logs of the wells that were drilled in the area.

Q Refer to the structural map, which is the last page of Exhibit No. 2, and explain that to the Commission.

A It's a Queen Sand structure map with all of the available points taken primarily from electric logs. It shows a monocline; no anticlinal structure. This, in my opinion, is a stratographic trap.

Q In other words, there's no structural condition to determine the boundaries of the unit particularly?

A No, sir. It appears to be controlled to the east by a change in facies from a sand to a shale and by permeability differences to the west.

Q Now, I believe you have testified to start with four injection wells?

A Yes, sir.

Q And you contemplate that there may be three

additional injection wells; is that right?

A That is correct.

Q Now, refer to the diagrammatic sketch, which is typical of the manner in which the injection wells will be completed, which is the third from the last of Exhibit 1.

A On page 29 is a diagrammatic sketch of the injection wells program. It shows the surface casing with the number of sacks of cement, where the oil string was set and the number of sacks used in each one of the initially proposed injection wells.

The two-inch tubing will be plastic lined and a packer set above the perforated interval. The intervals and the packer depths are shown on the diagrammatic sketch.

Q Now, the next exhibit in Exhibit No. 2 -- that is from the next to the last -- is a reduction decline curve. Would you explain that to the Commission?

A The production from all of the wells in the unit area were collected from the state records and each one of them -- the individual leases are shown from page 13 through 27.

These were combined into a field total on a



per well per month production basis starting with page ten and going through twelve is the field production. This field production was plotted with the left hand column, the oil production per well per month and time along the basis.

This decline graph clearly indicates that the field is in the last stages of primary depletion and that without real conservation as far as spending money, these are non-economic wells at the preset time.

Q Now, have the working interest owners who have acreage within the proposed unit area agreed upon a participating formula?

A Yes, sir. Several meetings were held and a study was made of the reservoir. It was decided that it was impossible to use any geological definitions of net pay and that the most factual basis that could be used was the number of wells with the estimated ultimate oil recovery if each of the tracts as determined from decline graph analysis, the cumulative oil recovery of the individual wells and the acres that were assigned to these individual wells.

From this study it was determined that the most equitable way to divide the unit participation was

on the basis of seventy-five percent of the cumulative oil recovery and twenty-five percent of the unit acres or wells which, of course, were the same so that they had complete agreement from all of the operators as to this participation formula.

Q Are you familiar with the formal unit agreement which is proposed to be used in this case and copies of which have been filed with the application?

A Yes, sir.

Q Who is designated as the unit operator?

A Kincaid and Watson Drilling Company.

Q Is the formal unit agreement substantially the same form as heretofore been used and approved where all state lands are involved?

A Yes, sir.

Q Do you know whether or not the Commission of public lands has approved the formal unit agreement in this case?

A Yes, sir. Exhibit 3 is a letter from Mr. Bilberry stating that he approved the form and content of the unit agreement.

Q Now, is Kincaid and Watson seeking approval of a project allowable in this case?

A Yes, sir. It would be much easier to operate and produce the unit if we did have a unit allowable and we so request.

Q That is in accord with Rule 701 of the Commission?

A Yes, sir.

Q What is the status of the execution of the unit agreement by the various working interest owners?

A As I understand from Mr. Watson this morning that at least seventy-five percent of the unit has already signed and agreed to it.

Q All of the working interest owners have, through your meetings you have testified to, formally agreed to commit their interest to the unit agreement?

A One hundred percent of the operators and interest owners have agreed to the proposal of the water injection and the unit by letter ballot.

The percentage signing that I spoke of was the signing of the formal agreement. We anticipate no trouble in getting all of the interest owners to sign.

Q Have you made any calculations as to the recovery you anticipate through water injection, secondary recovery?

A We attempted a volumetric study of the reservoir and tried to make a material balance, but it was extremely difficult to come up with figures we thought were accurate. We had but one core analysis that was of the pay zone and unfortunately this well was drilled at a later time in the life of the reservoir, which never proved to be a good producer; but, it did give us some basis for comparing. But, still, it was not considered good enough to use so that as an arbitrary figure, we used an amount equivalent to the primary oil recovery.

Q And that is shown in Exhibit No. 2 to be 222,500 barrels?

A Yes, sir. It's interesting to note that the field to date has produced 223,439 barrels -- not to date, this is to the end of June of 1969, 223,439. The differences in the 222,500 to that figure is that we assumed an economic limit in the primary production where we believe most of the operators are operating at a loss at the present time.

Q Do you know whether or not Kincaid and Watson is seeking administrative approval or would like to have the right by the order of approval to have administrative approval in the future of additional

injection wells?

A Yes, sir. We propose only the three additional and we believe that that should adequately waterflood the area.

Q In your opinion, if the unit agreement is approved will it be in the interest of conservation and prevention of waste?

A Yes, sir, it will.

Q Will it tend to protect correlative rights?

A Yes, sir.

MR. HINKLE: We would like to introduce into evidence Exhibits 1 through 3.

MR. PORTER: No objection? Exhibits 1, 2 and 3 will be admitted.

MR. HINKLE: That's all we have.

MR. PORTER: Does anyone have a question of Mr. Fitting?

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Fitting, again, what was the percentage of working interest ownership that has been committed to the unit to date?

A The commitment by letter ballot was one hundred

percent on the creation of the unit and the participation formula. The agreements have only recently been circulated and I am told by Mr. Watson that seventy-five percent of the unit has been returned as of today.

Q But, the participation formula was stated in the letter of agreement to unitize?

A Yes, sir.

Q So, you do have one hundred percent of agreement to the formula?

A That is correct.

Q Now, with respect to the mechanical construction of the well as depicted on Exhibit 29, I see that each well would have a packer installed and that injection would be through tubing.

A Correct.

Q Is it your proposal to use plastic lined tubing on these wells?

A It will be plastic lined as shown on page three, item six. What we propose to do is clean them out and then circulate hot water and equip the tubing and the packer with plastic coating before we use it.

Q Now, the annulus then between the tubing and the casing can be loaded with an inert fluid, can it not?

A Yes, sir.

Q Would you be agreeable to equipping that annulus with a pressure gauge at the surface to detect leakage?

A I would prefer it that way; yes, sir.

Q And the primary production to date has been 223,400 barrels. I believe as you stated on page three of Exhibit No. 2, you estimate that approximately the same amount of secondary oil would be recovered from the waterflood?

A Correct.

MR. NUTTER: Thank you. That's all.

MR. PORTER: Does anyone else have a question of Mr. Fitting? He may be excused.

(Witness excused.)

MR. PORTER: Does anyone have any further testimony to offer or any comment on the case? Cases 4254 and 4255 will be taken under advisement.

Call Case 4256.

I N D E X

| <u>WITNESS</u>                   | <u>PAGE</u> |
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E X H I B I T S

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STATE OF NEW MEXICO   )  
                                  ) ss  
COUNTY OF BERNALILLO )

I, GLENDA BURKS, Court Reporter in and for the  
County of Bernalillo, State of New Mexico, do hereby  
certify that the foregoing and attached Transcript of  
Hearing before the New Mexico Oil Conservation Commission  
was reported by me; and that the same is a true and correct  
record of the said proceedings to the best of my knowledge,  
skill and ability.

  
\_\_\_\_\_  
Notary Public

My Commission Expires:

March 12, 1973



## OIL CONSERVATION COMMISSION

**STATE OF NEW MEXICO**  
**P. O. BOX 2088 - SANTA FE**  
**87501**

**GOVERNOR  
DAVID F. CARGO  
CHAIRMAN**

**LAND COMMISSIONER  
ALEX J. ARMIJO  
MEMBER**

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

**November 24, 1969**

Mr. Clarence Hinkle  
Hinkle, Bondurant & Christy  
Attorneys at Law  
Post Office Box 10  
Roswell, New Mexico 88201

Re: Case No. 4255  
Order No. R-3881  
Applicant:  
**Kincaid & Watson**

Dear Sir:

Enclosed herewith is a copy of the above-referenced Commission order recently entered in the subject case. Letter pertaining to conditions of approval and maximum allowable to follow.

Very truly yours,

Very truly yours,  
A. L. Porter, Jr.

A. L. PORTER, Jr.  
Secretary-Director

ALP/ir

Copy of order also sent to:

|                |                   |          |
|----------------|-------------------|----------|
| Hobbs OCC      | <u>          </u> | <b>x</b> |
| Artesia OCC    | <u>          </u> | <b>x</b> |
| Aztec OCC      | <u>          </u> |          |
| State Engineer |                   | <b>x</b> |

Other \_\_\_\_\_

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

November 25, 1969

C Mr. Clarence Hinkle  
Hinkle, Bondurant & Christy  
Attorneys at Law  
Post Office Box 10  
Roswell, New Mexico 88201

Dear Sir:

O Reference is made to Commission Order No. R-3881, recently entered in Case No. 4255, approving the Kincaid & Watson East Red Lake Unit Waterflood Project.

P Initial injection shall be through the four authorized water injection wells, each of which shall be equipped with a string of plastic-coated tubing set in a packer. Packers shall be located as close as practicable to the uppermost perforation. The casing-tubing annulus of each injection well shall be loaded with an inert fluid and shall be equipped with a pressure gauge at the surface.

Y As to allowable, our calculations indicate that when all of the authorized injection wells have been placed on active injection, the maximum allowable which this project will be eligible to receive under the provisions of Rule 701-B-3 is 546 barrels per day when the Southeast New Mexico normal unit allowable is 42 barrels per day or less.

Please report any error in this calculated maximum allowable immediately, both to the Santa Fe office of the Commission and the appropriate district proration office.

In order that the allowable assigned to the project may be kept current, and in order that the operator may fully benefit from the allowable provisions of Rule 701, it behooves him to

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

-2-

November 25, 1969

Mr. Clarence Hinkle  
Hinkle, Bondurant & Christy  
Attorneys at Law  
Post Office Box 10  
Roswell, New Mexico 88201

C  
O  
P  
Y promptly notify both of the aforementioned Commission offices by letter of any change in the status of wells in the project area, i.e., when active injection commences, when additional injection or producing wells are drilled, when additional wells are acquired through purchase or unitization, when wells have received a response to water injection, etc.

Your cooperation in keeping the Commission so informed as to the status of the project and the wells therein will be appreciated.

Very truly yours,

A. L. PORTER, Jr.  
Secretary-Director

ALP/DSE/esr

cc: Oil Conservation Commission  
P. O. Box 1980  
Hobbs, New Mexico 88240

Oil Conservation Commission  
Drawer DD  
Artesia, New Mexico 88210

Mr. D. E. Gray  
State Engineer Office  
Santa Fe, New Mexico 87501

**BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO**

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

**CASE No. 4255  
Order No. R-3881**

**APPLICATION OF KINCAID & WATSON DRILLING  
COMPANY FOR A WATERFLOOD PROJECT, EDDY  
COUNTY, NEW MEXICO.**

**ORDER OF THE COMMISSION**

**BY THE COMMISSION:**

This cause came on for hearing at 9 a.m. on November 19, 1969, at Roswell, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 24th day of November, 1969, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

**FINDS:**

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Kincaid & Watson Drilling Company, seeks permission to institute a waterflood project in the East Red Lake Unit Area, East Red Lake Queen-Grayburg Pool, by the injection of water into the Queen formation through four injection wells in Section 36, Township 16 South, Range 28 East and Sections 1 and 2, Township 17 South, Range 28 East, NMPM, Eddy County, New Mexico.

(3) That the applicant further seeks an administrative procedure whereby said project could be expanded to include additional injection wells in said project as may be necessary in order to complete an efficient injection pattern; that said administrative procedure should provide for administrative

-2-

CASE No. 4255

Order No. R-3881

approval for conversion to water injection in exception to the well response requirements of Rule 701 E-5 of the Commission Rules and Regulations.

(4) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(5) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(6) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations, provided however, that the showing of well response as required by Rule 701 E-5 shall not be necessary before obtaining administrative approval for the conversion of additional wells to water injection.

IT IS THEREFORE ORDERED:

(1) That the applicant, Kincaid & Watson Drilling Company, is hereby authorized to institute a waterflood project in the East Red Lake Unit Area, East Red Lake Queen-Grayburg Pool, by the injection of water into the Queen formation through the following-described wells in Eddy County, New Mexico:

TOWNSHIP 16 SOUTH, RANGE 28 EAST, NMPM

Injection wells:

General Western Petroleum Corp. State Well No. 2 -  
Unit L - Section 36

General Western Petroleum Corp. State Well No. 3 -  
Unit N - Section 36

TOWNSHIP 17 SOUTH, RANGE 28 EAST, NMPM

Injection wells:

Kincaid & Watson Drilling Co. Atlantic State "A"  
Well No. 1 - Unit D - Section 1

Kincaid & Watson Drilling Co. Resler & Sheldon State  
Well No. 1 - Unit H - Section 2

CASE No. 4255

Order No. R-3881

(2) That the subject waterflood project is hereby designated the East Red Lake Unit Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations;

PROVIDED HOWEVER, that the Secretary-Director of the Commission may approve expansion of the East Red Lake Unit Waterflood Project to include such additional injection wells in said project as may be necessary to complete an efficient water injection pattern; that the showing of well response as required by Rule 701 E-5 shall not be necessary before obtaining administrative approval for the conversion of additional wells to water injection.

(3) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.


(4) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

  
DAVID F. CARGO, Chairman

  
ALEX J. ARMIJO, Member

  
A. L. PORTER, Jr., Member & Secretary

  
esr/

DOCKET: REGULAR HEARING - WEDNESDAY - NOVEMBER 19, 1969

OIL CONSERVATION COMMISSION - 9 A.M. - ROSWELL INN, 1815 NORTH MAIN  
ROSWELL, NEW MEXICO

- ALLOWABLE: (1) Consideration of the oil allowable for December, 1969.
- (2) Consideration of the allowable production of gas for December, 1969, from fifteen prorated pools in Lea, Eddy, Roosevelt and Chaves Counties, New Mexico, and also presentation of purchaser's nominations for said pools for the six-month period beginning January 1, 1970. Consideration of the allowable production of gas from nine prorated pools in San Juan, Rio Arriba and Sandoval Counties, New Mexico, for December, 1969.

CASE 4252: The application of the Oil Conservation Commission upon its own motion for an order granting an exception to the ninth paragraph of Chapter II, Section 2 of Order No. R-333-F to permit shutting in gas wells for the required shut-in test at some period during the 1970 test season other than immediately following the 7-day deliverability flow test; further to permit measuring the shut-in test pressure during the 8th to 15th day of shut-in of the well rather than on the 8th day as presently required. The above exceptions would be for the 1970 annual deliverability test season only and would be applicable to all wells in San Juan, Rio Arriba, McKinley, and Sandoval Counties, New Mexico, subject to the testing requirements of Chapter II of Order No. R-333-F.

CASE 4253: Application of Rice Engineering & Operating, Inc. for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres and Paddock formations in the perforated interval from 5030 feet to 6995 feet in its Vacuum SWD Well No. H-35, located in Unit H of Section 35, Township 17 South, Range 35 East, Vacuum Field, Lea County, New Mexico.

CASE 4254: Application of Kincaid & Watson Drilling Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the East Red Lake Unit Area comprising 518 acres, more or less, of State lands in Sections 35 and 36 of Township 16 South, Range 28 East and Sections 1 and 2 of Township 17 South, Range 28 East, East Red Lake Queen-Grayburg Pool, Eddy County, New Mexico.



CASE 4255: Application of Kincaid & Watson Drilling Company for a water-flood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a water-flood project in the East Red Lake Unit Area by the injection of water into the Penrose sand of the Queen formation through 4 wells located in Section 36, Township 16 South, Range 28 East and Sections 1 and 2, Township 17 South, Range 28 East, East Red Lake Queen-Grayburg Pool, Eddy County, New Mexico.

CASE 4256: Application of Southwestern Natural Gas, Inc. for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its T. P. State "4" Well No. 1 located in Unit O of Section 4, Township 11 South, Range 34 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Inbe Permo-Pennsylvanian Pool and the disposal of produced salt water through the intermediate-production casing annulus into the San Andres, Glorieta, Tubb, and Abo formations in the open-hole interval from 4150 feet to 8500 feet.

CASE 4257: Application of Sohio Petroleum Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in the open-hole interval from 4920 feet to 4995 feet in its Phillips Lea SWD Well No. 4 located in Unit M of Section 31, Township 17 South, Range 34 East, Vacuum Grayburg-San Andres Pool, Lea County, New Mexico.

CASE 4258: Southeastern nomenclature case calling for an order for the creation and extension of certain pools in Lea, Chaves, and Eddy Counties, New Mexico.

(a) Create a new pool in Lea County, New Mexico, classified as an oil pool for Montoya production and designated as the Loop 18-Montoya Pool. The discovery well is the Gulf Oil Corporation Harry Leonard NCT-E No. 5 located in Unit H of Section 16, Township 21 South, Range 37 East, NMPM. Said pool would comprise:

TOWNSHIP 21 SOUTH, RANGE 37 EAST, NMPM  
SECTION 16: NE/4

(b) Extend the North Baum-Upper Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 13 SOUTH, RANGE 32 EAST, NMPM  
SECTION 26: NW/4

(c) Extend the Double L-Queen Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 14 SOUTH, RANGE 29 EAST, NMPM  
SECTION 36: SE/4 SE/4

TOWNSHIP 15 SOUTH, RANGE 29 EAST, NMPM  
SECTION 1: E/2 E/2

TOWNSHIP 15 SOUTH, RANGE 30 EAST, NMPM  
SECTION 6: SW/4

(d) Extend the Hardy-Blinebry Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 36 EAST, NMPM  
SECTION 2: Lots 9, 10, 15 and 16

(e) Extend the Hobbs-Drinkard Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 38 EAST, NMPM  
SECTION 28: SW/4  
SECTION 30: NE/4

(f) Extend the Lea-Pennsylvanian Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 34 EAST, NMPM  
SECTION 14: NE/4

(g) Extend the West Sawyer-San Andres Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 9 SOUTH, RANGE 37 EAST, NMPM  
SECTION 33: SE/4 and E/2 SW/4

(h) Extend the Shugart Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 30 EAST, NMPM  
SECTION 25: E/2 NW/4

(i) Extend the Spencer-San Andres Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 36 EAST, NMPM  
SECTION 24: N/2 SW/4

(j) Extend the Sulimar-Queen Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 15 SOUTH, RANGE 29 EAST, NMPM  
SECTION 25: NW/4 NW/4

(k) Extend the Tulk-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 14 SOUTH, RANGE 32 EAST, NMPM  
SECTION 35: NW/4

BEFORE THE  
OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico

*Alpaz* Exhibit No. *2*  
Case No. *4254-4255*

KINCAID & WATSON DRILLING COMPANY  
WATERFLOOD UNIT  
RED LAKE (QUEEN, GRAYBURG), EAST FIELD  
EDDY COUNTY, NEW MEXICO

ENTIRE RESERVOIR

Name of Field: Red Lake (Queen, Grayburg), East Field

Location: Townships 16-South and 17-South, Ranges 28-East and  
29-East, Eddy County, New Mexico

Name of Formation: Queen Sand

Composition of Pay: Fine-grained tan-to-gray sand innerbedded  
with red silt and shale

Type of Structure: Monoclinial - Stratigraphic Trap

Type of Drive: Solution Gas

Original Bottom Hole Pressure: 800 psi (Estimated)

Current Bottom Hole Pressure: 50 psi (Estimated)

Depletion Status of Reservoir: At or near total primary oil depletion

PROJECT AREA

Leases: General Western Petroleum Corporation - State Lease  
SW/4 Section 36, Township 16-South, Range 28-East  
(160 Acres)

Kincaid & Watson Drilling Company - Kincaid State Lease  
SE/4 of SE/4 of Section 35, Township 16-South, Range  
28-East (40 Acres)

Kincaid & Watson Drilling Company - Atlantic State "A" Lease  
Lots 1 & 2 (N/2 of NW/4) of Section 1, Township 17-South,  
Range 28-East (79.04 Acres)

Kincaid & Watson Drilling Company - Resler & Sheldon  
State Lease  
Lots 1 & 2 (N/2 of NE/4), S/2 of NE/4 of Section 2,  
Township 17-South, Range 28-East (158.64 Acres)

McCoy & Stevens - Atlantic State Lease  
S/2 of NW/4 of Section 1, Township 17-South, Range  
28-East (80 Acres)

Total Acres - 517.68

Local Structure: See Map

Average Depth to Top of Pay: 1600'

Net Effective Pay Thickness: 12' to 18'

Estimated Average Porosity: 14.28%

Estimated Average Permeability: 11.45 md.

Average Water Saturation: 35.16%

Gravity of Crude: 30°

Primary Production History:

1. Date First Well Completed & Number of Present Wells

|  |          |
|--|----------|
| General Western-State - October 1959                 | 4 Wells  |
| Kincaid & Watson-Kincaid State - October 1959        | 1 Well   |
| Kincaid & Watson-Atlantic State "A" - July 1959      | 2 Wells  |
| Kincaid & Watson-Resler & Sheldon State - March 1959 | 4 Wells  |
| McCoy & Stevens-Atlantic State - September 1960      | 2 Wells  |
|  | 13 Wells |
2. See tabulation of Production History and Production Performance Graph
3. Average Current Daily Per Well Production

|  |
|--|
| Oil: 1.32 barrels                      |
| Water: Nil                             |
| Gas: Too small to measure              |
| Monthly Average Gas-Oil Ratio: Unknown |
4. Stage of Primary Depletion of Project Area: 99 Per Cent

Planned Injection:

1. Type of Injection Fluid: Water

2. Source of Injected Water: Santa Rosa Water Wells located in the NE/4 of Section 2, Township 17-South, Range 28-East
3. Probably a 5-Spot Pattern, depending on Pilot Waterflood results
4. Maximum Injection Pressure: 2000 psi
5. Estimated Maximum Per Well Rate of Injection: 400 barrels
6. The producing wells converted to injection service will be cleaned out, circulated with hot water, equipped with plastic coated injection tubing and packer (see Diagrammatic Sketch)

Results Expected:

1. Estimated Original Oil in Place: 890,000 barrels
2. Estimated Primary Oil Recovery: 222,500 barrels
3. Estimated Additional Oil Recovery  
by Secondary Oil Recovery means: 222,500 barrels

WATERFLOOD UNIT  
EAST RED LAKE (QUEEN) FIELD  
EDDY COUNTY, NEW MEXICO

The purpose of this report is to present the results of a geological and engineering study made with the objective of developing a secondary oil recovery program for the North Part of the East Red Lake (Queen) Field, Eddy County, New Mexico. The following is a discussion of the area and of the Secondary Oil Recovery Program.

FIELD DISCUSSION

The North Part of the East Red Lake (Queen) Field, located in North Central Eddy County, Sections 35 and 36, Township 16-South and Sections 1 and 2, Township 17-South, all in Range 28-East, has been developed with 16 producing oil wells, 1 shut-in gas well, and 5 dry holes. The waterflood area wells have a cumulative oil and ultimate primary recovery to July 1, 1969 of 223,439 barrels. All wells are currently considered producing at or below the economic producing limits. The estimated maximum secondary oil recovery producible by a complete alternate injection to producing well water injection pattern is 222,500 barrels.

Reservoir Characteristics

The oil pay occurs within the Penrose Sand interval of the Seven Rivers-Queen section and is composed of a fine-grained tan-to-gray sand innerbedded with red silt and shale. The accumulation is a stratigraphic-type trap, occurring on the flank of an easterly dipping monocline. The



eastern producing limits of the oil reservoir occur when the sand, through a facies change, grades into shale or siltstone and the limits of the reservoir are considered to have been completely defined. Average core data from the one well cored in the Unit Area is as follows:

|                               |                                  |
|-------------------------------|----------------------------------|
| Cored Interval: 1543-79(36')  | Average Porosity: 14.28%         |
| Feet of Core Recovered: 33.5' | Average Permeability: 11.45 md.  |
| Feet of Sand Analyzed: 12.5'  | Average Oil Saturation: 22.61%   |
| Feet of Net Sand: 10.5'       | Average Water Saturation: 35.16% |

The primary producing energy of the reservoir is considered solution gas drive.

A study has been made of available sample and electric logs from producing wells and dry holes in the general area. This investigation was conducted in an attempt to prepare net and gross isopachous maps of the Unit Area. These efforts proved non-productive as the gross pay interval, although from 12' to 18' in thickness, lacks sufficient character to differentiate between producing wells and dry holes and net pay determinations cannot be readily confirmed from the radioactive well survey logs. An analysis of the per well cumulative oil recoveries in relation to the probable net pay thickness was made but this evidence was considered non-uniform and inconclusive. The conclusion was made that gross acre-feet of pay as a unitization parameter could not be reasonably used. All parameters must, therefore, be based on producing performance, acreage and cumulative oil recovery (see attached tabulation).

#### Production History

The area discovery was the Kincaid & Watson Drilling Company, Resler & Sheldon State #1 completed in March 1959 and the last producing

well was drilled in March 1964. The per well cumulative oil production to January 1, 1967 ranges from a low for the last well drilled of 551 barrels to a high of 30,640 barrels (see attached plat of Unit Area). The reservoir is in the last stage of primary energy depletion with only three of the leases in January of 1967 producing in excess of 40 barrels of oil per well per month (see attached lease production history).

#### SECONDARY RECOVERY OPERATIONS

It is apparent that before secondary oil recovery operations can be commenced, a Unit must be created of the North Part of the East Red Lake Field. In view of the minimum recoveries anticipated by secondary oil recovery waterflood operations, the following plan of operation is considered the best method to effect the greatest recovery of secondary oil per investment dollar. The size of the program will be kept at a minimum until the degree of floodability of the reservoir is known.

##### Injection Pattern

Four wells have been selected for the initial water injection (see attached plat). These wells should provide the maximum amount of oil stimulation with a limited number of input wells. The injectors divide the Unit Area and should permit expansion to a full-scale five-spot injection pattern when the degree of stimulation dictates. The recommended pattern places injection wells within 1900' of every producing well and the resultant flood efficiency is assumed at 55 per cent of that attainable with a complete five-spot pattern. The injection water required for the initial four wells is approximately 780,000 barrels

with 1,365,000 barrels for the total input wells on expansion.

Water Injection System

The proposed water injection station is equipped with a single Triplex injection pump, tank and building. The injection lines are planned as 2" Line Pipe, cement lined, coated and wrapped. The producing wells converted to injection service will be cleaned out, circulated with hot water, and equipped with plastic coated injection tubing and packer. All produced water will be re-injected and all flow lines will be cement or plastic lined. The designed injection plant operating pressure is 2000 psi with a probable wellhead injection pressure of an average of 1100 psi at an input rate of 300 to 400 barrels of water per day.

Water Supply System

The injection water supply will be obtained from present water wells located in the NE/4 of Section 2, Township 17-South, Range 28-East. It is anticipated the Unit owners will purchase three of the present Santa Rosa water wells from the Double Eagle Water Company and all of the present surface equipment necessary to produce the wells will be included in the sale.

Enclosed is a copy of the basic and final tabulation of the unitization parameters used by the Operators to develop a participation formula for this Unit.

SUMMARY  
EAST RED LAKE (QUEEN) FIELD UNIT  
EDDY COUNTY, NEW MEXICO

PERCENTAGE PARTICIPATION PARAMETERS

| Unit<br>Tract<br>No. | Operator & Lease   | No.<br>Wells<br>Per Cent | Estimated<br>Oil Recovery,<br>Per Cent | Cumulative<br>Oil Recovery,<br>Per Cent | Estimated Future<br>Oil Recovery,<br>Per Cent | Unit Acres,<br>Per Cent | Producing Rate,<br>Per Cent |
|----------------------|--|--------------------------|--|---|---|-------------------------|-----------------------------|
| 1                    | <u>General Western Petroleum Corp.</u><br>State  | 30.770                   | 29.57                                  | 29.184637                               | 36.52   | 30.907124               | 33.96                       |
| 2                    | <u>Kincaid &amp; Watson Drilling Co.</u><br>Kincaid State  | 7.690                    | 4.42                                   | 4.602858                                | 1.12  | 7.726781                | 5.03                        |
| 4                    | <u>Kincaid &amp; Watson Drilling Co. &amp;<br/>Pearson-Sibert Oil Co. of Texas</u><br>Atlantic State "A" | 15.385                   | 20.40                                  | 20.653877                               | 15.85   | 15.268119               | 17.60                       |
| 3                    | Resler & Sheldon State   | 30.770                   | 26.23                                  | 27.260332                               | 7.92  | 30.644414               | 18.54                       |
| 5                    | <u>McCoy &amp; Stevens</u><br>Atlantic State   | 15.385                   | 19.38                                  | 18.298296                               | 38.59   | 15.453562               | 24.87                       |

PARTICIPATION FORMULA

| Unit<br>Tract<br>No. | Operator and Lease   | 75% Cumulative Recovery<br>25% Unit Acres or Wells |
|----------------------|--|--|
| 1                    | <u>General Western Petroleum Corp.</u><br>State  | 29.615259  |
| 2                    | <u>Kincaid &amp; Watson Drilling Co.</u><br>Kincaid State  | 5.383838   |
| 4                    | <u>Kincaid &amp; Watson Drilling Co. &amp;<br/>Pearson-Sibert Oil Co. of Texas</u><br>Atlantic State "A" | 19.307438  |
| 3                    | Resler & Sheldon State   | 28.106353  |
| 5                    | <u>McCoy &amp; Stevens</u><br>Atlantic State   | 17.587112  |

PARTICIPATION PARAMETERS  
EAST RED LAKE (QUEEN) FIELD UNIT  
EDDY COUNTY, NEW MEXICO

| Unit<br>Tract<br>No. | Operator & Lease   | Wells |          | Estimated Ultimate<br>Oil Recovery |          | Cumulative<br>Oil Recovery<br>to 12-1-66 |            | Estimated Future<br>Oil Recovery<br>From 12-1-66 |          | Unit Acres |            | Current<br>Producing Rate<br>6-1-66 to 12-1-66 |          |
|----------------------|--|-------|----------|------------------------------------|----------|--|------------|--|----------|------------|------------|--|----------|
|                      |  | No.   | Per Cent | Bbls.                              | Per Cent | Bbls.                                    | Per Cent   | Bbls.  | Per Cent | Acres      | Per Cent   | Bbls.  | Per Cent |
| 1                    | General Western<br>Petroleum Corp.<br>State                              | 4     | 30.770   | 64,602                             | 29.57    | 60,362                                   | 29.184637  | 4,240  | 36.52    | 160.00     | 30.907124  | 1,689  | 33.96    |
| 2                    | Kincaid & Watson<br>Drilling Co.<br>Kincaid State                        | 1     | 7.690    | 9,650                              | 4.42     | 9,520                                    | 4.602858   | 130  | 1.12     | 40.00      | 7.726781   | 250  | 5.03     |
| 4                    | Kincaid & Watson<br>Drilling Co. &<br>Pearson-Sibert Oil<br>Co. of Texas | 2     | 15.385   | 44,558                             | 20.40    | 42,718                                   | 20.653877  | 1,840  | 15.85    | 79.04      | 15.268119  | 875  | 17.60    |
| 3                    | Atlantic State "A"<br>Resler & Sheldon St.                               | 4     | 30.770   | 57,302                             | 26.23    | 56,382                                   | 27.260332  | 920  | 7.92     | 158.64     | 30.644414  | 922  | 18.54    |
| 5                    | McCoy & Stevens<br>Atlantic State  | 2     | 15.385   | 42,326                             | 19.38    | 37,846                                   | 18.298296  | 4,480  | 38.59    | 80.00      | 15.453562  | 1,237  | 24.87    |
|                      | TOTAL -  | 13    | 100.000  | 218,438                            | 100.00   | 206,828                                  | 100.000000 | 11,610   | 100.00   | 517.68     | 100.000000 | 4,973  | 100.00   |

# OIL PRODUCTION

Operator: Kincaid & Watson Drlg. Co.      Field: Red Lake (Queen, Grayburg)  
 Lease: East Red Lake Unit                      County: Eddy, New Mexico

|                   | No.          | Bbl.         | Per          |                   | No.          | Bbl.         | Per          |
|-------------------|--------------|--------------|--------------|-------------------|--------------|--------------|--------------|
|                   | <u>Wells</u> | <u>Prod.</u> | <u>Well</u>  |                   | <u>Wells</u> | <u>Prod.</u> | <u>Well</u>  |
|                   |              |              | <u>Prod.</u> |                   |              |              | <u>Prod.</u> |
| Year: <u>1959</u> |              |              |              | Year: <u>1960</u> |              |              |              |
| Jan.              |              |              |              | Jan.              | 8            | 5547         | 693          |
| Feb.              |              |              |              | Feb.              | 10           | 6631         | 663          |
| Mar.              | 1            | 182          | 182          | Mar.              | 10           | 6050         | 605          |
| Apr.              | 1            | 196          | 196          | Apr.              | 10           | 5178         | 518          |
| May               | 1            | 155          | 155          | May               | 10           | 5047         | 505          |
| June              | 1            | 190          | 190          | June              | 10           | 4232         | 423          |
| July              | 2            | 969          | 485          | July              | 10           | 4922         | 492          |
| Aug.              | 2            | 1477         | 739          | Aug.              | 10           | 4596         | 460          |
| Sept.             | 3            | 2441         | 814          | Sept.             | 11           | 4428         | 403          |
| Oct.              | 5            | 3344         | 669          | Oct.              | 11           | 4349         | 395          |
| Nov.              | 6            | 5857         | 976          | Nov.              | 12           | 3542         | 295          |
| Dec.              | 7            | 6117         | 874          | Dec.              | 12           | 4087         | 341          |
| Year Total:       |              | 20,928       |              | Year Total:       |              | 58,609       |              |
| Cum. Total:       |              | 20,928       |              | Cum. Total:       |              | 79,537       |              |
| Year: <u>1961</u> |              |              |              | Year: <u>1962</u> |              |              |              |
| Jan.              | 12           | 4972         | 414          | Jan.              | 12           | 2518         | 210          |
| Feb.              | 12           | 4214         | 351          | Feb.              | 12           | 2234         | 186          |
| Mar.              | 12           | 4275         | 356          | Mar.              | 12           | 2478         | 206          |
| Apr.              | 12           | 3966         | 330          | Apr.              | 12           | 1899         | 158          |
| May               | 12           | 3340         | 278          | May               | 12           | 2552         | 213          |
| June              | 12           | 3410         | 284          | June              | 12           | 2604         | 217          |
| July              | 12           | 3254         | 271          | July              | 12           | 2965         | 247          |
| Aug.              | 12           | 2534         | 211          | Aug.              | 12           | 2199         | 183          |
| Sept.             | 12           | 2391         | 199          | Sept.             | 12           | 1942         | 162          |
| Oct.              | 12           | 2318         | 193          | Oct.              | 12           | 3291         | 274          |
| Nov.              | 12           | 2403         | 200          | Nov.              | 12           | 2538         | 211          |
| Dec.              | 12           | 2536         | 211          | Dec.              | 12           | 2471         | 206          |
| Year Total:       |              | 39,613       |              | Year Total:       |              | 29,691       |              |
| Cum. Total:       |              | 119,150      |              | Cum. Total:       |              | 148,841      |              |

# OIL PRODUCTION

Operator: Kincaid & Watson Drlg. Co.      Field: Red Lake (Queen, Grayburg)  
 Lease: East Red Lake Unit                      County: Eddy, New Mexico

|                   | No.<br><u>Wells</u> | Bbl.<br><u>Prod.</u> | Per<br>Well<br><u>Prod.</u> |                   | No.<br><u>Wells</u> | Bbl.<br><u>Prod.</u> | Per<br>Well<br><u>Prod.</u> |
|-------------------|---------------------|----------------------|-----------------------------|-------------------|---------------------|----------------------|-----------------------------|
| Year: <u>1963</u> |                     |                      |                             | Year: <u>1964</u> |                     |                      |                             |
| Jan.              | 12                  | 2411                 | 201                         | Jan.              | 12                  | 1560                 | 130                         |
| Feb.              | 12                  | 1925                 | 160                         | Feb.              | 12                  | 1380                 | 115                         |
| Mar.              | 12                  | 2638                 | 220                         | Mar.              | 12                  | 1109                 | 92                          |
| Apr.              | 12                  | 2081                 | 173                         | Apr.              | 12                  | 1397                 | 116                         |
| May               | 12                  | 2046                 | 170                         | May               | 13                  | 1572                 | 121                         |
| June              | 12                  | 2088                 | 174                         | June              | 13                  | 1361                 | 105                         |
| July              | 12                  | 1534                 | 128                         | July              | 13                  | 1279                 | 98                          |
| Aug.              | 12                  | 1655                 | 138                         | Aug.              | 13                  | 1005                 | 77                          |
| Sept.             | 12                  | 1601                 | 133                         | Sept.             | 13                  | 1171                 | 90                          |
| Oct.              | 12                  | 1227                 | 102                         | Oct.              | 13                  | 1178                 | 91                          |
| Nov.              | 12                  | 1413                 | 118                         | Nov.              | 13                  | 1012                 | 78                          |
| Dec.              | 12                  | 1267                 | 106                         | Dec.              | 13                  | 1101                 | 85                          |
| Year Total:       |                     | 21,886               |                             | Year Total:       |                     | 15,125               |                             |
| Cum. Total:       |                     | 170,727              |                             | Cum. Total:       |                     | 185,852              |                             |
| Year: <u>1965</u> |                     |                      |                             | Year: <u>1966</u> |                     |                      |                             |
| Jan.              | 13                  | 1003                 | 77                          | Jan.              | 13                  | 962                  | 74                          |
| Feb.              | 13                  | 901                  | 69                          | Feb.              | 13                  | 916                  | 70                          |
| Mar.              | 13                  | 1014                 | 78                          | Mar.              | 13                  | 997                  | 77                          |
| Apr.              | 13                  | 884                  | 68                          | Apr.              | 13                  | 867                  | 67                          |
| May               | 13                  | 854                  | 66                          | May               | 13                  | 819                  | 63                          |
| June              | 13                  | 979                  | 75                          | June              | 13                  | 756                  | 58                          |
| July              | 13                  | 1068                 | 82                          | July              | 13                  | 875                  | 67                          |
| Aug.              | 13                  | 1095                 | 84                          | Aug.              | 13                  | 942                  | 72                          |
| Sept.             | 13                  | 951                  | 73                          | Sept.             | 13                  | 807                  | 62                          |
| Oct.              | 13                  | 981                  | 75                          | Oct.              | 13                  | 855                  | 66                          |
| Nov.              | 13                  | 971                  | 75                          | Nov.              | 13                  | 738                  | 57                          |
| Dec.              | 13                  | 951                  | 73                          | Dec.              | 13                  | 799                  | 61                          |
| Year Total:       |                     | 11,652               |                             | Year Total:       |                     | 10,333               |                             |
| Cum. Total:       |                     | 197,504              |                             | Cum. Total:       |                     | 207,837              |                             |

# OIL PRODUCTION

Operator: Kincaid & Watson Drlg. Co.      Field: Red Lake (Queen, Grayburg)  
 Lease: East Red Lake Unit                      County: Eddy, New Mexico

|                   | No.          | Bbl.         | Per          |                   | No.          | Bbl.         | Per          |
|-------------------|--------------|--------------|--------------|-------------------|--------------|--------------|--------------|
|                   | <u>Wells</u> | <u>Prod.</u> | <u>Well</u>  |                   | <u>Wells</u> | <u>Prod.</u> | <u>Well</u>  |
| Year: <u>1967</u> |              |              | <u>Prod.</u> | Year: <u>1968</u> |              |              | <u>Prod.</u> |
| Jan.              | 13           | 727          | 56           | Jan.              | 13           | 419          | 32           |
| Feb.              | 13           | 640          | 49           | Feb.              | 13           | 418          | 32           |
| Mar.              | 13           | 689          | 53           | Mar.              | 13           | 541          | 42           |
| Apr.              | 13           | 711          | 55           | Apr.              | 13           | 531          | 41           |
| May               | 13           | 638          | 49           | May               | 13           | 478          | 37           |
| June              | 13           | 614          | 47           | June              | 13           | 405          | 31           |
| July              | 13           | 533          | 41           | July              | 13           | 424          | 33           |
| Aug.              | 13           | 592          | 46           | Aug.              | 13           | 586          | 45           |
| Sept.             | 13           | 580          | 45           | Sept.             | 13           | 446          | 34           |
| Oct.              | 13           | 468          | 36           | Oct.              | 13           | 457          | 35           |
| Nov.              | 13           | 444          | 34           | Nov.              | 13           | 453          | 35           |
| Dec.              | 13           | 568          | 44           | Dec.              | 13           | 528          | 41           |
| Year Total:       |              | 7,204        |              | Year Total:       |              | 5,686        |              |
| Cum. Total:       |              | 215,041      |              | Cum. Total:       |              | 220,727      |              |

## Year: 1969

|       |    |     |    |
|-------|----|-----|----|
| Jan.  | 13 | 494 | 38 |
| Feb.  | 13 | 395 | 30 |
| Mar.  | 13 | 475 | 37 |
| Apr.  | 13 | 396 | 30 |
| May   | 13 | 418 | 32 |
| June  | 13 | 534 | 41 |
| July  |    |     |    |
| Aug.  |    |     |    |
| Sept. |    |     |    |
| Oct.  |    |     |    |
| Nov.  |    |     |    |
| Dec.  |    |     |    |

Year Total  
 to 7-1-69                      2,712

Cum. Total  
 to 7-1-69                      223,439



# OIL PRODUCTION

Operator: General Western Petr. Corp.      Field: East Red Lake (Queen)

Lease:      State      County: Eddy, New Mexico

|                   | No.<br>Wells | Bbl.<br>Prod. | Per<br>Well<br>Prod. |                   | No.<br>Wells | Bbl.<br>Prod. | Per<br>Well<br>Prod. |
|-------------------|--------------|---------------|----------------------|-------------------|--------------|---------------|----------------------|
| Year: <u>1959</u> |              |               |                      | Year: <u>1960</u> |              |               |                      |
| Jan.              |              |               |                      | Jan.              | 3            | 2068          | 689                  |
| Feb.              |              |               |                      | Feb.              | 4            | 2698          | 675                  |
| Mar.              |              |               |                      | Mar.              | 4            | 2366          | 592                  |
| April             |              |               |                      | April             | 4            | 1532          | 383                  |
| May               |              |               |                      | May               | 4            | 1390          | 350                  |
| June              |              |               |                      | June              | 4            | 1643          | 411                  |
| July              |              |               |                      | July              | 4            | 1520          | 380                  |
| Aug.              |              |               |                      | Aug.              | 4            | 1291          | 323                  |
| Sept.             |              |               |                      | Sept.             | 4            | 1181          | 295                  |
| Oct.              | 1            | 285           | 285                  | Oct.              | 4            | 1443          | 361                  |
| Nov.              | 2            | 2157          | 1079                 | Nov.              | 4            | 772           | 193                  |
| Dec.              | 2            | 2083          | 1042                 | Dec.              | 4            | 831           | 208                  |
| Year Total:       |              | 4,525         |                      | Year Total:       |              | 18,744        |                      |
| Cum. Total:       |              | 4,525         |                      | Cum. Total:       |              | 23,269        |                      |
| Year: <u>1961</u> |              |               |                      | Year: <u>1962</u> |              |               |                      |
| Jan.              | 4            | 840           | 210                  | Jan.              | 4            | 861           | 215                  |
| Feb.              | 4            | 784           | 196                  | Feb.              | 4            | 842           | 211                  |
| Mar.              | 4            | 1188          | 297                  | Mar.              | 4            | 912           | 228                  |
| April             | 4            | 1010          | 253                  | April             | 4            | 572           | 143                  |
| May               | 4            | 904           | 226                  | May               | 4            | 883           | 221                  |
| June              | 4            | 936           | 234                  | June              | 4            | 882           | 221                  |
| July              | 4            | 781           | 195                  | July              | 4            | 710           | 178                  |
| Aug.              | 4            | 699           | 175                  | Aug.              | 4            | 663           | 166                  |
| Sept.             | 4            | 710           | 178                  | Sept.             | 4            | 555           | 139                  |
| Oct.              | 4            | 826           | 207                  | Oct.              | 4            | 796           | 199                  |
| Nov.              | 4            | 725           | 181                  | Nov.              | 4            | 650           | 163                  |
| Dec.              | 4            | 702           | 176                  | Dec.              | 4            | 540           | 137                  |
| Year Total:       |              | 10,105        |                      | Year Total:       |              | 8,866         |                      |
| Cum. Total        |              | 33,374        |                      | Cum. Total:       |              | 42,240        |                      |

# OIL PRODUCTION

Operator: General Western Petr. Corp.      Field: East Red Lake (Queen)

Lease:      State      County: Eddy, New Mexico

|                   | No.<br>Wells | Bbls.<br>Prod. | Per<br>Well<br>Prod. |                   | No.<br>Wells | Bbls.<br>Prod. | Per<br>Well<br>Prod. |
|-------------------|--------------|----------------|----------------------|-------------------|--------------|----------------|----------------------|
| Year: <u>1963</u> |              |                |                      | Year: <u>1964</u> |              |                |                      |
| Jan.              | 4            | 707            | 177                  | Jan.              | 4            | 405            | 101                  |
| Feb.              | 4            | 561            | 140                  | Feb.              | 4            | 403            | 101                  |
| Mar.              | 4            | 676            | 169                  | Mar.              | 4            | 393            | 98                   |
| April             | 4            | 612            | 153                  | April             | 4            | 371            | 93                   |
| May               | 4            | 574            | 144                  | May               | 4            | 366            | 92                   |
| June              | 4            | 563            | 141                  | June              | 4            | 339            | 85                   |
| July              | 4            | 527            | 132                  | July              | 4            | 318            | 80                   |
| Aug.              | 4            | 509            | 127                  | Aug.              | 4            | 294            | 74                   |
| Sept.             | 4            | 453            | 113                  | Sept.             | 4            | 304            | 76                   |
| Oct.              | 4            | 504            | 126                  | Oct.              | 4            | 266            | 67                   |
| Nov.              | 4            | 440            | 110                  | Nov.              | 4            | 211            | 53                   |
| Dec.              | 4            | 454            | 114                  | Dec.              | 4            | 250            | 63                   |
| Year Total:       |              | 6,580          |                      | Year Total:       |              | 3,920          |                      |
| Cum. Total        |              | 48,820         |                      | Cum. Total:       |              | 52,740         |                      |
| Year: <u>1965</u> |              |                |                      | Year: <u>1966</u> |              |                |                      |
| Jan.              | 4            | 202            | 51                   | Jan.              | 4            | 374            | 94                   |
| Feb.              | 4            | 218            | 54                   | Feb.              | 4            | 366            | 92                   |
| Mar.              | 4            | 228            | 57                   | Mar.              | 4            | 366            | 92                   |
| April             | 4            | 221            | 55                   | April             | 4            | 336            | 84                   |
| May               | 4            | 192            | 48                   | May               | 4            | 341            | 85                   |
| June              | 4            | 380            | 95                   | June              | 4            | 324            | 81                   |
| July              | 4            | 547            | 137                  | July              | 4            | 292            | 73                   |
| Aug.              | 4            | 514            | 129                  | Aug.              | 4            | 300            | 75                   |
| Sept.             | 4            | 443            | 111                  | Sept.             | 4            | 276            | 69                   |
| Oct.              | 4            | 432            | 108                  | Oct.              | 4            | 279            | 70                   |
| Nov.              | 4            | 399            | 100                  | Nov.              | 4            | 218            | 55                   |
| Dec.              | 4            | 374            | 94                   | Dec.              | 4            | 261            | 65                   |
| Year Total:       |              | 4,150          |                      | Year Total:       |              | 3,733          |                      |
| Cum. Total:       |              | 56,890         |                      | Cum. Total:       |              | 60,623         |                      |

# OIL PRODUCTION

Operator: General Western Petr. Corp.      Field: East Red Lake (Queen)

Lease:      State      County: Eddy, New Mexico

|                   | <u>No.</u>   | <u>Bbl.</u>  | <u>Per</u>   |                   | <u>No.</u>   | <u>Bbl.</u>  | <u>Per</u>   |
|-------------------|--------------|--------------|--------------|-------------------|--------------|--------------|--------------|
|                   | <u>Wells</u> | <u>Prod.</u> | <u>Well</u>  |                   | <u>Wells</u> | <u>Prod.</u> | <u>Well</u>  |
|                   |              |              | <u>Prod.</u> |                   |              |              | <u>Prod.</u> |
| Year: <u>1967</u> |              |              |              | Year: <u>1968</u> |              |              |              |
| Jan.              | 4            | 226          | 57           | Jan.              | 4            | 157          | 39           |
| Feb.              | 4            | 181          | 45           | Feb.              | 4            | 124          | 31           |
| Mar.              | 4            | 210          | 53           | Mar.              | 4            | 170          | 43           |
| April             | 4            | 191          | 48           | April             | 4            | 191          | 48           |
| May               | 4            | 203          | 51           | May               | 4            | 179          | 45           |
| June              | 4            | 188          | 47           | June              | 4            | 169          | 42           |
| July              | 4            | 196          | 49           | July              | 4            | 121          | 30           |
| Aug.              | 4            | 195          | 49           | Aug.              | 4            | 184          | 46           |
| Sept.             | 4            | 198          | 50           | Sept.             | 4            | 147          | 37           |
| Oct.              | 4            | 181          | 45           | Oct.              | 4            | 146          | 37           |
| Nov.              | 4            | 186          | 47           | Nov.              | 4            | 138          | 35           |
| Dec.              | 4            | 158          | 40           | Dec.              | 4            | 136          | 34           |
| Year Total        |              | 2,313        |              | Year Total:       |              | 1,862        |              |
| Cum. Total        |              | 62,936       |              | Cum. Total:       |              | 64,798       |              |
| Year: 1969        |              |              |              |                   |              |              |              |
| Jan.              | 4            | 138          | 35           |                   |              |              |              |
| Feb.              | 4            | 115          | 29           |                   |              |              |              |
| Mar.              | 4            | 131          | 33           |                   |              |              |              |
| April             | 4            | 119          | 30           |                   |              |              |              |
| May               | 4            | 107          | 27           |                   |              |              |              |
| June              | 4            | 240          | 60           |                   |              |              |              |
| July              |              |              |              |                   |              |              |              |
| Aug.              |              |              |              |                   |              |              |              |
| Sept.             |              |              |              |                   |              |              |              |
| Oct.              |              |              |              |                   |              |              |              |
| Nov.              |              |              |              |                   |              |              |              |
| Dec.              |              |              |              |                   |              |              |              |
| Year Total        |              |              |              |                   |              |              |              |
| to 7-1-69         |              | 850          |              |                   |              |              |              |
| Cum. Total        |              |              |              |                   |              |              |              |
| to 7-1-69         |              | 65,648       |              |                   |              |              |              |

# OIL PRODUCTION

Operator: Kincaid & Watson Drlg. Co.      Field: East Red Lake (Queen)

Lease: Atlantic State "A"      County: Eddy, New Mexico

|                   | <u>No.</u>   | <u>Bbl.</u>  | <u>Per</u>   |                   | <u>No.</u>   | <u>Bbl.</u>  | <u>Per</u>   |
|-------------------|--------------|--------------|--------------|-------------------|--------------|--------------|--------------|
|                   | <u>Wells</u> | <u>Prod.</u> | <u>Well</u>  |                   | <u>Wells</u> | <u>Prod.</u> | <u>Well</u>  |
|                   |              |              | <u>Prod.</u> |                   |              |              | <u>Prod.</u> |
| Year: <u>1959</u> |              |              |              | Year: <u>1960</u> |              |              |              |
| Jan.              |              |              |              | Jan.              | 2            | 1537         | 768          |
| Feb.              |              |              |              | Feb.              | 2            | 1184         | 592          |
| Mar.              |              |              |              | Mar.              | 2            | 1010         | 505          |
| April             |              |              |              | April             | 2            | 1257         | 628          |
| May               |              |              |              | May               | 2            | 1264         | 632          |
| June              |              |              |              | June              | 2            | 1184         | 592          |
| July              | 1            | 912          | 912          | July              | 2            | 1098         | 549          |
| Aug.              | 1            | 1052         | 1052         | Aug.              | 2            | 1155         | 577          |
| Sept.             | 1            | 1165         | 1165         | Sept.             | 2            | 925          | 462          |
| Oct.              | 1            | 1084         | 1084         | Oct.              | 2            | 575          | 287          |
| Nov.              | 1            | 1019         | 1019         | Nov.              | 2            | 406          | 203          |
| Dec.              | 2            | 1479         | 739          | Dec.              | 2            | 702          | 351          |
| Year Total:       |              | 6,711        |              | Year Total:       |              | 12,297       |              |
| Cum. Total        |              | 6,711        |              | Cum. Total:       |              | 19,008       |              |
| Year: <u>1961</u> |              |              |              | Year: <u>1962</u> |              |              |              |
| Jan.              | 2            | 684          | 342          | Jan.              | 2            | 536          | 268          |
| Feb.              | 2            | 596          | 298          | Feb.              | 2            | 423          | 211          |
| Mar.              | 2            | 613          | 306          | Mar.              | 2            | 516          | 258          |
| April             | 2            | 595          | 297          | April             | 2            | 328          | 164          |
| May               | 2            | 494          | 247          | May               | 2            | 362          | 181          |
| June              | 2            | 591          | 295          | June              | 2            | 417          | 208          |
| July              | 2            | 533          | 266          | July              | 2            | 643          | 321          |
| Aug.              | 2            | 473          | 236          | Aug.              | 2            | 330          | 165          |
| Sept.             | 2            | 378          | 189          | Sept.             | 2            | 394          | 197          |
| Oct.              | 2            | 310          | 155          | Oct.              | 2            | 822          | 411          |
| Nov.              | 2            | 671          | 335          | Nov.              | 2            | 628          | 314          |
| Dec.              | 2            | 609          | 304          | Dec.              | 2            | 655          | 328          |
| Year Total        |              | 6,547        |              | Year Total:       |              | 6,054        |              |
| Cum. Total        |              | 25,555       |              | Cum. Total        |              | 31,609       |              |

# OIL PRODUCTION

Operator: Kincaid & Watson Drlg. Co.      Field: East Red Lake (Queen)  
 Lease: Atlantic State "A"      County: Eddy, New Mexico

|                   | No.<br>Wells | Bbl.<br>Prod. | Per<br>Well<br>Prod. |                   | No.<br>Wells | Bbl.<br>Prod. | Per<br>Well<br>Prod. |
|-------------------|--------------|---------------|----------------------|-------------------|--------------|---------------|----------------------|
| Year: <u>1963</u> |              |               |                      | Year: <u>1964</u> |              |               |                      |
| Jan.              | 2            | 648           | 324                  | Jan.              | 2            | 376           | 188                  |
| Feb.              | 2            | 480           | 240                  | Feb.              | 2            | 254           | 127                  |
| Mar.              | 2            | 620           | 310                  | Mar.              | 2            | 235           | 118                  |
| April             | 2            | 412           | 206                  | April             | 2            | 396           | 198                  |
| May               | 2            | 521           | 261                  | May               | 2            | 440           | 220                  |
| June              | 2            | 498           | 249                  | June              | 2            | 277           | 139                  |
| July              | 2            | 256           | 128                  | July              | 2            | 233           | 117                  |
| Aug.              | 2            | 315           | 158                  | Aug.              | 2            | 250           | 125                  |
| Sept.             | 2            | 189           | 95                   | Sept.             | 2            | 209           | 105                  |
| Oct.              | 2            | 354           | 177                  | Oct.              | 2            | 188           | 94                   |
| Nov.              | 2            | 470           | 235                  | Nov.              | 2            | 187           | 94                   |
| Dec.              | 2            | 249           | 125                  | Dec.              | 2            | 182           | 91                   |
| Year Total:       |              | 5,012         |                      | Year Total:       |              | 3,227         |                      |
| Cum. Total        |              | 36,621        |                      | Cum. Total        |              | 39,848        |                      |
| Year: <u>1965</u> |              |               |                      | Year: <u>1966</u> |              |               |                      |
| Jan.              | 2            | 200           | 100                  | Jan.              | 2            | 135           | 68                   |
| Feb.              | 2            | 132           | 66                   | Feb.              | 2            | 134           | 67                   |
| Mar.              | 2            | 168           | 84                   | Mar.              | 2            | 78            | 39                   |
| April             | 2            | 130           | 65                   | April             | 2            | 107           | 54                   |
| May               | 2            | 142           | 71                   | May               | 2            | 40            | 20                   |
| June              | 2            | 157           | 79                   | June              | 2            | 67            | 34                   |
| July              | 2            | 115           | 58                   | July              | 2            | 140           | 70                   |
| Aug.              | 2            | 135           | 68                   | Aug.              | 2            | 192           | 96                   |
| Sept.             | 2            | 151           | 76                   | Sept.             | 2            | 154           | 77                   |
| Oct.              | 2            | 111           | 56                   | Oct.              | 2            | 165           | 82                   |
| Nov.              | 2            | 137           | 69                   | Nov.              | 2            | 157           | 79                   |
| Dec.              | 2            | 133           | 66                   | Dec.              | 2            | 164           | 82                   |
| Year Total:       |              | 1,711         |                      | Year Total:       |              | 1,533         |                      |
| Cum. Total        |              | 41,559        |                      | Cum. Total        |              | 43,092        |                      |

# OIL PRODUCTION

Operator: Kincaid & Watson Drlg. Co. . Field: East Red Lake (Queen)

Lease: Atlantic State "A" County: Eddy, New Mexico

|                   | No.          | Bbl.         | Per          |                   | No.          | Bbl.         | Per          |
|-------------------|--------------|--------------|--------------|-------------------|--------------|--------------|--------------|
|                   | <u>Wells</u> | <u>Prod.</u> | <u>Well</u>  |                   | <u>Wells</u> | <u>Prod.</u> | <u>Well</u>  |
|                   |              |              | <u>Prod.</u> |                   |              |              | <u>Prod.</u> |
| Year: <u>1967</u> |              |              |              | Year: <u>1968</u> |              |              |              |
| Jan.              | 2            | 157          | 79           | Jan.              | 2            | 102          | 51           |
| Feb.              | 2            | 158          | 79           | Feb.              | 2            | 121          | 61           |
| Mar.              | 2            | 114          | 57           | Mar.              | 2            | 90           | 45           |
| April             | 2            | 146          | 73           | April             | 2            | 104          | 52           |
| May               | 2            | 94           | 47           | May               | 2            | 121          | 61           |
| June              | 2            | 124          | 62           | June              | 2            | 40           | 20           |
| July              | 2            | 112          | 56           | July              | 2            | 49           | 25           |
| Aug.              | 2            | 62           | 31           | Aug.              | 2            | 91           | 46           |
| Sept.             | 2            | 70           | 35           | Sept.             | 2            | 77           | 39           |
| Oct.              | 2            | 28           | 14           | Oct.              | 2            | 59           | 30           |
| Nov.              | 2            | 76           | 38           | Nov.              | 2            | 118          | 59           |
| Dec.              | 2            | 129          | 64           | Dec.              | 2            | 96           | 48           |
| Year Total:       |              | 1,270        |              | Year Total:       |              | 1,068        |              |
| Cum. Total        |              | 44,362       |              | Cum. Total        |              | 45,430       |              |

## Year: 1969

|       |   |     |    |
|-------|---|-----|----|
| Jan.  | 2 | 100 | 50 |
| Feb.  | 2 | 73  | 37 |
| Mar.  | 2 | 85  | 43 |
| Apr.  | 2 | 68  | 34 |
| May   | 2 | 62  | 31 |
| June  | 2 | 67  | 33 |
| July  |   |     |    |
| Aug.  |   |     |    |
| Sept. |   |     |    |
| Oct.  |   |     |    |
| Nov.  |   |     |    |
| Dec.  |   |     |    |

Year Total  
to 7-1-69 455

Cum Total  
to 7-1-69 45,885

# OIL PRODUCTION

Operator: Kincaid & Watson Drlg. Co.      Field: East Red Lake (Queen)

Lease: Kincaid State      County: Eddy, New Mexico

|                   | No.<br><u>Wells</u> | Bbl.<br><u>Prod.</u> | Per<br>Well<br><u>Prod.</u> |                   | No.<br><u>Wells</u> | Bbl.<br><u>Prod.</u> | Per<br>Well<br><u>Prod.</u> |
|-------------------|---------------------|----------------------|-----------------------------|-------------------|---------------------|----------------------|-----------------------------|
| Year: <u>1959</u> |                     |                      |                             | Year: <u>1960</u> |                     |                      |                             |
| Jan.              |                     |                      |                             | Jan.              | 1                   | 403                  | 403                         |
| Feb.              |                     |                      |                             | Feb.              | 1                   | 532                  | 532                         |
| Mar.              |                     |                      |                             | Mar.              | 1                   | 409                  | 409                         |
| April             |                     |                      |                             | April             | 1                   | 358                  | 358                         |
| May               |                     |                      |                             | May               | 1                   | 322                  | 322                         |
| June              |                     |                      |                             | June              | 1                   | 264                  | 264                         |
| July              |                     |                      |                             | July              | 1                   | 210                  | 210                         |
| Aug.              |                     |                      |                             | Aug.              | 1                   | 231                  | 231                         |
| Sept.             |                     |                      |                             | Sept.             | 1                   | 358                  | 358                         |
| Oct.              | 1                   | 200                  | 200                         | Oct.              | 1                   | 241                  | 241                         |
| Nov.              | 1                   | 1028                 | 1028                        | Nov.              | 1                   | 226                  | 226                         |
| Dec.              | 1                   | 824                  | 824                         | Dec.              | 1                   | 227                  | 227                         |
| Year Total:       |                     | 2,052                |                             | Year Total:       |                     | 3,781                |                             |
| Cum. Total        |                     | 2,052                |                             | Cum. Total        |                     | 5,833                |                             |

|                   |   |       |     |                   |   |       |     |
|-------------------|---|-------|-----|-------------------|---|-------|-----|
| Year: <u>1961</u> |   |       |     | Year: <u>1962</u> |   |       |     |
| Jan.              | 1 | 187   | 187 | Jan.              | 1 | 178   | 178 |
| Feb.              | 1 | 162   | 162 | Feb.              | 1 | 74    | 74  |
| Mar.              | 1 | 153   | 153 | Mar.              | 1 | 122   | 122 |
| April             | 1 | 138   | 138 | April             | 1 | 71    | 71  |
| May               | 1 | 154   | 154 | May               | 1 | 66    | 66  |
| June              | 1 | 154   | 154 | June              | 1 | 5     | 5   |
| July              | 1 | 106   | 106 | July              | 1 | 0     | 0   |
| Aug.              | 1 | 16    | 16  | Aug.              | 1 | 5     | 5   |
| Sept.             | 1 | 99    | 99  | Sept.             | 1 | 89    | 89  |
| Oct.              | 1 | 41    | 41  | Oct.              | 1 | 99    | 99  |
| Nov.              | 1 | 6     | 6   | Nov.              | 1 | 78    | 78  |
| Dec.              | 1 | 76    | 76  | Dec.              | 1 | 97    | 97  |
| Year Total:       |   | 1,292 |     | Year Total:       |   | 884   |     |
| Cum. Total        |   | 7,125 |     | Cum. Total:       |   | 8,009 |     |

# OIL PRODUCTION

Operator: Kincaid & Watson Drlg Co.

Field: East Red Lake (Queen)

Lease: Kincaid State

County: Eddy, New Mexico

|                   | <u>No.</u>   | <u>Bbl.</u>  | <u>Per</u>   |                   | <u>No.</u>   | <u>Bbl.</u>  | <u>Per</u>   |
|-------------------|--------------|--------------|--------------|-------------------|--------------|--------------|--------------|
|                   | <u>Wells</u> | <u>Prod.</u> | <u>Well</u>  |                   | <u>Wells</u> | <u>Prod.</u> | <u>Well</u>  |
|                   |              |              | <u>Prod.</u> |                   |              |              | <u>Prod.</u> |
| Year: <u>1963</u> |              |              |              | Year: <u>1964</u> |              |              |              |
| Jan.              | 1            | 97           | 97           | Jan.              | 1            | 25           | 25           |
| Feb.              | 1            | 100          | 100          | Feb.              | 1            | 35           | 35           |
| Mar.              | 1            | 95           | 95           | Mar.              | 1            | 28           | 28           |
| April             | 1            | 97           | 97           | April             | 1            | 21           | 21           |
| May               | 1            | 90           | 90           | May               | 1            | 22           | 22           |
| June              | 1            | 90           | 90           | June              | 1            | 19           | 19           |
| July              | 1            | 5            | 5            | July              | 1            | 11           | 11           |
| Aug.              | 1            | 5            | 5            | Aug.              | 1            | 16           | 16           |
| Sept.             | 1            | 5            | 5            | Sept.             | 1            | 14           | 14           |
| Oct.              | 1            | 8            | 8            | Oct.              | 1            | 22           | 22           |
| Nov.              | 1            | 70           | 70           | Nov.              | 1            | 34           | 34           |
| Dec.              | 1            | 38           | 38           | Dec.              | 1            | 36           | 36           |
| Year Total:       |              | 700          |              | Year Total:       |              | 283          |              |
| Cum. Total:       |              | 8,709        |              | Cum. Total:       |              | 8,992        |              |
| Year: <u>1965</u> |              |              |              | Year: <u>1966</u> |              |              |              |
| Jan.              | 1            | 30           | 30           | Jan.              | 1            | 13           | 13           |
| Feb.              | 1            | 31           | 31           | Feb.              | 1            | 25           | 25           |
| Mar.              | 1            | 33           | 33           | Mar.              | 1            | 8            | 8            |
| April             | 1            | 25           | 25           | April             | 1            | 17           | 17           |
| May               | 1            | 19           | 19           | May               | 1            | 18           | 18           |
| June              | 1            | 9            | 9            | June              | 1            | 14           | 14           |
| July              | 1            | 4            | 4            | July              | 1            | 58           | 58           |
| Aug.              | 1            | 17           | 17           | Aug.              | 1            | 59           | 59           |
| Sept.             | 1            | 15           | 15           | Sept.             | 1            | 43           | 43           |
| Oct.              | 1            | -            | -            | Oct.              | 1            | 41           | 41           |
| Nov.              | 1            | -            | -            | Nov.              | 1            | 35           | 35           |
| Dec.              | 1            | 14           | 14           | Dec.              | 1            | 37           | 37           |
| Year Total:       |              | 197          |              | Year Total:       |              | 368          |              |
| Cum. Total:       |              | 9,189        |              | Cum. Total:       |              | 9,557        |              |



# OIL PRODUCTION

Operator: Kincaid Watson Drlg. Co.

Field: East Red Lake (Queen)

Lease: Kincaid State

County: Eddy, New Mexico

|                   | <u>No.</u><br><u>Wells</u> | <u>Bbl.</u><br><u>Prod.</u> | <u>Per</u><br><u>Well</u><br><u>Prod.</u> |
|-------------------|----------------------------|-----------------------------|---|
| Year: <u>1967</u> |                            |                             |   |
| Jan.              | 1                          | 29                          | 29  |
| Feb.              | 1                          | 35                          | 35  |
| Mar.              | 1                          | 43                          | 43  |
| April             | 1                          | 12                          | 12  |
| May               | 1                          | 10                          | 10  |
| June              | 1                          | 12                          | 12  |
| July              | 1                          | 10                          | 10  |
| Aug.              | 1                          | 11                          | 11  |
| Sept.             | 1                          | 5                           | 5   |
| Oct.              | 1                          | 18                          | 18  |
| Nov.              | 1                          | 11                          | 11  |
| Dec.              | 1                          | 20                          | 20  |

Year Total: 216  
Cum. Total: 9,773

|                   | <u>No.</u><br><u>Wells</u> | <u>Bbl.</u><br><u>Prod.</u> | <u>Per</u><br><u>Well</u><br><u>Prod.</u> |
|-------------------|----------------------------|-----------------------------|---|
| Year: <u>1968</u> |                            |                             |   |
| Jan.              | 1                          | 25                          | 25  |
| Feb.              | 1                          | 18                          | 18  |
| Mar.              | 1                          | 21                          | 21  |
| April             | 1                          | 6                           | 6   |
| May               | 1                          | 7                           | 7   |
| June              | 1                          | 5                           | 5   |
| July              | 1                          | 13                          | 13  |
| Aug.              | 1                          | 8                           | 8   |
| Sept.             | 1                          | 17                          | 17  |
| Oct.              | 1                          | 17                          | 17  |
| Nov.              | 1                          | 21                          | 21  |
| Dec.              | 1                          | 19                          | 19  |

Year Total: 177  
Cum. Total: 9,950

Year: 1969

|       |   |    |    |
|-------|---|----|----|
| Jan.  | 1 | 23 | 23 |
| Feb.  | 1 | 18 | 18 |
| Mar.  | 1 | 23 | 23 |
| Apr.  | 1 | 14 | 14 |
| May   | 1 | 18 | 18 |
| June  | 1 | 16 | 16 |
| July  |   |    |    |
| Aug.  |   |    |    |
| Sept. |   |    |    |
| Oct.  |   |    |    |
| Nov.  |   |    |    |
| Dec.  |   |    |    |

Year Total  
to 7-1-69 112

Cum. Total  
to 7-1-69 10,062

# OIL PRODUCTION

Operator: Kincaid & Watson Drlg. Co.      Field: East Red Lake (Queen)

Lease: Resler & Sheldon State      County: Eddy, New Mexico

|                   | <u>No.</u>   | <u>Bbl.</u>  | <u>Per</u>   |                   | <u>No.</u>   | <u>Bbl.</u>  | <u>Per</u>   |
|-------------------|--------------|--------------|--------------|-------------------|--------------|--------------|--------------|
|                   | <u>Wells</u> | <u>Prod.</u> | <u>Well</u>  |                   | <u>Wells</u> | <u>Prod.</u> | <u>Well</u>  |
|                   |              |              | <u>Prod.</u> |                   |              |              | <u>Prod.</u> |
| Year: <u>1959</u> |              |              |              | Year: <u>1960</u> |              |              |              |
| Jan.              |              |              |              | Jan.              | 2            | 1539         | 769          |
| Feb.              |              |              |              | Feb.              | 3            | 2217         | 739          |
| Mar.              | 1            | 182          | 182          | Mar.              | 3            | 2265         | 755          |
| April             | 1            | 196          | 196          | April             | 3            | 2031         | 677          |
| May               | 1            | 155          | 155          | May               | 3            | 2062         | 687          |
| June              | 1            | 190          | 190          | June              | 3            | 1141         | 380          |
| July              | 1            | 57           | 57           | July              | 3            | 2094         | 698          |
| Aug.              | 1            | 425          | 425          | Aug.              | 3            | 1919         | 640          |
| Sept.             | 2            | 1276         | 638          | Sept.             | 3            | 1210         | 403          |
| Oct.              | 2            | 1775         | 887          | Oct.              | 3            | 1066         | 355          |
| Nov.              | 2            | 1653         | 826          | Nov.              | 3            | 657          | 219          |
| Dec.              | 2            | 1731         | 865          | Dec.              | 3            | 1010         | 337          |
| Year Total:       |              | 7,640        |              | Year Total:       |              | 19,211       |              |
| Cum. Total:       |              | 7,640        |              | Cum. Total        |              | 26,851       |              |
| Year: <u>1961</u> |              |              |              | Year: <u>1962</u> |              |              |              |
| Jan.              | 3            | 1108         | 369          | Jan.              | 3            | 574          | 191          |
| Feb.              | 3            | 960          | 320          | Feb.              | 3            | 530          | 177          |
| Mar.              | 3            | 846          | 282          | Mar.              | 3            | 541          | 180          |
| April             | 3            | 805          | 268          | April             | 3            | 537          | 179          |
| May               | 3            | 412          | 137          | May               | 3            | 535          | 178          |
| June              | 3            | 779          | 260          | June              | 3            | 483          | 161          |
| July              | 3            | 980          | 327          | July              | 3            | 764          | 255          |
| Aug.              | 3            | 666          | 222          | Aug.              | 3            | 669          | 223          |
| Sept.             | 3            | 663          | 221          | Sept.             | 3            | 572          | 191          |
| Oct.              | 3            | 743          | 248          | Oct.              | 3            | 778          | 259          |
| Nov.              | 3            | 590          | 197          | Nov.              | 3            | 649          | 216          |
| Dec.              | 3            | 663          | 221          | Dec.              | 3            | 510          | 170          |
| Year Total:       |              | 9,215        |              | Year Total:       |              | 7,142        |              |
| Cum. Total:       |              | 36,066       |              | Cum. Total:       |              | 43,208       |              |

# OIL PRODUCTION

Operator: Kincaid & Watson Drlg. Co.      Field: East Red Lake (Queen)  
 Lease: Resler & Sheldon State      County: Eddy, New Mexico

|                   | No.<br><u>Wells</u> | Bbl.<br><u>Prod.</u> | Per<br>Well<br><u>Prod.</u> |                   | No.<br><u>Wells</u> | Bbl.<br><u>Prod.</u> | Per<br>Well<br><u>Prod.</u> |
|-------------------|---------------------|----------------------|-----------------------------|-------------------|---------------------|----------------------|-----------------------------|
| Year: <u>1963</u> |                     |                      |                             | Year: <u>1964</u> |                     |                      |                             |
| Jan.              | 3                   | 439                  | 146                         | Jan.              | 3                   | 437                  | 146                         |
| Feb.              | 3                   | 381                  | 127                         | Feb.              | 3                   | 334                  | 111                         |
| Mar.              | 3                   | 699                  | 233                         | Mar.              | 3                   | 237                  | 79                          |
| April             | 3                   | 523                  | 174                         | April             | 3                   | 271                  | 90                          |
| May               | 3                   | 405                  | 135                         | May               | 4                   | 404                  | 101                         |
| June              | 3                   | 499                  | 166                         | June              | 4                   | 403                  | 101                         |
| July              | 3                   | 641                  | 214                         | July              | 4                   | 366                  | 92                          |
| Aug.              | 3                   | 573                  | 191                         | Aug.              | 4                   | 127                  | 32                          |
| Sept.             | 3                   | 413                  | 138                         | Sept.             | 4                   | 310                  | 76                          |
| Oct.              | 3                   | 92                   | 30                          | Oct.              | 4                   | 354                  | 89                          |
| Nov.              | 3                   | 73                   | 24                          | Nov.              | 4                   | 251                  | 63                          |
| Dec.              | 3                   | 133                  | 41                          | Dec.              | 4                   | 315                  | 79                          |
| Year Total:       |                     | 4,871                |                             | Year Total:       |                     | 3,809                |                             |
| Cum. Total:       |                     | 48,079               |                             | Cum. Total:       |                     | 51,888               |                             |
| Year: <u>1965</u> |                     |                      |                             | Year: <u>1966</u> |                     |                      |                             |
| Jan.              | 4                   | 266                  | 67                          | Jan.              | 4                   | 178                  | 45                          |
| Feb.              | 4                   | 254                  | 63                          | Feb.              | 4                   | 187                  | 47                          |
| Mar.              | 4                   | 278                  | 64                          | Mar.              | 4                   | 299                  | 75                          |
| April             | 4                   | 237                  | 59                          | April             | 4                   | 161                  | 40                          |
| May               | 4                   | 234                  | 59                          | May               | 4                   | 195                  | 49                          |
| June              | 4                   | 183                  | 46                          | June              | 4                   | 134                  | 36                          |
| July              | 4                   | 191                  | 48                          | July              | 4                   | 160                  | 40                          |
| Aug.              | 4                   | 196                  | 49                          | Aug.              | 4                   | 182                  | 45                          |
| Sept.             | 4                   | 132                  | 33                          | Sept.             | 4                   | 148                  | 37                          |
| Oct.              | 4                   | 201                  | 50                          | Oct.              | 4                   | 162                  | 40                          |
| Nov.              | 4                   | 201                  | 50                          | Nov.              | 4                   | 136                  | 34                          |
| Dec.              | 4                   | 179                  | 44                          | Dec.              | 4                   | 147                  | 37                          |
| Year Total:       |                     | 2,552                |                             | Year Total:       |                     | 2,089                |                             |
| Cum. Total:       |                     | 54,440               |                             | Cum. Total:       |                     | 56,529               |                             |

# OIL PRODUCTION

Operator: Kincaid & Watson Drlg. Co.      Field: East Red Lake (Queen)

Lease: Resler & Sheldon State      County: Eddy, New Mexico

|                   | No.<br><u>Wells</u> | Bbl.<br><u>Prod.</u> | Per<br>Well<br><u>Prod.</u> |                   | No.<br><u>Wells</u> | Bbl.<br><u>Prod.</u> | Per<br>Well<br><u>Prod.</u> |
|-------------------|---------------------|----------------------|-----------------------------|-------------------|---------------------|----------------------|-----------------------------|
| Year: <u>1967</u> |                     |                      |                             | Year: <u>1968</u> |                     |                      |                             |
| Jan.              | 4                   | 120                  | 30                          | Jan.              | 4                   | 15                   | 4                           |
| Feb.              | 4                   | 98                   | 25                          | Feb.              | 4                   | 52                   | 13                          |
| Mar.              | 4                   | 87                   | 22                          | Mar.              | 4                   | 80                   | 20                          |
| April             | 4                   | 143                  | 36                          | April             | 4                   | 54                   | 14                          |
| May               | 4                   | 143                  | 36                          | May               | 4                   | 40                   | 10                          |
| June              | 4                   | 111                  | 28                          | June              | 4                   | 81                   | 20                          |
| July              | 4                   | 62                   | 16                          | July              | 4                   | 40                   | 10                          |
| Aug.              | 4                   | 145                  | 36                          | Aug.              | 4                   | 93                   | 23                          |
| Sept.             | 4                   | 146                  | 37                          | Sept.             | 4                   | 51                   | 13                          |
| Oct.              | 4                   | 69                   | 17                          | Oct.              | 4                   | 37                   | 9                           |
| Nov.              | 4                   | 20                   | 5                           | Nov.              | 4                   | 20                   | 5                           |
| Dec.              | 4                   | 55                   | 14                          | Dec.              | 4                   | 82                   | 21                          |
| Year Total:       |                     | 1,199                |                             | Year Total:       |                     | 645                  |                             |
| Cum. Total:       |                     | 57,728               |                             | Cum. Total:       |                     | 58,373               |                             |

## Year: 1969

|       |   |    |    |
|-------|---|----|----|
| Jan.  | 4 | 50 | 12 |
| Feb.  | 4 | 27 | 7  |
| Mar.  | 4 | 32 | 8  |
| April | 4 | 13 | 3  |
| May   | 4 | 53 | 13 |
| June  | 4 | 32 | 8  |
| July  |   |    |    |
| Aug.  |   |    |    |
| Sept. |   |    |    |
| Oct.  |   |    |    |
| Nov.  |   |    |    |
| Dec.  |   |    |    |

Year Total: 207  
to 7-1-69

Cum. Total: 58,580  
to 7-1-69

Year Total.  
Cum. Total:

# OIL PRODUCTION

Operator: McCoy & Stevens

Field: East Red Lake (Queen)

Lease: Atlantic-State

County: Eddy, New Mexico

|                   | No.<br><u>Wells</u> | Bbl.<br><u>Prod.</u> | Per<br>Well<br><u>Prod.</u> |
|-------------------|---------------------|----------------------|-----------------------------|
| Year: <u>1964</u> |                     |                      |                             |
| Jan.              | 2                   | 317                  | 159                         |
| Feb.              | 2                   | 354                  | 177                         |
| Mar.              | 2                   | 216                  | 108                         |
| April             | 2                   | 338                  | 169                         |
| May               | 2                   | 340                  | 170                         |
| June              | 2                   | 323                  | 162                         |
| July              | 2                   | 351                  | 176                         |
| Aug.              | 2                   | 318                  | 159                         |
| Sept.             | 2                   | 334                  | 167                         |
| Oct.              | 2                   | 348                  | 174                         |
| Nov.              | 2                   | 329                  | 165                         |
| Dec.              | 2                   | 318                  | 159                         |

Year Total: 3,886  
Cum. Total: 32,384

Year: 1966

|       | No.<br><u>Wells</u> | Bbl.<br><u>Prod.</u> | Per<br>Well<br><u>Prod.</u> |
|-------|---------------------|----------------------|-----------------------------|
| Jan.  | 2                   | 262                  | 131                         |
| Feb.  | 2                   | 204                  | 102                         |
| Mar.  | 2                   | 246                  | 123                         |
| April | 2                   | 246                  | 123                         |
| May   | 2                   | 225                  | 113                         |
| June  | 2                   | 217                  | 109                         |
| July  | 2                   | 225                  | 113                         |
| Aug.  | 2                   | 209                  | 105                         |
| Sept. | 2                   | 186                  | 93                          |
| Oct.  | 2                   | 208                  | 104                         |
| Nov.  | 2                   | 192                  | 96                          |
| Dec.  | 2                   | 190                  | 95                          |

Year Total: 2,610  
Cum. Total: 38,036

Year: 1965

|       | No.<br><u>Wells</u> | Bbl.<br><u>Prod.</u> | Per<br>Well<br><u>Prod.</u> |
|-------|---------------------|----------------------|-----------------------------|
| Jan.  | 2                   | 305                  | 152                         |
| Feb.  | 2                   | 266                  | 133                         |
| Mar.  | 2                   | 307                  | 154                         |
| April | 2                   | 271                  | 136                         |
| May   | 2                   | 267                  | 134                         |
| June  | 2                   | 250                  | 125                         |
| July  | 2                   | 211                  | 106                         |
| Aug.  | 2                   | 233                  | 117                         |
| Sept. | 2                   | 210                  | 105                         |
| Oct.  | 2                   | 237                  | 119                         |
| Nov.  | 2                   | 234                  | 117                         |
| Dec.  | 2                   | 251                  | 126                         |

Year Total: 3,042  
Cum. Total: 35,426

Year: 1967

|       | No.<br><u>Wells</u> | Bbl.<br><u>Prod.</u> | Per<br>Well<br><u>Prod.</u> |
|-------|---------------------|----------------------|-----------------------------|
| Jan.  | 2                   | 195                  | 98                          |
| Feb.  | 2                   | 168                  | 84                          |
| Mar.  | 2                   | 235                  | 118                         |
| April | 2                   | 219                  | 110                         |
| May   | 2                   | 188                  | 94                          |
| June  | 2                   | 179                  | 90                          |
| July  | 2                   | 153                  | 77                          |
| Aug.  | 2                   | 179                  | 90                          |
| Sept. | 2                   | 161                  | 81                          |
| Oct.  | 2                   | 172                  | 86                          |
| Nov.  | 2                   | 151                  | 76                          |
| Dec.  | 2                   | 206                  | 103                         |

Year Total: 2,206  
Cum. Total: 40,242

# OIL PRODUCTION

Operator: McCoy & Stevens

Field: East Red Lake (Queen)

Lease: Atlantic State

County: Eddy, New Mexico

|                   | <u>No.</u><br><u>Wells</u> | <u>Bbl.</u><br><u>Prod.</u> | <u>Per</u><br><u>Well</u><br><u>Prod.</u> |
|-------------------|----------------------------|-----------------------------|---|
| Year: <u>1968</u> |                            |                             |   |
| Jan.              | 2                          | 120                         | 60  |
| Feb.              | 2                          | 103                         | 52  |
| Mar.              | 2                          | 180                         | 90  |
| April             | 2                          | 176                         | 88  |
| May               | 2                          | 131                         | 66  |
| June              | 2                          | 110                         | 55  |
| July              | 2                          | 201                         | 101                                       |
| Aug.              | 2                          | 210                         | 105                                       |
| Sept.             | 2                          | 154                         | 77  |
| Oct.              | 2                          | 198                         | 99  |
| Nov.              | 2                          | 156                         | 78  |
| Dec.              | 2                          | 195                         | 98  |

Year Total: 1,934  
Cum. Total: 42,176

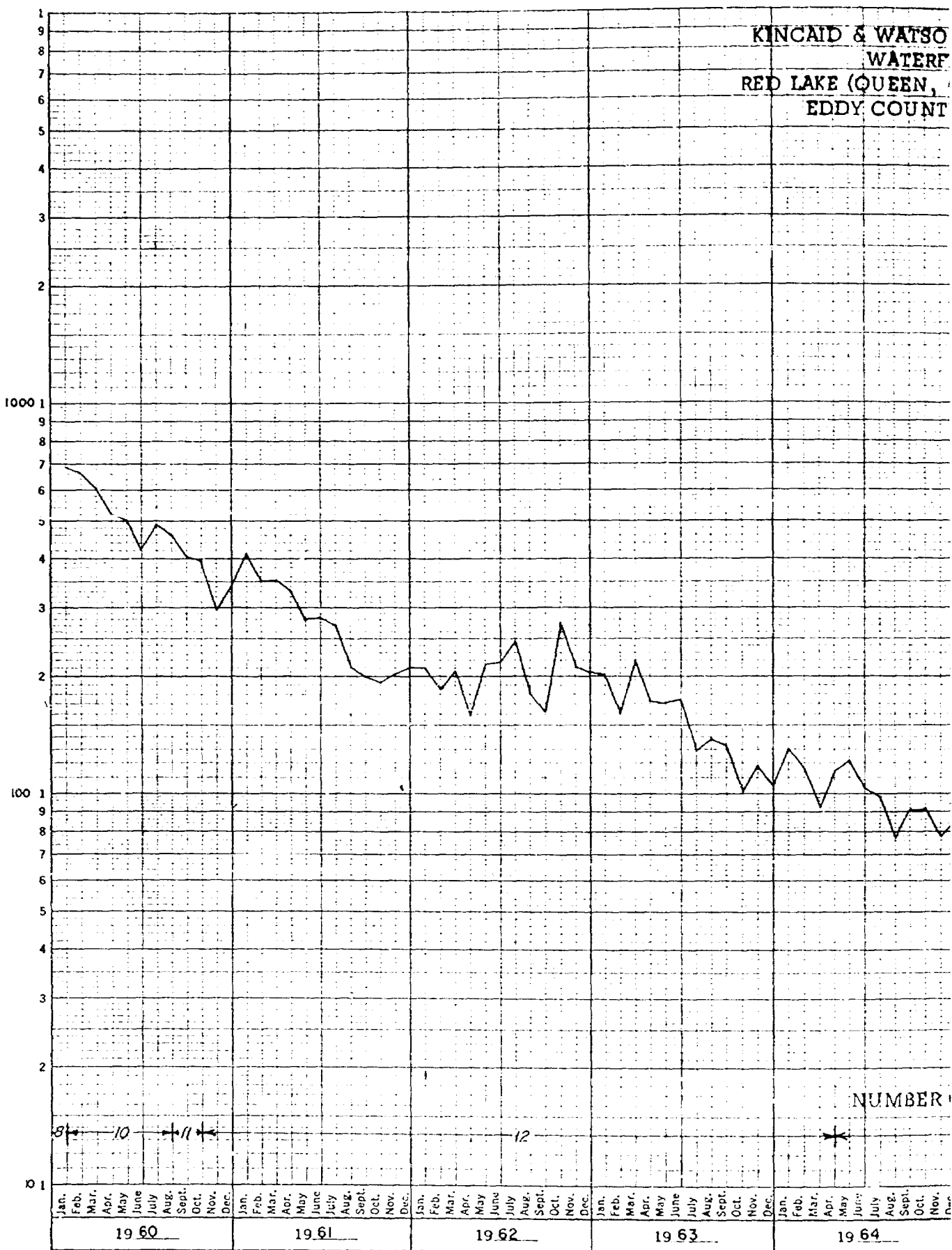
|                   | <u>No.</u><br><u>Wells</u> | <u>Bbl.</u><br><u>Prod.</u> | <u>Per</u><br><u>Well</u><br><u>Prod.</u> |
|-------------------|----------------------------|-----------------------------|---|
| Year: <u>1969</u> |                            |                             |   |
| Jan.              | 2                          | 183                         | 92  |
| Feb.              | 2                          | 162                         | 81  |
| Mar.              | 2                          | 204                         | 102                                       |
| April             | 2                          | 182                         | 91  |
| May               | 2                          | 173                         | 87  |
| June              | 2                          | 179                         | 90  |
| July              |                            |                             |   |
| Aug.              |                            |                             |   |
| Sept.             |                            |                             |   |
| Oct.              |                            |                             |   |
| Nov.              |                            |                             |   |
| Dec.              |                            |                             |   |

Year Total 1,088  
to 7-1-69

Cum. Total  
to 7-1-69 43,264

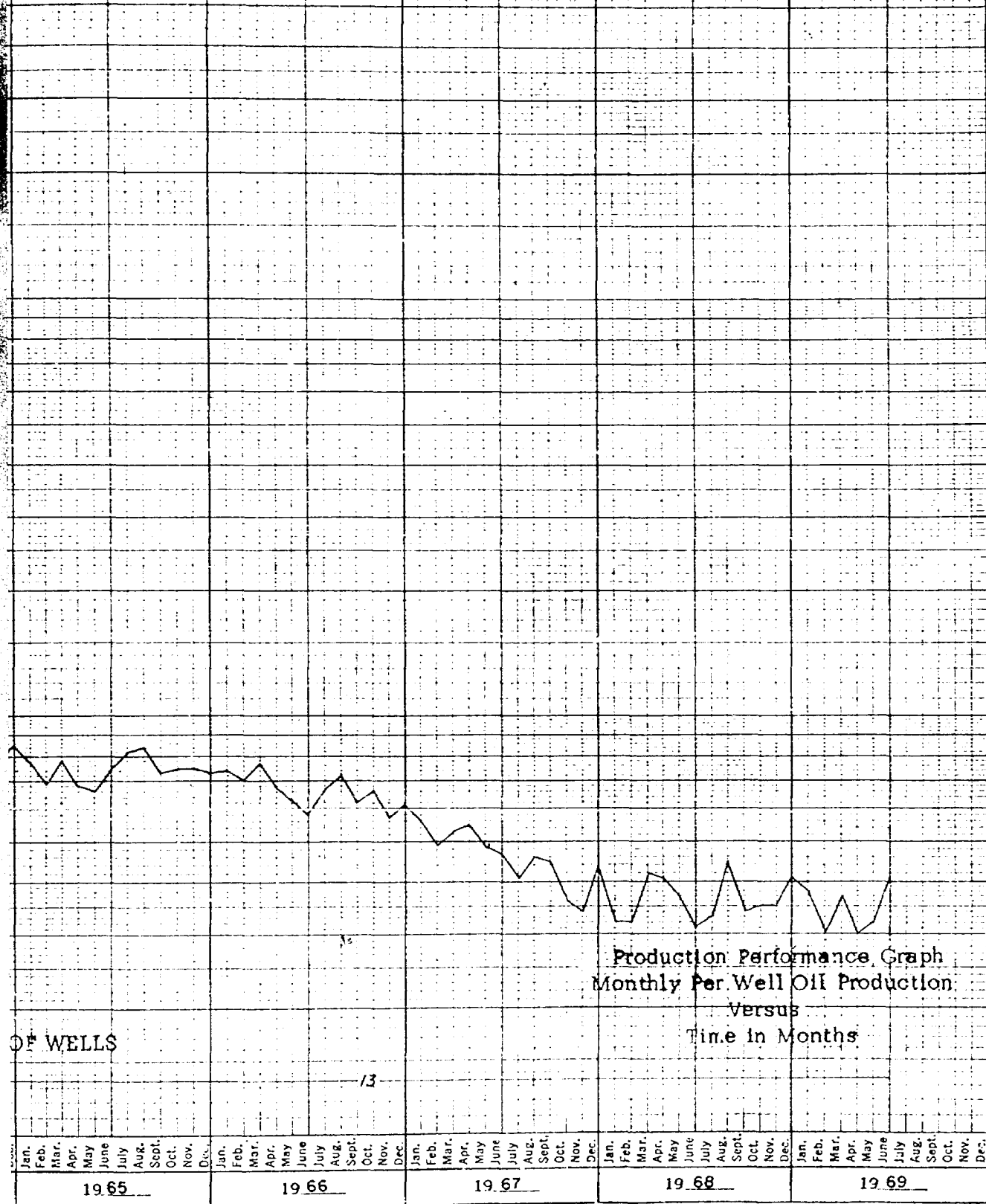
K&E 10 YEARS BY MONTHS 47 6743  
 X 3 LOG CYCLES  
 MADE IN U.S.A.  
 KEUFFEL & ESSER CO.

OIL, BARRELS PER WELL PER MONTH

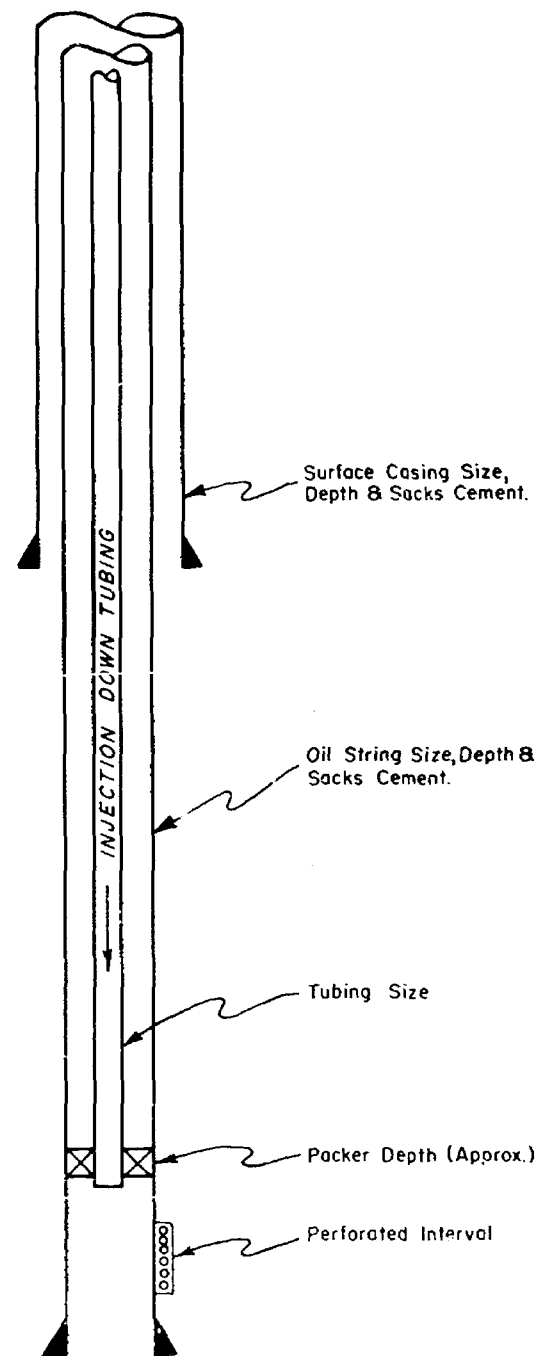




N DRILLING COMPANY  
 OOD UNIT  
 GRAYBURG), EAST FIELD  
 Y, NEW MEXICO

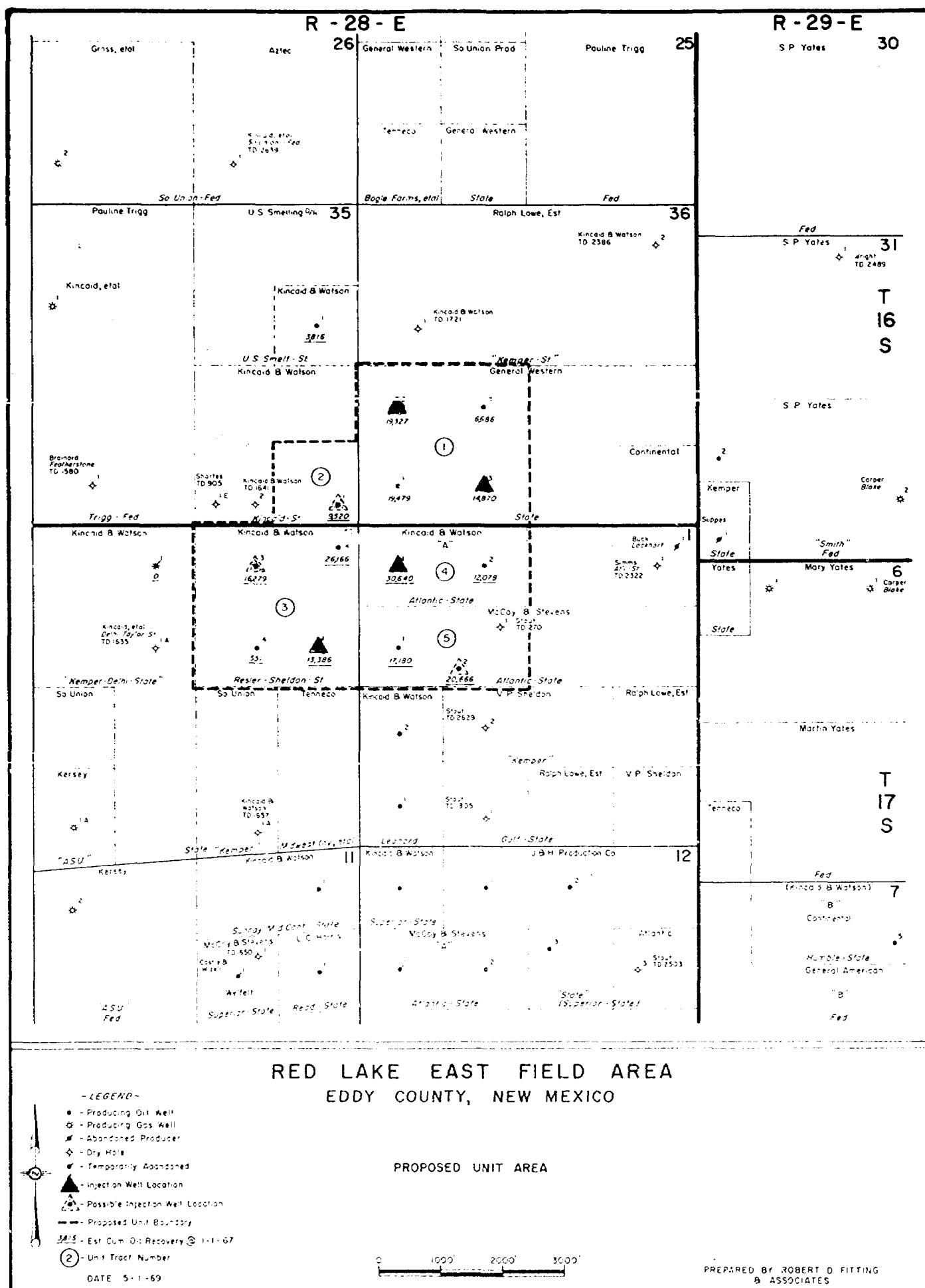


| TRACT & WELL NO. |                |                |                |
|------------------|----------------|----------------|----------------|
| TRACT 1-2        | TRACT 1-3      | TRACT 3-1      | TRACT 4-1      |
| 8 5/8" - 255'    | 8 5/8" - 349'  | 8 5/8" - 501'  | 8 5/8" - 493'  |
| 150 Sx.          | 100 Sx.        | 50 Sx.         | 50 Sx.         |
|                  |                |                |                |
| 4 1/2" - 1679'   | 4 1/2" - 1700' | 4 1/2" - 1640' | 5 1/2" - 1680' |
| 150 Sx.          | 100 Sx.        | 100 Sx.        | 100 Sx.        |
|                  |                |                |                |
| 2"               | 2"             | 2"             | 2"             |
|                  |                |                |                |
| 1630'            | 1650'          | 1560'          | 1610'          |
|                  |                |                |                |
| 1631 - 1643'     | 1650 - 1658'   | 1564 - 1572'   | 1612 - 1626'   |



DIAGRAMMATIC SKETCH  
INJECTION WELL COMPLETION DATA

EAST RED LAKE (Queen) UNIT  
Eddy County, New Mexico





BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

*Case 4255*

APPLICATION OF KINCAID & WATSON  
DRILLING COMPANY FOR APPROVAL OF  
A WATERFLOOD PROJECT FOR THE EAST  
RED LAKE UNIT AREA COMPRISING  
517.68 ACRES OF STATE LANDS IN  
TOWNSHIPS 16 AND 17 SOUTH, RANGE  
28 EAST, EDDY COUNTY, NEW MEXICO  
BY THE INJECTION OF WATER INTO  
WELLS COMPLETED IN THE PENROSE  
SAND OF THE QUEEN FORMATION

Oil Conservation Commission  
Box 2088  
Santa Fe, New Mexico 87501

Comes Kincaid & Watson Drilling Company, a New Mexico corporation, with offices at Artesia, New Mexico, acting by and through the undersigned attorneys, and hereby makes application for approval of a waterflood project for the East Red Lake Unit Area comprising 517.68 acres of lands of the State of New Mexico more particularly described as follows:

Township 16 South, Range 28 East

Section 35 - SE $\frac{1}{4}$ SE $\frac{1}{4}$

Section 36 - SW $\frac{1}{4}$

Township 17 South, Range 28 East

Section 1 - Lots 3 and 4 (N $\frac{1}{2}$ NW $\frac{1}{4}$ ), S $\frac{1}{2}$ NW $\frac{1}{4}$

Section 2 - Lots 1 and 2 (N $\frac{1}{2}$ NE $\frac{1}{4}$ ), S $\frac{1}{2}$ NE $\frac{1}{4}$

by the injection of water into 4 wells completed in the Penrose Sand of the Queen formation underlying the above described area, and in support thereof respectfully shows:

1. That applicant is the unit operator of the proposed unit agreement for the development and operation of the East Red Lake Unit Area, Eddy County, New Mexico, and has made application to the

Oil Conservation Commission for approval of said unit agreement as required by applicable rules and regulations.

2. Applicant seeks approval of a secondary recovery project covering all of the lands within the proposed East Red Lake Unit Area. There is attached hereto as Exhibit "A" a plat showing the location of all the wells within the proposed unit area and surrounding area and the 4 wells which applicant proposes to convert to injection wells. The 4 injection wells consist of the following:

General Western Petroleum Corporation State 2-L  
in Section 36, Township 16 South, Range 28 East;

General Western Petroleum Corporation State 3-N  
in Section 36, Township 16 South, Range 28 East;

Kincaid & Watson Drilling Company Atlantic A State 1-D  
in Section 1, Township 17 South, Range 28 East;

Kincaid & Watson Drilling Company Resler & Sheldon  
1-H in Section 2, Township 17 South, Range 28 East.

Exhibit "A" also shows by broken line triangles additional wells which might possibly be converted to injection wells in the future depending upon the success of the waterflood project.

3. There is also attached hereto as Exhibit "B" a typical diagrammatic sketch of the proposed method of conversion of the producing wells into injection wells. There are also filed herewith copies of electrical logs of Kincaid & Watson Drilling Company Atlantic A State 1-D and Resler & Sheldon 1-H wells referred to above. Applicant has been unable to locate electrical logs of the other two proposed injection wells.

4. Applicant proposes to purchase fresh water for injection purposes from the Kewanee owned water supply system located in the NE $\frac{1}{4}$  Section 2, Township 17 South, Range 28 East. Applicant will be unable to determine the quantities of water which will be injected until injection pressures and other information has been obtained.

5. Applicant seeks to have assigned to the East Red Lake Unit Area a maximum project allowable in accordance with Rule 701 of the Commission.

6. Applicant believes that the proposed waterflood project is in the interest of conservation and the prevention of waste and will promote the greatest ultimate recovery of oil and gas from the project area and tend to protect correlative rights.

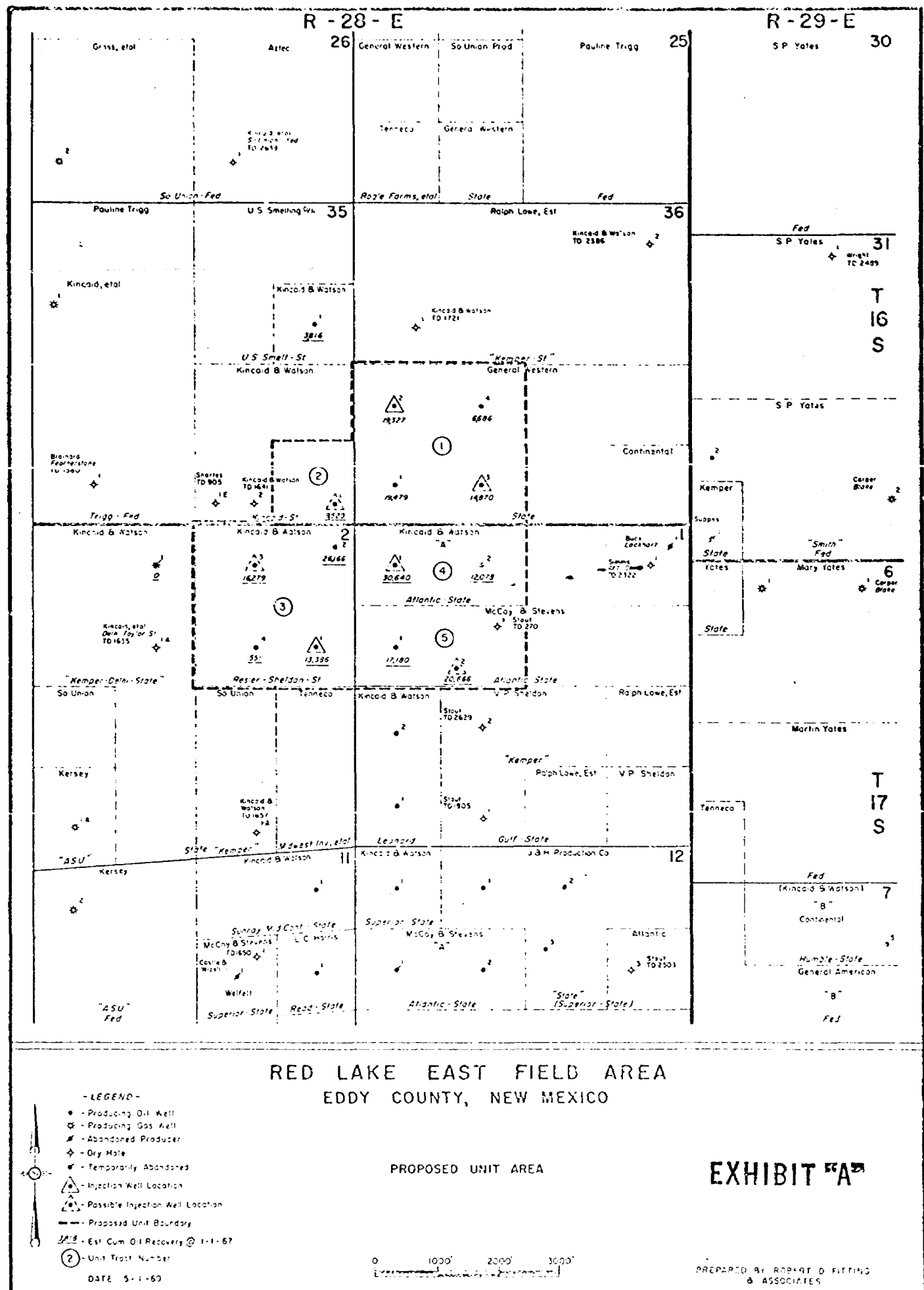
Applicant requests that this matter be set down for hearing as soon as possible.

Respectfully submitted,

KINCAID & WATSON DRILLING COMPANY

By 

Member of the Firm of  
HINKLE, BONDURANT & CHRISTY  
Box 10  
Roswell, New Mexico 88201





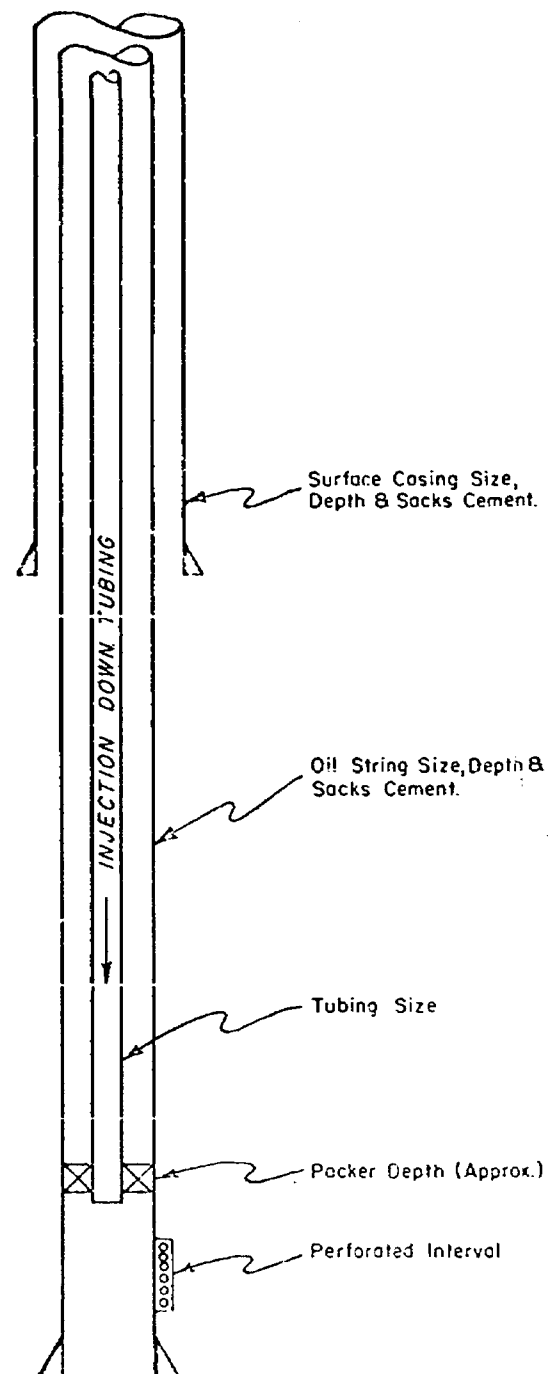
| TRACT & WELL NO. |               |               |               |
|------------------|---------------|---------------|---------------|
| TRACT 1-#2       | TRACT 1-#3    | TRACT 3-#1    | TRACT 4-#1    |
| 8 5/8" - 255'    | 8 5/8" - 349' | 8 5/8" - 501' | 8 5/8" - 493' |
| 150 Sx.          | 100 Sx.       | 50 Sx.        | 50 Sx.        |

|                |                |                |                |
|----------------|----------------|----------------|----------------|
| 4 1/2" - 1679' | 4 1/2" - 1700' | 4 1/2" - 1640' | 5 1/2" - 1680' |
| 150 Sx.        | 100 Sx.        | 100 Sx.        | 100 Sx.        |

|    |    |    |    |
|----|----|----|----|
| 2" | 2" | 2" | 2" |
|----|----|----|----|

|       |       |       |       |
|-------|-------|-------|-------|
| 1630' | 1650' | 1560' | 1610' |
|-------|-------|-------|-------|

|              |              |              |              |
|--------------|--------------|--------------|--------------|
| 1631 - 1643' | 1650 - 1658' | 1564 - 1572' | 1612 - 1626' |
|--------------|--------------|--------------|--------------|



DIAGRAMMATIC SKETCH  
INJECTION WELL COMPLETION DATA

EAST RED LAKE (Queen) UNIT  
Eddy County, New Mexico

EXHIBIT "B"

ROUGH DRAFT FOR WATERFLOOD LETTERS

Mr. Clarence Hinkle  
Hinkle, Bondurant & Christy  
Attorneys at Law  
Post Office Box 10  
Roswell, New Mexico 88201

Dear Sir:

*Reference is made to* Commission Order No. R-3881, *monthly* entered in Case No. 4255, approving the *Kinnard & Loabson East & Lake Unit* Waterflood Project.

*Initial injection shall be through the three four authorized water injection wells, each of which shall be equipped with a string of plastic lined tubing set in a packer. Packers shall be located as close as practicable to the uppermost perforation. The casing-tubing annulus of each injection well shall be loaded with an inert fluid and shall be equipped with a pressure gauge at the surface.*  
As allowable, our calculations indicate that when all of the authorized injection wells have been placed on active injection, the maximum allowable which this project will be eligible to receive under the provisions of Rule 701-E-3 is 546 barrels per day when the Southeast New Mexico normal unit allowable is 42 barrels per day or less.

Please report any error in this calculated maximum allowable immediately, both to the Santa Fe office of the Commission and the appropriate district proration office.

In order that the allowable assigned to the project may be kept current, and in order that the operator may fully benefit from the allowable provisions of Rule 701, it behooves him to promptly notify both of the aforementioned Commission offices by letter of any change in the status of wells in the project area, i.e., when active injection commences, when additional injection or producing wells are drilled, when additional wells are acquired through purchase or unitization, when wells have received a response to water injection, etc.

Your cooperation in keeping the Commission so informed as to the status of the project and the wells therein will be appreciated.

Very truly yours,

A. L. PORTER, Jr.  
Secretary-Director

cc: OCC: Hobbs X  
Artesia X  
Aztec       

USGS       

~~Mr. Frank Irby~~, State Engineer Office, Santa Fe, New Mexico  
Mr. D. E. Gray

DRAFT

GMH/esr

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

CASE No. 4255

Order No. R-3881

APPLICATION OF KINCAID & WATSON DRILLING COMPANY  
FOR A WATERFLOOD PROJECT, EDDY COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on November 19, 1969, at Roswell, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this \_\_\_\_\_ day of November, 1969, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, and being fully advised in the premises,

FINDS:

(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the applicant, Kincaid & Watson Drilling Company, seeks permission to institute a waterflood project in the \_\_\_\_\_  
East Red Lake Unit Area, East Red Lake  
Queen-Grayburg Pool, by the injection of water into the Queen formation through four injection wells in Section 36, Township 16 South, Range 28 East and Sections 1 and 2, Township 17 South, Range 28 East, NMPM, Eddy County, New Mexico.

(3) That the applicant further seeks an administrative procedure whereby said project could be expanded to include additional ~~injection~~ injection wells in ~~the area of the~~ said project as may be necessary in order to complete an efficient injection pattern; that said administrative procedure should provide for administrative approval for conversion to water injection in exception to the well response requirements of Rule 701 E-5 of the Commission Rules and Regulations.

(SEE UNDER)

the recovery of otherwise unrecoverable oil, thereby preventing waste.

(6) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations; provided however, that the showing of well response as required by Rule 701 E-5 shall not be necessary before obtaining administrative approval for the conversion of additional wells to water injection.

(SEE UNDER)

is hereby authorized to institute a waterflood project in the  
East Red Lake Unit Area, East Red Lake Pool,  
by the injection of water into the Queen formation  
through the following-described wells in Eddy County, New Mexico:  
Township  
~~North, South, Range~~ ~~West, East, NMPM~~  
~~County, New Mexico~~

Township 16 South, Range 28 East, NMPM

Injection wells:

General Western Petroleum Corp. State Well No. 2 - Unit L - Section 36  
General Western Petroleum Corp. State Well No. 3 - Unit N - Section 36

Township 17 South, Range 28 East, NMPM

Injection wells:

Kincaid & Watson Drilling Co. Atlantic State Well No. 1 - Unit D - Section 1  
Kincaid & Watson Drilling Co. Atlantic State Well No. 1 - Unit H - Section 2

(2) That the subject waterflood project is hereby designated the East Red Lake Unit Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations;

PROVIDED HOWEVER, that the Secretary-Director of the Commission may approve expansion of the East Red Lake Unit Waterflood Project to include such additional ~~lands and~~ injection wells in ~~the area of the~~ project as may be necessary to complete an efficient water injection pattern; that the showing of well response as required by Rule 701 E-5 shall not be necessary before obtaining administrative approval for the conversion of additional wells to water injection.

(SEE UNDER)

(4) That jurisdiction of this

entry of such further orders as the Commission may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.