CASE 5130: Kaiser Oil Corporation for a waterflood project, Lea County, New Mexico

CASE No.
5150

Application,

Transcripts,

Small Exhibits

ETC.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
January 16, 1974

EXAMINER HEARING

IN THE MATTER OF:

Application of Hanson Oil Corporation for a waterflood project, Lea County, New Mexico.

Case No. 5150

BEFORE: Richard L. Stamets, Examiner.

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the New Mexico Oil Conservation Commission: Thomas Derryberry, Esq.
Legal Counsel for the Commission
State Land Office Bldg.
Santa Fe, New Mexico

For the Applicant:
(Hanson Oil Corporation) Thomas W. Kellahin, Esq.
KELLAHIN & FOX
550 Don Gaspar
Santa Fe, New Mexico

I N D E X

E X H I B I T S

	Marked	Admitted
Applicant's Exhibits 1 thru 17	--	11

MR. STAMETS: We'll call Case 5150.

MR. DERRYBERRY: Case 5150. Application of Hanson Oil Corporation for a waterflood project, Lea County, New Mexico.

MR. STAMETS: Call for appearances in this case.

MR. KELLAHIN: Tom Kellahin, Kellahin and Fox, appearing on behalf of the Applicant, Hanson Oil Corporation. I have one witness to be sworn.

MR. STAMETS: Any other appearances in this case?

(Witness sworn.)

RALPH G. GRAY

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Mr. Gray, would you state your full name, by whom you are employed and in what capacity?

A Ralph Gray and I am self-employed with a consulting engineering business in Artesia.

Q Have you previously testified before this Commission?

A Yes, sir.

Q What is your working relationship with Hanson Oil

Corporation with regards to this particular Application?

A I have assisted Hanson Oil Corporation in getting this waterflood project started.

MR. KELLAHIN: If the Examiner please, are the qualifications of the witness acceptable?

MR. STAMETS: They are.

BY MR. KELLAHIN:

Q Mr. Gray, would you please refer to what has been marked as Exhibit No. 1 and identify it.

A Exhibit No. 1 is a map of the general area and this shows all the leases within two-mile radius of the proposed waterflood project. The Mescalero Ridge Unit is shown by the yellow border on the map and this takes in a portion of Section 26 and all of Section 25, Township 19 South, Range 34 East.

Q Has this unit previously been approved by the Oil Conservation Commission?

A Yes.

Q What type of land is involved here, Mr. Gray?

A This is all federal land within the unit.

Q Please continue.

A Exhibit No. 1 further shows the source for our water supply for the waterflood project, being the Marathon

Lea Unit in Section 12, Township 27, Range 34 East. Agreement has been worked out with these people whereby Hanson will be permitted to take Devonian water that is produced at one of their Devonian wells.

The approximate location of the supply line is indicated on Exhibit 1 by this green line.

Q Please refer to Exhibit No. 2 and identify it.

A Exhibit No. 2 is a more detailed map of the unit and this shows the location of eight injection wells which are proposed for immediate conversion indicated by the blue colored circles.

Q All of these to be converted production wells?

A Yes. They are presently producing and it's proposed to convert these to water injection.

Q What is indicated by the difference between the blue and red circles?

A The red locations are proposed for later conversion at such time as this operator might work out a suitable line agreement with the offset operators.

Q I don't know if you've stated or not, but what is the producer formation for these wells?

A These are the producing Queen formation.

Q The source of your injection water will be a

Devonian formation, is that correct?

A That's correct.

Q Would you please refer to Exhibit No. 3 and identify it?

A Exhibit No. 3 is a table showing pertinent well data of all of the wells located within the unit. These wells have casings set through the pay and there are various pay zones present that are producing, I think there are six producing sands in some of these wells. They are not all productive in all the wells, but they are present in some of the wells over the entire area. The casing has been perforated and most of the wells have been dry.

Q Does Exhibit 3 contain a well data on each of the proposed injection wells?

A Yes. This will include not only the proposed injection wells, but also the producing wells.

Q Would you please refer to Exhibit 4 and identify it?

A Exhibit No. 4 is a structure map with contours drawn on the top of the Queen formation. The structure is a small-final-type structure and this indicates most of the production is well on the higher portions of the structure.

Q Does this structure map indicate that waterflood

project would be feasible in and even successful?

A I doubt if the structure really is too important in the flood itself other than consideration of more information, I would say, than the structure.

Q All right. Let's do altogether Exhibits 5 through 13. Would you identify them and explain what they are?

A Exhibits 5 through 14, I believe are logs of all of the proposed water injection wells. These show the locations and formations of the markers and the yellow coloring is used to indicate the zones that are presently opened in the wells.

I might refer you to the Exhibit 8. It's a more typical log of this area. If you will note in this case there are five zones present in this particular case. The chief producing zones we think is the Upper Queen Zone, which is the top zone shown on it. We think this zone is thicker and has furnished by far the most of the primary oil that has been recovered. These other zones, which occur in what is called the top middle Queen and the Lower Queen, top Penrose, top middle Penrose and the lower Penrose are less significant and generally these are very thin zones with limited permeability and sometimes these peter out from well to well. They aren't predominant as the top zone which

we call the upper Queen zone.

Q Would you please refer to Exhibit No. 15?

A Exhibit No. 15 is a diagramatic sketch of all of the proposed injection wells. This shows the locations of the eight and five-eighths casing, number of sacks of cement used, the estimated top of the cement behind the pipe. Then, it shows the total depth, location of five and half casings, number of sacks of cement, estimated top of the cement behind the pipe, the perforated intervals from the top to bottom and this shows also the locations, the approximate location of a packer which will be installed to separate the upper Queen zone from the other zones.

Q How will you regulate the volumes of water between the upper Queen and the other Queen zones?

A It's proposed to use a packer-down-hole regulator which will regulate the amount of water that goes into the upper Queen zone and will regulate the amount of water that's injected below the packer.

(Whereupon, a discussion was held off the record.)

Q Would you please refer to Exhibits 16 and 17?

A Exhibit 16 is a table showing monthly oil, water and gas production for wells located in Section 16 for 1971

and 1972 and 1973 through September. Also, these show the cumulative oil recovered and the cumulative gas recovered.

Exhibit No. 17 is ia similar table showing the same information for wells located in Section 35.

I'd just like to point out that these wells are stripper-type wells. For example, in Section 26 these wells average about six barrels of oil per day in wells in Section 35, about 10 barrels per day.

Q In your opinion, the production has declined to such an extent that you would recommend the institution of secondary recovery by waterflood?

A Yes, sir.

Q Will the proposed waterflood adversely effect the correlative rights of anyone else?

A No.

Q And it is your opinion, reached from these Exhibits that this unit area can be successful economically waterflooded?

A Yes, we think so.

Q Will your proposed Application, if approved, result in recovery of oil that is otherwise not recoverable?

A Yes.

Q Would you please refer now to the quality and nature of this Devonian water that you are going to attain

from the Marathon Lea Unit and its compatability with your Queen formation?

A We have had a test run on this water by Martin Laboratories and other people, and they tell us that the water can be treated successfully so that it can be used for an injection fluid.

Q Is it your intention to have this water treated in such a manner so that it is compatible with the water fluid project?

A Yes.

Q In addition, with regard to your proposed injection wells, your tubing, will this be coated in any manner?

A Yes, the tubing will be initially coated with either plastic or cement lining. Also, the surface injection lines will similarly be coated inside.

Q What volume of water do you anticipate injecting?

A It's expected that approximately 300 barrels of water per day per injection well would be used at pressures ranging up to a final maximum pressure of maybe 2,400 psi. We don't expect our pressure for the first three or four year period to exceed maybe 1,600 or some such figure.

Q Were Exhibits 1 through 17 prepared by you or prepared under your direction and supervision?

A Yes.

MR. KELLAHIN: Move the introduction of Exhibits 1 through 17.

MR. STAMETS: These Exhibits will be so admitted.

(Whereupon, Applicant's Exhibits Nos. 1 through 17 were admitted in evidence.)

CROSS EXAMINATION

BY MR. STAMETS:

Q Mr. Gray, referring to Exhibit No. 2, you seek authority at this time to have Wells No. 1 and 15 authorized as injection wells with the provision that no injection will take place until you have agreement of the offset operators?

A Yes, I think it should be approved as part of the program at such time as suitable agreement is worked out.

Q And that could be furnished to the Commission after that date?

A Yes.

Q Looking at the logs that were furnished, I see that a number of different zones in there, productive, will water be going into all of those zones? Are sufficient offset producing wells completed in these zones to insure the oil will be produced?

A Yes, there will be some additional zones opened that aren't presently open in some of these wells. We have gone through the connected log and tried to be sure we knew which zones should be opened. We made a recommendation to the operator that these zones be opened and treated. It is my understanding he has proceeded with that work.

Q Referring to Exhibit No. 15, it appears as though a packer is set below perforations into which you intend to inject water; is that correct?

A Yes, the packer will be set below the upper Queen zone in all cases and this would project the production casing to a Devonian water and to pressures injection, yes.

Q So, you would not be able to enclose the annulus in this case with intended fluid and put a gauge on there to determine whether or not there is leakage of the injection tubing or the production casing?

A Well, of course, once the hole is loaded, of course, it can be loaded with fluid which contains chemical to protect corrosion. The entry of water, of course, will be from the bottom and normally you wouldn't expect any movement of water above this thing. It's more or less a tactic condition. Movement of water will be from the lower part of the tubing up into these perforations so that I wouldn't expect very

much movement really of that fluid. It's trapped up above there.

Q If a hole did develop in the casing above that point, for whatever reason, the fluid could migrate up the casing and out the hole at that time and into any formation lined, this five-and-a-half inch casing?

A That's true.

Q It is possible, is it not, to install this type of system with packer above the upper most perforation and packer between two zones of interest, the second packer above the top most perforation?

A Yes, I think it is possible. I think they prefer not to make that kind of an installation.

(Whereupon, a discussion was held off the record.)

Q Mr. Gray, if a second packer were required in this well, would the Applicant be willing to load the annulus space with inhibited fluid and install a gauge or some other attention attracting lead detection device on the injection wells?

A Yes, sir.

Q The operator will have field men around at most normal times to report any leakage from injection wells to

producing wells to the Commission?

A Yes.

MR. STAMETS: Any other questions of this witness?

MR. KELLAHIN: No, sir

MR. STAMETS: You may be excused.

(Witness excused.)

MR. STAMETS: Anything further to offer in this case? Take the case under advisement.

STATE OF NEW MEXICO)
)ss.
COUNTY OF SANTA FE)

I, RICHARD L. NYE, Court Reporter, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me, and the same is a true and correct record of the said proceedings, to the best of my knowledge, skill and ability.

RICHARD L. NYE, Court Reporter

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 5150, heard by me on Jan 16, 1974.

Richard L. Stamets, Examiner
New Mexico Oil Conservation Commission

THE NYE REPORTING SERVICE
STATE-WIDE DEPOSITION NOTARIES
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SANTA FE, NEW MEXICO 87501
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OIL CONSERVATION COMMISSION

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

I. R. TRUJILLO
CHAIRMAN
LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER
STATE GEOLOGIST
A. L. PORTER, JR.
SECRETARY - DIRECTOR

January 24, 1974

Re: CASE NO. 5150
ORDER NO. R-4714
Applicant:
HANSON OIL CORPORATION

Mr. Tom Kellahin
Kellahin & Fox
Attorneys at Law
Post Office Box 1769
Santa Fe, New Mexico

Dear Sir:

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

A. L. Porter, Jr.

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC x
Artesia OCC
Aztec OCC

Other State Engineer Office

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. 5150
Order No. R-4714

APPLICATION OF HANSON OIL CORPORATION
FOR A WATERFLOOD PROJECT, LEA COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on January 16, 1974, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 24th day of January, 1974, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, 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, Hanson Oil Corporation, seeks authority to institute a waterflood project in the Mescalero Ridge Unit Area, Pearl-Queen Pool, by the injection of water into the Queen formation through 10 injection wells in Sections 26 and 35, Township 19 South, Range 34 East, NMPM, Lea County, New Mexico.

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

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

(5) That the applicant should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

(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.

IT IS THEREFORE ORDERED:

(1) That the applicant, Hanson Oil Corporation, is hereby authorized to institute a waterflood project in the Mescalero Ridge Unit Area, Pearl-Queen Pool, by the injection of water into the Queen formation through the following-described wells in Township 19 South, Range 34 East, NMPM, Lea County, New Mexico.

	WELL	UNIT	SECTION
MRU-26	3	O	26
MRU-26	5	K	26
MRU-26	7	M	26
MRU-35	1	I	35
MRU-35	4	G	35
MRU-35	6	C	35
MRU-35	8	K	35
MRU-35	12	E	35
MRU-35	15	A	35
MRU-35	16	O	35

PROVIDED HOWEVER, that no injection shall take place through MRU Wells Nos. 1 and 15 until a lease line agreement with the offset operator is completed and filed with the Commission.

(3) That injection into each of said wells shall be through internally plastic- or cement-lined tubing set in a packer which shall be located above and as near as practicable to the uppermost perforation and that the casing tubing annulus of each injection well shall be loaded with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak detection device.

(4) That the operator shall immediately notify the supervisor of the Commission's Hobbs District Office of the failure of the tubing or packer in any of said injection wells, the leakage of water or oil from around any producing well, or the leakage of water from any plugged and abandoned well within the project area and shall take such timely steps as may be necessary or required to correct such failure or leakage.

(5) That the subject waterflood project is hereby designated the Mescalero Ridge Unit Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(6) 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.

(7) 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

I. R. TRUJILLO, Chairman

ALEX J. ARMIJO, Member

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

S E A L

dr/

Docket No. 2-74

DOCKET: EXAMINER HEARING - WEDNESDAY - JANUARY 16, 1974

9 A.M. - OIL CONSERVATION COMMISSION CONFERENCE ROOM,
STATE LAND OFFICE BUILDING - SANTA FE, NEW MEXICO

The following cases will be heard before Richard L. Stamets, Examiner, or Daniel S. Nutter, Alternate Examiner:

ALLOWABLE: (1) Consideration of the allowable production of gas for February, 1974, from fifteen prorated pools in Lea, Eddy, Roosevelt and Chaves Counties, New Mexico;

(2) Consideration of the allowable production of gas from nine prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico, for February, 1974.

CASE 5110: (Continued from the November 15, 1973, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider extending the horizontal limits of the Washington Ranch-Morrow Gas Pool, Eddy County, New Mexico, to include the S/2 of Section 28, Township 25 South, Range 24 East.

Also to be considered will be the institution of gas prorationing in said pool to provide for fixing the total allowable natural gas production from said pool to an amount equal to reasonable market demand and to the capacity of the gas transportation facilities. Also to be considered will be the adoption of special rules and regulations for said pool including a provision for allocating the allowable production among the wells in the pool.

CASE 5111: (Continued from the November 15, 1973, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider extending the horizontal limits of the Burton Flats-Morrow Gas Pool, Eddy County, New Mexico, to include the S/2 of Section 34, Township 20 South, Range 28 East, and the N/2 of Sections 8 and 9, and all of Section 10, Township 21 South, Range 27 East.

Also to be considered will be the institution of gas prorationing in said pool to provide for fixing the total allowable natural gas production from said pool to an amount equal to reasonable market demand and to the capacity of the gas transportation facilities. Also to be considered will be the adoption of special rules and regulations for said pool including a provision for allocating the allowable production among the wells in the pool.

CASE 5112: (Continued from the November 15, 1973, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider extending the horizontal limits of the Burton Flats-Strawn Gas Pool, Eddy County, New Mexico, to include all of Section 10, Township 21 South, Range 27 East.

(Case 5112 continued from Page 1)

Also to be considered will be the institution of gas prorationing in said pool to provide for fixing the total allowable natural gas production from said pool to an amount equal to reasonable market demand and to the capacity of the gas transportation facilities. Also to be considered will be the adoption of special rules and regulations for said pool including a provision for allocating the allowable production among the wells in the pool.

CASE 5113: (Continued from the November 15, 1973, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider the institution of gas prorationing in the Burton Flats-Atoka Gas Pool, Eddy County, New Mexico, and to provide for fixing the total allowable natural gas production from said pool to an amount equal to reasonable market demand and to the capacity of the gas transportation facilities. Also to be considered will be the adoption of special rules and regulations for said pool including a provision for allocating the allowable production among the wells in the pool.

CASE 5124: (Continued from the November 28, 1973, Examiner Hearing)

Application of Belco Petroleum Corporation for compulsory pooling and an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests underlying the S/2 of Section 30, Township 20 South, Range 33 East, South Salt Lake-Morrow Gas Pool, Lea County, New Mexico, to be dedicated to a well to be drilled at an unorthodox location 660 feet from the South line and 1300 feet from the East line of said Section 30. Also to be considered will be the cost of drilling and completing said well and the allocation of such costs, as well as actual operating costs and charges for supervision. Also to be considered is the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 5143: Application of El Paso Natural Gas Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its proposed Rocky Arroyo "D" Com. Well No. 2 in the center of Unit L of Section 4, Township 22 South, Range 22 East, Rocky Arroyo-Morrow Gas Pool, Eddy County, New Mexico, the S/2 of said Section 4 to be dedicated to the well.

CASE 5144: Application of Depco, Inc. for two waterflood projects, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute two waterflood projects by the injection of water into the Grayburg-San Andres formation through six wells located on applicant's State 647 lease in Sections 31 and 32, Township 17 South, Range 28 East, Artesia Pool, Eddy County, New Mexico, and through one well on the Kersey and Company Ramapo "A" Lease in said Section 32.

CASE 5145: Application of Texas Pacific Oil 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 Devonian formation in the perforated interval from 10,872 feet to 11,032 feet in its State "B" Well No. 2 located in Unit B of Section 11, Township 12 South, Range 33 East, Bagley Siluro-Devonian Pool, Lea County, New Mexico.

CASE 4969: (Reopened)

In the matter of Case No. 4969 being reopened pursuant to the provisions of Order No. R-4557, which order established a temporary special depth bracket allowable for the Tocito Dome-Pennsylvanian "D" Oil Pool, San Juan County, New Mexico. All interested parties may appear and show cause why the special allowable should be made permanent.

CASE 5146: Application of Midwest Oil Corporation for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Target Unit Area comprising 5120 acres, more or less, of State and Federal lands in Townships 25 and 26 South, Range 25 East, Eddy County, New Mexico.

CASE 5147: Application of Mesa Petroleum Corporation for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Morrow formation underlying the S/2 of Section 12, Township 16 South, Range 35 East, North Shoe Bar Field, Lea County, New Mexico, to be dedicated to a well to be drilled at a standard location for said unit in Unit O of said Section 12. Also to be considered will be the cost of drilling and completing said well and the allocation of such costs, as well as actual operating costs and charges for supervision. Also to be considered is the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 5148: Application of Coquina Oil Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill a well at an unorthodox gas well location 990 feet from the North and East lines of Section 16, Township 19 South, Range 25 East, Boyd-Morrow Gas Pool, Eddy County, New Mexico, the N/2 of said Section 16 to be dedicated to said well.

CASE 5149: Application of Cities Service Oil Company for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the N/2 of Section 33, Township 21 South, Range 27 East, Eddy County, New Mexico, to be dedicated to a well to be drilled at a standard Pennsylvanian gas well location for said unit. Also to be considered will be the cost of drilling and completing said well and the allocation of such costs, as well as actual operating costs and charges for supervision. Also to be considered is the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

CASE 5150: Application of Hanson Oil Corporation for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Queen formation through 10 wells in its Mescalero Ridge Unit Area in Sections 26 and 35, Township 19 South, Range 34 East, Pearl-Queen Pool, Lea County, New Mexico.

CASE 5151: Application of Penroc Oil Corporation for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause seeks approval for the dual completion (conventional) of its Dero-Federal A-Com Well No. 1, located in Unit N of Section 35, Township 19 South, Range 28 East, Eddy County, New Mexico, in such a manner as to produce gas from the Winchester-Wolfcamp gas pool and an undesignated Strawn gas pool through the casing-tubing annulus and through tubing.

CASE 5152: Application of Petro-Lewis Corporation for a Special Depth Bracket Allowable, Media-Entrada Oil Pool, Sandoval County, New Mexico. Applicant, in the above-styled cause, seeks a special depth bracket allowable for the Media-Entrada Oil Pool, Township 19 North, Range 3 West, Sandoval County, New Mexico.

CASE 5140: (Continued from the January 3, 1974, Examiner Hearing)

Application of Pierce & Dehlinger for compulsory pooling, Vada-Pennsylvanian Pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Vada-Pennsylvanian Pool underlying the NW/4 of Section 24, Township 9 South, Range 33 East, Lea County, New Mexico, to be dedicated to the King Resources Sheridan Well No. 1-A located in Unit C of said Section 24. Also to be considered is designation of the applicant as operator of the NW/4 of said Section 24 and the well located thereon, provision for allocation of actual operating costs and charges for supervision, and allocation of costs for reworking said well including a 200% charge attributable to any non-consenting working interest owner's pro rata share of said workover costs, for the risk involved in said workover.

CASE 4956: (Reopened) (Continued from the January 3, 1974, Examiner Hearing)

Application of Pierce & Dehlinger for a determination of well costs, Lea County, New Mexico. Applicant, as operator of the Sheridan Well No. 1 located in Unit M of Section 13, Township 9 South, Range 33 East, Lea County, New Mexico, to which well is dedicated the SW/4 of said Section 13, all mineral interests in the Vada-Pennsylvanian Pool thereunder having been pooled by Commission Order No. R-4560, seeks the determination of reasonable well costs attributable to applicant and to King Resources, including, but not limited to, the costs of reworking and placing said Sheridan Well No. 1 back on production and attorneys fees in connection therewith. Applicant further seeks an order assessing, as a charge for the risk involved in the reworking of the well, 120% of the pro rata share of the reasonable well costs attributable to the working interest of King Resources.

5150

Typical waterflood order like R4609

Hobbs district

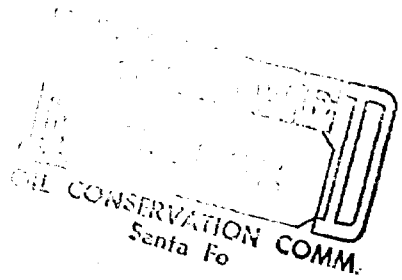
inject thru plastic coat or cement lined tubing under a packer as near as practicable upper perfs (No open hole wells)

No injection into wells No 1 & 15 until lease line agreement ~~completed~~ with offset operator & filed with OCC

NO procedure wells Request for Adm for additional

RALPH L. GRAY
PETROLEUM ENGINEERING - PRODUCTION
CONSULTANT
P. O. BOX 198
ARTESIA, NEW MEXICO

January 17, 1974



New Mexico Oil Conservation Commission
P. O. Box #2088
Santa Fe, New Mexico 87501

Attention: Mr. Dick Stamets

Dear Sir:

Attached are three copies of our amended Exhibit 15, which was presented January 16, Case No. 5150, Application of Hanson Oil Corporation for a Waterflood Project. This amended exhibit shows the suggested location for setting the upper packers.

Yours very truly,

Ralph L. Gray

RALPH L. GRAY

RLG:lw

Encls.

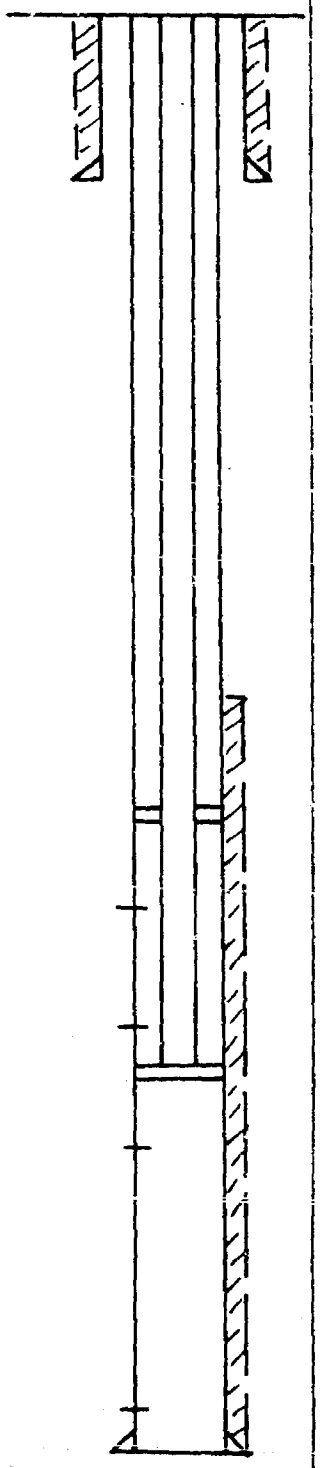
MRU - 26

WELL NO.	#3	#5	#7	#1
T. Cement (Estimated)	Surface	Surface	Surface	76'
8-5/8" Csg.	208	235	223	201
sx. Cement	200	200	200	125
Top Cement (Estimated)	2930	2959	2816	2914
Top Packer	4590	4590	4570	4530
Perforations	4630	No	4614	4580
Packer	4657	Perfs	4646	4584
	4700	4730	4700	4650
Perforations	No	4990	4989	4716
	Perfs	5006	4993	5086
5½" Csg.	5145	5174	5031	5129
sx. Cement	350	350	350	350
Total Depth	5150	5174	5031	5152

HANSON OIL CORP.

MRU - 35

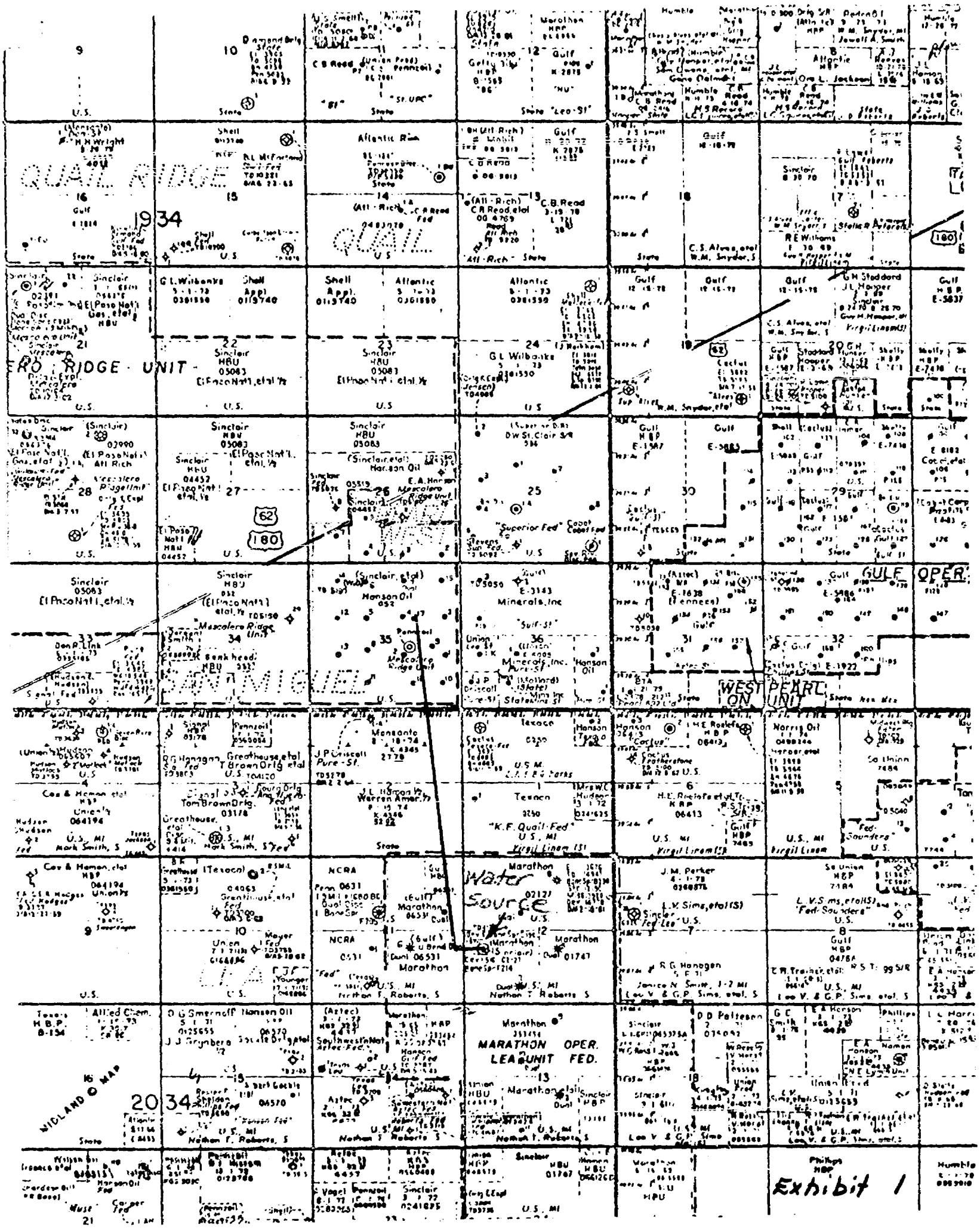
#4	#6	#8	#12	#15	#16
85'	87'	95'	75'	79'	Surface
210	212	216	200	229	217
125	125	125	125	150	250
2988	3035	3017	2911	2919	2935
4540	4550	4550	4520	4540	4540
4579	4591	4594	4568	4585	4582
4620	4631	4624	4629	4637	4607
4670	4700	4680	4700	4700	4700
4717	4830	4739	4875	4738	No
5190	5184	5019	5016	4971	Perfs.
5203	5250	5232	5126	5134	5150
350	350	350	350	350	350
5203	5250	5232	5200	5135	5150

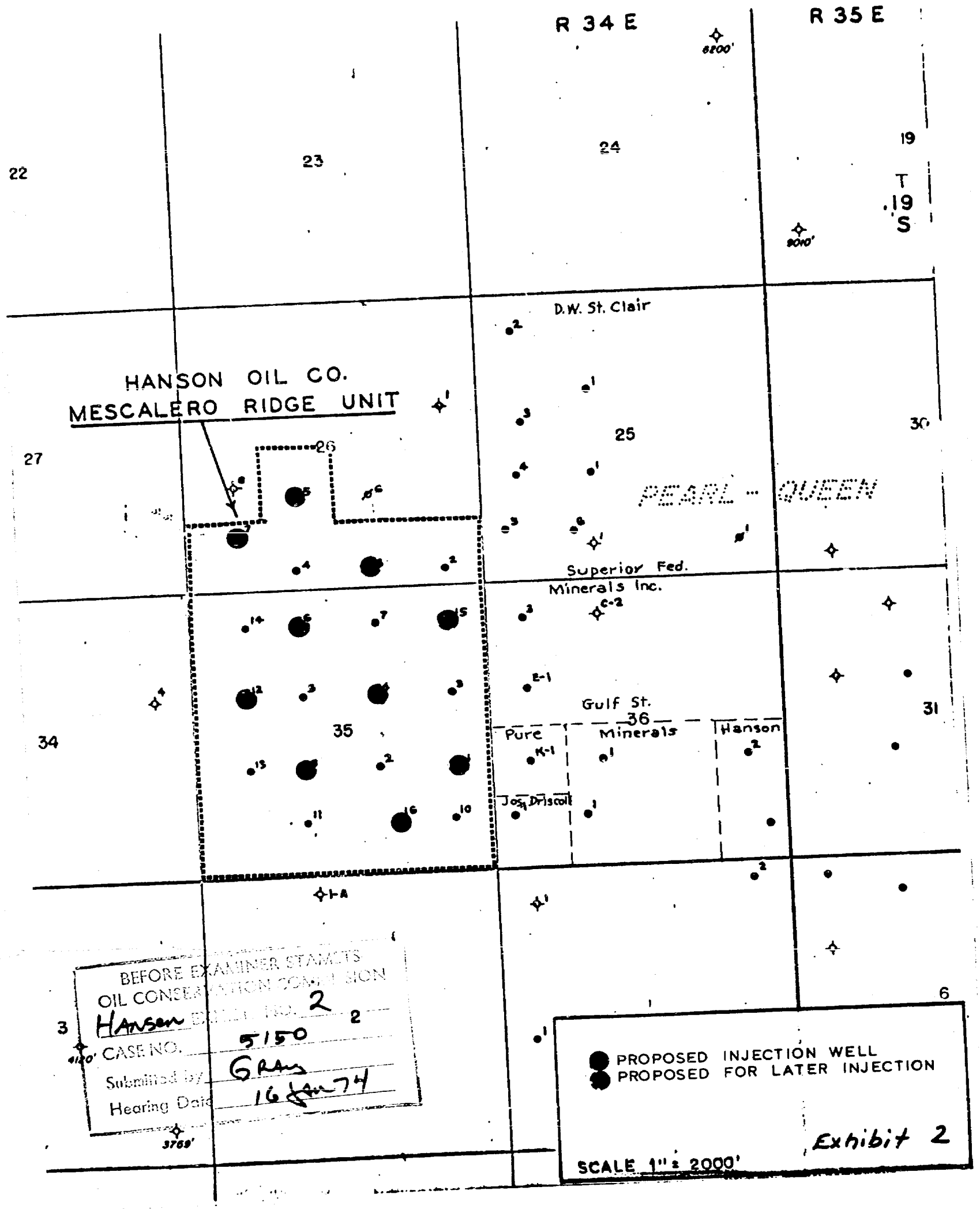


Diagrammatic Sketch

RALPH L. GR[illegible]
PETROLEUM ENGINEERING

Exhibit 15.


QUAIL RIDGE
1934
QUAIL RIDGE UNIT
Mescalero Ridge Unit
SAN MIGUEL
WEST PEARL ON UNIT
GULF OPER.
Water Source
MARATHON OPER. LEA UNIT FED.
MIDLAND MAP
2034
Exhibit 1


R 34 E
R 35 E
6800'
8010'
22
23
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S
D.W. St. Clair
HANSON OIL CO.
MESCALERO RIDGE UNIT
26
27
25
30
PEARL - QUEEN
Superior Fed.
Minerals Inc.
C-2
E-1
Gulf St.
36
31
34
35
Pure
Minerals
Hanson
K-1
Jos. Driscoll
1-A
3
4120'
3769'
6
BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION
BATTLE NO. 2
Hanson
CASE NO. 5150
Submitted by: Gray
Hearing Date 16 Jan 74
PROPOSED INJECTION WELL
PROPOSED FOR LATER INJECTION
SCALE 1" = 2000'
Exhibit 2

WELL DATA

HANSON OIL COMPANY - PEARL QUEEN POOL

WELL	ELEVATION	COMPLETED	TOTAL DEPTH	CASING SIZE	CASING DEPTH	PERFORATIONS	TREATMENTS	I. P.	REMARKS
MRU 26 #1	3789 KB	7-24-65	5250'						P & A.
#2	3740	7-25-66	5150 PB 5147	5½" -	5150' w/350 sx.	4623, 25, 33, 42 4644, 46, 4816, 17 4848, 4970, 71, 72	4816-4972 Frac 500 gals. + 15,000 gals. oil + 10,000# sand. 4623-46 Frac 500 gals. oil + 14,100# sand.	P 57 BOPD	
#3	3742	10-15-66	5150 PB 5145	5½" -	5145 w/350 sx.	4630, 32, 37, 50, 52, 4654, 57	Acid/750 gals. Frac/20,000# sd.	P 50 BOPD	
#4	3739	2-1-67	5220 PB 5192	5½" -	5220 w/350 sx.	4602, 08, 18, 27, 30, 4633, 35, 4978, 79, 4980, 90, 91, 92	4602-35 Frac/500 gals. acid + 500 BO + 20,000# sd. 4978-92 Frac/750 gals. acid + 500 BO + 20,000# sd.	P 58 BO + 2 BWPD.	
#5	3751	5-1-67	5174 PB 5154	5½" -	5174 w/350 sx.	4990, 91, 92, 94, 5003, 04, 05, 06	Acid/ball sealers Frac/720 BO + 14,500# sd/balls.	P 80 BOPD.	
#6	3753	8-15-67	5160						P & A.
#7	3740	12-10-67	5031 PB 5029	5½" -	5031' w/350 sx.	4614, 23, 30, 33, 42, 4646, 4989, 93	Acid 4989 & 4993 w/500 gals. acid remaining perfs. w/1250 gals. Frac all perfs. w/40,000 gals. oil + 32,500# sd.	P 38 BO + 52 BWPD.	
#8	3755	3-14-68	5036						P & A.

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION
Hansen EXHIBIT NO. 3
CASE NO. 5150
Submitted by Gray
Hearing Date 16 Jan 74

Exhibit 3

Table 1.

WELL DATA (Continued)

WELL	ELEVATION	COMPLETED	TOTAL DEPTH	CASING SIZE	CASING DEPTH	PERFORATIONS	TREATMENTS	I. P.	REMARKS
MRU 35 #1	3712	12-12-63	5152 PB 5129	5½"	5129 w/250 sx.	4580-84, 4716-19, 4846-50, 4952-56, 4963-66, 5070-75, 5084-86	Isolated zones 4580-84 4716-4850 4952-66 and 5070-86. Frac w/total of 2500 gals. acid + 60,000 gals. oil + 35,000# sd.	F 63 BOPD F 250 BO in 3 hrs.	
#2	3714	2-12-64	5268	5½"	5268' W/350 sx.	3986-92, 4585-90, 4722-24, 4859-60, 4862-65, 4984-87, 4995-97, 5206, 08, 5213, 14, 16, 18,	5206-19 acid/1,000 gals. Swb. dry Set bridge plug at 5150' 4585-90, Acid/500 gals. Frac/24,600 gals oil + 20,000# sd. (1) 4722-24 acid/250 gals. Frac/10,000 gals oil + 6,500# sd. (2) 4869-75 acid/1,000 gals. Frac/10,000 gals. oil + 7,000# sd. (3) 4984-97 acid/250 gals. Frac/20,400 gals oil + 16,000# sd. (4) 3986-92 acid/500 gals. Frac/20,000 gals oil + 16,500# sd. (5)	P 77 BO + 63 BWPD.	7 Rivers Zone packed off.

(5) Tested 42 BO + 38 BWPD. Set packer at 4025'. Interval from 5150-4025 tested 231 BO + .189 BWPD.

Table 1.

WELL DATA (Continued)

WELL	ELEVATION	COMPLETED	TOTAL DEPTH	CASING SIZE	CASING DEPTH	PERFORATIONS	TREATMENTS	I. P.	REMARKS
MRU 35 #3	3723	3-1-64	5435'	5½"	5228' w/350 sx.	4569-75, 4603-09, 4713-15, 4837-40, 4934-39, 4945-46, 5077-83	4569-75 Frac w/500 gals. acid + 19,320 gals. oil + 17,500# sd. 4603-09 Frac w/500 gals acid + 20,000 gals oil + 18,500# sd. 4713-4840 Frac w/500 gals acid + 13,826 gals oil + 9,500# sd. 4934-46 Frac w/1,000 gals acid + 16,926 gals oil + 11,500# sd. 5077-83 Frac w/1,000 gals acid.	P 76 BOPD	Set HM packer at 4580 to shut off high pressure gas. Sand at 4598-4605 is high pressure gas zone.
MRU 35 #4	3724	3-15-64	5203	5½"	5203' w/350 sx.	4579-80, 4582-83, 4587-88, 4590, 4616-20, 4717-19, 4842-47, 5087-93, 5184-90	4579-90 Frac w/250 gals acid + 13,230 gals oil + 10,000# sd. 4616-20 Frac w/250 gals. acid + 13,600 gals oil + 11,000# sd. 4717-4847 Frac w/250 gals acid + 13,734 gals oil + 7,000# sd. 5087-93 Frac w/250 gals acid + 14,028 gals oil + 10,500# sd. 5184-90 Frac w/250 gals acid + 14,028 gals. oil + 10,500# sd.	F 118 BOPD	

Table 1.

WELL DATA (Continued)

WELL	ELEVATION	COMPLETED	TOTAL DEPTH	CASING SIZE	CASING DEPTH	PERFORATIONS	TREATMENTS	I. P.	REMARKS
MRU 35 #5	3719	7-25-64	5286 5230 PB	5½"	5230 w/350 sx.	4576, 95, 96, 4606, 4618, 27, 28, 4871, 4872, 73, 74, 4921, 4922, 23 & 5144-50.	4576-4628 Frac/250 gals acid + 29,140 gals oil + 17,670# sd. 4871-4923 Frac/250 gals acid + 19,950 gals oil + 15,000# sd. 5144-50 Frac/250 gals acid + 15,330 gals oil + 11,000# sd.	P 135 BO + 15 BWPD.	
MRU 35 #6	3728	8-5-64	5250	5½"	5250' w/350 sx.	4591, 92, 4600, 10, 4612, 30, 31, 4860, 4861, 63, 64, 65, 66, 67, 4981-84, 4994-96, 5171-73, 5182-84	4591-4631 Frac/1250 gals acid + 18,500 gals oil + 17,000# sd. 4860-67 Frac/250 gals acid + 17,500 gals oil + 15,000# sd. 4981-96 Frac/250 gals acid + 17,500 gals oil + 14,000# sd. 5171-84 Frac/250 gals acid + 16,250 gals oil + 15,000# sd.	P 90 BO + 10 BWPD.	
MRU 35 #7	3721	11-20-64	5250 PB 5222	5½"	5249' w/350 sx.	4601, 03, 08, 10, 23, 33, 4639, 4859-65, 4968-71, 4981-83, 5203-09	5203-09 Frac/250 gals. acid. Wouldn't take frac. 4968-83 Frac/250 gals acid + 16,800 gals oil + 18,000# sd. 4859-65 Frac/250 gals acid + 17,400 gals oil + 16,000# sd. 4601-39 Frac/1,000 gals acid + 15,540 gals oil + 14,000# sd.	P 48 BO + 2 BWPD.	

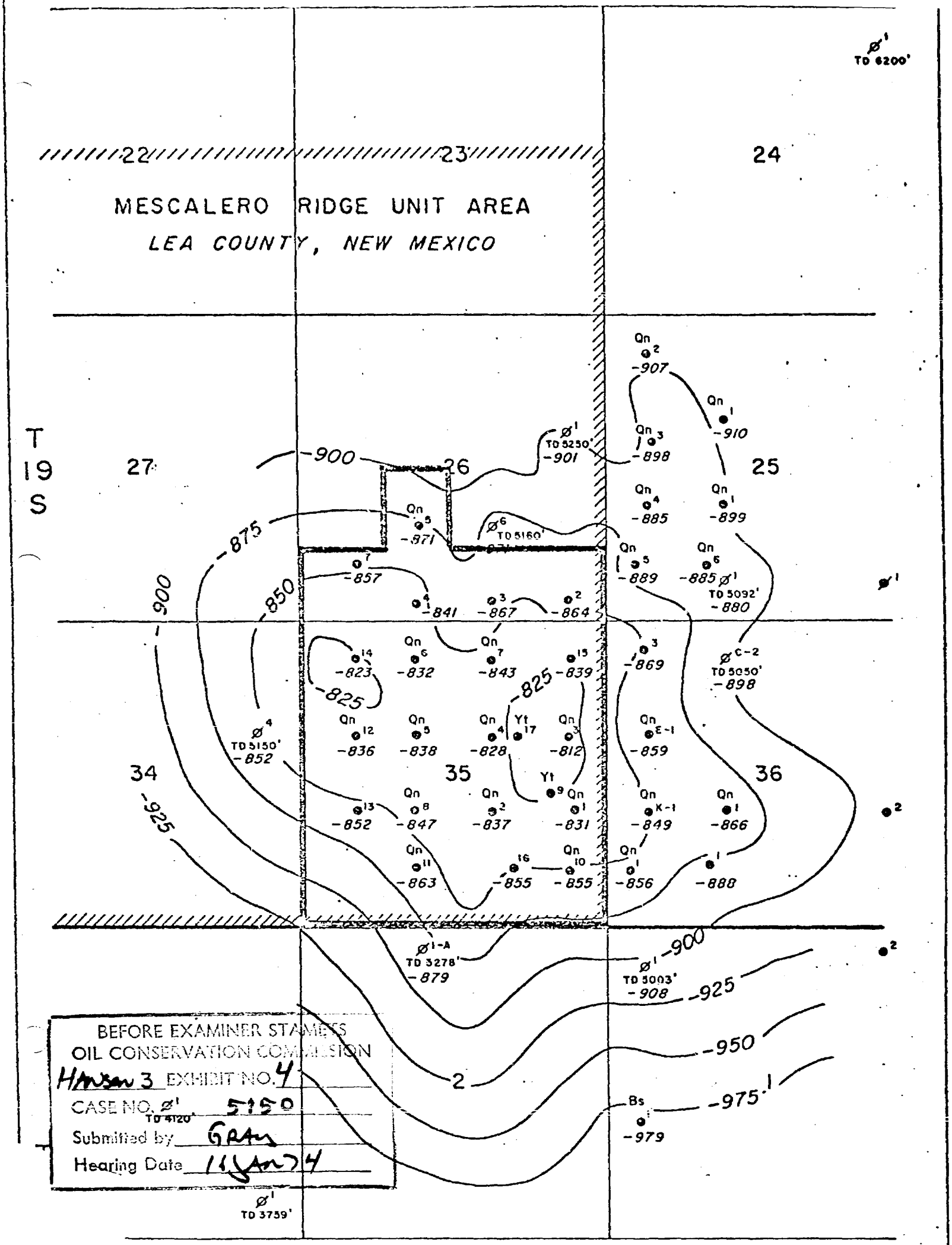
Table 1.

WELL DATA (Continued)

WELL	ELEVATION	COMPLETED	TOTAL DEPTH	CASING SIZE	CASING DEPTH	PERFORATIONS	TREATMENTS	I. P.	REMARKS
MRU 35 #8	3716	12-15-64	5232 PB 5214	5½"	5232' w/350 sx.	4594, 98, 4601, 4605, 08, 18, 34, 4739, 4741, 43, 4875, 77, 79, 4881, 4927, 28, 29, 5012, 15, 17, 19.	4594-4624 Frac/1500 gals acid + 15,000 gals oil + 13,000# sd. 4739-4881 Frac/750 gals acid + 16,380 gals oil + 14,000# sd. 4927-5019 Frac/250 gals acid + 16,800 gals oil + 15,000# sd.	P 45 BO + 5 BWPD.	
MRU 35 #9	3714	4-1-65	4023 PB 4019	5½"	4023' w/125 sx.	4003, 04, 05, 07, 08, 09, 4011, 13, 15.	Frac/500 gals. acid + 20,000 gals oil + 21,000# sd.	P 60 BO + 120 BWPD.	7 Rivers Zone.
MRU 35 #10	3713	4-1-65	5180 PB 5175	5½"	5175 w/350 sx.	4595, 97, 4601, 05, 07, 4617, 19, 4728, 30, 4963, 4964, 65, 4975, 76.	4728-4976 Frac/750 gals acid + 17,750 gals oil + 17,500# sd. 4595-4619 Frac/750 gals acid + 17,750 gals oil + 17,500# sd.	P 49 BO + 2 BWPD.	
MRU 35 #11	3713	4-15-65	5106 PB 5105	5½"	5105 w/350 sx.	4604-08, 4934, 35 5032-36	4934-5036 Frac/400 gals acid + 612 BO + 17,000# sd. 4604-08 Frac/1100 gals acid + 540 BO + 17,000# sd.	P 47 BO + 3 BWPD.	Converted to water disposal well Jan. 1, 1969.
MRU 35 #12	3724	8-15-65	5200 PB 5116	5½"	5126' w/350 sx.	4568, 88, 4602, 15, 24, 4629, 4875, 77, 79, 5012, 5014, 16.	4875-5016 Frac/400 gals acid + 9,180 gals oil + 2120# sd. 4568-4629 Frac/500 gals acid + 26,080 gals oil + 18,500# sd.	P 52 BO + 8 BWPD.	

WELL DATA (Continued)

WELL	ELEVATION	COMPLETED	TOTAL DEPTH	CASING SIZE	CASING DEPTH	PERFORATIONS	TREATMENTS	I. P.	REMARKS
MRU 35 #13	3711	9-20-65	5200 PB 5189	5½"	5192' w/350 sx.	4576, 95, 97, 4605 4617, 19, 4745, 4881, 4885, 4929, 31, 5024, 5036	4745-5036 Frac/1500 gals acid + 20,000 gals oil + 6,000# sd. 4576-4619 Frac/500 gals acid + 30,000 gals oil + 13,300# sd.	P 47 BO + 3 BWPD.	
MRU 35 #14	3733 Recompleted	12-22-65 7-25-66	5197 5050	5½"	5050 w/350 sx.	4599, 4601, 12, 14, 4625, 29, 4768, 69, 4862-65.	4599-4629 Frac/500 gals acid + 15,000 gals oil + 10,000# sd. 4768-4865 Frac/500 gals acid + 15,000 gals oil + 10,000# sd.	P 48 BO + 3 BWPD.	P. & A.
MRU 35 #15	3732	4-1-66	5135 PB 5134	5½"	5134 w/350 sx.	4585, 99, 4601, 08, 17, 4633, 37, 4738, 4855, 4858, 59, 4957, 59, 71	4738-4971 Frac/250 gals acid + 17,808 gals oil + 11,000# sd. 4585-4637 Frac/750 gals acid + 15,540 gals oil + 13,000# sd.	F 52 BO + 1 BWPD.	Well flowed 420 BO/12 hrs. 8/64" ch. FTP - 175 psi.
MRU 35 #16	3715	11-5-66	5150	5½"	5150 w/350 sx.	4582, 92, 95, 4600 4604, 07.	Frac/750 gals acid + 20,000 gals oil + 20,000# sd.	P 57 BO + 13 BWPD.	
MRU 35 #17	3725	5-12-67	4040 PB 4032	5½"	4040 w/200 sx.	4009, 12, 15, 18, 20, 4022, 24	F/1,000 gals. acid + 22,260 gals. oil + 20,000# sd. balls.	P 58 BOPD.	7 Rivers Zone. Converted to salt water disposal.



DATA AVAILABLE ON DECEMBER 10, 1967

UNIT AREA

NINTH REVISED QUEEN PARTICIPATING AREA

EXHIBIT "—" 4

Figure 3.

TYPE & KIND OF MAP

STRUCTURE

CONTOUR HORIZON Queen

CONTOUR INTERVAL 25'

CONTOURED BY J.E. Wescott DATE 9-18-66

REVISED BY J.E. Wescott DATE 12-10-67

WEST PEARL POOL

LEA COUNTY, NEW MEXICO

DRAWN BY ____ CHECKED BY ____ DATE ____

SCALE 1" = 2000' REVISED ____

OIL, WATER & GAS PRODUCTION
HANSON OIL CORP. - MESCALERO RIDGE UNIT
SECTION 26

DATE	NO. WELLS	MONTHLY OIL (BBLS.)	CUMULATIVE OIL (BBLS.)	MONTHLY GAS (MCF)	CUMULATIVE GAS (MCF)	MONTHLY WATER (BBLS.)
1971						
Jan.	5	1,943	154,952	1,239	107,088	8,680
Feb.		1,473	156,425	1,732	108,820	7,840
Mar.		1,299	157,724	375	109,195	8,680
Apr.		1,592	159,316	704	109,899	8,520
May		1,433	160,747	1,230	111,102	6,820
June		1,372	162,121	1,118	111,220	6,780
July		1,372	163,493	1,040	113,260	8,711
Aug.		1,350	164,843	1,175	114,435	8,773
Sep.		1,355	166,198	327	114,762	8,700
Oct.		1,417	167,615	475	115,237	8,804
Nov.		986	168,601	727	115,964	8,790
Dec.		1,440	170,041	1,190	117,154	8,773
		17,032		11,305		
1972						
Jan.		1,239	171,280	889	118,043	8,680
Feb.		1,142	172,422	944	118,987	8,120
Mar.		1,559	173,981	1,453	120,440	6,200
Apr.		1,379	175,360	1,283	121,723	3,808
May		1,365	176,725	1,321	123,044	4,805
June		1,291	178,016	1,319	124,363	5,520
July		1,171	179,187	1,386	125,749	3,678
Aug.		1,225	180,412	1,060	126,809	3,533
Sep.		1,182	181,594	1,025	127,834	3,614
Oct.		1,230	182,824	1,049	128,883	3,372
Nov.		1,213	184,037	969	129,852	3,520
Dec.		1,217	185,254	982	130,834	3,559
		15,213		13,680		
1973						
Jan.		1,136	186,390	917	131,751	3,349
Feb.		989	187,379	689	132,440	2,915
Mar.		1,054	188,433	772	133,212	3,441
Apr.		990	189,423	722	133,934	3,330
May		1,087	190,510	1,040	134,974	3,448
June		1,024	191,534	980	135,954	3,343
July		1,032	192,566	1,160	137,114	3,369
Aug.		1,012	193,578	857	137,971	3,404
Sep.		945	194,523	641	138,612	3,279

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION
HANSEN EXHIBIT NO. 16
CASE NO. 5150
Submitted by: GRAY 16 Jan 74
Hearing Date
RALPH L. GRAY
PETROLEUM ENGINEERING

Exhibit 16

OIL, WATER & GAS PRODUCTION
HANSON OIL CORP. - MESCALERO RIDGE UNIT
SECTION 35

DATE	NO. WELLS	MONTHLY OIL (BBLS.)	CUMULATIVE OIL (BBLS.)	MONTHLY GAS (MCF)	CUMULATIVE GAS (MCF)	MONTHLY WATER (BBLS.)
1971						
Jan.	15	6,058	766,235	8,603	501,847	7,781
Feb.		5,434	771,669	7,778	509,625	7,420
Mar.		5,812	777,481	3,835	513,460	8,277
Apr.		5,878	783,359	312	513,772	8,010
May		5,615	788,974	6,801	520,573	7,905
June		5,031	794,005	5,412	525,985	7,350
July		5,446	799,451	4,035	530,020	7,843
Aug.		5,206	804,657	2,925	532,945	7,626
Sep.		5,713	810,370	953	533,898	7,500
Oct.		5,266	815,636	1,516	535,414	7,657
Nov.		4,408	820,044	1,859	537,273	7,350
Dec.		4,371	824,415	6,878	544,151	7,595
		64,238		50,907		
1972						
Jan.	15	4,478	828,893	6,384	550,535	7,595
Feb.		4,536	833,429	6,147	556,682	7,018
Mar.		5,205	838,634	6,970	563,652	7,440
Apr.		5,429	844,063	7,245	570,897	8,151
May		5,600	849,663	7,467	578,364	8,941
June		5,006	854,669	7,398	585,762	9,420
July		5,044	859,713	7,490	593,252	6,630
Aug.		4,986	864,699	5,875	599,127	4,755
Sep.		4,370	869,069	5,331	604,458	4,871
Oct.		4,679	873,748	5,228	609,686	4,360
Nov.		4,588	878,336	5,732	615,418	7,373
Dec.		4,656	882,992	5,354	620,772	7,795
		58,577		76,621		
1973						
Jan.		4,370	887,362	5,371	626,143	7,418
Feb.		4,270	891,632	4,960	631,103	7,320
Mar.		4,587	896,219	5,703	636,806	7,712
Apr.		4,350	900,569	5,390	642,196	8,280
May		4,379	904,948	5,646	647,842	8,429
June		4,109	909,057	4,809	652,651	7,938
July		4,392	913,449	5,973	658,624	8,457
Aug.		4,525	917,974	5,141	663,765	8,715
Sep.		4,554	922,528	4,281	668,046	8,000

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION
Hanson EXHIBIT NO. 17
CASE NO. 5150
Submitted by GRAY
Hearing Date 16 JAN 74

RALPH L. GRAY
PETROLEUM ENGINEERING

Exhibit 17

Case : 5150

KELLAHIN AND FOX
ATTORNEYS AT LAW
500 DON GASPAR AVENUE
POST OFFICE BOX 1769
SANTA FE, NEW MEXICO 87501

JASON W. KELLAHIN
ROBERT E. FOX
W. THOMAS KELLAHIN

TELEPHONE 982-4315
AREA CODE 505

December 4, 1973

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

Enclosed is the application of Hanson Oil Corporation for approval of a waterflood project in the Mescalero Ridge Unit. It is requested that this application be set for hearing before the Commission's examiner at the January 16, 1974 hearing, or such other date as may be available.

Yours very truly,

Jason W. Kellahin

Jason W. Kellahin

JWK:ks

Enclosure

cc: Mr. Reagan Sweet
Mr. Ralph L. Gray
w/ Encls.

Case 5150

BEFORE THE

OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE APPLICATION
OF HANSON OIL CORPORATION FOR
APPROVAL OF A WATER FLOOD PROJECT,
LEA COUNTY, NEW MEXICO

A P P L I C A T I O N

COMES NOW HANSON OIL CORPORATION and applies to the Oil Conservation Commission of New Mexico for approval of a waterflood project in the Mescalero Ridge Unit area, Lea County, New Mexico, and in support thereof would show the Commission:

1. Applicant proposes to inject produced water in the Mescalero Ridge Unit, into the Queen formation. Initially injection will be through ten wells, as follows:

WELL	LOCATION
MRU - 26 #3	Unit O - Sec. 26-19S-34E
" #5	K - " "
" #7	M - " "
MRU - 35 #1	Unit I - Sec. 35-19S-34E
" #4	G - " "
" #6	C " "
" #8	K " "
" #12	E " "
" #15	A " "
" #16	O " "

2. Injection is anticipated to be at the approximate rate of 300 barrels of water per well per day, with maximum pressures of approximately 2400 psi.

3. It is anticipated that water will be obtained from the Marathon Lea unit in Section 12, Township 20 South,

Pearl Queen Pool

Range 34 East, N.M.P.M.

4. The conversion of the MRU wells Nos. 1 and 15 will be scheduled for later injection, subject to agreement with offset operators.

5. Applicant further seeks approval of an administrative procedure for the approval of injection and producing wells at orthodox and unorthodox well locations upon such terms as may be proper.

6. Approval of the application is in the interests of conservation, the prevention of waste, and will result in the recovery of hydrocarbons that would not otherwise be recovered.

WHEREFORE applicant requests that this application be set for hearing before the Commission or the Commission's duly appointed examiner, and that after notice and hearing as required by law, the Commission enter its order approving the waterflood project as submitted.

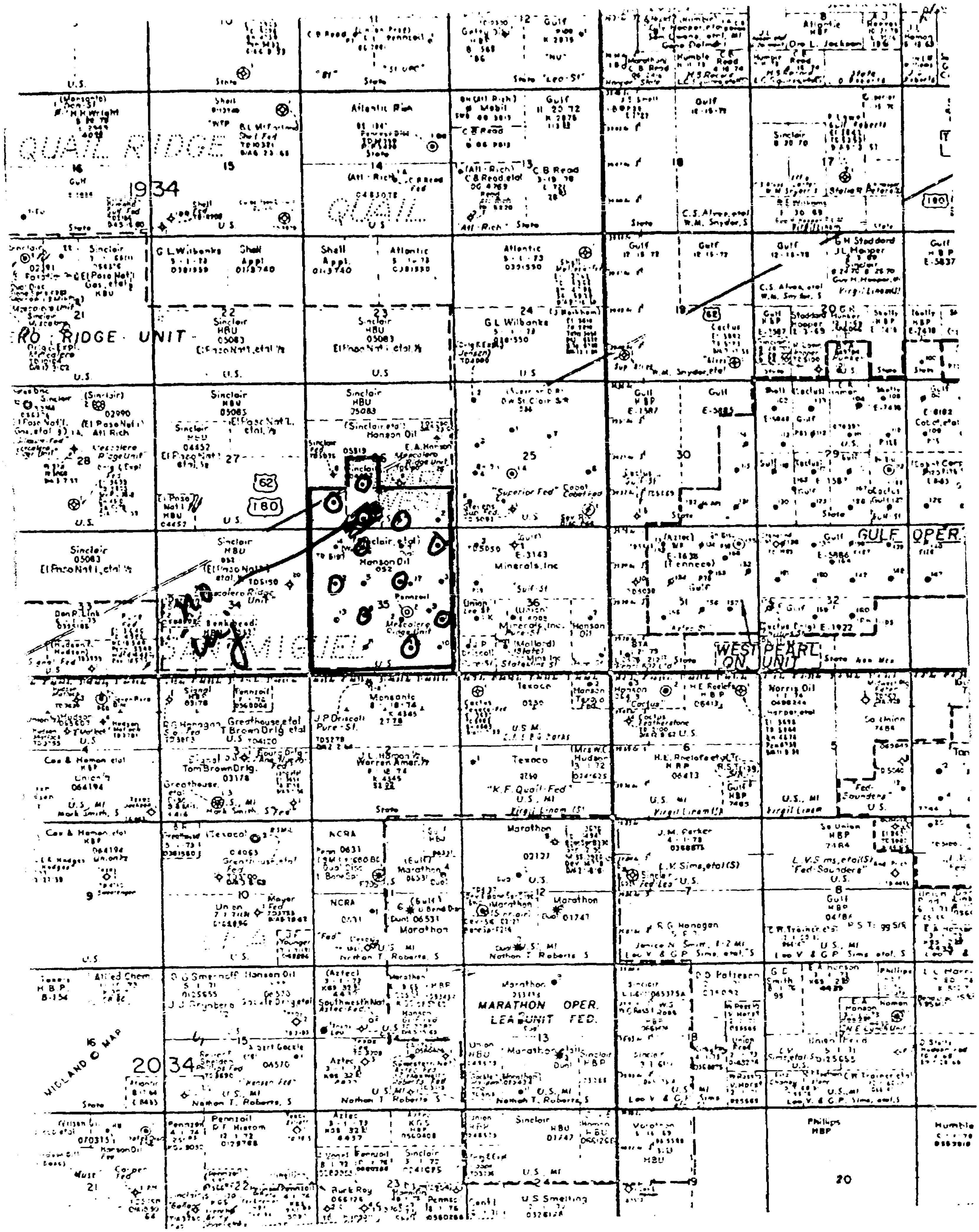
Respectfully submitted,

HANSON OIL CORPORATION

By Jason W. Kellahin

KELLAHIN & FOX
P. O. Box 1769
Santa Fe, New Mexico 87501

ATTORNEYS FOR APPLICANT


QUAIL RIDGE
1934
QUAIL
RO RIDGE UNIT
Sinclair HBU 05083
Atlantic Rich
Gulf
GULF OPER.
WEST PEARL QN UNIT
Minerals, Inc.
Superior Fed
Hanson Oil
Texaco
K.F. Quail Fed
Marathon
MARATHON OPER. LEA UNIT FED.
Nathan T. Roberts, S
U.S. Smelting
2034
MIDLAND MAP
Philips HBP
Humble
20

DRAFT

TWD/jr

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. 5150

Order No. R-4714

APPLICATION OF HANSON OIL CORPORATION
FOR A WATERFLOOD PROJECT, LEA COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on January 16, 1974, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this _____ day of January, 1974, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, 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, Hanson Oil Corporation, seeks authority to institute a waterflood project in the Mescalero Ridge Unit Area, Pearl-Queen Pool, by the injection of water into the Queen formation through 10 injection wells in Sections 26 and 35, Township 19 South, Range 34 East, NMPM, Lea County, New Mexico.

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

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

(5) That the applicant should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

(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.

IT IS THEREFORE ORDERED:

(1) That the applicant, Hanson Oil Corporation, is hereby authorized to institute a waterflood project in the Mescalero Ridge Unit Area, Pearl-Queen Pool, by the injection of water into the Queen formation through the following-described wells in Township 19 South, Range 34 East, NMPM, Lea County, New Mexico.

	WELL	UNIT	SECTION
MRU-26	#3	O	26
"	#5	K	26
"	#7	M	26
MRU-35	#1	I	35
"	#4	G	35
"	#6	C	35
"	#8	K	35
"	#12	E	35
"	#15	A	35
"	#16	O	35

PROVIDED HOWEVER, that no injection shall take place through MRU Wells Nos. 1 and 15 until a lease line agreeement with the offset operator is completed and filed with the Commission.

(3) That injection into each of said wells shall be through internally plastic or cement-lined tubing set in a packer which shall be located above and as near as practicable to the uppermost perforation and that the casing tubing annulus of each injection well shall be loaded with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak detection device.

(4) That the operator shall immediately notify the supervisor of the Commission's Hobbs District Office of the failure of the tubing or packer in any of said injection wells, the leakage of water or oil from around any producing well, or the leakage of water from any plugged and abandoned well within the project area and shall take such timely steps as may be necessary or required to correct such failure or leakage.

(5) That the subject waterflood project is hereby designated the Mescalero Ridge Unit Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(6) 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.

(7) 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.