

CASE 4087: Application of SOLAR
OIL COMPANY FOR A DUAL COMPLETION
LEA COUNTY, NEW MEXICO.

Case Number.

4087

Application

Transcripts.

Small Exhibits

ETC.

dearnley-meier

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

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



BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

March 26, 1969

EXAMINER HEARING

IN THE MATTER OF:

Application of Solar Oil
Company for a dual comple-
tion, Lea County, New
Mexico.

Case No. 4087.

BEFORE: Elvis A. Utz, Examiner

TRANSCRIPT OF HEARING

MR. UTZ: Case 4087.

MR. HATCH: Case 4087, application of Solar Oil Company for a dual completion, Lea County, New Mexico.

MR. KELLAHIN: Jason Kellahin, appearing for the applicant, and I have one witness I would like to have sworn.

(Witness sworn.)

(Whereupon, Applicant's Exhibits Numbers 1 and 2, were marked for identification.)

DAROYL R. CURRY

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q State your name, please.

A I am Daroyl R. Curry.

MR. UTZ: Are there any other appearances? You may proceed.

Q Mr. Curry, by whom are you employed? And, in what position?

A I am a vice president of Solar Oil Company, and a petroleum engineer.

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

A Yes, I have.

Q And your qualifications as a petroleum engineer are a matter of record?

A Yes.

MR. KELLAHIN: Are the witness's qualifications acceptable?

MR. UTZ: Yes, they are.

Q Mr. Curry, are you familiar with the application of Solar Oil Company in Case No. 4087?

A Yes, I am.

Q What is proposed by Solar Oil Company in this case?

A Solar Oil Company proposes to seek approval for the dual completion in a conventional manner of its McCallister No. 1, an oil completion producing from the Drinkard and Abo Formations, on a location in Unit C, Section 7, Township 22 South, Range 38 East, Lea County, New Mexico.

Q Have there been dual completions to produce from these two horizons within one mile of this well?

A As of the first of 1968, the Commission proration schedule did not reflect any completions producing at this time.

Q It was indicated to you that that required a hearing, and could not be approved on administrative action of

the Commission, is that correct?

A That's correct.

Q Now, briefly, referring to Exhibit Number 1, would you outline the history of this well?

A The Solar Oil Company McCallister No. 1 was spudded on 14 August, 1968, and was drilled to a total depth of 7,300 feet. It was cased to total depth with seven and five-eighths OD casing, and was cemented with 835 sacks. It was then perforated in the Abo Formation from 7,240 feet to 6,924 feet. The Abo was then acidized with 5,000 gallons, and fracture-treated with 22,000 of brine water, plus six tenths per gallon of sand.

The Abo Formation was then isolated with the retrievable bridge plug, and the Drinkard Formation was perforated from 6,398 feet to 6,491 feet. The Drinkard Formation was acidized with 4,750 gallons, and was fracture-treated with 80,000 of yellow brine, plus nine tenths of a pound per gallon of sand.

The well was cleaned out, and an Otus Permatrieve retrievable production packer was set at 6,911 feet. Dual two and three-eighth OD tubing strings were then run, and production was independently effected from the Abo and Drinkard Formations.

I submit as an exhibit in this hearing, photocopies of the diagrammatic sketch showing multiple completion information, termed Exhibit 1.

Q I think that is reversed.

A Termed Exhibit 2, New Mexico Oil Conservation Commission, southeast New Mexico, packer leakage test. These exhibits reflect that conventional multiple completion practices which have previously been acceptable to the Commission, have been utilized in the subject well, and that these practices have been effective in segregating the fluids in the two formations, thereby constituting no hazard to conservation.

Q Do you have any information on the pressures in the two zones?

A Both zones are pumping. I do have the initial potential form, and the packer leakage test submitted as an exhibit. It reflects that the Flow Test No. 1, the non-producing completion, had a beginning pressure of 380 psi, and had an ending pressure of 380 psi. The producing completion, being the Abo Formation, had 40 psi at the start of the test, and had 20 psi at the conclusion. This was a 23-hour test.

Q You did not encounter pressures in these two zones that would cause any problems with the packer, is that correct?

A No, they are well within the mechanical capabilities

of the equipment.

Q Do you have any information on the fluid characteristics of the two zones?

A I don't have any test here, but the correlation with offset production that we produced in this area, would indicate that the fluids are relatively non-corrosive.

Q Do you know what the gravities are?

A The gravity on the Abo Formation is 41.2, and the gravity on the Drinkard Formation is 39.8.

Q In your opinion, will the dual completion of this well as shown on your Exhibit Number 2, adequately protect the two producing horizons?

A Yes, it will.

Q And it is a type of dual completion which has been approved in other cases by this Commission, is it not?

A Yes.

Q Was Exhibit 2 prepared by you or under your supervision?

A It was prepared under my supervision.

Q And Exhibit Number 1 is a copy of the Commission's packer leakage test?

A That's correct.

MR. KELLAHIN: At this time, I would like to offer

Exhibits 1 and 2.

MR. UTZ: Without objection, Exhibits 1 and 2 will be entered into the record of this case.

(Whereupon, Applicant's Exhibits Numbers 1 and 2 were admitted into evidence.)

MR. KELLAHIN: That is all I have on direct examination.

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Curry, can you tell me what the cement program was on this completion?

A The eight and five-eighths, seven and five-eighths casing cemented with a total of 835 sacks.

Q About what depth would that be?

A I'm sorry, I don't have that information immediately available. This was a cementing program approved by the Commission.

Q Well, it would be above the Drinkard, right?

A Correct. It would be probably 1,500, 2,000 feet above that.

Q What was the surface casing program?

A The surface casing was approximately 850 feet of ten and three-quarters, which was circulated to the surface.

Q You had just the two strings?

A That's correct.

Q I note on your Flow Test No. 2 on the packer leakage form, that you had a decrease of 30 pounds on the shut-in zone. Can you explain what that might have been?

A This is producing the upper completion, and there is some temperature difference and fluid expansion, contraction in the parallel tubing strings, and the instruments used on this test were, I believe, zero to 2,000 psi, dual pin recording pressure gauges, calibrated by dead weight test, and possibly the meter correction test.

MR. UTZ: Any other questions of the witness? You may be excused. Any other statements?

The case will be taken under advisement.

I N D E X

<u>WITNESS</u>	<u>PAGE</u>
DAROYL R. CURRY	
Direct Examination by Mr. Kellahin	2
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<u>EXHIBITS</u>	<u>MARKED</u>	<u>ADMITTED IN EVIDENCE</u>
Applicant's Exhibits Numbers 1 and 2	2	7

STATE OF NEW MEXICO)
) ss.
 COUNTY OF BERNALILLO)

I, SAMUEL MORTELETTE, 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.

Samuel Mortelette

To hereby certify that the foregoing is
 complete record of the proceedings in
 a hearing before the New Mexico Oil
 Conservation Commission held on
 the 1st day of June, 1969, at
 the New Mexico Oil Conservation Commission
 at the City of Albuquerque, New Mexico.



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

P. O. BOX 208B - SANTA FE

87501

April 1, 1969

GOVERNOR
DAVID F. CARGO
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER

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

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

Re: Case No. 4087
Order No. R-3719
Applicant:
Solar Oil Company

Dear Sir:

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

Very truly yours,

G. L. Parker, Jr.

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC x

Artesia OCC

Aztec OCC

Other _____

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. 4087
Order No. R-3719

APPLICATION OF SOLAR OIL COMPANY
FOR A DUAL COMPLETION, LEA COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 26, 1969,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 1st day of April, 1969, 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, Solar Oil Company, seeks authority
to complete its McCallister Well No. 1, located in Unit C of
Section 7, Township 22 South, Range 38 East, NMPM, Lea County,
New Mexico, as a dual completion (conventional) to produce oil
from an undesignated Drinkard oil pool and an undesignated Abo
oil pool through parallel strings of 2 3/8-inch tubing, with
separation of the zones by a packer set at approximately 6911
feet.

(3) That the mechanics of the proposed dual completion are
feasible and in accord with good conservation practices.

(4) That approval of the subject application will prevent
waste and protect correlative rights.

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CASE No. 4087

Order No. R-3719

IT IS THEREFORE ORDERED:

(1) That the applicant, Solar Oil Company, is hereby authorized to complete its McCallister Well No. 1, located in Unit C of Section 7, Township 22 South, Range 38 East, NMPM, Lea County, New Mexico, as a dual completion (conventional) to produce oil from an undesignated Drinkard oil pool and an undesignated Abo oil pool through parallel strings of 2 3/8-inch tubing, with separation of the zones by a packer set at approximately 6911 feet;

PROVIDED HOWEVER, that the applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A of the Commission Rules and Regulations insofar as said rule is not inconsistent with this order;

PROVIDED FURTHER, that the applicant shall take packer-leakage tests upon completion and annually thereafter during the Annual Gas-Oil Ratio Test Period for the undesignated Abo oil pool.

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

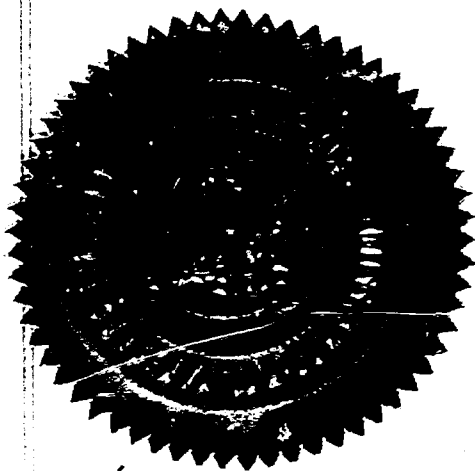
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


DAVID F. CARGO, Chairman


ALEX J. ARMIJO, Member


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



esr/

Case #087
Hear 2-26-69
Rec. 3-27-69.

Grant Solar a dual completion
in 2 Undesignated ~~zones~~ pools.
Drinkard + Abo. Both zones
are to be pumped thru 2 3/8"
 tubing. ~~which~~ Zones will be
separated with the packer set
at approx. 6911'. A conventional
completion.

Thur. [Signature]

OIL CONSERVATION COMMISSION
I DISTRICT

MAR 24 1969

Call 1057

OIL CONSERVATION COMMISSION
BOX 871
SANTA FE, NEW MEXICO

DATE March 21, 1969

Re: Proposed NSP _____
Proposed Triple _____
Proposed NSL _____
Proposed NFO _____
Proposed DC X

Gentlemen:

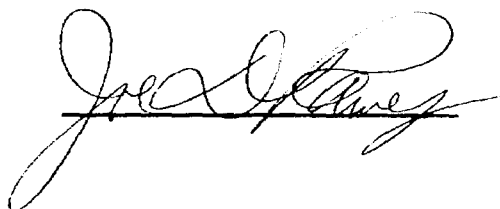
I have examined the application dated 2/24/69
for the Solar Oil Co. McCallister #1-C 7-22-38
Operator Lease and Well No. S-T-R

and my recommendations are as follows:

O.K.---J.D.R.

O.K.---J.W.R.

Yours very truly,



DOCKET: EXAMINER HEARING - WEDNESDAY - MARCH 26, 1969

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

The following cases will be heard before Elvis A. Utz, Examiner, or Daniel S. Nutter, Alternate Examiner:

- CASE 4078: Application of J. Gregory Merriam for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle production from the Devils Fork-Gallup Pool and an undesignated Mesaverde oil pool in the well-bore of his NCRA State Well No. 3 located in Unit L of Section 16, Township 24 North, Range 6 West, Rio Arriba County, New Mexico.
- CASE 4079: Application of Robert B. Holt for the creation of a new pool, assignment of a discovery allowable, and the promulgation of special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Middle Pennsylvanian oil pool for his Aztec State Well No. 2 located in Unit A of Section 26, Township 13 South, Range 32 East, Lea County, New Mexico, and for the assignment of an oil discovery allowable in the amount of approximately 48,715 barrels to said well. Applicant further seeks the promulgation of special pool rules for said pool, including a provision for 160-acre proration units and the assignment of 80-acre allowables.
- CASE 3975: (Reopened)
In the matter of Case No. 3975 being reopened pursuant to the provisions of Order No. R-3618, which order established 80-acre spacing units for the East Bluitt-San Andres Pool, Roosevelt County, New Mexico, for a period of approximately two months. All interested parties may appear and present evidence as to whether the subject area is indeed a separate common source of supply or an extension of the Bluitt-San Andres Gas Pool. Further, in the event said East Bluitt-San Andres Pool is found to be an extension of said Bluitt-San Andres Gas Pool, the Commission will consider the amendment of the Special Rules and Regulations governing the Bluitt-San Andres Gas Pool to provide for the classification of oil and gas wells, spacing and well location requirements for oil and gas wells, and an allocation formula for withdrawals from the gas cap and oil rim.
- CASE 4080: Application of Monsanto Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Black River Unit Area comprising 14,961.23 acres, more or less, of State, Federal and Fee lands

CASE 4080 - Continued

in Townships 25 and 26 South, Ranges 23 and 24 East, Eddy County, New Mexico.

CASE 4081: Application of Curtis Hankamer for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Brushy Draw Deep Unit Area comprising 9,672.53 acres, more or less, of State and Federal lands in Township 26 South, Ranges 29 and 30 East, Eddy County, New Mexico.

CASE 4082: Application of Sam D. Ares for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to inject produced salt water into the Yates-Seven Rivers formation in the open-hole interval from approximately 3358 to 3495 feet in his Arnott Ramsey "A" Well No. 3, located 660 feet from the North and West lines of Section 2, Township 25 South, Range 36 East, Jalmat Yates Seven Rivers Pool, Lea County, New Mexico.

CASE 4083: Application of Gulf Oil Corporation for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle production from the Penrose Skelly Pool and the Paddock Pool in the well-bore of its Eunice King Well No. 7 located in Unit G of Section 28, Township 21 South, Range 37 East, Lea County, New Mexico, with the provision that no more than one allowable will be produced from said well.

CASE 4084: Application of Olen F. Featherstone for the creation of a new pool and for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Wolfcamp oil pool for his Cabot State Well No. 1 located in the NE/4 NW/4 of Section 29, Township 15 South, Range 32 East, Lea County, New Mexico, and for the promulgation of special rules therefor including a provision for 160-acre spacing and proration units and the assignment of 80-acre allowables.

CASE 4085: Application of Tamarack Petroleum Corporation, 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 Queen formation in the perforated interval from approximately 4948 feet to 5043 feet in its Cabot 23 State Well No. 2 located in Unit C of Section 23, Township 19 South, Range 35 East, Pearl-Queen Pool, Lea County, New Mexico.

CASE 4086: Application of Hansen Oil Company for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its CSA Federal Well No. 1 located in Unit 2 of Section 29, Township 26 South, Range 37 East, Starborough Yates-Seven Rivers Pool, Lea County, New Mexico, in such a manner as to permit production of oil from the Yates formation and the disposal of produced salt water into the Seven Rivers formation through parallel strings of tubing.

CASE 4087: Application of Solar Oil Company for a dual completion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its McCallister Well No. 1 located in Unit C of Section 7, Township 22 South, Range 38 East, Lea County, New Mexico, to produce oil from undesignated Drinkard and Abo oil pools through parallel strings of tubing.

CASE 4071: (Continued from the March 19, 1969, Regular Hearing)
Application of T. J. Sivley for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete his Federal Silver Well No. 4 located in the SW/4 SE/4 of Section 28, Township 20 South, Range 34 East, Lynch Yates-Seven Rivers Pool, in such a manner as to permit production of oil from the Yates-Seven Rivers formations and the disposal of produced salt water into the lower Seven Rivers formation.

CASE 4088: Application of Paul M. Mershon, Jr., for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Upper Pennsylvanian formation underlying Section 21, Township 22 South, Range 23 East, Eddy County, New Mexico. Said acreage to be dedicated to a well to be drilled at an unorthodox gas well location 990 feet from the North and East lines of said Section 21, and within one mile of the Indian Basin-Upper Pennsylvanian Gas Pool. Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.

CASE 4089: Application of Paul M. Mershon, Jr., for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the special rules and regulations governing the Indian Basin-Upper Pennsylvanian Gas Pool to permit the drilling of a well at an unorthodox gas well location 990 feet from the North and East lines of Section

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Docket No. 9-69

Examiner Hearing - March 26, 1969

21, Township 22 South, Range 23 East, Indian Basin-
Upper Pennsylvanian Gas Pool, Eddy County, New Mexico.

CASE 4090: Application of Getty Oil Company for an exception to Commission Order No. R-111-A, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to the potash-oil area casing and cementing rules as set forth in Commission Order No. R-111-A. Applicant proposes to re-enter and deepen approximately 3500 feet in the Yates formation four wells located in Sections 19 and 30 of Township 20 South, Range 34 East, Lea County, New Mexico, in such a manner as to eliminate the necessity of running the salt protection string provided the production string would be cemented to the surface.

CASE 4091: Application of Union Oil Company of California for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its Elliott Federal Well No. 1 located in Unit O of Section 27, Township 11 South, Range 38 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Field Ranch-Wolfcamp Pool and the disposal of produced salt water into the San Andres, Glorieta, Blinberry, Tubb and Abo formations in the open-hole interval from approximately 4458 feet to 8050 feet.

NEW MEXICO OIL CONSERVATION COMMISSION
 SOUTHEAST NEW MEXICO PACKER LEAKAGE TEST

Operator SOLAR OIL COMPANY			Lease McCallister			Well No. 1	
Location of Well	Unit	Sec	Twp	Rge	County		
		7	T22S	R38E	Lea		
Name of Reservoir or Pool			Type of Prod (Oil or Gas)	Method of Prod Flow, Art. Lift	Prod. Medium (Tub or Csg)	Choke Size	
Upper Compl	Drinkard		Oil	Pumping	Tubing	Open	
Lower Compl	Abo		Oil	Pumping	Tubing	Open	

FLOW TEST NO. 1

Both zones shut-in at (hour, date): 2:00 P.M. 12-10-68

Well opened at (hour, date): 2:00 P.M. 12-11-68

	Upper Completion	Lower Completion
Indicate by (X) the zone producing.....		X
Pressure at beginning of test.....	380	40
Stabilized? (Yes or No).....	Yes	Yes
Maximum pressure during test.....	380	40
Minimum pressure during test.....	380	20
Pressure at conclusion of test.....	380	20
Pressure change during test (Maximum minus Minimum).....	0	20
Was pressure change an increase or a decrease?.....	0	Decrease
Well closed at (hour, date): 1:00 P.M. 12-12-68	Total Time On Production	23 hr.
Oil Production	Gas Production	
During Test: 78 bbls; Grav. 41.2	During Test: 569	MDF; GOR 1380

Remarks

FLOW TEST NO. 2

Well opened at (hour, date): 3:00 P.M. 12-14-68

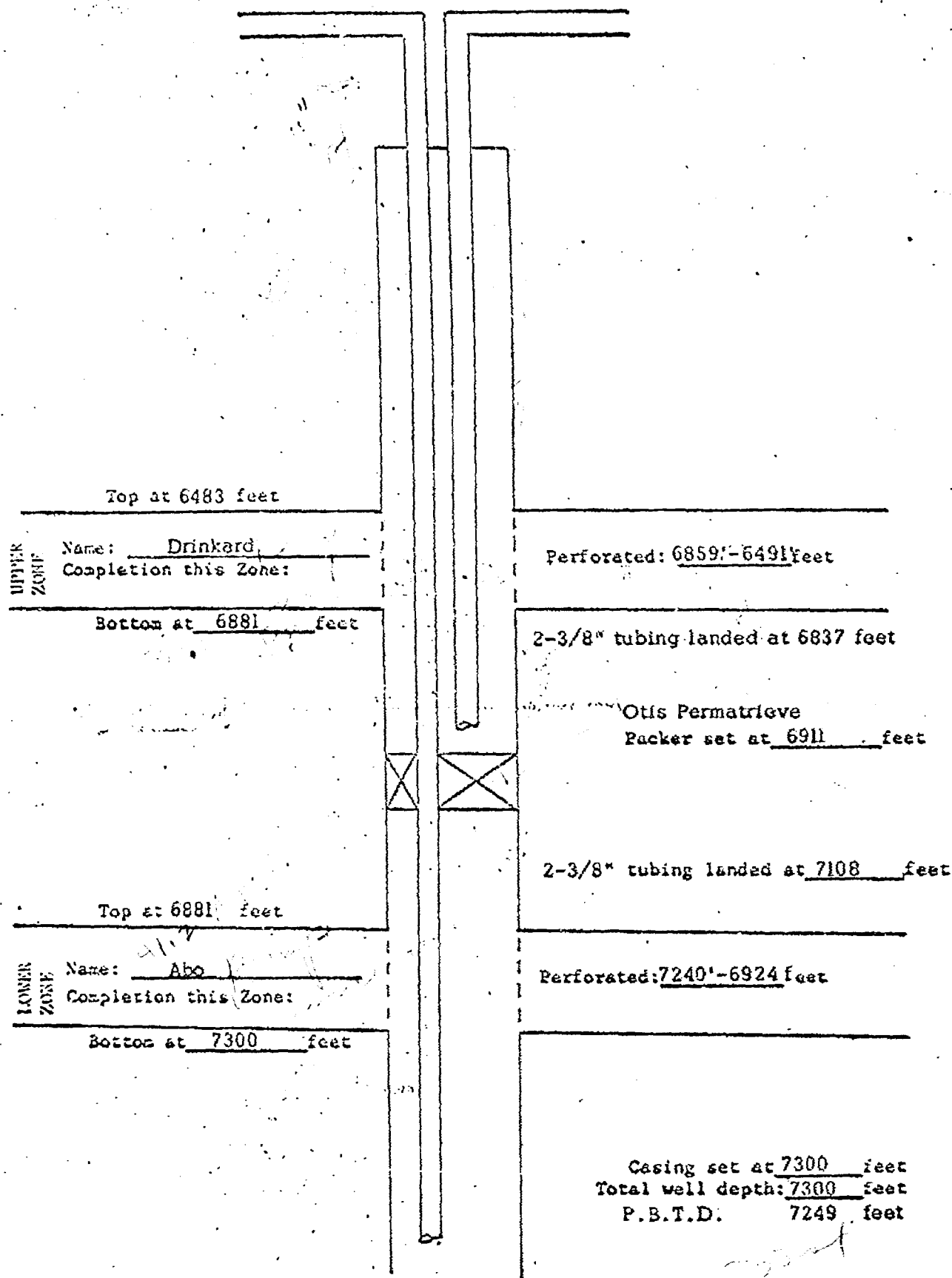
	Upper Completion	Lower Completion
Indicate by (X) the zone producing.....	X	
Pressure at beginning of test.....	120	590
Stabilized? (Yes or No).....	Yes	Yes
Maximum pressure during test.....	120	620
Minimum pressure during test.....	10	590
Pressure at conclusion of test.....	10	620
Pressure change during test (Maximum minus Minimum).....	110	30
Was pressure change an increase or a decrease?.....	Decrease	Increase
Well closed at (hour, date): 6:30 P.M. 12-15-68	Total time on Production	27 1/2 hrs.
Oil Production	Gas Production	
During Test: 42 bbls; Grav. 39.8	During Test: 693	MDF; GOR 1740

Remarks

I hereby certify that the information herein contained is true and complete to the best of my

BEFORE EXAMINER WJZ
 OIL CONSERVATION COMMISSION
 EXHIBIT NO. 1
 CASE NO. 4087

DIAGRAMMATIC SKETCH SHOWING MULTIPLE COMPLETION INSTALLATION



DATE: January 31, 1969 OPERATOR: SOLAR OIL COMPANY LEASE: McCallister
 POOL: Drinkard & Abo COUNTY: Lea WELL NO.: 1

BEFORE EXAMINER UTZ
 OIL CONSERVATION COMMISSION
 EXHIBIT NO. 2
 CASE NO. 44517

NEW MEXICO OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO
APPLICATION FOR MULTIPLE COMPLETION

Form O-107
5-1-67

Case 4087

Applicant SOLAR OIL COMPANY		City Lea	Date January 31, 1969
Address P. O. BOX 5596, Midland, Texas 79701		County McCallister	Well No. 1
Location of Well C	Section 660	Township 22-S	Range 38-E

1. Has the New Mexico Oil Conservation Commission heretofore authorized the multiple completion of a well in these same pools or in the same zones within one mile of the subject well? YES _____ NO X
2. If answer is yes, identify one such instance: Order No. _____; Operator Lease, and Well No.: _____

3. The following facts are submitted:	Upper Zone	Intermediate Zone	Lower Zone
a. Name of Pool and Formation	Undesignated Drinkard		Undesignated Abo
b. Top and Bottom of Pay Section (Perforations)	6841' - 6859'		6924' - 7240'
c. Type of production (Oil or Gas)	Oil		Oil
d. Method of Production (Flowing or Artificial Lift)	Pump		Pump

4. The following are attached. (Please check YES or NO)

- | Yes | No | |
|-------------------------------------|--------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | a. Diagrammatic Sketch of the Multiple Completion, showing all casing strings, including diameters and setting depths, centralizers and/or turbolizers and location thereof, quantities used and top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | c. Waivers consenting to such multiple completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.* |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | d. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed it shall be submitted as provided by Rule 112-A.) |

5. List all offset operators to the lease on which this well is located together with their correct mailing address.

SOHIO PETROLEUM COMPANY Rankin Hwy. Midland, Texas

N. G. PENROSE, 1605 Commerce Bldg., Fort Worth, Texas 76102

Were all operators listed in Item 5 above notified and furnished a copy of this application? YES X NO _____. If answer is yes, give date of such notification _____.

CERTIFICATE: I, the undersigned, state that I am the Production Clerk of the SOLAR OIL COMPANY (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

M. J. Smith
Signature
DOCKET MAILED
3-14-69
Date

If waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.

NOTE: If the proposed multiple completion will result in an unorthodox well location and/or a non-standard proration unit in one or more of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.

NEW MEXICO OIL CONSERVATION COMMISSION

SOUTHEAST NEW MEXICO PACKER LEAKAGE TEST

Case 4087

Operator SOLAR OIL COMPANY			Lease McCallister			Well No. 1	
Location of Well	Unit	Sec 7	Twp T22S	Rge R38E	County Lea		
Name of Reservoir or Pool			Type of Prod (Oil or Gas)	Method of Prod Flow, Art Lift	Prod. Medium (Tbg or Csg)	Choke Size	
Upper Compl	Drinkard		Oil	Pumping	Tubing	Open	
Lower Compl	Abo		Oil	Pumping	Tubing	Open	

FLOW TEST NO. 1

Both zones shut-in at (hour, date): 2:00 P.M. 12-10-68

Well opened at (hour, date): 2:00 P.M. 12-11-68

	Upper Completion	Lower Completion
Indicate by (X) the zone producing.....		X
Pressure at beginning of test.....	380	40
Stabilized? (Yes or No).....	Yes	Yes
Maximum pressure during test.....	380	40
Minimum pressure during test.....	380	20
Pressure at conclusion of test.....	380	20
Pressure change during test (Maximum minus Minimum).....	0	20
Was pressure change an increase or a decrease?.....	0	Decrease
Well closed at (hour, date): 1:00 P.M. 12-12-68	Total Time On Production	23 hr.
Oil Production	Gas Production	
During Test: 78 bbls; Grav. 41.2 ; During Test 569 MCF; GOR 1380		

Remarks _____

FLOW TEST NO. 2

Well opened at (hour, date): 3:00 P.M. 12-14-68

	Upper Completion	Lower Completion
Indicate by (X) the zone producing.....	X	
Pressure at beginning of test.....	120	590
Stabilized? (Yes or No).....	Yes	Yes
Maximum pressure during test.....	120	620
Minimum pressure during test.....	10	590
Pressure at conclusion of test.....	10	620
Pressure change during test (Maximum minus Minimum).....	110	30
Was pressure change an increase or a decrease?.....	Decrease	Increase
Well closed at (hour, date): 6:30 P.M. 12-15-68	Total time on Production	27½ hrs.
Oil Production	Gas Production	
During Test: 42 bbls; Grav. 39.8 ; During Test 693 MCF; GOR 1740		

Remarks _____

I hereby certify that the information herein contained is true and complete to the best of my knowledge.

Approved _____ 19
New Mexico Oil Conservation Commission

Operator SOLAR OIL COMPANY

By _____

By _____

Title _____

Title Production Clerk

Date January 31, 1969

5. Following completion of flow test No. 1, the well shall again be shut-in, in accordance with Paragraph 3 above.

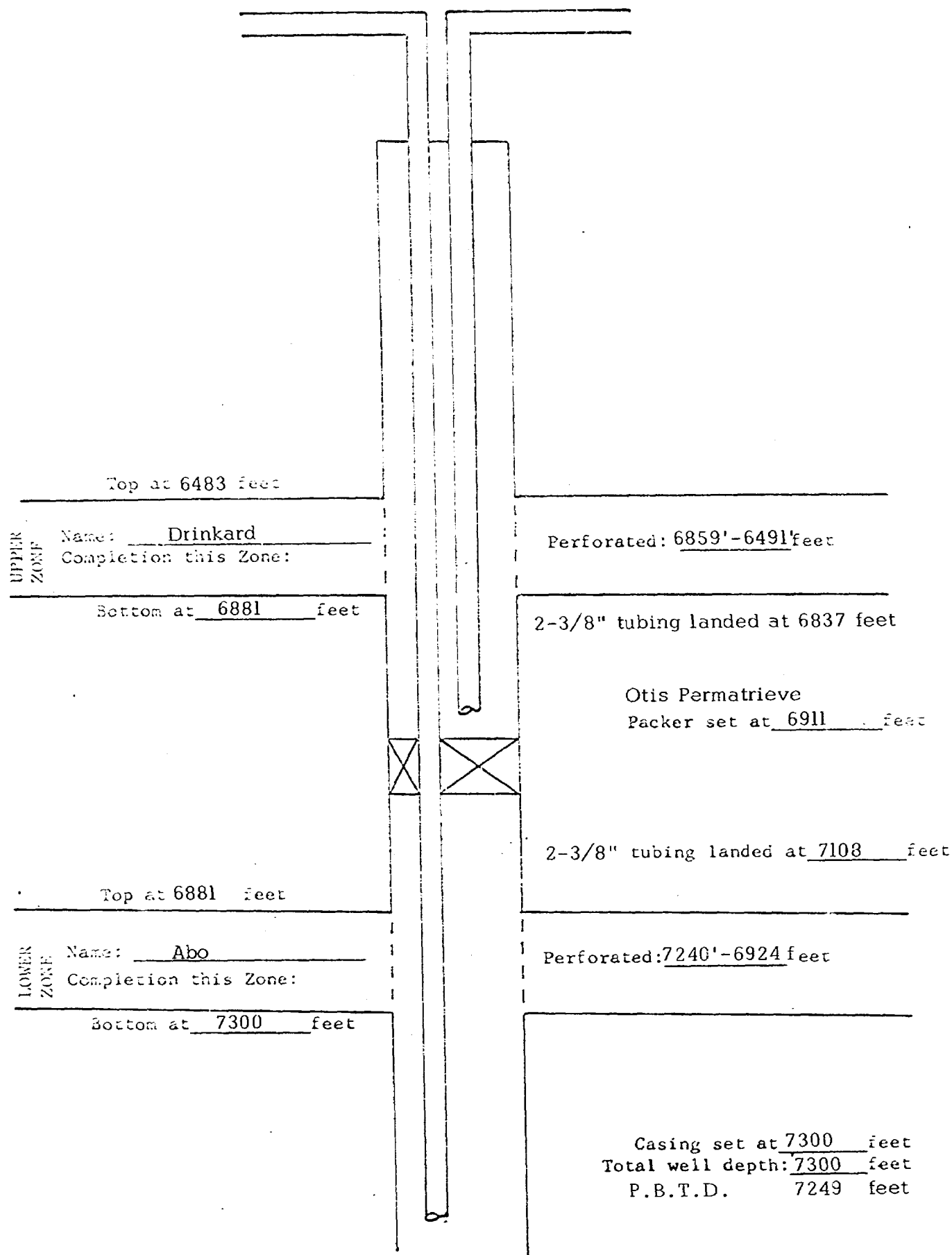
6. Flow Test No. 2 shall be conducted even though the well was shut-in during Flow Test No. 1. Procedure for Flow Test No. 2 is to be the same as for Flow Test No. 1 except that the previously shut-in well shall remain shut-in while the previously shut-in zone is produced.

7. All pressures, throughout the entire test, shall be continuously measured and recorded with recording pressure gauges. The manometer which must be checked with a deadweight tester at least before the beginning and once at the end of each flow test.

8. The results of the above-described tests shall be filed in the file within 15 days after completion of the test. The results shall be filed in the appropriate District Office of the New Mexico Oil Conservation Commission on Southeast New Mexico Interior (except for New Mexico District 8, together with the original pressure recording gauge charts with a list of deadweight pressures which were taken indicated thereon). In the case of filing the aforesaid charts, the operator may construct a pressure versus time curve for each zone of each test, indicating thereon all pressure changes which may be reflected by the gauge charts as well as all deadweight pressure readings which were taken. If the pressure curve is submitted, the original chart must be permanently filed in the operator's office. Form C-116 shall also accompany the Backer Leakage Test Form when the test period coincides with a gas-oil ratio test period.

[illegible]

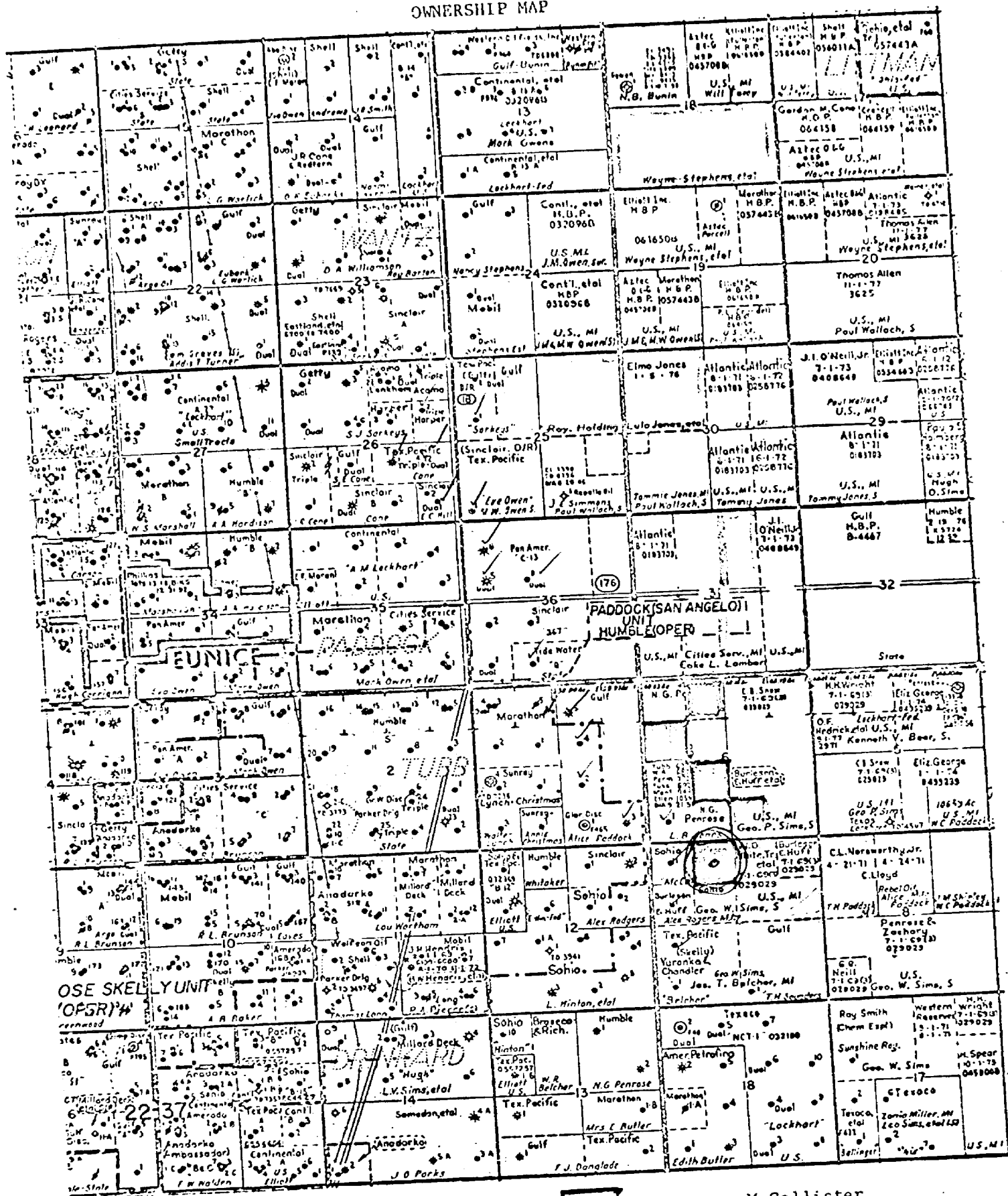
DIAGNOSTIC SKETCH SHOWING MULTIPLE COMPLETION INSTALLATION



DATE: January 31, 1969 OPERATOR: SOLAR OIL COMPANY LEASE: McCallister
POOL: Drinkard & Abo COUNTY: Lea WELL NO.: 1

Case 4087

EXHIBIT "C"
LEASE PLAT AND
OWNERSHIP MAP



COUNTY Lea

STATE New Mexico

LEASE DESCRIPTION:
Sec. 6, T-22-S, R-37-E:
NE $\frac{1}{4}$ NW $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$
NE $\frac{1}{4}$ SW $\frac{1}{4}$
Sec. 7, T-22-S, R-37-E:
NE $\frac{1}{4}$ SW $\frac{1}{4}$

LEASE McCallister

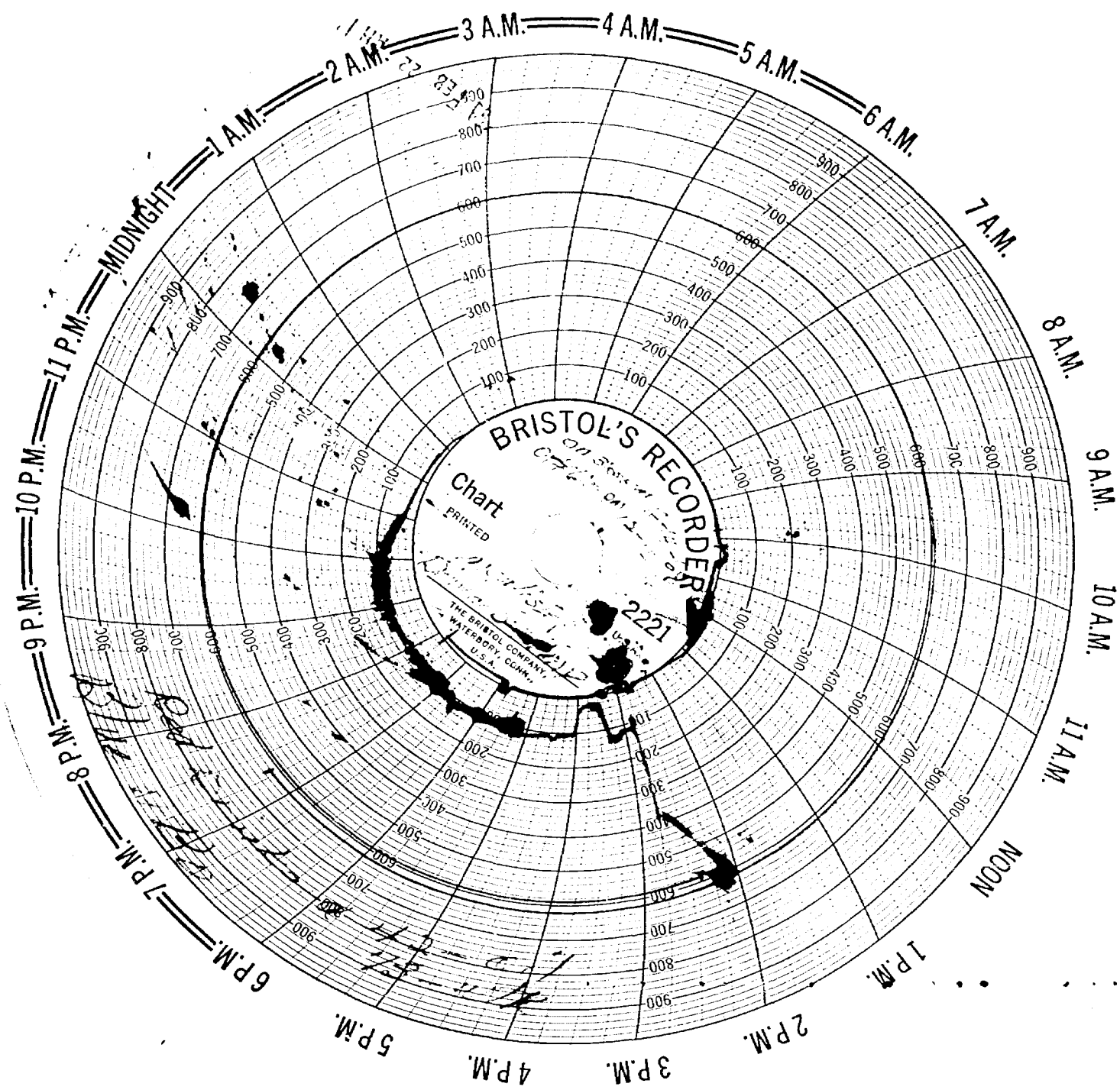
WELL NO. 1

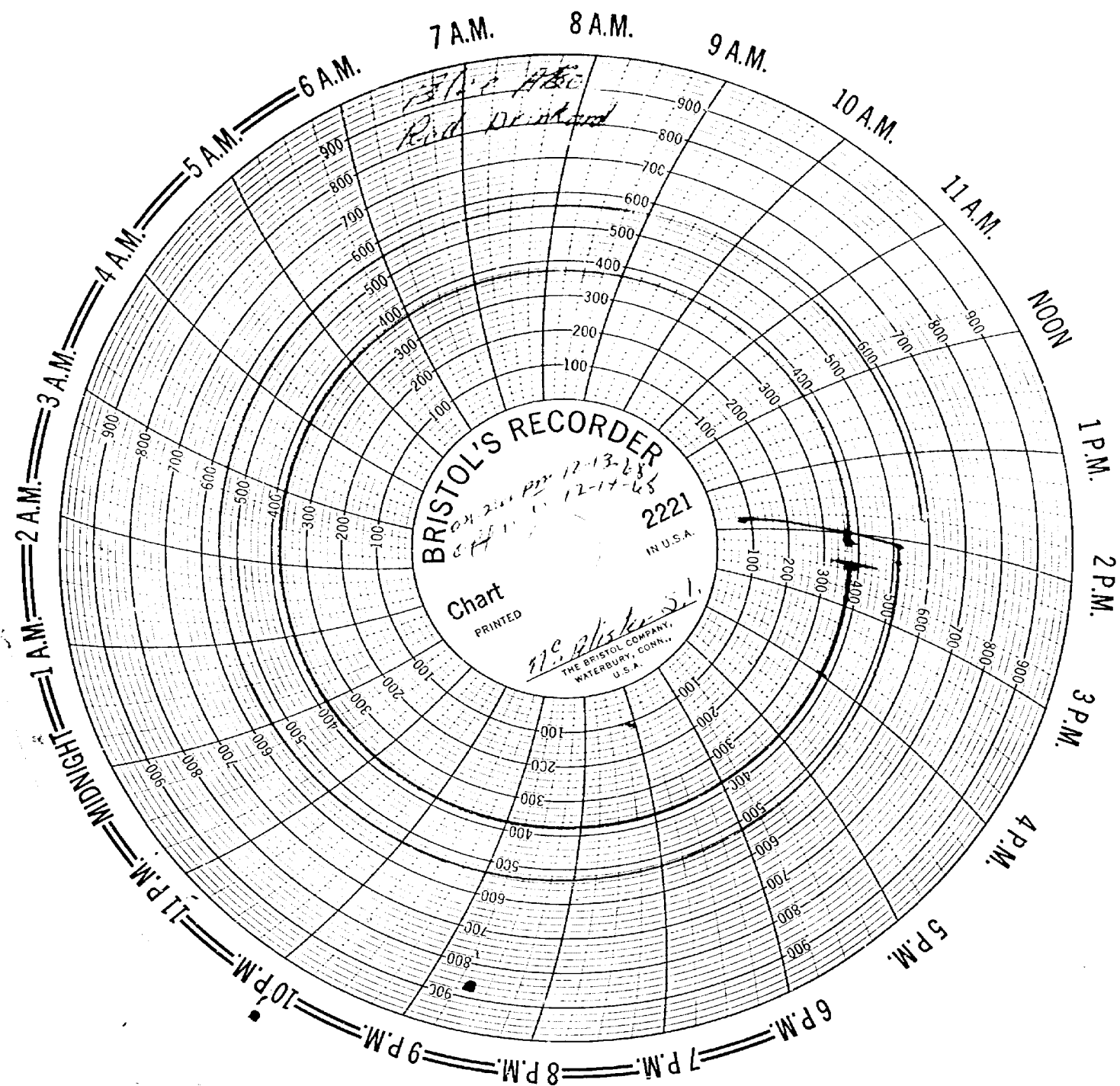
OTHER LEASES OWNED IN AREA

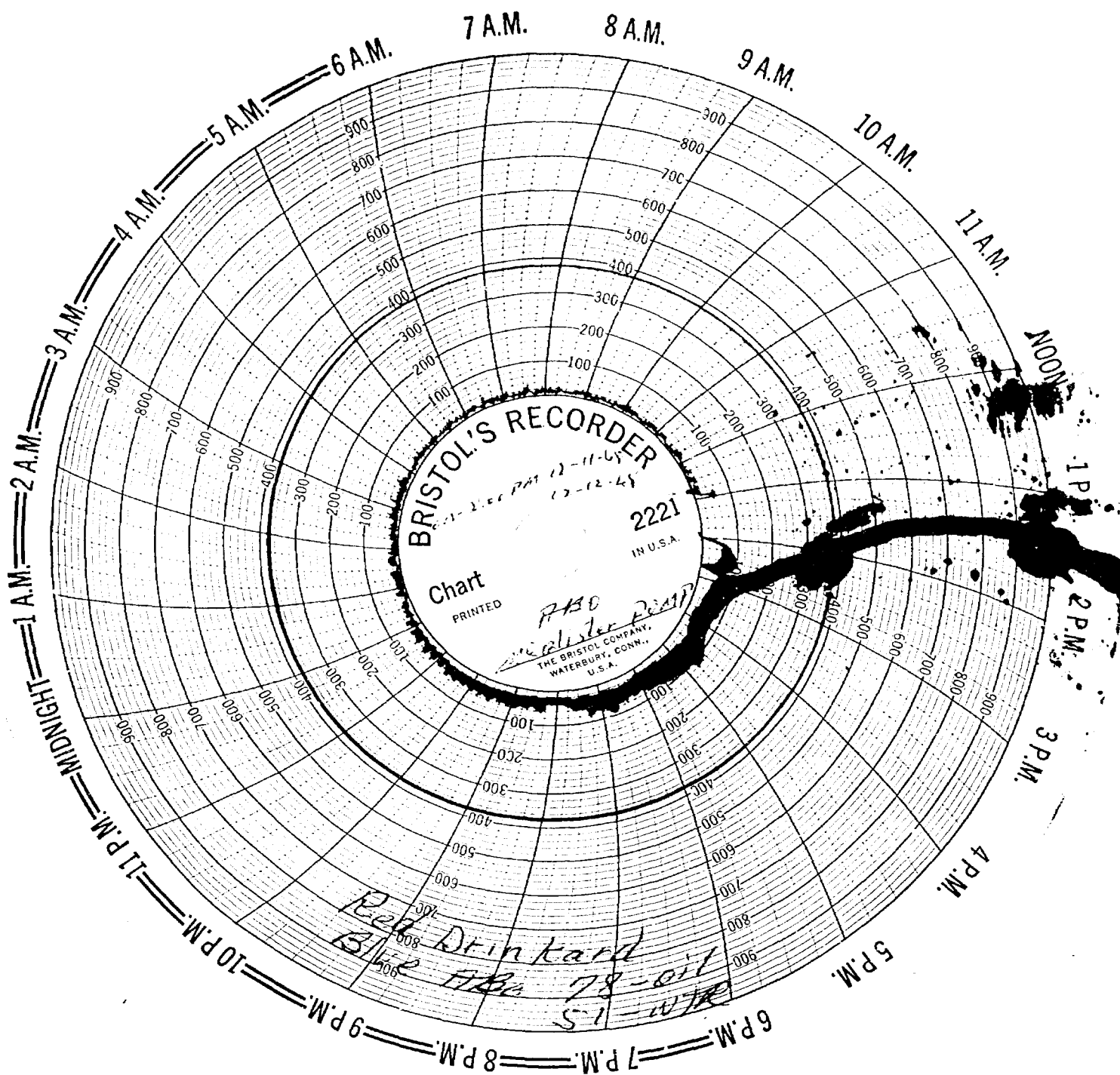
PROPOSED LOCATION

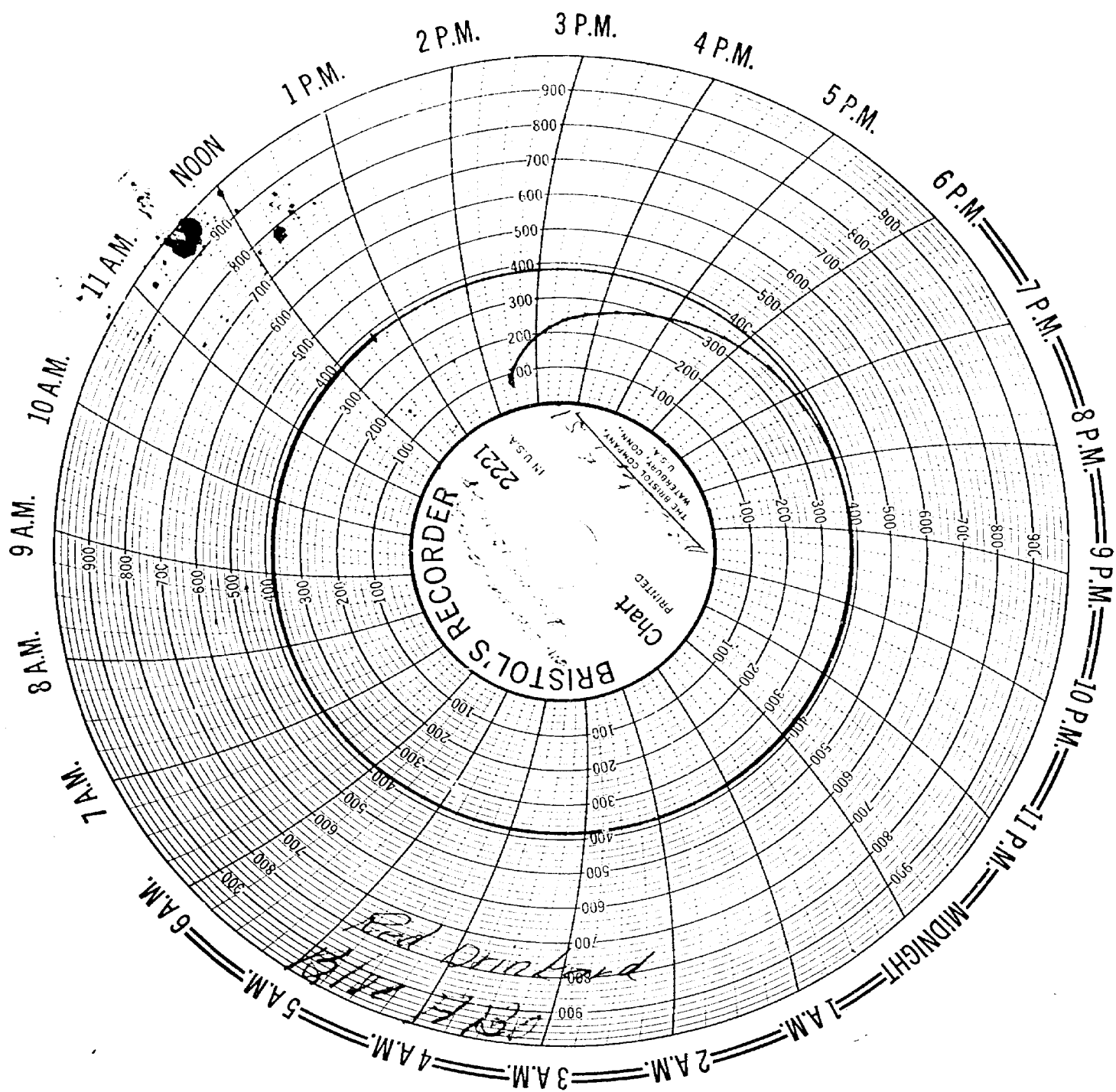
WELLS PRODUCING IN OBJECTIVE HORIZON.

Case 4089









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. 4087

Order No. R- 3719

APPLICATION OF SOLAR OIL COMPANY
FOR A DUAL COMPLETION, LEA COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on
March 26, 1969, at Santa Fe, New Mexico, before Examiner
Elvis A. Utz.

NOW, on this _____ day of _____, 1969, 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, Solar Oil Company,
seeks authority to complete its McCallister
Well No. 1, located in Unit C of Section 7, Township
22 South, Range 38 East, NMPM, Lea County, New
~~North~~ ~~West~~
Mexico, as a dual completion ~~from the~~ ~~xxxxxx~~ ~~Pool~~ ~~through~~ ~~xxxxxx~~
~~from the~~ ~~xxxxxx~~ ~~Pool~~ ~~through~~ ~~xxxxxx~~
an undesignated Drinkard oil pool and an undesignated Abo oil
pool through parallel strings of 2 3/8 -inch tubing, with
separation of the zones by a packer set at approximately
6911 feet.

(3) That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.

(4) That approval of the subject application will prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Solar Oil Company,
is hereby authorized to complete its McCallister
Well No. 1, located in Unit C of Section 7, Township
22 ~~South~~ North, Range 38 ~~East~~ West, NMPM, Lea County, New
Mexico, as a dual completion (conventional) oil
(~~combination~~) to produce (~~gas~~)
(~~tubingless~~)
~~from the~~ ~~Pool through~~
from an undesignated Drinkard oil pool and an undesignated Abo
oil pool through parallel strings of 2 3/8 -inch tubing, with
separation of the zones by a packer set at approximately
6911 feet;

PROVIDED HOWEVER, that the applicant shall complete, operate,
and produce said well in accordance with the provisions of Rule
112-A of the Commission Rules and Regulations insofar as said rule
is not inconsistent with this order;

PROVIDED FURTHER, that the applicant shall take packer-leakage
tests upon completion and annually thereafter during the Annual
Gas-Oil Ratio Test Period for the undesignated Abo oil pool.
~~Deliverability~~

(2) 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 herein-
above designated.