

CASE 5454: BURK ROYALTY CO. for
a waterflood project, Chaves
County, New Mexico

CASE No.

5454

Application,

Transcripts,

Small Exhibits

ETC.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico
April 16, 1975

EXAMINER HEARING

IN THE MATTER OF:

(Continued from the March 19, 1975
Examiner Hearing)

Application of Burk Royalty Company,
for a unit agreement, Chaves County,
New Mexico.

CASE NO. 5415

Application of Burk Royalty Company,
for a waterflood project, Chaves
County, New Mexico.

CASE NO. 5454

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the New Mexico Oil
Conservation Commission:

William F. Carr, Esq.
Legal Counsel for the
Commission
State Land Office Building
Santa Fe, New Mexico 87501

(Appearances continued)

THE NYE REPORTING SERVICE

STATE-WIDE DEPOSITION NOTARIES
225 JOHNSON STREET
SANTA FE, NEW MEXICO 87501
TEL. (505) 982-0386

APPEARANCES (Continued)

For the Applicant:

Sim B. Christy, IV, Esq.
JENNINGS, CHRISTY & COPPLE
P. O. Box 1180
Roswell, New Mexico 88201

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BEAR-DIRECT

MR. NUTTER: Case 5415.

MR. CARR: Case 5415. Continued from the March 19, 1975 Examiner Hearing. Application of Burk Royalty Company, for a unit agreement, Chaves County, New Mexico.

MR. CHRISTY: Sim Christy, Jennings, Christy and Copple for the Applicant, Burk Royalty Company.

May I suggest to the Examiner that it might be expeditious to combine this case with Case 5454 which is the next case on the docket and has to do with an application for a waterflood in the same unit area.

MR. NUTTER: We will call now Case No. 5454.

MR. CARR: Case 5454, Application of Burk Royalty Company for a waterflood project, Chaves County, New Mexico.

MR. NUTTER: Cases 5415 and 5454 will be consolidated for the purpose of hearing.

MR. CHRISTY: We have two witnesses, Mr. Examiner.

(Witnesses sworn.)

JOHN H. BEAR

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

DIRECT EXAMINATION

BY MR. CHRISTY:

Q Would you please state your name, by whom you are

BEAR-DIRECT

employed and in what capacity?

A Jon H. Bear, Wichita Falls, Texas, Petroleum Engineer and Vice President for the Company.

Q Mr. Bear, are you familiar with the proposed Double L Queen Unit Agreement?

A Yes, I am.

Q Let me refer you to what has been marked as Exhibit 1, which purports to be a copy of the Unit Agreement, and I will ask you if you will briefly summarize for us the unit provisions. I believe there are 2670.10 acres of land involved in Townships 14 and 15 South, Range 29 and 30 East, Chaves County, New Mexico, is that correct?

A That is correct.

Q And it is proposed to waterflood the Queen formation underlying those lands?

A That's right.

Q I believe your Exhibit B to the Unit Agreement reflects that there are 14 tracts of Federal land for 1231.44 acres or 46.12 percent of the unit. There are 8 State of New Mexico tracts for 1120.02 acres or 41.95 percent of the unit area and there are two private owned or B Tracts totaling 318.64 acres or 11.93 percent of the unit area, is that correct?

BEAR-DIRECT

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A That is correct.

Q How is the allocation of productions in the Unit Agreement made?

A Do you mean the participation formula?

Q Yes.

A The participation formula is a two-phase formula. The first phase is based on 50-percent remaining primary reserves after December 1st, 1972 and 50-percent period income from June 1st, 1972 through December, 1972.

The second phase is based 50-percent on acre-feet and 50-percent on total ultimate primary expected production.

Q This is based upon a formula shown in Section 13, Pages 9 and 10 of the Unit Agreement, is that correct?

A That is correct.

Q And recapped in Exhibit C by tract?

A Yes.

Q Have you obtained preliminary approval of the Unit Agreement by Federal and State authorities?

A Yes, sir, we have.

Q I believe your Federal approval was obtained on October 4, 1974 and your State approval was obtained January 15, 1975, is that correct?

A Yes, sir.

BEAR-DIRECT

Q Do you have indications as to joinders in any percentages? Have you passed this Unit Agreement out to other operators and have them check it?

A Yes. We have approximately 96.7 working interests owner approval.

Q That is 96.7-percent?

A Percent.

Q Is this Unit Agreement similar to prior waterflood agreements in southeast New Mexico that have been approved by this Commission?

A Yes, it is.

Q I believe you have a pending unit-operating agreement that has been prepared?

A Right.

Q And that is Exhibit 2?

A Yes.

Q Do you have logs and core analyses?

A Yes, we do.

Q I think I incorrectly said that the unit operating agreement was Exhibit 2. It is Exhibit 3 and the logs are Exhibit 2, is that correct?

A Yes.

Q There was attached to the Application certain

BEAR-DIRECT

schematic diagrams. You are familiar with that?

A Yes, I am.

Q Have you prepared other copies of those which is Exhibit 4?

A Correct.

Q Now, also in the Exhibit with the Application, I believe you attached a map showing the outline of the unit and the various working interest owners within two miles, is that correct?

A That's correct.

Q Is that your Exhibit 5 for this hearing?

A Yes, that's correct.

Q Also, have you prepared another unit outline showing the injection wells in the proposed unit?

A Yes.

Q Is that your Exhibit 6?

A Correct.

Q Let's look at Exhibit 6 here a second to clarify the record. What are the red circled wells?

A Those are the proposed water-injection wells.

Q Where do you propose to start your injection on your pilot project, referring to Exhibit 6, please?

A Actually, when we secure permission and start the

BEAR-DIRECT

flood, we propose to start the whole flood. In other words, we will convert all of the wells indicated here at one time when we start water injection in all of the water injection wells. There will really not be a "pilot flood."

Q Pilot the whole unit?

A The pilot would be the whole unit.

Q What kind of water is this? You are injecting water, aren't you?

A Yes.

Q You propose to inject water?

A Yes.

Q What kind of water is it?

A We hope that it will be fresh water secured from the Double Eagle Corporation.

Q Do they have water in this area?

A They do have a line and are serving other water-floods in the immediate area.

Q Have you made any contacts or have any estimates as to whether or not you will be able to obtain the water?

A We have made numerous contacts. We have made one within the past 30 days and they indicate that they will still be able to purchase water.

Q Approximately how much water will you be using on

BEAR--DIRECT

a daily basis?

A A little over 5000 barrels a day.

Q I think the Application refers to 350 barrels per well per day or a total of 5600 barrels per day initially, is that correct?

A Yes.

Q And then the amount of water, I assume, by re-injecting it, you would decrease the amount of water that you need to use?

A Yes. We will reinject the produced water as it becomes available.

Q You were one of the prime movers in the preparation of the Unit Operating Agreement, were you not?

A Yes, I was.

Q Did you design the unit so as to maximize recovery of the hydrocarbons underlying the unit area *error* and to burn that place?

A Yes, we did.

Q Do you know of any reason that the correlative rights of any interested party might be violated by the approval of the unit and the allowance of the pilot water-flood project?

A No, I don't.

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MR. CHRISTY: That's all.

MR. NUTTER: Are there any questions of this witness?

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Bear, you mentioned that you had 96.7-percent of the working interest committed to the unit. Returning to your Exhibit B in the Unit Agreement, would you identify the tracts that have not been committed, if any tracts in toto have not been?

A I might explain that we have not submitted this to the working-interest owners for final signature or final whatever it is called. We have requested from all the working-interest owners preliminary agreement to the unit. The ones that we do not have a letter back from are Tract 20, Tract 22, Tract 4 and Tract 11.

Q Tract 20 is a 40-acre tract, is that correct?

A Yes, sir.

Q Tract 22 is a 40.01-acre tract?

A Yes, sir.

Q Tract 4 is a 40-acre tract?

A 40 acres, yes, sir.

Q And Tract 11 is an 80-acre tract?

BEAR-CROSS

A Yes, sir.

Q So, you've got something like 200 acres of the total that have not been committed?

A Yes, sir.

Q But you haven't received replies on it, I should say?

A Yes, sir. Now, if we are doing it on an acreage basis, it is going to be different because the basis on which I use the 96.7 is the participation formula and not the acreage basis.

Q I see. So, 96.7 percent of the participation factors have indicated that they would join?

A Yes, sir.

MR. CHRISTY: In acreage it is about 200 acres out of the 2670 acres uncommitted.

MR. NUTTER: Right.

BY MR. NUTTER:

Q Now, Mr. Bear, in going through the participation formula, I think that you said that under Phase 1, it would be 50-percent A and 50-percent B?

A Yes, sir.

Q And I think you said under Phase 2, it would be 50-percent and 50-percent?

A Yes, sir, but of different criteria.

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Q Well, doesn't the Unit Agreement on Page 10 provide 55-percent of Factor C and 45-percent of Factor D?

A Okay, if that is what it says, that is what it is. We have changed it so many times, I have lost track.

Q So, under Phase 1, it is 50-50 and under Phase 2, it is 55-45?

A Okay.

Q Now, there are only two basic royalty owners in the unit, correct?

A No, there are three. There is the State of New Mexico, the Federal Government and there are two tracts that are fee land.

Q Two fee tracts. Have the fee royalty owners agreed to the Unit Agreement?

A No, sir, we have not as yet contacted them.

MR. NUTTER: Are there any further questions of Mr. Bear? You may be excused.

(Witness dismissed)

LEON LAMPERT

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

DIRECT EXAMINATION

BY MR. CHRISTY:

THE NYE REPORTING SERVICE
STATE-WIDE DEPOSITION NOTARIES
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Q Will you please state your name, your address, by whom you are employed and in what capacity?

A Leon Lampert, Geologist, Dalport Oil Corporation, Corpus Christi.

Q You have previously testified before this regulatory body and had your qualifications as a Petroleum Geologist accepted, have you not?

A Yes.

Q Let me hand you what has been marked as Burk's Exhibit 7, and I will ask you if that is a geological-engineering report on the proposed Double L Queen Unit?

A That's right.

Q Briefly, tell us a little about the geology in this area?

A This is a stratigraphic. It is a large stratigraphic trap in the Queen Sand which is Guadalupian in age in the Permian. The sand porosity pinches out on the west side of the gas cap. There is a gas cap on the west side of the oil rim. The gas-oil contact is at approximately plus 1937 on the Sub-C datum basis and downdip from the oil rim there is a tilted-water contact that is plus 1915 on the south end of the field and plus 1895 on the northeast end of the field. This is not a water-drive

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field. It is -- the drive mechanism is based on expansion of the gas cap and solution gas drive, but the sand is encountered from about 1900 to 2000 feet below the level of the ground and there is normally 10 feet of productive interval and that varies considerably. The productive is a gray sand. It can have high porosity, high permeability. We have seen up to 2000 millidarcy in some wells, but the average perm is 121 millidarcy. The average porosity is 20 -- well, it is in the report -- but basically, you have a gray sand that is productive and you have red sands that are interpolated within the gray-sand interval and the red sand is not productive.

It is the same type of geology that occurs in the Sulimar Queen Field which is in south which is being flooded today and has been flooded for 2 or 2½ years. It is the same type of structure. It is a stratigraphic terrace. It is not a structure. The contours depict a 40 to 60 degree -- 40 to 60 foot per mile dip to the southeast.

Q Geologically speaking, does this appear to be a unit area susceptible to waterflood unitization?

A Yes, sir.

Q Will that maximize recovery of hydrocarbons?

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A It sure would.

Q The waterflood idea?

A It sure would.

Q What kind of drive is this? You said it is not a water drive.

A It is a solution-gas expansion and the possibility of the expansion of the gas cap. There might be a slight water drive, but I don't think so. At least we haven't encountered any kind of water pressure.

Q Is there anything else that I haven't asked you that you think might be of interest to the Examiner in connection with the Application?

A I don't think so.

MR. CHRISTY: That's all.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Lampert, what has been the primary recovery in this unit area to date?

A Total?

Q Yes, sir.

A Cumulative, 1.4 -- it was 1.1 and a fraction million barrels. It is probably 1.3 million approximately now. That is an approximation.

LAMPERT-CROSS

MR. NUTTER: Are you going to furnish that report as a part of the record?

MR. CHRISTY: Yes, sir, Exhibit 7. Unfortunately, I only have one copy. I think there is one attached to the Application. It would have been a Red-i-back.

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

BY MR. NUTTER:

Q According to that geological report, Mr. Lampert, what was the cumulative production at the time that report was made?

A It was 1,123,912 barrels as of 12/1/72.

Q At the time that report was made, was there a prognostication as to what secondary recovery would yield in there?

A Yes.

Q What was that equal to?

A In total barrels?

Q Yes.

A It was 1.8 million barrels.

Q So, you anticipate that your secondary recovery would be somewhat in excess of the primary?

A Yes, sir. 1.14 times ultimate primary -- 1.12 to 1.14.

LAMPERT-CROSS

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Q Now, in the unit area as you have outlined, is any of the gas cap as we know the gas cap to exist, included in the area?

A No, sir. We have tried not to include any of the gas cap. There might be a slight portion of the contour included, but a very very little amount because you can't cut the unit across some of the contours.

Q You are familiar with the pool rules for the Double L Queen Pool, are you not?

A Yes, sir.

Q And those pool rules provide for classification of a well as a gas well if the GOR is 30,000 or more. Are any of the wells that are included in the unit boundary, as you have defined it here on Exhibit No. 5, classified as gas wells under those pool rules?

A I don't know. I would have to double-check that matter, Mr. Nutter. I would have to double-check that.

Q Do you have that information there or would you have to check that after you returned to your office?

A I think I would have to check that after I returned to my office. I know as far as the Dalport Wells, they would not be included, but I would have to check on one of the others.

MR. CHRISTY: We will furnish that information to you.

MR. NUTTER: If you would, please.

Are there any further questions of Mr. Lampert?
He may be excused.

(Witness dismissed)

MR. CHRISTY: I offer into evidence Applicant's Exhibits 1 through 7, inclusive.

MR. NUTTER: Applicant's Exhibits 1 through 7 in Cases 5415 and 5454 consolidated will be admitted in evidence.

(Whereupon, Applicant's Exhibits 1 through 7 were marked for identification, and were offered and admitted into evidence.)

MR. CHRISTY: We have nothing further, Mr. Examiner.

MR. NUTTER: Does anyone have anything they wish to offer in this case?

MR. LINES: Yes. I am Farrell Lines. I am making entry for Michael Grace. I am sorry I wasn't here earlier.

We would ask at this time that Section 1 be excluded from this proposal. We have a statement of one well there. I would ask the Commission to be able to

furnish it at a later time with the permission of the Commission. I am applying to the Commission that one is classified as a gas well. We also have plans for the State No. 2 well that is just to the left of that and he was going to inject through No. 2 to get some more gas from No. 1. He feels that this is in the gas cap and that it shouldn't be included in the other oil areas and we would ask permission to be able to furnish this information to the Commission before they make their finding.

MR. NUTTER: Which section was that?

MR. LINES: This is Section 1.

MR. CHRISTY: That is the northeast northeast of No. 1?

MR. LINES: Yes.

MR. CHRISTY: I will state to the Examiner, to the best of my knowledge on that point. We initially included the northeast northeast of No. 1 in the unit area without preliminary approval from the U.S.G.S. We sent it to the State and they declined to approve it because the northeast northeast of 1 was in it. They said they would not approve it with that, so we took it out and gave it back to the U.S.G.S. and the U.S.G.S. said, "No, leave it in the unit area, but you don't have to commit it." So,

that is the position we are in. We have absolutely no objection to the northeast northeast being not committed. It needs to be a part of the unit area as far as unitary designation is concerned, but my information is that the Commissioner will not approve that tract in the unit.

MR. NUTTER: And it is a 40-acre tract.

MR. CHRISTY: 40-acre tract.

MR. NUTTER: You are not proposing a water-injection well on that 40-acre tract?

MR. CHRISTY: I defer to the exhibit, but I don't think so. The answer is, no. As depicted in Exhibit 6, it is not.

MR. NUTTER: Does anyone else have anything they wish to offer in Cases 5415 and 5454?

We will take the cases under advisement.

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

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.

COURT REPORTER

I hereby certify that the foregoing is a true and correct record of the proceedings in the Examiner hearing of Case No. 5415-5454 heard by me on 4/16, 1975.

Richard L. Nye Examiner
New Mexico Oil Conservation Commission

THE NYE REPORTING SERVICE
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OIL CONSERVATION COMMISSION

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

I. R. TRUJILLO
CHAIRMAN

LAND COMMISSIONER
PHIL R. LUCERO
MEMBER

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

May 6, 1975

Mr. Sim Christy
Jennings, Christy & Copple
Attorneys at Law
Post Office Box 1180
Roswell, New Mexico 88201

Re: CASE NO. 5454
ORDER NO. R-5007

Applicant:

Burk Royalty Company

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 X
Aztec OCC

Other State Engineer Office

JAMES T. JENNINGS
SIM B. CHRISTY IV
ROGER L. COPPLE
BRIAN W. COPPLE

ROBERT G. ARMSTRONG

LAW OFFICES OF
JENNINGS, CHRISTY & COPPLE

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AREA CODE 505

April 17, 1975

APR 18 1975

REGISTRATION COMMISSION
Santa Fe

Mr. Leon M. Lampert
Dalport Oil Corporation
The 600 Building - Room 1134
Corpus Christi, Texas 78401

File
Case

Re: NMOCC Case 4515 & 4554

Dear Leon:

Just a short note to remind you that you promised to send Mr. Daniel Nutter a report as to whether or not there are any gas wells in the proposed Double L Queen Unit, and if so their location, etc.

Would you please send me a copy of your report to Mr. Nutter.

Best personal regards,

JENNINGS, CHRISTY & COPPLE

BY

S. B. Christy IV
S. B. Christy IV

SBC/jy

cc: Mr. Daniel Nutter
cc: Mr. Jon Bear

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. 5454
Order No. R-5007

APPLICATION OF BURK ROYALTY CO. FOR
A WATERFLOOD PROJECT, CHAVES COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 16, 1975,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 6th day of May, 1975, 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, Burk Royalty Co., seeks authority
to institute a waterflood project in the Double L Queen Unit
Area, Double L Queen Pool, by the injection of water into the
Queen formation through 17 injection wells in Sections 23, 24,
25, and 36, Township 14 South, Range 29 East; Section 31, Town-
ship 14 South, Range 30 East; Sections 1 and 12, Township 15
South, Range 29 East, and Sections 6, 7, and 18, Township 15 South,
Range 30 East, NMPM, Chaves 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 operator should take all steps necessary to
ensure that the injected water enters only the proposed injec-
tion interval and is not permitted to escape to other formations
or onto the surface from injection, production, or plugged and
abandoned wells.

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(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, Burk Royalty Co., is hereby authorized to institute a waterflood project in the Double L Queen Unit Area, Double L Queen Pool, by the injection of water into the Queen formation through the following-described wells in Chaves County, New Mexico:

TOWNSHIP 14 SOUTH, RANGE 29 EAST, NMPM

Company	Lease	Well No.	Unit	Section
Amoco	Walgout "A" Federal	1	P	23
McClellan	Sun State	1	M	24
Amoco	State EK	4	E	25
Dalport	Spurck State	9	J	25
Amoco	State EK	1	N	25
Dalport	Spurck State	6	B	36
Dalport	Spurck State	4	G	36
Dalport	Spurck State	5	J	36

TOWNSHIP 14 SOUTH, RANGE 30 EAST, NMPM

Company	Lease	Well No.	Unit	Section
Dalport	Amco Federal	2	E	31
McClellan	Elyse Federal	2	J	31

TOWNSHIP 15 SOUTH, RANGE 29 EAST, NMPM

Company	Lease	Well No.	Unit	Section
Dalport	Rob State	1	H	1
Dalport	Sunset State	1	H	12

TOWNSHIP 15 SOUTH, RANGE 30 EAST, NMPM

Company	Lease	Well No.	Unit	Section
Amoco	Lusk "A"	3	A	6
Amoco	Lusk "A"	2	G	6
McClellan	Marion Federal	1	C	7
McClellan	Mary Jane	2	M	7
McClellan	Lisa "B" Federal	9	F	18

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Case No. 5454
Order No. R-5007

(2) That injection into each of said wells shall be through internally coated tubing, set in a packer which shall be located as near as practicable to the uppermost perforation; 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.

(3) That the operator shall immediately notify the supervisor of the Commission's Artesia 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 or oil 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.

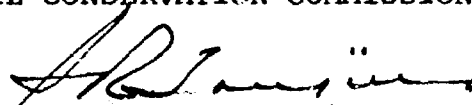
(4) That the subject waterflood project is hereby designated the Double L Queen Unit Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(5) 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.


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

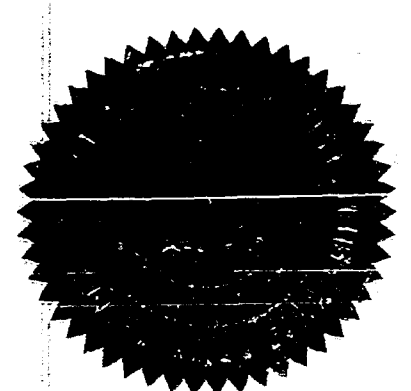
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


I. R. TRUJILLO, Chairman


PHIL R. LUCERO, Member


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


S E A L

jr/

Memo

From

R. L. STAMETS
Technical
Support Chief

To

Call from Mr. Bear

10:20 AM 5-1-75.

He said they would
use lined tubing

UNIT AGREEMENT
DOUBLE L QUEEN UNIT
COUNTY OF CHAVES
STATE OF NEW MEXICO

UNIT AGREEMENT
DOUBLE L QUEEN UNIT
CHAVES COUNTY, NEW MEXICO

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UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION OF THE
DOUBLE L QUEEN UNIT
CHAVES COUNTY, NEW MEXICO

THIS AGREEMENT, entered into as of the 1st day of January, 1975, by and between the parties subscribing, ratifying or consenting hereto, and herein referred to as "Parties hereto";

WITNESSETH:

WHEREAS, the parties hereto are the owners of working, royalty or other oil or gas interests in the Unit Area subject to this Agreement; and

WHEREAS, the Mineral Leasing Act of February 25, 1920, (41 Stat. 437, as amended 30 U.S.C. Sections 181 et seq.) authorizes Federal lessees and their representatives to unite with each other, or jointly or separately with others in collectively adopting and operating a unit plan of development or operation of any oil or gas pool, field, or like area, or any part thereof for the purpose of more properly conserving the natural resources thereof whenever determined and certified by the Secretary of the Interior to be necessary or advisable in the public interest; and

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Sec. 3, Chap. 88, Laws 1943 as amended by Section 1 of Chap. 162, Laws of 1951, Chap. 7, Art 11, Sec. 39, N.M.S. 1953 Ann.) to consent to or approve this Agreement on behalf of the State of New Mexico, insofar as it covers and includes lands and mineral interests of the State of New Mexico; and

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Sec. 3, Chap. 88, Laws of 1943, as amended by Sec. 1, Chap. 162, Laws of 1951, Chap. 7, Art. 11, Sec. 41, N.M.S. and 1953 Ann.) to amend with the approval of the lessee, any oil and gas lease embracing State lands so that the length of the term of said lease may coincide with the term of such unitized development and operation of State lands; and

WHEREAS, the Oil Conservation Commission of the State of New Mexico is authorized by law (Chap. 72, Laws of 1935, as amended by Chap. 193, Laws of 1937, Chap. 166, Laws of 1941, and Chap. 168, Laws of 1949) to approve this agreement, and the conservation provisions hereof; and

WHEREAS, the parties hereto hold sufficient interests in the Double L Queen Unit covering the land hereinafter described to give reasonably effective control of operation therein; and

WHEREAS, it is the purpose of the parties hereto to conserve natural resources, to prevent waste and secure the other benefits obtainable through development and operation of the area subject to this Agreement under the terms, conditions and limitations herein set forth.

NOW, THEREFORE, in consideration of the premises and the promises herein contained, the parties hereto commit to this Agreement their respective interests in the unitized formation of the below defined Unit Area, and agree severally among themselves as follows:

SECTION 1. ENABLING ACT AND REGULATIONS. The Mineral Leasing Act of February 25, 1920, as amended, supra, and all valid pertinent regulations, including operating and unit plan regulations, heretofore issued thereunder and valid, pertinent and reasonable regulations hereafter issued thereunder are accepted and made a part of this Agreement as to Federal lands, provided such regulations are not inconsistent with the terms of this Agreement; and as to non-Federal lands, the oil and gas operating regulations in effect as of the effective date hereof governing drilling and producing operations, not inconsistent with the terms hereof or the laws of the State in which the non-Federal land is located, are hereby accepted and made a part of this Agreement.

SECTION 2. UNIT AREA AND DEFINITIONS. For the purpose of this Agreement, the following terms and expressions as used herein shall mean:

(a) "Unit Area" is defined as those lands described in Exhibit "B" and depicted on Exhibit "A" hereof, and such land is hereby designated and recognized as constituting the Unit Area, containing 2,670.10 acres, more or less, in Chaves County, New Mexico.

(b) "Land Commissioner" is defined as the Commissioner of Public Lands of the State of New Mexico.

(c) "Commission" is defined as the Oil Conservation Commission of the State of New Mexico.

(d) "Director" is defined as the Director of the United States Geological Survey.

(e) "Secretary" is defined as the Secretary of the Interior of the United States of America, or his duly authorized delegate.

(f) "Department" is defined as the Department of the Interior of the United States of America.

(g) "Supervisor" is defined as the Oil and Gas Supervisor of the United States Geological Survey for the area in which the Unit Area is situated.

(h) "Unitized Formation" shall mean that subsurface portion of the Unit Area commonly known as the Queen Formation, and which is the same formation that was encountered between the logged depths of 1870' (subsea elevation of +1984') and 1980' (subsea elevation of +1874') in Dalport Oil Corporation's Spurck State Well #5 as shown on the Schlumberger Compensated Formation Density log of said well dated July 30, 1969 which well is located 1980' FSL and 1980' FEL of Section 36, T-14-S, R-29-E, Chaves County, New Mexico.

(i) "Unitized Substances" are all oil, gas, gaseous substances, sulphur contained in gas, condensate, distillate and all associated and constituent liquid or liquefiable hydrocarbons within and produced from the Unitized Formation, of the Unitized Land.

(j) "Tract" is each parcel of land described as such and given a Tract number in Exhibit "B".

(k) "Tract Participation" is defined as the percentage of participation shown on Exhibit "C" for allocating Unitized Substances to a Tract under this Agreement.

(l) "Unit Participation" is the sum of the percentages obtained by multiplying the Working Interest of a Working Interest Owner in each Tract by the Tract Participation of such Tract.

(m) "Working Interest" is the right to search for, produce and acquire Unitized Substances whether held as an incident of ownership of mineral fee simple title, under an oil and gas lease, or otherwise held, which interest is chargeable with and obligated to pay or bear, either in cash or out of production, or otherwise, all or a portion of the cost of drilling, developing and producing the Unitized Substances from the Unitized Formation and operations thereof hereunder. Provided that any royalty interest created out of a working interest subsequent to the execution of this Agreement by the owner of the working interest shall continue to be subject to such working interest burdens and obligations.

(n) "Working Interest Owner" is any party hereto owning a Working Interest, including a carried working interest owner, holding an interest in Unitized Substances by virtue of a lease, operating agreement, fee title or otherwise. The owner of Oil and Gas Rights that are free of lease or other instrument creating a Working Interest in another shall be regarded as a Working Interest Owner to the extent of seven-eighths (7/8) of his interest in Unitized Substances, and as a Royalty Owner with respect to his remaining one-eighth (1/8) interest therein.

(o) "Royalty Interest" or "Royalty" is an interest reserved to the original lessor or other party in or right to receive a portion of the Unitized Substances or the proceeds thereof, but does not include any overriding royalty interest, oil payment interest, net profit contracts, or any other payments or burdens which does not carry with it the right to search for and produce Unitized Substances.

(p) "Royalty Owner" is the owner of a Royalty Interest.

(q) "Unit Operating Agreement" is the agreement entered into by and between the Unit Operator and the Working Interest Owners as provided in section 9, infra, and shall be styled "Unit Operating Agreement, Double L Queen Unit, Chaves County, New Mexico".

(r) "Oil and Gas Rights" is the right to explore, develop and operate lands within the Unit Area for the production of Unitized Substances, or to share in the production so obtained or the proceeds thereof.

(s) "Outside Substances" is any substance obtained from any source other than the Unitized Formation and injected into the Unitized Formation.

(t) "Unit Manager" is any person or corporation appointed by Working Interest Owners to perform the duties of Unit Operator until the selection and qualification of a successor Unit Operator as provided for in Section 7 herof.

(u) "Unit Operator" is the party designated by Working Interest Owners under the Unit Operating Agreement to conduct Unit Operations.

(v) "Unit Operations" is any operation conducted pursuant to this Agreement and the Unit Operating Agreement.

(w) "Unit Equipment" is all personal property, lease and well equipment, plants, and other facilities and equipment taken over or otherwise acquired for the joint account for use in Unit Operations.

(x) "Unit Expense" is all cost, expense, or indebtedness incurred pursuant to this Agreement and the Unit Operating Agreement for or on account of Unit Operations.

(y) "Overriding Royalty Interest" is an interest in or right to receive a portion of the Unitized Substances or the proceeds therefrom as an overriding royalty interest, oil payment interest, net profits contracts, or any other payment or burden, exclusive of a Royalty Interest, which does not carry with it the right to search for or produce Unitized Substances.

SECTION 3. EXHIBITS. Exhibit "A" attached hereto is a map showing the Unit Area and the boundaries and identity of tracts and leases in said Unit Area to the extent known to the Unit Operator. Exhibit "B" attached hereto is a schedule showing, to the extent known to the Unit Operator, the acreage comprising each Tract, percentages and kind of ownership of oil and gas interests in all land in the Unit Area. Exhibit "C" attached hereto shows the Tract Participation of each Tract in the

Unit Area. However, nothing herein or in said schedule or map shall be construed as a representation by any party hereto as to the ownership of any interest other than such interest or interests as are shown in said map or schedule as owned by such party. Exhibit "D" attached hereto is the provisions of paragraphs 1 through 7 of Section 202 of Executive Order 11246 as amended. Exhibits, "A", "B", and "C" shall be revised by the Unit Operator whenever changes in the Unit Area render such revision necessary or when requested by the Supervisor, and copies of such revision shall be filed with the Land Commissioner, and not less than five copies shall be filed with the Supervisor.

SECTION 4. EXPANSION. The above described Unit Area may when practicable be expanded to include therein any additional Tract or Tracts regarded as reasonably necessary or advisable for the purposes of this Agreement. Such expansion shall be effected in the following manner:

(a) The Working Interest Owner or Owners of a Tract or Tracts desiring to bring such Tract or Tracts into this unit, shall file an application therefor with Unit Operator requesting such admission.

(b) Unit Operator shall circulate a notice of the proposed expansion to each Working Interest Owner in the Unit Area and in the Tract proposed to be included in the unit, setting out the basis for admission, the Tract Participation to be assigned to each Tract in the enlarged Unit Area and other pertinent data. After negotiation (at Working Interest Owner's meeting or otherwise) if at least three Working Interest Owners having in the aggregate seventy-five percent (75%) Unit Participation then in effect have agreed to inclusion of such Tract or Tracts in the Unit Area, the Unit Operator shall:

(1) After obtaining preliminary concurrence by the Director, prepare a notice of proposed expansion describing the contemplated changes in the boundaries of the Unit Area, the reason therefor, the basis for admission of the additional Tract or Tracts, the Tract Participation to be assigned thereto and the proposed effective date thereof; and

(2) Deliver copies of said notice to the Land Commissioner, the Supervisor, each Working Interest Owner and to the lessee and lessor whose interests are affected, advising such parties that thirty (30) days will be allowed for submission to the Unit Operator of any objection to such proposed expansion; and

(3) File, upon the expiration of said thirty (30) day period as set out in (2) immediately above with the Land Commissioner and Supervisor the following: (a) Evidence of mailing or delivering copies of said notice of expansion; (b) An application for approval of such expansion; (c) An instrument containing the appropriate joinders in compliance with the participation requirements of Section 14, and Section 32, infra; and (d) A copy of all objections received along with the operators response thereto.

The expansion shall, after due consideration of all pertinent information and approval by the Land Commissioner and the Supervisor, become effective as of the date prescribed in the notice thereof, preferably the first day of a month subsequent to the date of notice. The revised Tract Participation of the respective Tracts included within the Unit Area prior to such enlargement shall remain the same ratio one to another.

SECTION 5. UNITIZED LAND. All land committed to this Agreement as to the Unitized Formation shall constitute land referred to herein as "Unitized Land" or "Land subject to this Agreement". Nothing herein shall be construed to unitize, pool, or in any way affect the oil, gas and other minerals contained in or that may be produced from any formation other than the Unitized Formation as defined in Section 2 (h) of this Agreement.

SECTION 6. UNIT OPERATOR. Burk Royalty Co. is hereby designated the Unit Operator, and by signing this instrument as Unit Operator agrees and consents to accept the duties and obligations of Unit Operator for the operation, development and production of Unitized Substances as herein provided. Whenever reference is made herein to the Unit Operator, such reference means the Unit Operator acting in that capacity and not as an owner of interests in Unitized Substances, when such interests are owned by it and the term "Working Interest Owner" when used herein shall include or refer to the Unit Operator as the owner of a Working Interest when such an interest is owned by it.

The interest of Working Interest Owners and the Unit Operator in the Unit Area shall be subject to a reciprocal lien and security interest to the extent provided in the Unit Operating Agreement.

SECTION 7. RESIGNATION OR REMOVAL OF UNIT OPERATOR. Unit Operator shall have the right to resign at any time, but such resignation shall not become effective so as to release Unit Operator from the duties and obligations of Unit Operator and terminate Unit Operator's rights as such for a period of six (6) months after written notice of intention to resign has been given by Unit Operator to all Working Interest Owners, the Land Commissioner and the Supervisor unless a new Unit Operator shall have taken over and assumed the duties and obligations of Unit Operator prior to the expiration of said period. The resignation or removal of Unit Operator shall not release Unit Operator from any liability for any default by it hereunder occurring prior to the effective date of its resignation or removal.

The Unit Operator shall be subject to removal by Working Interest Owners having in the aggregate seventy percent (70%) or more Unit Participation then in effect exclusive of the Working Interest Owner who is the Unit Operator. Such removal shall be effective upon notice thereof to the Land Commissioner and the Supervisor.

In all such instances of effective resignation or removal, until a successor to Unit Operator is selected and approved as hereinafter pro-

vided, the Working Interest Owners shall be jointly responsible for the performance of the duties of the Unit Operator and shall, not later than thirty (30) days before such resignation or removal becomes effective, appoint a Unit Manager to represent them in any action to be taken hereunder.

The resignation or removal of Unit Operator under this Agreement shall not terminate its right, title or interest as the owner of a Working Interest or other interest in Unitized Substances, but upon the resignation or removal of Unit Operator becoming effective, such Unit Operator shall deliver possession of all wells, equipment, books and records, materials, appurtenances and any other assets used in connection with the Unit Operations and owned by the Working Interest Owners to the new duly qualified successor Unit Operator or to the Unit Manager if no such new Unit Operator is elected, to be used for the purpose of conducting Unit Operations hereunder. Nothing herein shall be construed as authorizing the removal of any material, equipment or appurtenances needed for the preservation of any wells. Nothing herein contained shall be construed to relieve or discharge any Unit Operator or Unit Manager who resigns or is removed hereunder from any liability or duties accruing or performable by it prior to the effective date of such resignation or removal.

SECTION 8. SUCCESSOR UNIT OPERATOR. Whenever the Unit Operator shall tender its resignation as Unit Operator or shall be removed as hereinabove provided, the Working Interest Owners shall select a successor Unit Operator as herein provided. Such selection shall not become effective until (a) a Unit Operator so selected shall accept in writing the duties and responsibilities of Unit Operator, and (b) the selection shall have been approved by the Land Commissioner and the Supervisor. If no successor Unit Operator or Unit Manager is selected and qualified as herein provided, the Land Commissioner and/or the Director, at their election, may declare this Agreement terminated.

In selecting a successor Unit Operator the affirmative vote of three or more Working Interest Owners having a total of sixty-five percent (65%) or more of the total Unit Participation shall prevail; provided that if any one Working Interest Owner has a Unit Participation of more than thirty-five percent (35%), its negative vote or failure to vote shall not be regarded as sufficient unless supported by the vote of one or more other Working Interest Owners having a total Unit Participation of at least five percent (5%). If the Unit Operator who is removed votes only to succeed itself or fails to vote, the successor Unit Operator may be selected by the affirmative vote of the owners of at least seventy-five percent (75%) of the Unit Participation remaining after excluding the Unit Participation of Unit Operator so removed.

SECTION 9. ACCOUNTING PROVISIONS AND UNIT OPERATING AGREEMENT.

Costs and expenses incurred by Unit Operator in conducting Unit Operations hereunder shall be paid, apportioned among and borne by the Working Interest Owners in accordance with the Unit Operating Agreement. Such Unit Operating Agreement shall also provide the manner in which the Working Interest Owners shall be entitled to receive their respective proportionate and allocated share of the benefits accruing hereto in conformity with their underlying operating agreements, leases or other contracts and such other rights and obligations as between Unit Operator and the Working Interest Owners as may be agreed upon by the Unit Operator and the Working Interest Owners; however, no such Unit Operating Agreement shall be deemed either to modify any of the terms and conditions of this Agreement or to relieve the Unit Operator of any right or obligation established under this Agreement, and in case of any inconsistency or conflict between this Agreement and the Unit Operating Agreement, this Agreement shall prevail. Copies of any Unit Operating Agreement executed pursuant to this Section shall be filed with the Land Commissioner and with the Supervisor as required prior to approval of this Agreement.

SECTION 10. RIGHTS AND OBLIGATIONS OF UNIT OPERATOR. Except as otherwise specifically provided herein the exclusive right, privilege and duty of exercising any and all rights of the parties hereto which are necessary or convenient for prospecting for, producing, storing, allocating and distributing the Unitized Substances are hereby delegated to and shall be exercised by the Unit Operator as herein provided. Upon request, acceptable evidence of title to said rights shall be deposited with said Unit Operator, and together with this Agreement, shall constitute and define the rights, privileges and obligations of Unit Operator. Nothing herein, however, shall be construed to transfer title to any land or to any lease or operating agreement, it being understood that under this Agreement the Unit Operator, in its capacity as Unit Operator, shall exercise the rights of possession and use vested in the parties hereto only for the purposes herein specified.

SECTION 11. PLAN OF OPERATIONS. It is recognized and agreed by the parties hereto that all of the land subject to this Agreement is reasonably proved to be productive of Unitized Substances and that the object and purpose of this Agreement is to formulate and to put into effect an improved recovery project in order to effect additional recovery of Unitized Substances, prevent waste and conserve natural resources. The parties hereto agree that the Unit Operator may, subject to the consent and approval of a Plan of Operation by the Working Interest Owners, the Supervisor, the Land Commissioner and the Commission, inject into the Unitized Formation, through any well or wells completed therein, brine, water, air, gas, oil, liquefied petroleum gases and any one or more other substances or combination of substances whether produced from the Unitized Land or not, and that the location of input wells and the rates of injection therein shall be governed by standards of good geologic and petroleum engineering practices and conservation methods. Subject to like approval the Plan of Operation may be revised as conditions may warrant.

The initial Plan of Operation shall be filed with the Supervisor, the Land Commissioner and the Commission concurrently with the filing of this Agreement for final approval. Said initial Plan of Operation and all revisions thereof shall be as complete and adequate as the Supervisor, the Land Commissioner and the Commission may determine to be necessary for timely operation consistent herewith. Upon approval of this Agreement and the initial plan by the Supervisor and Commissioner, said plan, and all subsequently approved plans shall constitute the operating obligations of the Unit Operator under this Agreement for the period specified therein. Thereafter, from time to time before the expiration of any existing plan, the Unit Operator shall submit for like approval a plan for an additional specified period of operation. After such operations are commenced, reasonable diligence shall be exercised by the Unit Operator in complying with the obligations of the approved Plan of Operation.

Notwithstanding anything to the contrary herein contained, should the Unit Operator fail to commence operation of an improved recovery project incorporating the injection of water within one (1) year after the effective date of this Agreement, or any extension thereof approved by the Supervisor, this Agreement shall terminate automatically as of the date of default.

SECTION 12. USE OF SURFACE AND USE OF WATER. The parties have to the extent of their rights and interests, hereby granted to Unit Operator the right to use as much of the surface of the Unitized Land as may reasonably be necessary for Unit Operations; provided that nothing herein shall be construed as leasing or otherwise conveying to the Unit Operator a site for water, gas injection or other plants or camp site.

Unit Operator shall have free use of water or brine or both from the Unitized Land for Unit Operations, except water from any well, lake, pond or irrigation ditch of a surface Owner, unless approval for such use is granted by the surface Owner.

Unit Operator shall pay the Owner for damages to growing crops, timber, fences, improvements and structures on the Unitized Land that result from Unit Operations.

SECTION 13. TRACT PARTICIPATION. In Exhibit "C" attached hereto there are listed and numbered the various Tracts within the Unit Area, and set forth opposite each Tract are figures which represent the Tract Participation, during Phase I and Phase II of Unit Operations if all Tracts in the Unit Area qualify as provided herein. The Phase I and

Phase II Tract Participations of each Tract as shown in Exhibit "C" were determined in accordance with the following formulas:

Tract Participation during Phase I: $50\% A + 50\% B$
Phase II: $55\% C + 45\% D$

Where A = Ratio of the volume of oil determined to be producible after 12/1/72 from each Tract to the summation of the volume of producible oil after 12/1/72 from all Tracts being 346,846 barrels.

B = Ratio of the gross income from each Tract to the summation of the gross income from all Tracts for the period 6/1/72 to 12/1/72 being \$415,900.18.

C = Ratio of the volume of oil determined to be ultimately producible from each Tract to the summation of the volume determined to be ultimately producible from all Tracts being 1,470,758 barrels.

D = Ratio of the Acre-Feet of originally productive oil reservoir from each Tract to the summation of Acre-Feet from all Tracts being 10,077.3 acre feet.

Phase I shall begin on the Effective Date of this Agreement and continuing until the first day of the calendar month next following the date on which the total number of barrels of oil produced from the Unitized Formation underlying all Tracts described in the original Exhibit "B" hereof equals 1,470,758 barrels as determined from the official production reports (currently known as C-115 reports) filed with the New Mexico Conservation Commission. Phase II shall begin with the termination of Phase I and continue for the remainder of the term of this Agreement.

In the event less than all Tracts are qualified on the Effective Date hereof, the Tract Participations shall be calculated on the basis of all such qualified Tracts rather than all Tracts in the Unit Area. The total number of barrels of oil to be produced before Phase II begins shall remain at 1,470,758 barrels; however, oil produced from all Tracts within the Unit Area, qualified as well as non-qualified Tracts, shall count toward the required total of 1,470,758 barrels.

SECTION 14. TRACTS QUALIFIED FOR PARTICIPATION. On and after the Effective Date hereof the Tracts within the Unit Area which shall be

entitled to participation in the production of Unitized Substances shall be those Tracts more particularly described in Exhibit "B" that corner or have a common boundary (Tracts separated only by a public highway or a railroad right of way shall be considered to have a common boundary), and that otherwise qualify as follows:

(a) Each Tract as to which Working Interest Owners owning one hundred percent (100%) of the Working Interest have become parties to this Agreement and as to which Royalty Owners owning seventy-five percent (75%) or more of the Royalty Interest have become parties to this Agreement.

(b) Each Tract as to which Working Interest Owners owning one hundred percent (100%) of the Working Interest have become parties to this Agreement, and as to which Royalty Owners owning less than seventy-five percent (75%) of the Royalty Interest have become parties to this Agreement, and as to which (1) Working Interest Owners, including the Working Interest Owner who operates the Tract, owning a total of seventy-five percent (75%) or more of the Working Interest in such Tract that is committed to this agreement have joined in a request for the inclusion of such Tract in the Unit Area, and as to which (2) Working Interest Owners having seventy-five percent (75%) or more of the combined Phase I Unit Participation in all Tracts that meet the requirements of Section 14 (a) above have voted in favor of the inclusion of such tract. (3) As to leases issued by the United States of America the joinder to this Agreement by the lessee of record shall supplant joinder of the Royalty Interest.

(c) Each Tract as to which Working Interest Owners owning less than one hundred percent (100%) of the Working Interest have become parties to this Agreement, regardless of the percentage of Royalty Interest therein that is committed hereto; and as to which (1) Working Interest Owners, including the Working Interest Owner who operates the Tract, owning a total of seventy-five percent (75%) or more of the Working Interest in such Tract that is committed to this Agreement have joined in a request for inclusion of such Tract in the Unit Area, and have executed and delivered, or obligated themselves to execute and deliver, an indemnity agreement indemnifying and agreeing to hold harmless the other Working Interest Owners in the Unit Area, their successors and assigns, against all claims and demands that may be made by the owners of Working Interest in such Tract who are not parties to this Agreement, and which arise out of the inclusion of the Tract in the Unit Area; and as to which (2) Working Interest Owners having seventy-five percent (75%) or more of the Unit Participation in all Tracts that meet the requirements of Section 14 (a) and 14(b) have voted in favor of the inclusion of such tract and to accept the indemnity agreement. Upon the inclusion of such a Tract in the Unit Area, the Tract Participations which would have been attributed to the non-subscribing owners of Working Interest in such Tract, had they become parties to this Agreement and the Unit Operating Agreement, shall be attributed to the Working Interest Owners in such Tract who have become parties to such agreements, and joined in the indemnity agreement, in proportion to their respective Working Interests in the Tract.

If on the Effective Date of this Agreement there is any Tract or Tracts which have not been effectively committed to or made subject to this Agreement by qualifying as above provided, then such Tract or Tracts shall not be entitled to participate hereunder. Unit Operator shall, when submitting this Agreement for final approval by the Land Commissioner and the Supervisor, file therewith a schedule of those Tracts which have been committed and made subject to this Agreement and are entitled to participate in Unitized Substances. Said schedule shall set forth opposite each such committed Tract the lease number or assignment number, the owner of record of the lease, and the percentage participation of such Tract which shall be computed according to the participation formula set out in Section 13 (Tract Participation) above. This schedule of participation shall be Revised Exhibit "C" and upon approval thereof by the Land Commissioner and the Supervisor shall become a part of this Agreement and shall govern the allocation of production of Unitized Substances until a new schedule is approved by the Land Commissioner and Supervisor.

SECTION 15. ALLOCATION OF UNITIZED SUBSTANCES. All Unitized Substances produced and saved (less, save and except any part of such Unitized Substances used in conformity with good operating practices on unitized land for drilling, operating, camp and other production or development purposes and for injection or unavoidable loss in accordance with a Plan of Operation approved by the Supervisor) shall be apportioned among and allocated to the qualified Tracts in accordance with the respective Tract Participations effective hereunder during the respective periods such Unitized Substances were produced, as set forth in the schedule of participation in Exhibit "C". The amount of Unitized Substances so allocated to each Tract, and only that amount, (regardless of whether it be more or less than the amount of the actual production of Unitized Substances from the well or wells, if any, on such Tract) shall, for all intents, uses and purposes, be deemed to have been produced from such Tract.

The Unitized Substances allocated to each Tract shall be distributed among, or accounted for, to the parties entitled to share in the production from such Tract in the same manner, in the same proportions, and upon the same conditions, as they would have participated and shared in the production from such Tracts, or in the proceeds thereof, had this Agreement not been entered into; and with the same legal force and effect.

No Tract committed to this Agreement and qualified for participation as above provided shall be subsequently excluded from participation hereunder on account of depletion of Unitized Substances.

If the Working Interest and/or the Royalty Interest in any Tract are divided with respect to separate parcels or portions of such Tract and owned now or hereafter in severalty by different persons, the Tract Participation during both Phase I and Phase II shall, in the absence of a recordable instrument executed by all owners and furnished to Unit Operator fixing the divisions of ownership, be divided among such parcels or portions in proportion to the number of surface acres in each.

The Unitized Substances allocated to each Tract shall be delivered in kind to the respective Working Interest Owners and parties entitled thereto by virtue of the ownership of Oil and Gas Rights therein. Each Working Interest Owner and the parties entitled thereto shall have the continuing right to receive such production in kind at a common point within the Unit Area and to sell or dispose of the same as it sees fit. Each such party shall have the right to construct, maintain and operate all necessary facilities for that purpose on unitized land, provided the same are so constructed, maintained and operated as not to interfere with operations carried on pursuant hereto. Subject to Section 17 hereof, any extra expenditure incurred by Unit Operator by reason of the delivery in kind of any portion of the Unitized Substances shall be borne by the party responsible therefor under the controlling lease or contract. In the event any Interest Owner shall fail to take or otherwise adequately dispose of its proportionate share of the production from the Unitized Formation currently as and when produced, then so long as such condition continues, Unit Operator, for the account and at the expense of the Working Interest Owner of the Tract or Tracts concerned, and in order to avoid curtailing the operation of the Unit Area, may, but shall not be required to, sell or otherwise dispose of such production to itself or to others on a day-to-day basis, provided that all contracts of sale by Unit Operator of any other party's share of Unitized Substances shall be only for such reasonable periods of time as are consistent with the minimum needs of the industry under the circumstances, but in no event shall any such contract be for a period in excess of one year, and at not less than the prevailing market price in the area for like production, and the account of such Working Interest Owner shall be charged therewith as having received such production. The net proceeds, if any, of the Unitized Substances so disposed of by Unit Operator shall be paid to the Working Interest Owner of the Tract or Tracts concerned. Notwithstanding the foregoing, Unit Operator shall not make a sale into interstate commerce of any Working Interest Owner's share of gas production without first giving such Working Interest Owner sixty (60) days notice of such intended sale.

Any Working Interest Owner receiving in kind or separately disposing of all or any part of the Unitized Substances allocated to any Tract,

or receiving the proceeds therefrom if the same is sold or purchased by Unit Operator, shall be responsible for the payment of all Royalty, overriding royalty and production payments due thereon, and each such party shall hold each other Working Interest Owner harmless against all claims, demands and causes of action by owners of such Royalty, overriding royalty and production payments.

If, after the Effective Date of this Agreement, there is any Tract or Tracts that are subsequently committed hereto, as provided in Section 4 (Expansion) hereof, or any Tract or Tracts within the Unit Area not committed hereto as of the Effective Date hereof but which are subsequently committed under the provisions of Section 14 (Tracts Qualified for Participation) and Section 32 (Nonjoinder and Subsequent Joinder), or if any Tract is excluded from this Agreement as provided for in Section 31 (Loss of Title), the schedule of participation as shown in Exhibit "C", shall be revised by the Unit Operator; and the revised Exhibit "C", upon approval by the Land Commissioner and the Supervisor, shall govern the allocation of production on and after the effective date thereof until a revised schedule is approved as hereinabove provided. In any such revised Exhibit "C", pursuant to this paragraph, the Tract Participation of the previously qualified Tracts shall remain in the same ratio one to the other.

SECTION 16. OUTSIDE SUBSTANCES. If gas obtained from formations not subject to this Agreement is introduced into the Unitized Formation for use in repressuring, stimulating of production or increasing ultimate recovery which shall be in conformity with a Plan of Operation first approved by the Land Commissioner, the Commission, and the Supervisor, a like amount of gas with appropriate deduction for loss or depletion from any cause may be withdrawn from unit wells completed in the Unitized Formation royalty free as to dry gas, but not royalty free as to the products extracted therefrom; provided that such withdrawal shall be at such time as may be provided in the approved Plan of Operation or as otherwise may be consented to or prescribed by the Land Commissioner, the Commission, and the Supervisor as conforming to good petroleum engineering practices and provided further that such right of withdrawal shall terminate on the termination date of this Agreement.

SECTION 17. ROYALTY SETTLEMENT. The State of New Mexico and United States of America and all Royalty Owners who, under an existing contract, are entitled to take in kind a share of the substances produced from any Tract unitized hereunder, shall continue to be entitled to such right to take in kind their share of the Unitized Substances allocated to such Tract, and Unit Operator shall make deliveries of such Royalty share taken in kind in conformity with the applicable contracts, laws and regulations. Settlement for Royalty not taken in kind shall be made by Working Interest Owners responsible therefor under existing contracts, laws and regulations on or before the last day of each month for Unitized Substances produced during the preceding calendar month; provided, however, that nothing herein contained shall operate to relieve the lessees

of any land from their respective lease obligations for the payment of any Royalty due under their leases, except that such Royalty shall be computed on Unitized Substances as allocated to each Tract in accordance with the terms of this Agreement. With respect to Federal leases committed hereto on which the royalty rate depends upon the daily average production per well, such average production shall be determined in accordance with the operating regulations pertaining to Federal leases as though the committed Tracts were included in a single consolidated lease.

If the amount of production or the proceeds thereof accruing to any Royalty Owner (except the United States of America) in a Tract depends upon the average production per well or the average pipeline runs per well from such Tract during any period of time, then such production shall be determined from and after the effective date hereof by dividing the quantity of Unitized Substances allocated hereunder to such Tract during such period of time by the number of wells located thereon capable of producing Unitized Substances as of the Effective Date hereof, provided that any Tract not having any well so capable of producing Unitized Substances on the Effective Date hereof shall be considered as having one such well for the purpose of this provision.

All Royalty due the State of New Mexico and the United States of America and the other Royalty Owners hereunder shall be computed and paid on the basis of all Unitized Substances allocated to the respective Tract or Tracts committed hereto, in lieu of actual production from such Tract or Tracts.

Each Royalty Owner (other than the State of New Mexico and the United States of America) that executes this Agreement represents and warrants that it is the owner of a Royalty Interest in a Tract or Tracts within the Unit Area as its interest appears in Exhibit "B" attached hereto. If any Royalty Interest in a Tract or Tracts should be lost by title failure or otherwise in whole or in part, during the term of this Agreement, then the Royalty Interest of the party representing himself to be the owner thereof shall be reduced proportionately and the interests of all parties shall be adjusted accordingly.

SECTION 18. RENTAL SETTLEMENT. Rentals or minimum Royalties due on leases committed hereto shall be paid by Working Interest Owners responsible therefor under existing contracts, laws and regulations provided that nothing herein contained shall operate to relieve the lessees of any land from their respective lease obligations for the payment of any rental or minimum Royalty in lieu thereof, due under their leases. Rental for lands of the State of New Mexico subject to this Agreement shall be paid at the rate specified in the respective leases from the State of New Mexico. Rental or minimum Royalty for lands of the United States of America subject to this Agreement shall be paid at the rate specified in the respective leases from the United States of America, unless such rental or minimum Royalty is waived, suspended or reduced by law or by approval of the Secretary or his duly authorized representative.

SECTION 19. CONSERVATION. Operations hereunder and production of Unitized Substances shall be conducted to provide for the most economical and efficient recovery of said substances without waste, as defined by or pursuant to Federal and State laws and regulations.

SECTION 20. DRAINAGE. The Unit Operator shall take appropriate and adequate measures to prevent drainage of Unitized Substances from unitized land by wells on land not subject to this Agreement.

The Unit Operator, upon approval by the Working Interest Owners, the Supervisor and the Land Commissioner, is hereby empowered to enter into a border line agreement or agreements with working interest owners of adjoining lands not subject to this Agreement with respect to operation in the border area for the maximum economic recovery, conservation purposes and proper protection of the parties and interest affected.

SECTION 21. LEASES AND CONTRACTS CONFORMED AND EXTENDED. The terms, conditions and provisions of all leases, subleases and other contracts relating to exploration, drilling, development or operation for oil or gas on lands committed to this Agreement are hereby expressly modified and amended to the extent necessary to make the same conform to the provisions hereof, but otherwise to remain in full force and effect, and the parties hereto hereby consent that the Secretary and the Land Commissioner, respectively, shall and by their approval hereof, or by the approval hereof by their duly authorized representatives, do hereby establish, alter, change or revoke the drilling, producing, rental, minimum Royalty and Royalty requirements of Federal and State leases committed hereto and the regulations in respect thereto to conform said requirements to the provisions of this Agreement.

Without limiting the generality of the foregoing, all leases, subleases and contracts are particularly modified in accordance with the following:

(a) The development and operation of lands subject to this Agreement under the terms hereof shall be deemed full performance of all obligations for development and operation with respect to each part or separately owned Tract subject to this Agreement, regardless of whether there is any development of any particular part or Tract of the Unit Area, notwithstanding anything to the contrary in any lease, operating agreement or other contract by and between the parties hereto, or their respective predecessors in interest, or any of them.

(b) Drilling, producing or improved recovery operations performed hereunder shall be deemed to be performed upon and for the benefit of each Tract, and no lease shall be deemed to expire by reason of failure to drill or produce wells situated on the land therein embraced.

(c) Suspension of drilling or producing operations on all unitized lands pursuant to direction or consent of the Land Commissioner and the Secretary, or their duly authorized representatives, shall be deemed to constitute such suspension pursuant to such direction or consent as to each Tract of unitized lands.

(d) Each lease, sublease, or contract relating to the exploration, drilling, development or operation for oil and gas which by its terms might expire prior to the termination of this Agreement, is hereby extended beyond any such term so provided therein, so that it shall be continued in full force and effect for and during the term of this Agreement.

(e) Any lease embracing lands of the State of New Mexico which is made subject to this Agreement shall continue in force beyond the term provided therein as to the lands committed hereto until the termination hereof.

(f) Any lease embracing lands of the State of New Mexico having only a portion of its land committed hereto shall be segregated as to that portion committed and that not committed, and the terms of such lease shall apply separately to such segregated portions commencing as of the effective date hereof. Provided, however, that notwithstanding any of the provisions of this Agreement to the contrary, such lease shall continue in full force and effect beyond the term provided therein as to all lands embraced in such lease if oil or gas is, or has heretofore been discovered in paying quantities on some part of the lands embraced in such lease committed to this Agreement or, so long as a portion of the Unitized Substances produced from the Unit Area is, under the terms of this Agreement, allocated to the portion of the lands covered by such lease committed to this Agreement, or, at any time during the term hereof, as to any lease that is then valid and subsisting and upon which the lessee or the Unit Operator is then engaged in bona fide drilling, reworking, or improved recovery operations on any part of the lands embraced in such lease, then the same as to all lands embraced therein shall remain in full force and effect so long as such operations are diligently prosecuted, and if they result in the production of oil or gas, said lease shall continue in full force and effect as to all of the lands embraced therein, so long thereafter as oil or gas in paying quantities is being produced from any portion of said lands.

(g) The segregation of any Federal lease committed to this Agreement is governed by the following provision in the fourth paragraph of Section 17 (j) of the Mineral Leasing Act, as amended by the Act of September 2, 1960, (74 Stat. 781-784): "Any (Federal) lease heretofore or hereafter committed to any such (unit) plan embracing lands that are in part within and in part outside of the area covered by any such plan shall be segregated into separate leases as to the lands committed and the lands not committed as of the Effective Date of unitization; provided, however, that any such lease as to the non-unitized portion shall continue in force and effect for the term

thereof but for not less than two years from the date of such segregation and so long thereafter as oil or gas is produced in Paying Quantities."

Section 22. COVENANTS RUN WITH LAND. The covenants herein shall be construed to be covenants running with the land with respect to the interest of the parties hereto and their successors in interest until this Agreement terminates, and any grant, transfer or conveyance of interest in land or leases subject hereto shall be and hereby is conditioned upon the assumption of all privileges and obligations hereunder by the grantee, transferee or other successor in interest. No assignment or transfer of any Working Interest subject hereto shall be binding upon Unit Operator until the first day of the calendar month after Unit Operator is furnished with the original, or acceptable photostatic or certified copy of the recorded instrument or transfer; and no assignment or transfer of any Royalty Interest subject hereto shall be binding upon the Working Interest Owner responsible therefor until the first day of the calendar month after said Working Interest Owner is furnished with the original, or acceptable photostatic or certified copy, of the recorded instrument or transfer.

SECTION 23. EFFECTIVE DATE AND TERM. This Agreement shall become binding upon each party who executes or ratifies it as of the date of execution or ratification by such party and shall become effective on the first day of the calendar month next following the approval of this Agreement by the Supervisor, the Land Commissioner and the Commission, and the filing of this Agreement or notice thereof in the Office of the County Clerk of the County in which the Unit Area is situated.

If this Agreement does not become effective on or before January 1, 1976, it shall ipso facto expire on said date (hereinafter called "expiration date") and thereafter be of no further force or effect, unless prior thereto this Agreement has been executed or ratified by Working Interest Owners owning a combined Phase I Participation of at least eighty percent (80%), and at least seventy-five percent (75%) of such Working Interest committed to this Agreement have decided to extend said expiration date for a period not to exceed six months (hereinafter called "extended expiration date"). If said expiration date is so extended and this Agreement does not become effective on or before said extended expiration date, it shall ipso facto expire on said extended expiration date and thereafter be of no further force or effect.

Unit Operator shall file for record within thirty (30) days after the Effective Date of this Agreement, in the office where a counter part of this Agreement is recorded, a certificate to the effect that this Agreement has become effective according to its terms and stating further the effective date.

The term of this Agreement shall be for and during the time that Unitized Substances are produced from the unitized land and so long thereafter as drilling, reworking or other operations (including secondary recovery operations) are prosecuted thereon without cessation of more than ninety (90) consecutive days unless sooner terminated as herein provided.

This Agreement may be terminated with the approval of the Land Commissioner and the Supervisor by Working Interest Owners owning eighty percent (80%) of the Unit Participation then in effect whenever such Working Interest Owners determine that Unit Operations are no longer profitable, or in the interest of conservation. Upon approval, such termination shall be effective as of the first day of the month after said Working Interest Owners' determination. Notice of any such termination shall be filed by Unit Operator in the office of the County Clerk of Chaves County, New Mexico, within thirty (30) days of the effective date of termination.

Upon termination of this Agreement, the parties hereto shall be governed by the terms and provisions of the leases and contracts affecting the separate Tracts just as if this Agreement had never been entered into.

If not otherwise provided by the leases unitized under this Agreement, Royalty Owners hereby grant Working Interest Owners a period of six months after termination of this Agreement in which to salvage, sell, distribute or otherwise dispose of the personal property and facilities used in connection with Unit Operations.

SECTION 24. RATE OF PROSPECTING, DEVELOPMENT AND PRODUCTION. All production and the disposal thereof shall be in conformity with allocations and quotas made or fixed by any duly authorized person or regulatory body under any Federal or State statute. The Director is hereby vested with authority to alter or modify from time to time, in his discretion, the rate of prospecting and development and within the limits made or fixed by the Commission to alter or modify the quantity and rate of production under this Agreement, such authority being hereby limited to alteration or modification in the public interest, the purpose thereof and the public interest to be served thereby to be stated in the order of alteration or modification; provided, further, that no such alteration or modification shall be effective as to any land of the State of New Mexico as to the rate of prospecting and development in the absence of the specific written approval thereof by the Land Commissioner and as to any lands of the State of New Mexico or privately-owned lands subject to this Agreement or to the quantity and rate of production from such lands in the absence of specific written approval thereof by the Commission.

Powers in this Section vested in the Director shall only be exercised after notice to Unit Operator and opportunity for hearing to be held not less than fifteen (15) days from notice, and thereafter subject to administrative appeal before becoming final.

SECTION 25. NONDISCRIMINATION. Unit Operator in connection with the performance of work under this Agreement relating to leases of the United States agrees to comply with the clauses set forth in Exhibit "D" attached hereto and made a part hereof.

SECTION 26. APPEARANCES. Unit Operator shall have the right to appear for or on behalf of any interests affected hereby before the Land Commissioner, the Department, and the Commission, and to appeal from any order issued under the rules and regulations of the Land Commissioner, the Department or the Commission, or to apply for relief from any of said rules and regulations or in any proceedings relative to operations before the Land Commissioner, the Department or the Commission or any other legally constituted authority; provided, however, that any other interested party shall also have the right at his or its own expense to be heard in any such proceeding.

SECTION 27. NOTICES. All notices, demands, objections or statements required hereunder to be given or rendered to the parties hereto shall be deemed fully given if made in writing and personally delivered to the party or parties or sent by postpaid certified or registered mail, addressed to such party or parties at their respective addresses set forth in connection with the signatures hereto or to the ratification or consent hereof or to such other address as any such party or parties may have furnished in writing to the party sending the notice, demand or statement.

SECTION 28. NO WAIVER OF CERTAIN RIGHTS. Nothing in this Agreement contained shall be construed as a waiver by any party hereto of the right to assert any legal or constitutional right or defense as to the validity or invalidity of any law of the State wherein said Unitized Lands are located, or regulations issued thereunder in any way affecting such party, or as a waiver by any such party of any right beyond his or its authority to waive; provided, however, each party hereto covenants that it will not resort to any action to partition the unitized land or the Unit Equipment.

SECTION 29. EQUIPMENT AND FACILITIES NOT FIXTURES ATTACHED TO REALTY. Each Working Interest Owner has heretofore placed and used on its Tract or Tracts committed to this Agreement various well and lease equipment and other property, equipment and facilities. It is also recognized that additional equipment and facilities may hereafter be placed and used upon the Unitized Land as now or hereafter constituted. Therefore, for all purposes of this Agreement any such equipment shall be considered to be personal property and not fixtures attached to realty. Accordingly, said well and lease equipment and personal property is hereby severed from the mineral estates affected by this Agreement, and it is agreed that any such equipment and personal property shall be and remain personal property of the Working Interest Owners for all purposes.

SECTION 30. UNAVOIDABLE DELAY. All obligations under this Agreement requiring the Unit Operator to commence or continue improved recovery operations or to operate on or produce Unitized Substances from any of the lands covered by this Agreement shall be suspended while, but only so long as, the Unit Operator, despite the exercise of due care and diligence, is prevented from complying with such obligations, in whole

or in part, by strikes, acts of God, Federal, State or municipal law or agency, unavoidable accident, uncontrollable delays in transportation, inability to obtain necessary materials in open market, or other matters beyond the reasonable control of the Unit Operator whether similar to matters herein enumerated or not.

SECTION 31. LOSS OF TITLE. In the event title to any Tract of Unitized Land shall fail so as to render the Tract inoperable under this Agreement and the true owner cannot be induced to join this Agreement, such Tract shall be automatically regarded as not committed hereto as of the first day of the calendar month in which the failure of title is determined and there shall be such readjustment of future costs and benefits as may be required on account of the loss of such title. In the event of a dispute as to title as to any Royalty, Working Interest or other interest subject thereto, payment or delivery on account thereof may be withheld without liability or interest until the dispute is finally settled; provided, that as to State or Federal land or leases, no payments of funds due the State of New Mexico or the United States of America shall be withheld, but such funds shall be deposited as directed by the Land Commissioner and/or the Supervisor (as the case may be), to be held as unearned money pending final settlement of the title dispute, and then applied as earned or returned in accordance with such final settlement.

Unit Operator as such is relieved from any responsibility for any defect or failure of any title hereunder.

SECTION 32. NONJOINDER AND SUBSEQUENT JOINDER. Joinder by any Royalty Owner, at any time, must be accompanied by appropriate joinder of the corresponding Working Interest Owner in order for the interest of such Royalty Owner to be regarded as effectively committed. Joinder to this Agreement by a Working Interest Owner, at any time, must be accompanied by appropriate joinder to the Unit Operating Agreement in order for such interest to be regarded as effectively committed to this Agreement.

Any oil or gas interest in the Unitized Formations not committed hereto prior to submission of this Agreement to the Land Commissioner and the Supervisor for final approval may thereafter be committed hereto upon compliance with the applicable provisions of this Section and of Section 14 (Tracts Qualified for Participation) hereof, at any time up to the effective date hereof on the same basis of participation as provided in said Section 14, by the owner or owners thereof subscribing, ratifying, or consenting in writing to this Agreement and, if the interest is a Working Interest, by the owner of such interest subscribing also to the Unit Operating Agreement.

It is understood and agreed, however, that from and after the Effective Date hereof the right of subsequent Joinder as provided in this Section shall be subject to such requirements or approvals and on such basis as may be agreed upon by Working Interest Owners owning not less than sixty-five percent (65%) of the Unit Participation then in effect,

and approved by the Land Commissioner and Supervisor. Such subsequent joinder by a proposed Working Interest Owner must be evidenced by his execution or ratification of this Agreement and the Unit Operating Agreement and, where State or Federal land is involved, such Joinder must be approved by the Land Commissioner or Supervisor. Such Joinder by a proposed Royalty Owner must be evidenced by his execution, ratification or consent of this Agreement and must be consented to in writing by the Working Interest Owner responsible for the payment of any benefits that may accrue hereunder in behalf of such proposed Royalty Owner. Except as may be otherwise herein provided, subsequent joinder to this Agreement shall be effective as of the first day of the month following the filing with the Land Commissioner and the Supervisor of duly executed counterparts of any and all documents necessary to establish effective commitment of any Tract or interest to this Agreement, unless objection to such joinder by the Land Commissioner or the Supervisor is duly made sixty (60) days after such filing.

SECTION 33. COUNTERPARTS. This Agreement may be executed in any number of counterparts, no one of which needs to be executed by all parties and may be ratified or consented to by separate instrument in writing, specifically referring hereto, and shall be binding upon all those parties who have executed such a counterpart, ratification or consent hereto with the same force and effect as if all parties had signed the same document, and regardless of whether or not it is executed by all other parties owning or claiming an interest in the land within the above described Unit Area.

SECTION 34. JOINDER IN DUAL CAPACITY. Execution as herein provided by any party as either a Working Interest Owner or a Royalty Owner shall commit all interests owned or controlled by such party; provided, that if the party is the owner of a Working Interest, he must also execute the Unit Operating Agreement.

SECTION 35. TAXES. Each party hereto shall, for its own account, render and pay its share of any taxes levied against or measured by the amount or value of the Unitized Substances produced from the unitized land; provided, however, that if it is required or if it be determined that the Unit Operator or the several Working Interest Owners must pay or advance said taxes for the account of the parties hereto, it is hereby expressly agreed that the parties so paying or advancing said taxes shall be reimbursed therefor by the parties hereto, including Royalty Owners, who may be responsible for the taxes on their respective allocated share of said Unitized Substances. No taxes shall be charged to the United States or to the State of New Mexico, nor to any lessor who has a contract with a lessee which requires his lessee to pay such taxes.

SECTION 36. NO PARTNERSHIP. The duties, obligations and liabilities of the parties hereto are intended to be several and not joint or collective. This Agreement is not intended to create, and shall not be construed to create, an association or trust, or to impose a partnership

duty, obligation or liability with regard to any one or more of the parties hereto. Each party hereto shall be individually responsible for its own obligations as herein provided.

SECTION 37. PRODUCTION AS OF THE EFFECTIVE DATE. Unit Operator shall make a proper and timely gauge of all leases and other tanks within the Unitized Area in order to ascertain the amount of merchant able oil above the pipe line connection in such tanks as of the effective date hereof. All such oil which has then been produced in accordance with established allowables shall be and remain the property of the Working Interest Owner entitled thereto, the same as if the unit had not been formed, and the responsible Working Interest Owner shall promptly remove said oil from the Unitized Land. Any such oil not so removed shall be sold by Unit Operator for the account of such Working Interest Owners, subject to the payment of all Royalty to Royalty Owners under the terms hereof. The oil that is in excess of the prior allowable of the wells from which it was produced shall be regarded as Unitized Substances produced after Effective Date hereof.

If, as of the Effective Date hereof, any Tract is overproduced with respect to the allowable of the wells on that Tract and the amount of over-production has been sold or otherwise disposed of, such over-production shall be regarded as a part of the Unitized Substances produced after the Effective Date hereof and shall be charged to such Tract as having been delivered to the parties entitled to Unitized Substances allocated to such Tract.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed and have set opposite their representative names the date of execution

BURK ROYALTY CO.
Unit Operator and Working Interest Owner

BY: _____
Vice-President

800 Oil & Gas Building
Wichita Falls, Texas 76301

STATE OF TEXAS X
 SS:
COUNTY OF WICHITA X

The foregoing instrument was acknowledged before me this ____ day of _____, 1975, by _____, Vice-President for Burk Royalty Co., a Texas corporation, on behalf of said corporation.

Notary Public in and for
County, Texas.

My Commission expires:

DOUBLE L QUEEN UNIT
Chaves County, New Mexico

TRACT LOCATOR KEY
Exhibit A Supplement

<u>Tract</u>	<u>Section In Which Located</u>
1	18 T-15-S R-30-E
2	13 T-15-S R-29-E
3	31 T-14-S R-30-E
4	31 T-14-S R-30-E
5	31 T-14-S R-30-E
6	6 T-15-S R-30-E
7	6 T-15-S R-30-E
8	6 T-15-S R-30-E
9	7 T-15-S R-30-E
10	7 T-15-S R-30-E
11	6 T-15-S R-30-E
12	12 T-15-S R-29-E
13	23 T-14-S R-29-E
14	7 T-15-S R-30-E
15	12 T-15-S R-29-E
16	12 T-15-S R-29-E
17	36 T-14-S R-29-E
18	12 T-15-S R-29-E
19	25 T-14-S R-29-E
20	1 T-15-S R-29-E
21	24 T-14-S R-29-E
22	24 T-14-S R-29-E
23	1 T-15-S R-29-E
24	6 T-15-S R-30-E
	6 T-15-S R-30-E

EXHIBIT "B"
To Unit Agreement
DOUBLE L QUEEN UNIT
Chaves County, New Mexico
January 1, 1975

Tract No.	Description of Land	No. of Acres	Serial No. & Expiration Date Of Lease	Basic Royalty Ownership and Percentage	Lessee of Record	Overriding Royalty Owner and Percentage	Working Interest Owner and Percentage
Federal Land							
1	T-15-S, R-30-E, Sec. 18; Lot 1,2, E 1/2 NW 1/4 (Lisa B Federal)	160.77	NM-17114 Segre- gated out of LC-069280 7/1/59 HBP	USA 12.50%	L. C. Harris 1/4 J. Penrod Toles 1/6 Robert L. Graham 1/6 Robert Patterson 1/6 Albert J. Black 1/8 Jack McClellan 1/8	Henry R. Wilson 3.0468% William J. Schnedar .0677% John Schnedar .0677% Jeanne S. Kunko .0677% Texaco, Inc. 3.0000%	McClellan Oil Corporation 12.50% L. C. Harris 25.00% J. Penrod Toles 16.67% Robert M. Patterson 16.67% Robert L. Graham 16.66% Albert J. Black 12.50%
2	T-15-S, R-29-E, Sec. 13; NE/4 NE/4	40.00	NM-17114 Segre- gated out of LC-069280-B 7/1/59 HBP	USA 12.50%	L. C. Harris 1/4 J. Penrod Toles 1/6 Robert L. Graham 1/6 Robert Patterson 1/6 Albert J. Black 1/8 Jack McClellan 1/8	Henry R. Wilson 3.0468% William J. Schnedar .0677% John Schnedar .0677% Jeanne S. Kunko .0677% Texaco, Inc. 3.0000%	McClellan Oil Corporation 12.50% L. C. Harris 25.00% J. Penrod Toles 16.67% Robert M. Patterson 16.67% Robert L. Graham 16.66% Albert J. Black 12.50%
3	T-14-S, R-30-E, Sec. 31; W/2 SE/4 (Elyse Federal)	80.00	NM-0199070-A 11/1/71 HBP	USA 12.50%	Amerada Hess Corporation	Amoco 4.0000% Amerada BPO 6.2500% APO 8.5000%	McClellan Oil Corporation 12.50% Abby Corporation 25.00% J. Penrod Toles 16.67% Robert L. Graham 16.66% Albert J. Black 12.50%
4	T-14-S, R-30-E, Sec. 31; SE/4 SE/4	40.00	NM-0199070-A 11/1/71 HBP	USA, 12.50%	Amerada Hess Corporation	Wolfson Oil Co.	Wolfson Oil Co. 100.00%

EXHIBIT "B"
To Unit Agreement
DOUBLE L QUEEN UNIT
Chaves County, New Mexico
January 1, 1975

Tract No.	Description of Land	No. of Acres	Serial No. & Expiration Date Of Lease	Basic Royalty Ownership and Percentage	Lessee of Record	Overriding Royalty Owner and Percentage	Working Interest Owner and Percentage
5	T-14-S, R-30-E, Sec. 31; W/2 (Amoco-Federal Lse.)	314.20	NM-0199070-B 11/1/71 HBP	USA 12.50%	Dalport Oil Corp. 1/2 Burk Royalty Co. 1/2	Amoco Oil Corp. 5.0000% Leon M. Lampert 1.2500%	Dalport Oil Corp. 50.00% Burk Royalty Co. 50.00%
6	T-15-S, R-30-E, Sec. 6; NW/4 SE/4	40.00	NM-0199827-A	USA 100.00%	Amerada-Hess Corp.	Charles P. Kimpel 3.0000%	Wolfson Oil Co. 100.00%
7	T-15-S, R-30-E, Sec. 6; E/2 SW/4 (Sue Federal)	80.00	NM-0199827-A 11/1/71 HBP	USA 12.50%	Amerada-Hess Corp.	E. G. McNeil .3333% R. Walter/Zealand .2500% Kaibab Corp. .6666% Charles P. Kimpel .7500% Amerada Hess BFO 6.2500% APO 9.5000%	McClellan Oil Corporation 12.50% L. C. Harris 25.00% J. Penrod Toles 16.67% Robert M. Patterson 16.66% Robert L. Graham 16.67% Albert J. Black 12.50%
8	T-15-S, R-30-E, Lots 1 & 2, Sec. 7; (Hesse Federal)	78.92	USA-0306551 9/1/72 HBP	USA 12.50%	Exxon Corporation	R.E.S. Hesse, etux 1.5000% Hazel M. Hesse C. E. Strange, etux 1.5000% Sherrie R. Strange	Exxon 100.00%
9	T-15-S, R-30-E, Sec. 7; SE/4 NW/4 (Marion Federal)	40.00	NM-0306551 9/1/72 HBP	USA 12.50%	Exxon Corporation	R.E.S. Hesse 1.5000% Humble BFO 6.2500% APO 12.5000% C. E. Strange 1.5000%	McClellan Oil Corporation 12.50% L. C. Harris 25.00% J. Penrod Toles 16.66% Robert M. Patterson 16.67% Robert L. Graham 16.67% Albert J. Black 12.50%

EXHIBIT "B"
To Unit Agreement
DOUBLE L QUEEN UNIT
Chaves County, New Mexico
January 1, 1975

Tract No.	Description of Land	No. of Acres	Serial No. & Expiration Date Of Lease	Basic Royalty Ownership and Percentage	Lessee of Record	Overriding Royalty Owner and Percentage	Working Interest Owner and Percentage
10	T-15-S, R-30-E, Sec. 6; Lots 6 & 7 (DeSmet Federal)	78.47	NM-0317354 6/1/72 HBP	USA 12.50%	Exxon Corporation	Thelma F. DeSmet & Richard P. DeSmet 3.0000%	Exxon 100.00%
11	T-15-S, R-29-E, Sec. 12; W/2 NE/4 (Amerada Federal)	80.00	NM-0390243	USA 100.00%	Amerada-Hess Corp.	None	Wolfson Oil Co. 100.00%
12	T-14-S, R-29-E, Sec. 23; E/2 SE/4 (Joseph W. Falgout)	80.00	NM-0493690 1/1/74 HBP	USA 12.50%	Amoco Production Co.	Joseph J. Falgout .5000% Lester E. Kabacoff 1.5000% Edgar B. Stern, Jr. 1.5000% Phillip B. Stern 1.5000%	Amoco Production Co. 100.00%
13	T-15-S, R-30-E, Sec. 7; Lots 3 & 4 (Mary Jane Federal)	79.08	NM-3287 10/1/77 HBP	USA 12.50%	L. C. Harris 1/4 J. Penrod Toles 1/6 Robert L. Graham 1/6 Robert Patterson 1/6 Albert J. Black 1/8 Jack McClellan 1/8	D. O. Keon, etux 5.0000%	McClellan Oil Corporation 12.50% L. C. Harris 25.00% J. Penrod Toles 16.67% Robert M. Patterson 16.67% Robert L. Graham 16.66% Albert J. Black 12.50%
14	T-15-S, R-29-E, Sec. 12; SE/4 SE/4 (Barbara Federal)	40.00	NM-3613 11/1/77 HBP	USA 12.50%	L. C. Harris 1/4 J. Penrod Toles 1/6 Robert L. Graham 1/6 Robert Patterson 1/6 Albert J. Black 1/8 Jack McClellan 1/8	Thomas G. Slanker, Jr., Etux .7500% Consuelo M. Johnstone .7500% Laron P. Martin .7500% Mrs. Mercedes M. Martin .7500%	McClellan Oil Corporation 12.50% L. C. Harris 25.00% J. Penrod Toles 16.66% Robert M. Patterson 16.67% Robert L. Graham 16.67% Albert J. Black 12.50%

Total 14 Federal Tracts ----- 1231.44 acres or 46.12% of Unit Area

EXHIBIT "B"
To Unit Agreement
DOUBLE L QUEEN UNIT
Chaves County, New Mexico
January 1, 1975

Tract No.	Description of Land	No. of Acres	Serial No. & Expiration Date Of Lease	Basic Royalty Ownership and Percentage	Lessee of Record	Overriding Royalty Owner and Percentage	Working Interest Owner & Percentage
State Land							
15	T-15-S, R-29-E, Sec. 12; SE/4 NE/4, NE/4 SE/4, C.S. (Sunset-State)	80.00	B-10417-10 7/6/43 HBP	State of New Mexico-12.50%	Crown Central Petroleum Corp.	Leon M. Lampert, Trustee 1.0000%	Dalport Oil Corp. 37.50% Burk Royalty Co. 37.50% Crown Central Petroleum Corp. 12.50% Walters Amusements, Inc. 12.50%
16	T-14-S, R-29-E; Sec. 25; NE/4 SW/4, NW/4 SE/4 S/2 SE/4, C.S. (Spurck-State) Section 36: NE/4 NW/4, NE/4 N/2 SE/4, SE/4 SE/4, C. S. (Spurck State)	480.00	B-10418-78 7/6/53 HBP	State of New Mexico-12.50%	Dalport Oil Corp.	Vada Spurck 6.2500%	Dalport Oil Corp. 37.50% Burk Royalty Co. 62.50%
17	T-15-S, R-29-E, Sec. 12; NE/4 NE/4 C.S. (Lois State)	40.01	K-4988-1 5/18/75 HBP	State of New Mexico-12.50%	Humble Oil & Refining Co.	Humble 12.5000%	McClellan Oil Corporation 75.00% J. Penrod Toles 8.34% Robert M. Patterson 8.33% Robert L. Graham 8.33%
18	T-14-S, R-29-E, Sec. 25; NW/4, SW/4 NE/4 NW/4 SW/4, SE/4 SW/4 (State "EK")	280.00	K-5652-2 1/18/76 HBP	State of New Mexico-12.50%	Amoco Production Co.	Ben B. & Mabelle E. Ginsberg 2.5000% W.G. Smith, Jr. .6250% Audrey C. Smith .6250% C. E. Dorsey 1.2500%	Amoco Production Co. 100.00%

EXHIBIT "B"
To Unit Agreement
DOUBLE L QUEEN UNIT
Chaves County, New Mexico
January 1, 1975

Tract No.	Description of Land	No. of Acres	Serial No. & Expiration Date Of Lease	Basic Royalty Ownership and Percentage	Lessee of Record	Overriding Royalty Owner and Percentage	Working Interest Owner and Percentage
19	T-15-S, R-29-E, Sec. 1; SE/4 NE/4, E/2 SE/4 C. S. (Rob)	120.00	K-6647 1-17-77	HBP State of New Mexico-12.50%	R. G. McPheron	Robt. L. Summers 3.1250% Margaret McPheron 1.5625% Robt. Lee McPheron .7812% Collen G. McPheron .7812% Wallace 1.0000% Leon N. Lampert, Trustee	Dalport Oil Corporation 50.00% Burk Royalty Co. 50.00%
20	T-14-S, R-29-E, Sec. 24; NW/4 SW/4, C. S. (Sun State)	40.00	K-6772-1 12-1-81	HBP State of New Mexico-12.50%	Sun Oil Company	Sun Oil Company 15.0000%	Roark & Hooker 87.50% J. C. Monk 12.50%
21	T-14-S, R-29-E, Sec. 24; SW/4 SW/4, C. S. (Sun State)	40.00	K-6772-1 12-1-81	HBP State of New Mexico-12.50%	Sun Oil Company	Sun Oil Company 6.2500%	McClellan Oil Corporation 12.50% Wall Street Oil Corp. 12.50% W. W. La Force, Jr. 25.00% Tom Schneider 12.50% A. N. Norwood 12.50% George Eng 6.25% Alan Q. Norwood 6.25% W. B. Perry, Jr. 3.1250% Charles H. Juni 3.1250% Wallace G. Comer 3.1250% Warren D. Barton 1.5625% G. W. Green 1.5625%

EXHIBIT "B"
To Unit Agreement
DOUBLE L QUEEN UNIT
Chaves County, New Mexico
January 1, 1975

Tract No.	Description of Land	No. of Acres	Serial No. & Expiration Date Of Lease	Basic Royalty Ownership and Percentage	Lessee of Record	Overriding Royalty Owner and Percentage	Working Interest Owner and Percentage
22	T-15-S, R-29-E, Sec. 1, NE/4 NE/4	40.01	K-4321 8/18/74	State of New Mexico-12.50%	Covine Grace	None	Covine Grace 100.00%

Total 8 State Tracts ----- 1121.02 acres or 41.95% of Unit Area

Fee Land							
23	T-15-S, R-30-E, Sec. 6; Lots 1 & 2 S/2 NE/4 (Florence B. Lusk)	160.53	Fee 12/8/72	HBP	Florence B. Lusk 3.12500 Donald Winston, Trustee .39222 Roy G. Barton, Jr. .78458 Roy G. Barton, Sr. .78458 R. W. Brown .86795 R. C. Beveridge .53675 James R. Roop .39229 Brenda Ann Moran .92905	Pan American Petro. Corp.	Amoco Production Co. 100.00%

EXHIBIT "B"
To Unit Agreement
DOUBLE L QUEEN UNIT
Chavez County, New Mexico
January 1, 1975

Tract No.	Description of Land	No. of Acres	Serial No. & Expiration Date Of Lease	Basic Royalty Ownership and Percentage	Lessee of Record	Overriding Royalty Owner and Percentage	Working Interest Owner and Percentage
23	cont'd.				K. D. McPeters .39229 A. T. Williamson .39229 Howell Spear .29422 Marshall Brothers Ltd. .39229 Marshall and Winston, Inc. .78458 W. Bryce Duggar .19615 T. T. Sanders, Jr. .19615 Ann W. Marshall .19615 Investors Royalty Co., Inc. 1.35305 Cleo Hendricks Duggar .19614 Ellie Spear .29422 <u>16.50000</u>		

EXHIBIT "B"
To Unit Agreement
DOUBLE L QUEEN UNIT
Chaves County, New Mexico
January 1, 1975

Tract No.	Description of Land	No. of Acres	Serial No. & Expiration Date Of Lease	Basic Royalty Ownership and Percentage	Lessee of Record	Overriding Royalty Owner and Percentage	Working Interest Owner and Percentage
24	T-15-S; R-30-E, Sec. 6; Lots 3, 4, & 5 SE/4 NW/4 (Lusk)	158.11	Fee 4/16/75 HBP	Roy G. Barton Exxon .784585 Roy G. Barton, Jr. .784585 R. C. Beveridge .536754 R. W. Brown .867947 Cleo Hendricks Duggar .1961 W. Bryce Duggar .196146 Investors Royalty Company, Inc. 1.353016 Florence B. Lusk 3.125000 K. D. McPeters .392292 Marshall Brothers, Ltd. .392292 Marshall & Winston, Inc. .784585		None	Exxon 100.00%

EXHIBIT "B"
To Unit Agreement
DOUBLE L QUEEN UNIT
Chaves County, New Mexico
January 1, 1975

Tract No.	Description of Land	No. of Acres	Serial No. & Expiration Date Of Lease	Basic Royalty Ownership and Percentage	Lessee of Record	Overriding Royalty Owner and Percentage	Working Interest Owner and Percentage
24	cont'd.			Ann W. Marshall .196146 Brenda Ann Moran .929046 James R. Roop .392292 T. T. Sanders, Jr. .196146 Ellie Spear .294219 Howell Spear .294219 A. T. Williamson .392292 Donald Winston, Tr. under Agreement with Francisca S. Winston dated Dec. 31, 1941 .392292 12.500000			

Total 2 Fee Tracts ----- 318.64 acres of 11.93% of Unit Area

RECAP

Federal	Tracts 1-14 or 14 Tracts	----- 1231.44 acres or 46.12 percent of Unit Area
State	Tracts 15-22 or 8 Tracts	----- 1120.02 acres or 41.95 percent of Unit Area
Fee	Tracts 23-24 or 2 Tracts	----- 318.64 acres or 11.93 percent of Unit Area

EXHIBIT "C"
To Unit Agreement

DOUBLE L QUEEN UNIT
Chaves County, New Mexico
January 1, 1975

<u>TRACT NO.</u>	<u>TRACT PARTICIPATION %</u>	
	<u>PHASE I</u>	<u>PHASE II</u>
1	12.6690	6.4884
2		.0221
3	5.6500	4.1909
4		.0468
5	12.5500	15.2155
6		.0293
7	1.1075	2.4652
8	1.9930	2.6103
9		.0113
10	2.6295	3.9260
11	.8525	.3653
12	.5370	.7526
13	5.0365	3.6226
14	1.2240	.8407
15	7.6425	6.2666
16	9.3795	16.1292
17	4.1205	2.9144
18	10.4685	5.9534
19	4.1805	5.1212
20	2.6420	1.0481
21	1.3290	1.6549
22	.6425	1.2343
23	1.8435	4.3769
24	13.5025	14.7140
	100.0000	100.0000

PROVISIONS OF SECTION 202 OF
EXECUTIVE ORDER 11246

EXHIBIT "D"
To Unit Agreement
Double "L" Queen Unit
Chaves County, New Mexico
January 1, 1974

"(1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex or national origin. Such action shall include but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

"(2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.

"(3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

"(4) The contractor will comply with all provisions of Executive Order No. 11246 of Sept. 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

"(5) The contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

"(6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of Sept. 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by Law.

"(7) The contractor will include the provisions of Paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of Sept. 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States."

Contractor shall also abide by the regulations of Executive Order 11598, Occupational Safety and Health Act and by Executive Order 11640, Veterans Hire Regulation, which orders are inserted herein by reference.

SCHEMATIC DIAGRAM

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
Buck EXHIBIT NO. 4
CASE NO. 5415145454

Injection System
Gate Valve (2")
Tubing Head
Braden Head

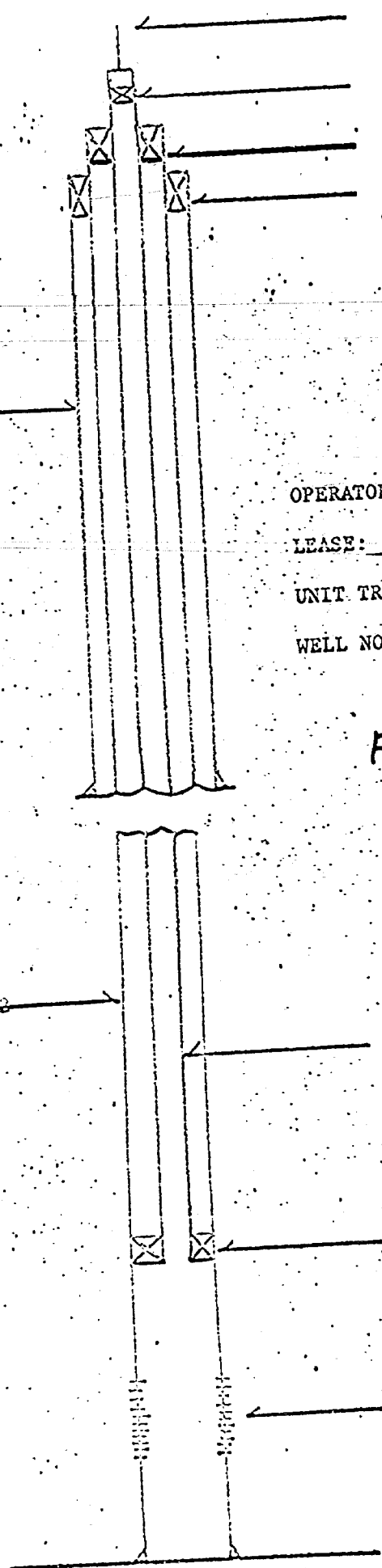
Surface Pipe Size $8 \frac{5}{8}$
Set at 385
Sacks Cement 100

OPERATOR: McClellan Oil Corporation
LEASE: Lisa B Federal
UNIT TRACT NO. 1
WELL NO. 9

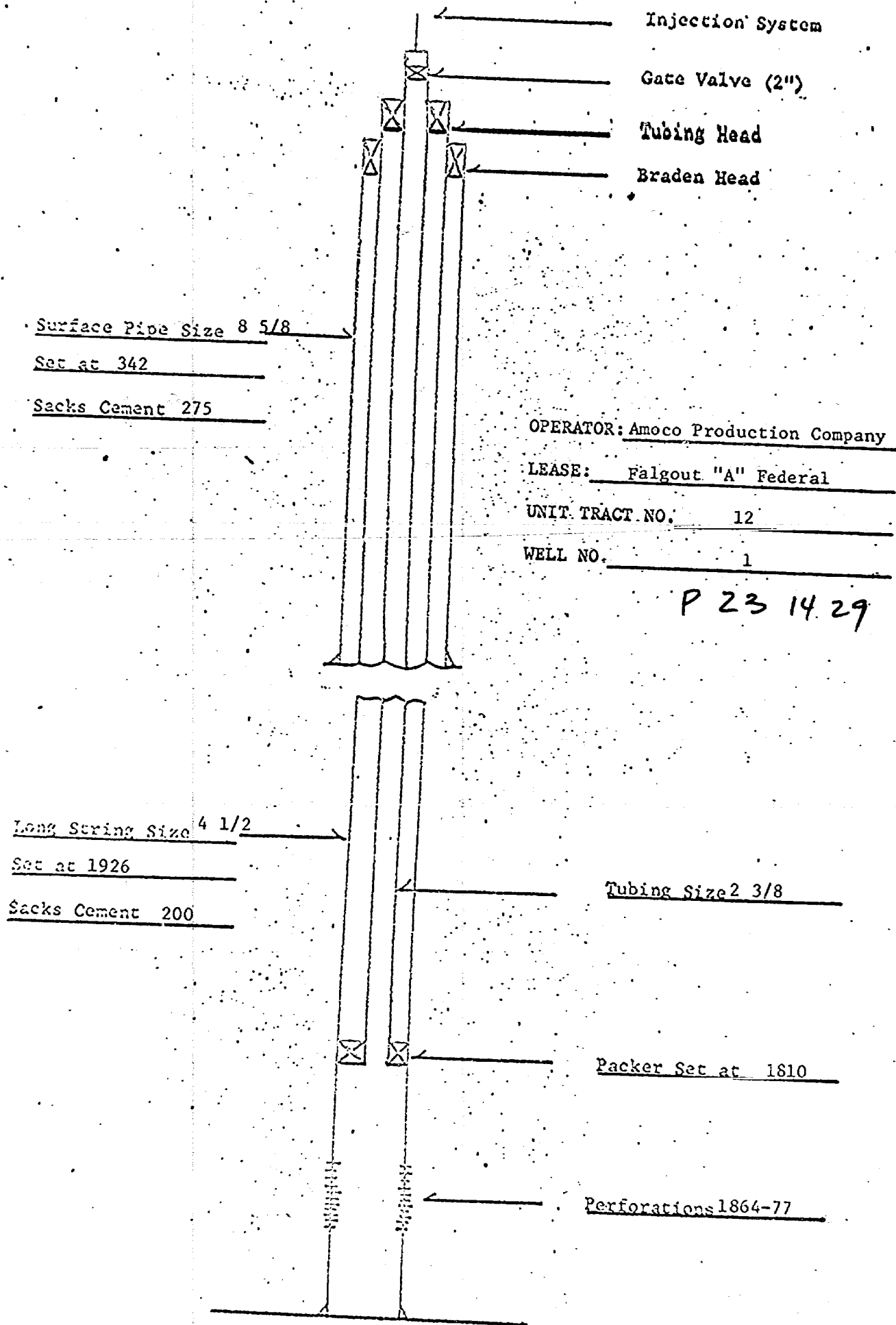
F 18 15 30

Long String Size $5 \frac{1}{2}$
Set at 2055
Sacks Cement 150

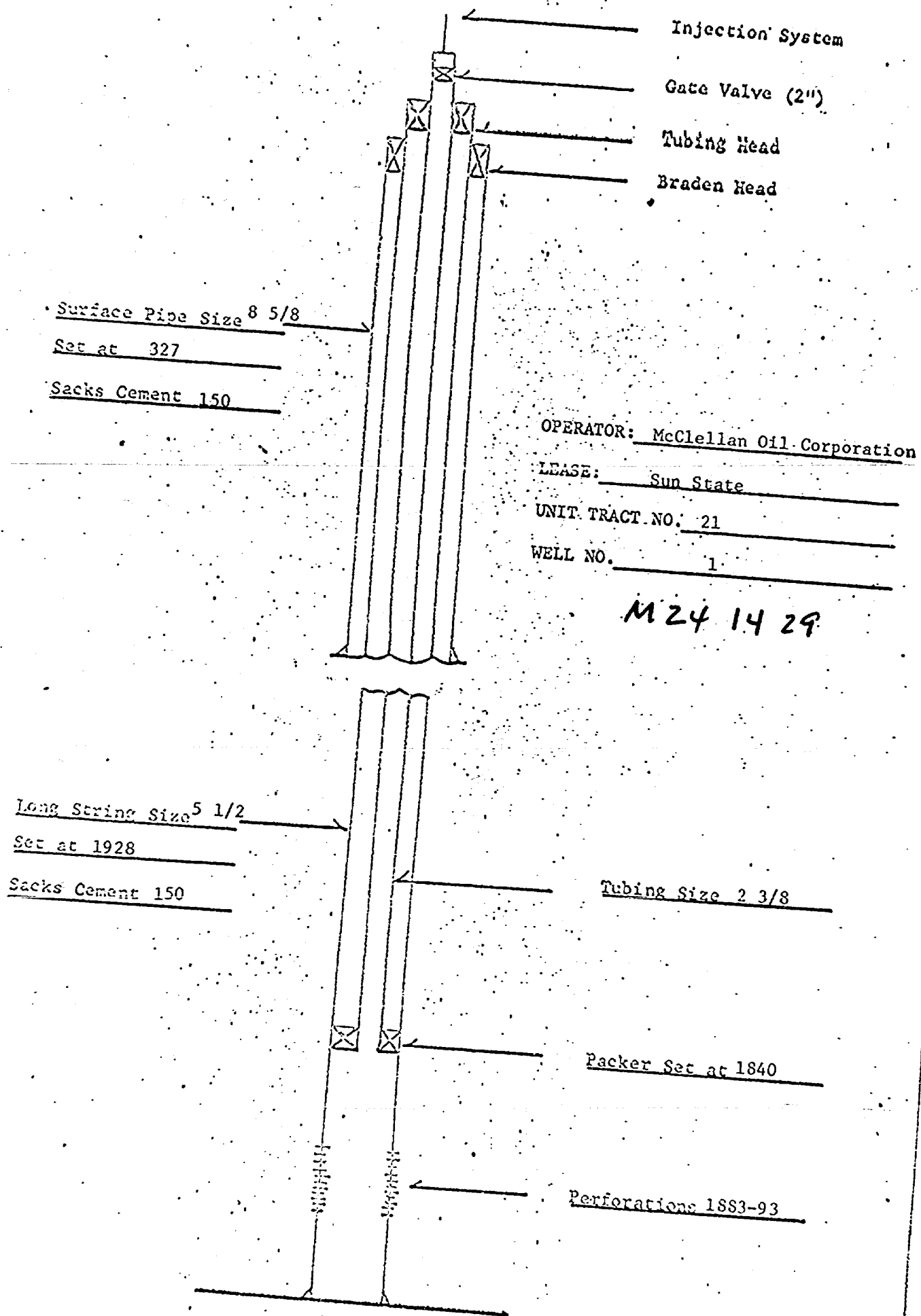
Tubing Size $2 \frac{3}{8}$
Packer Set at 1980
Perforations 2020-34



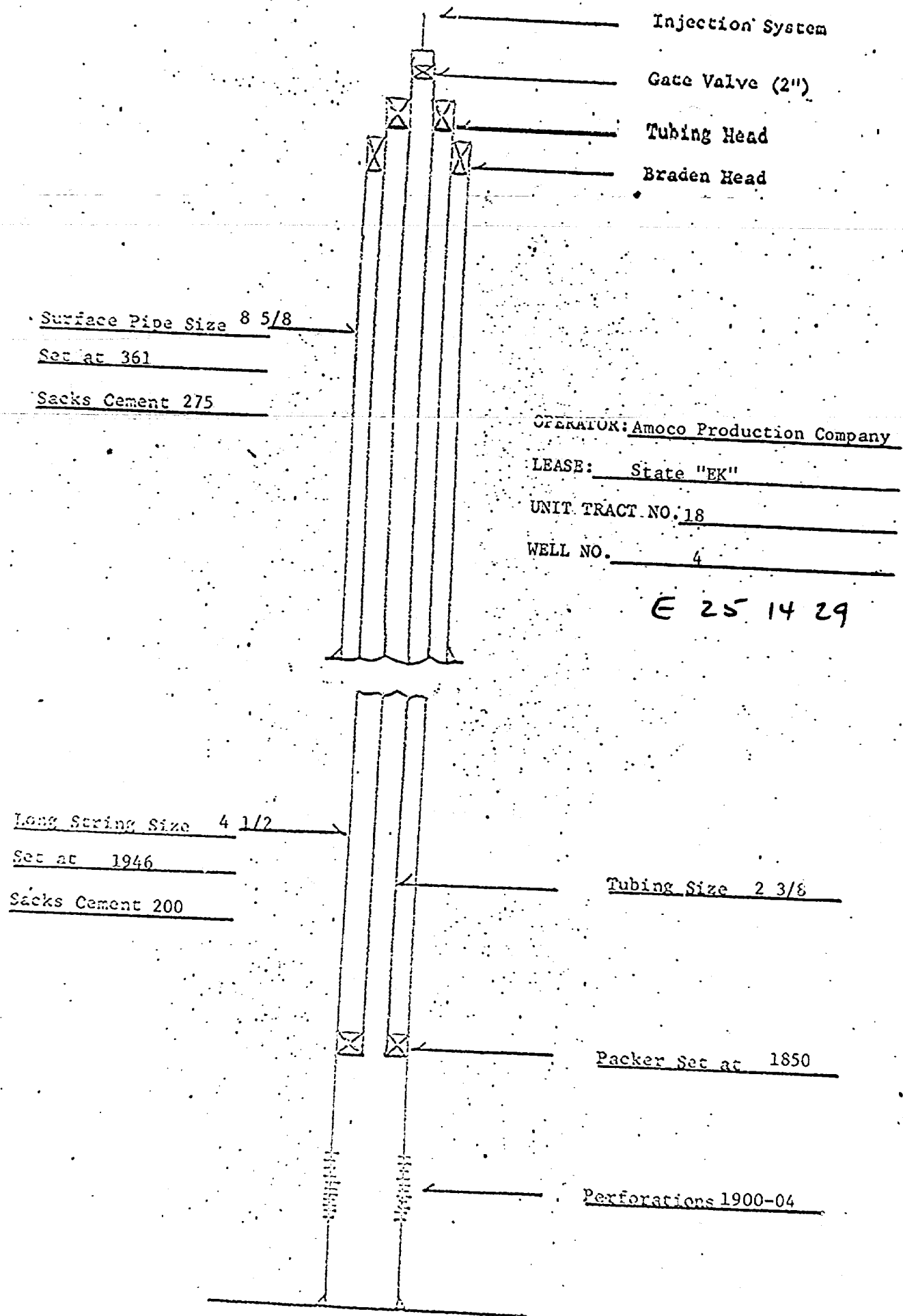
SCHEMATIC DRAWING



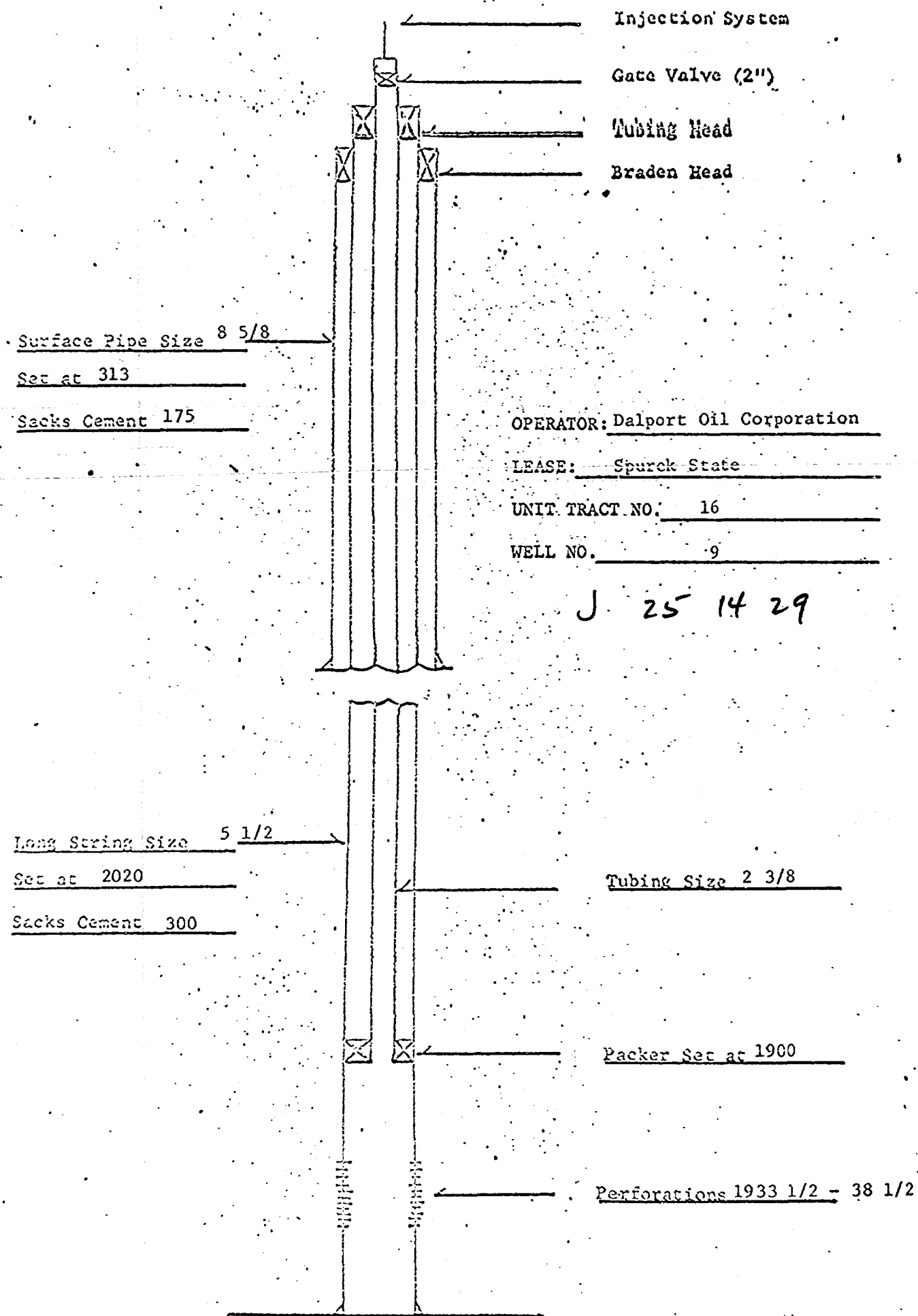
SCHEMATIC DIAGRAM



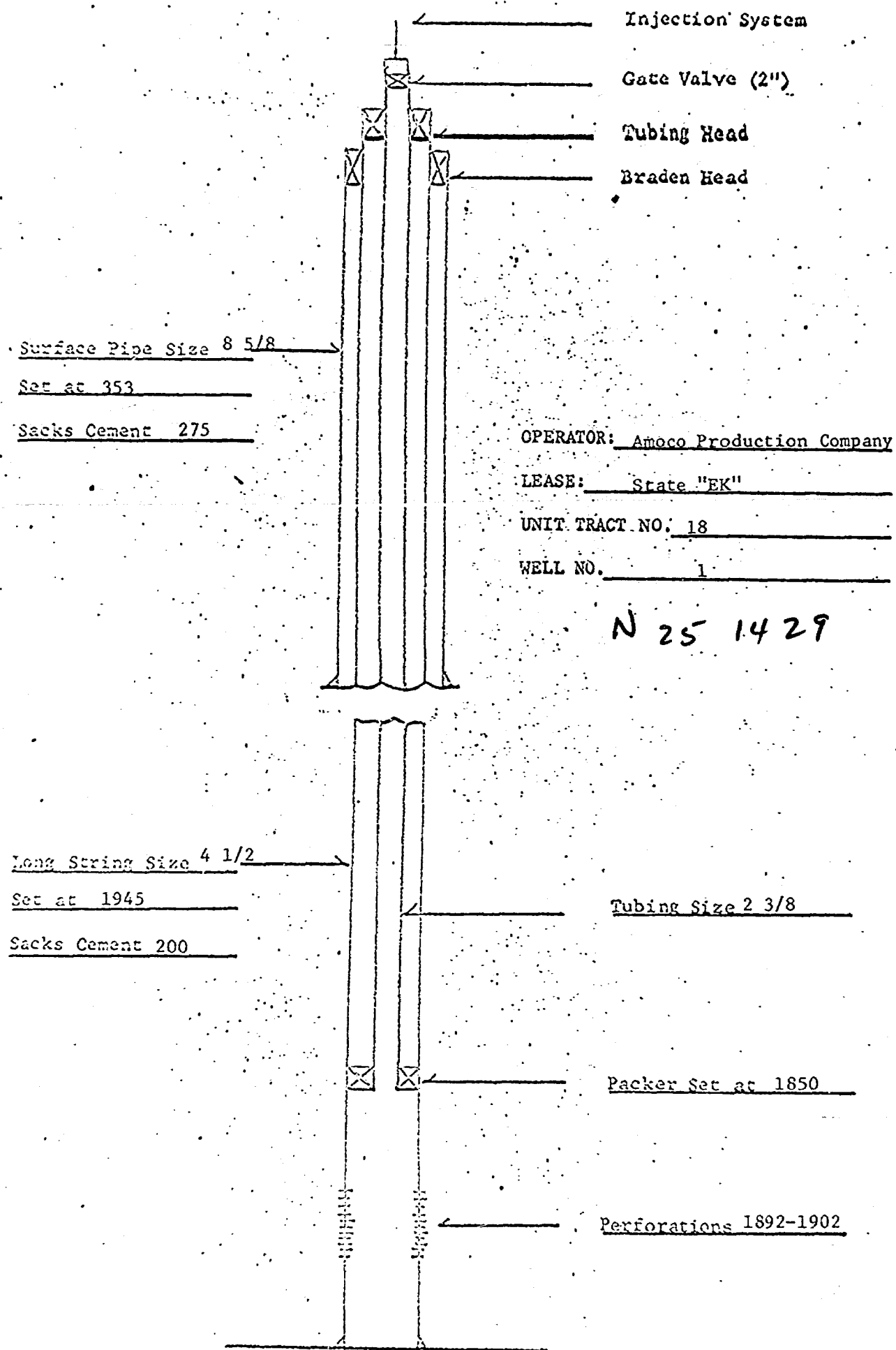
SCHEMATIC DIAGRAM



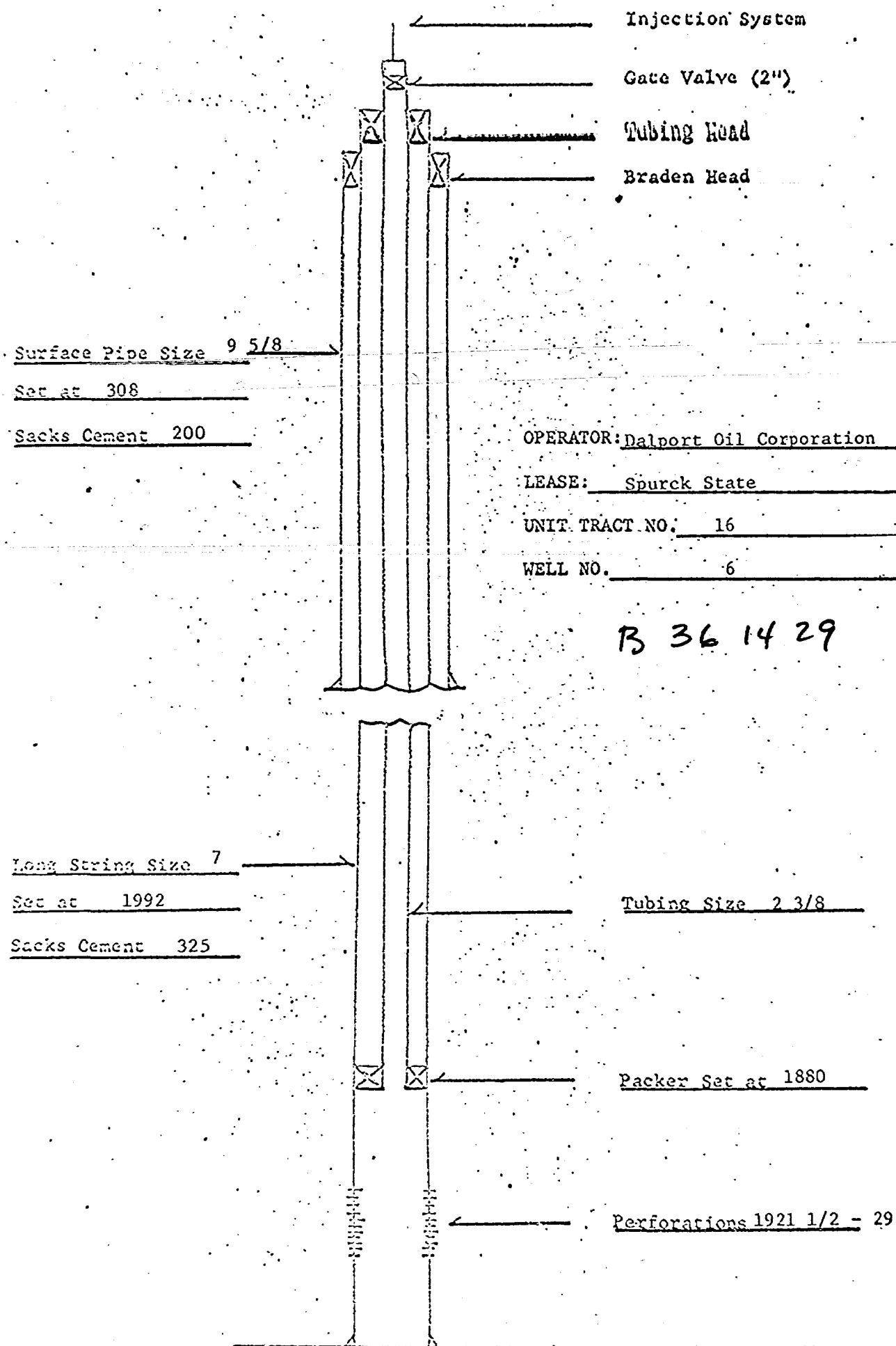
SCHEMATIC DIAGRAM



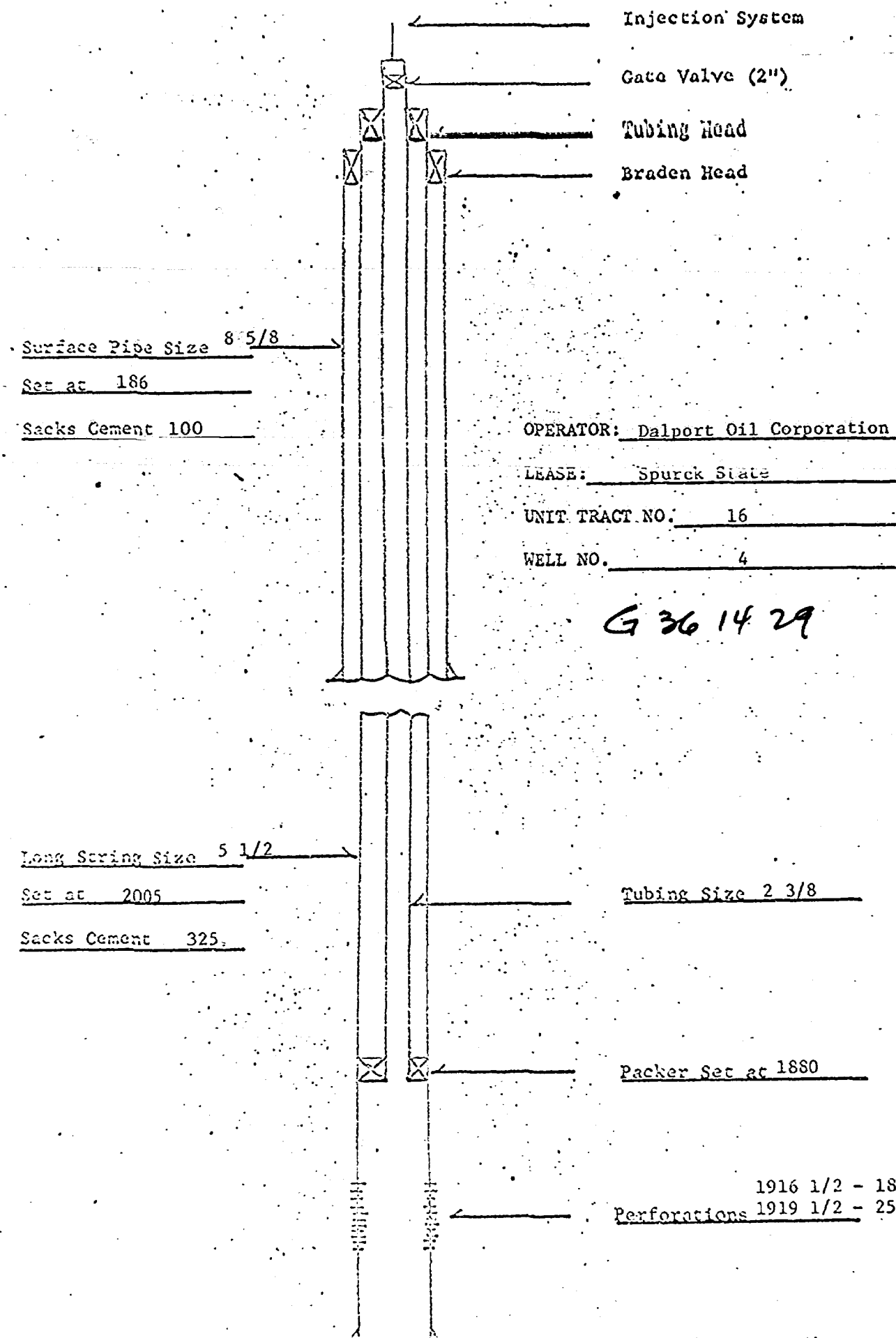
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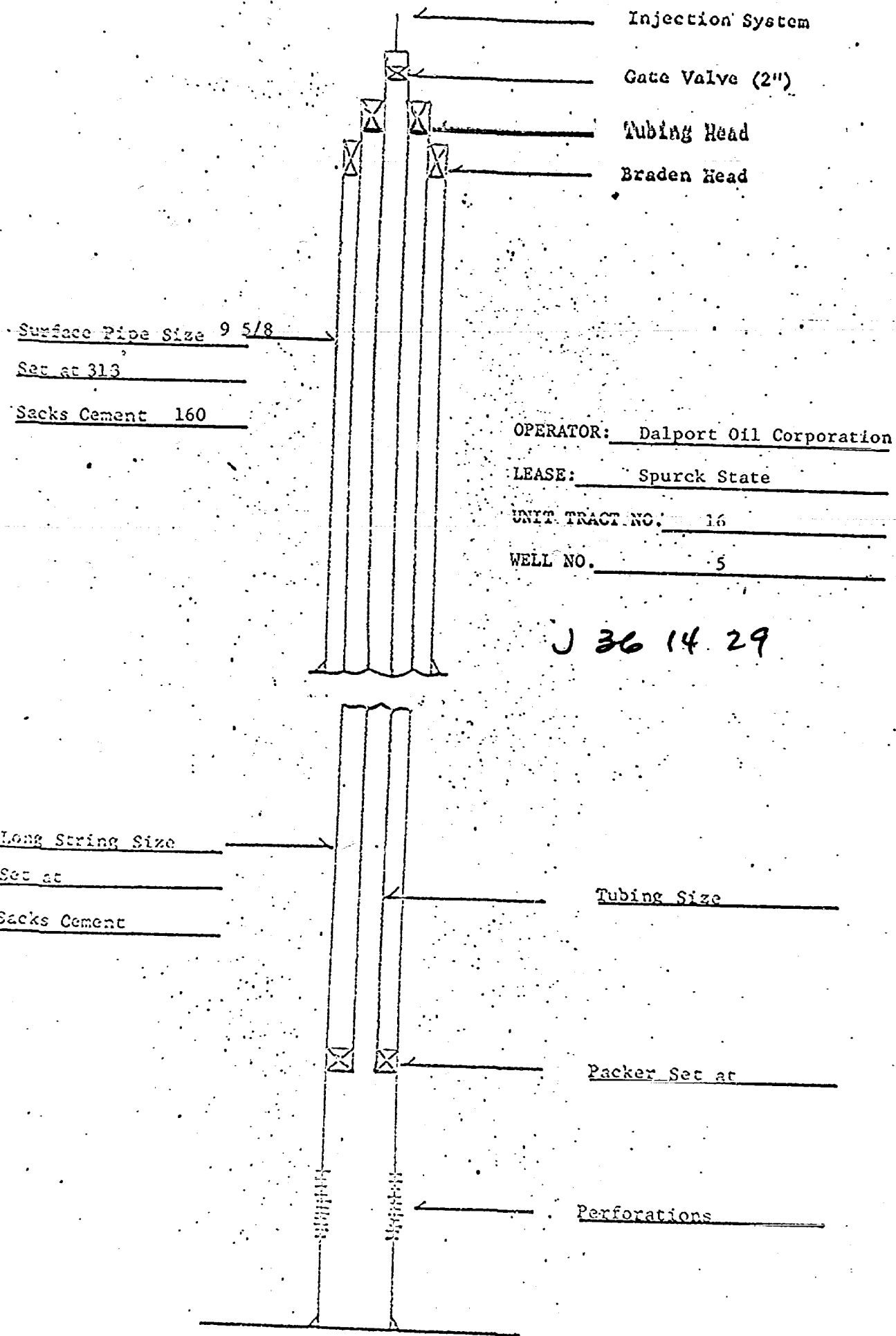
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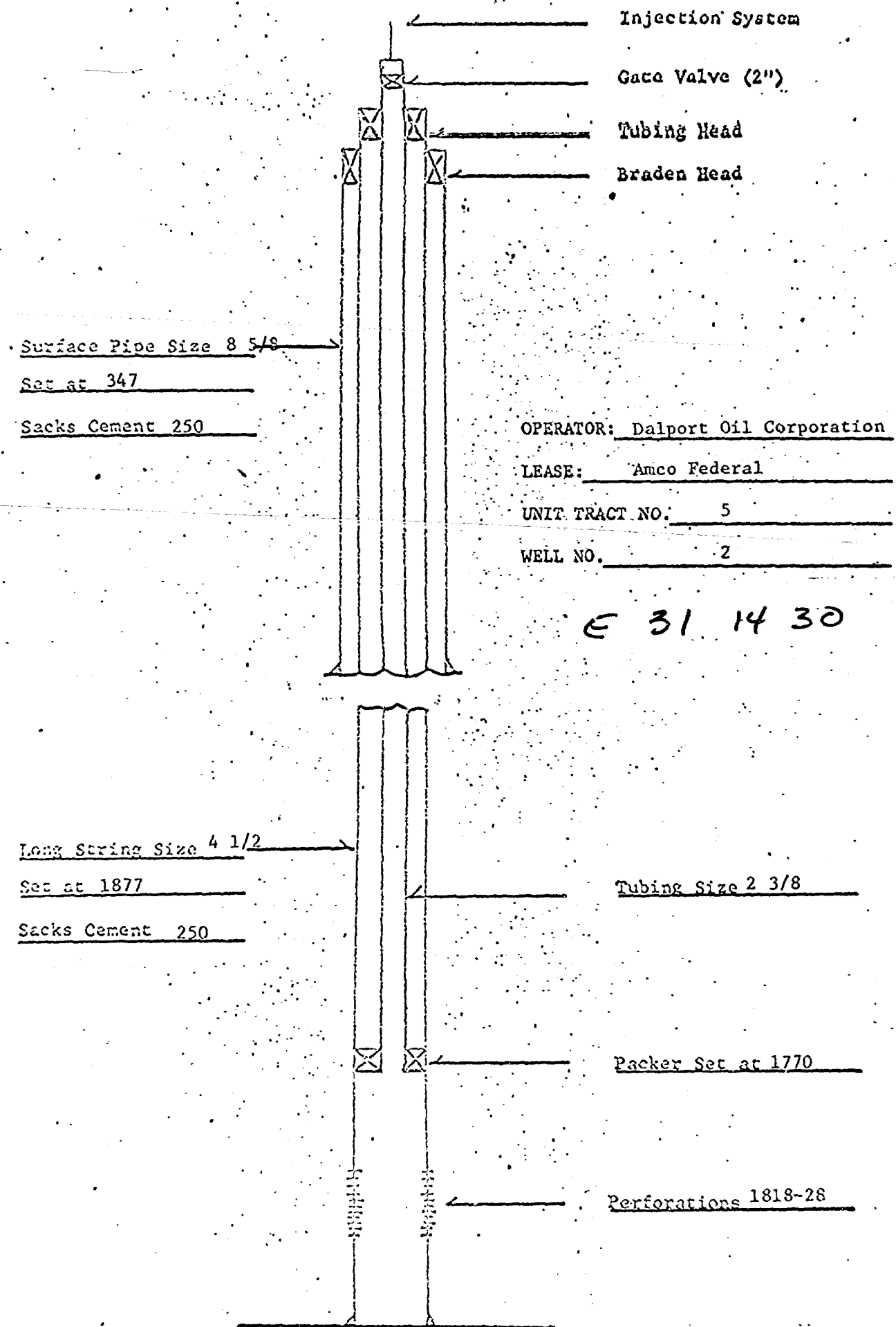
SCHEMATIC DIAGRAM



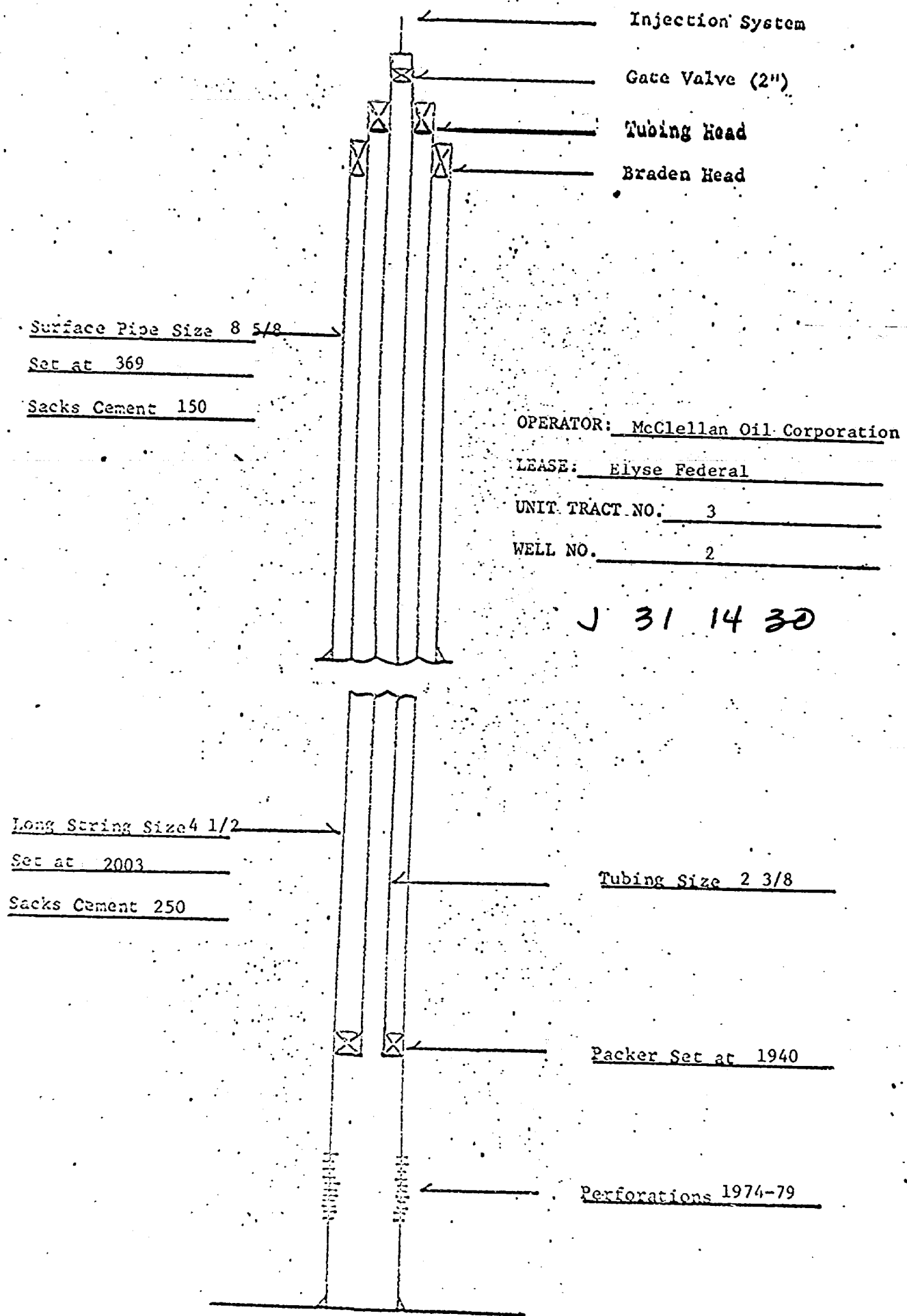
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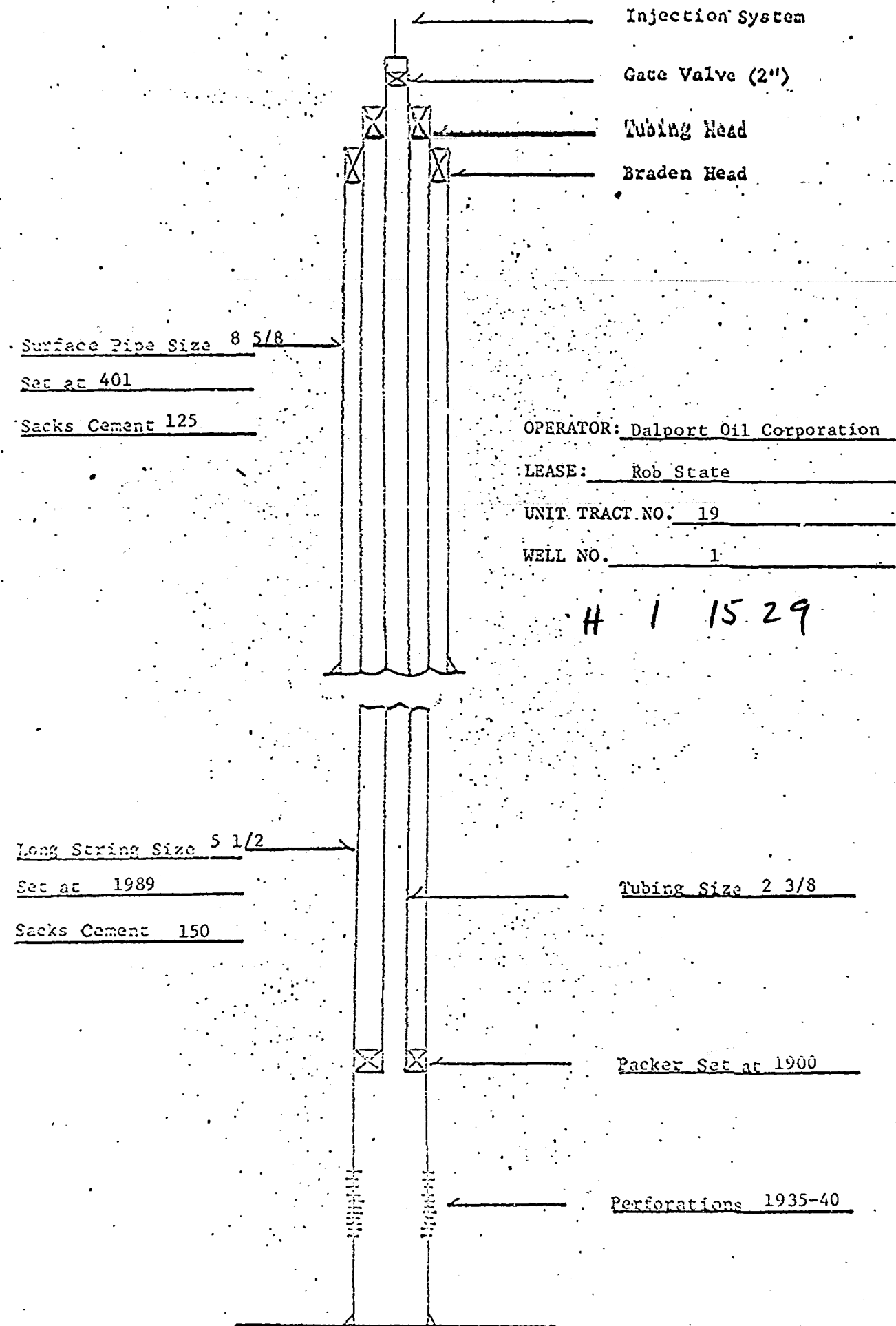
SCHEMATIC DIAGRAM



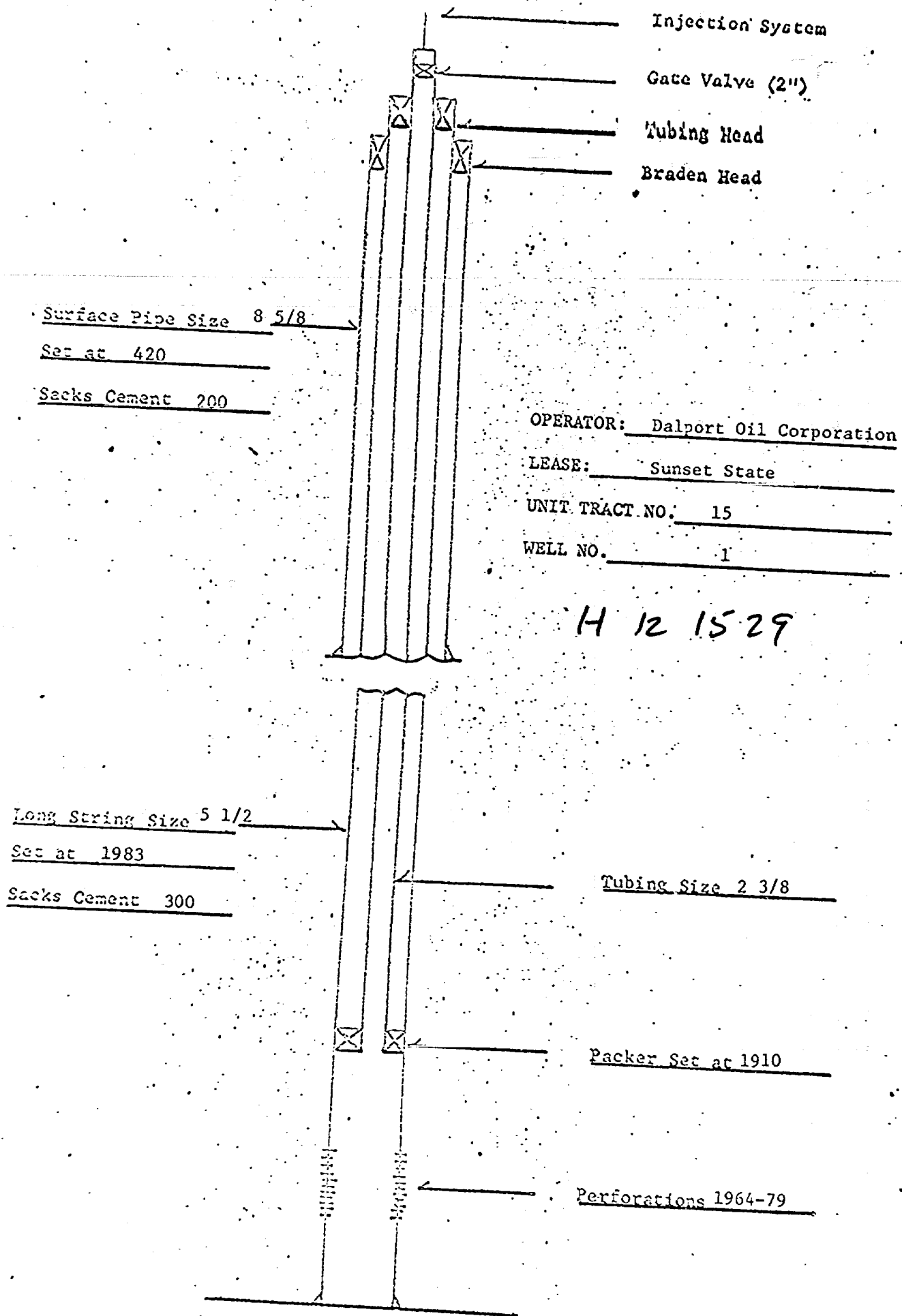
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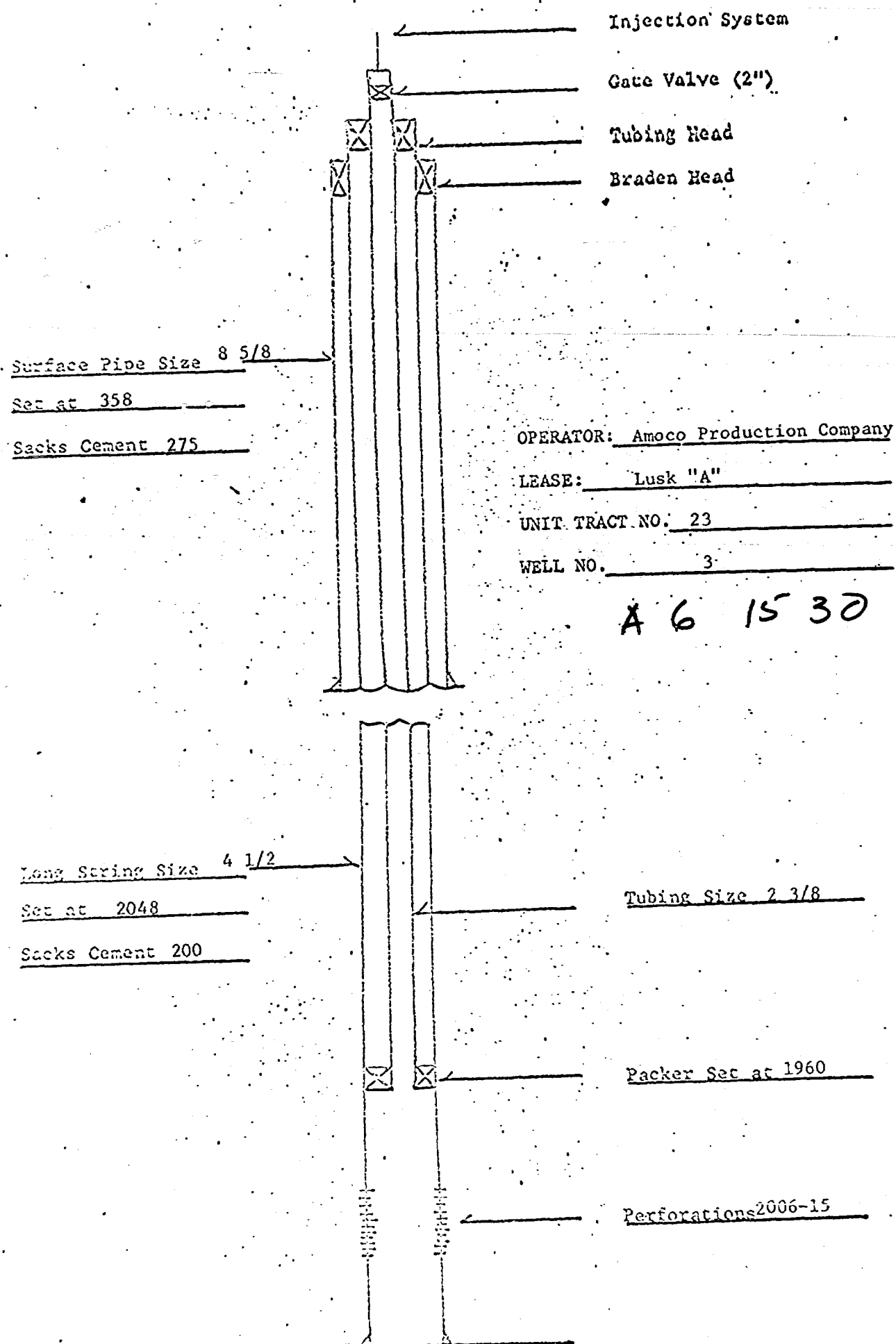
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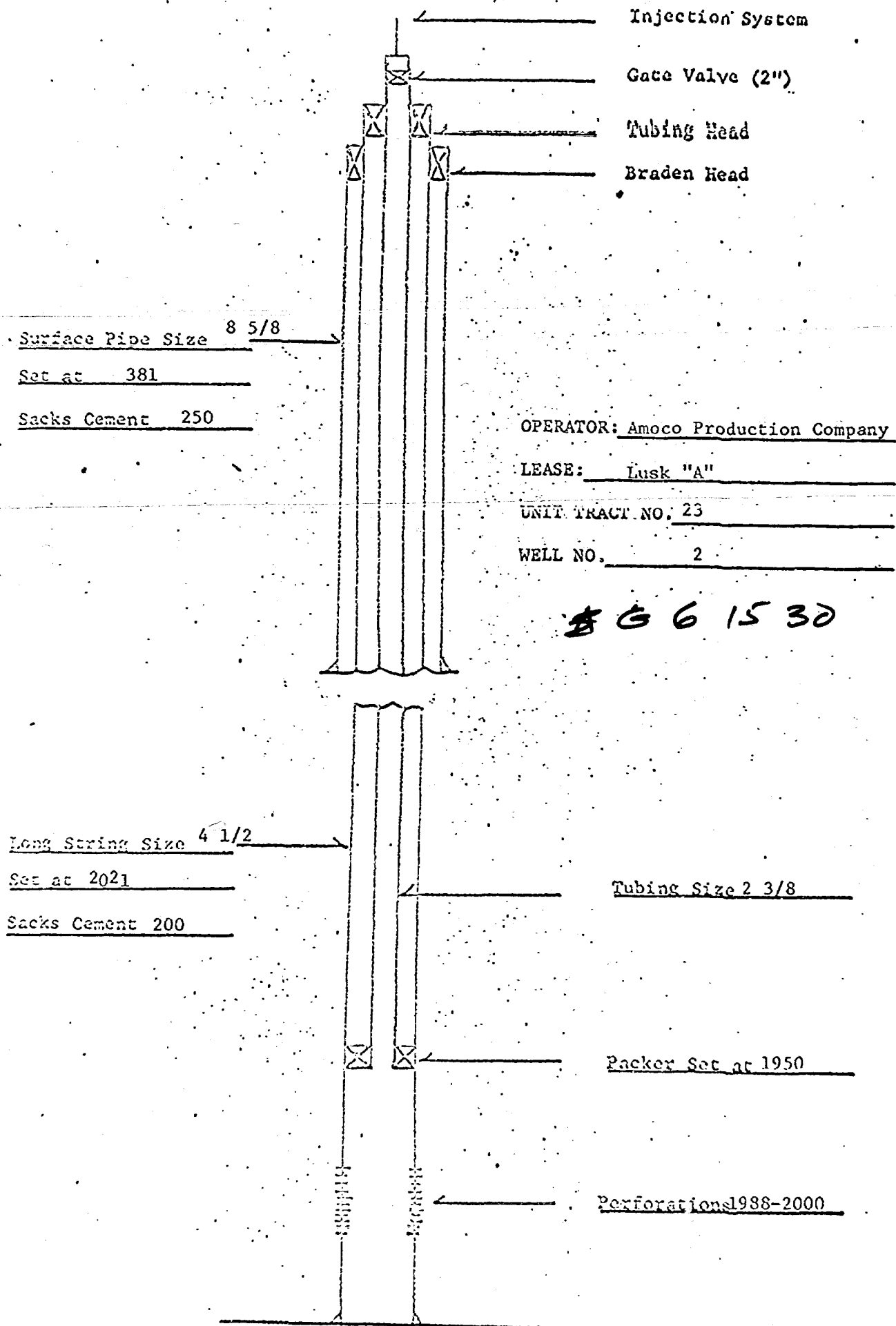
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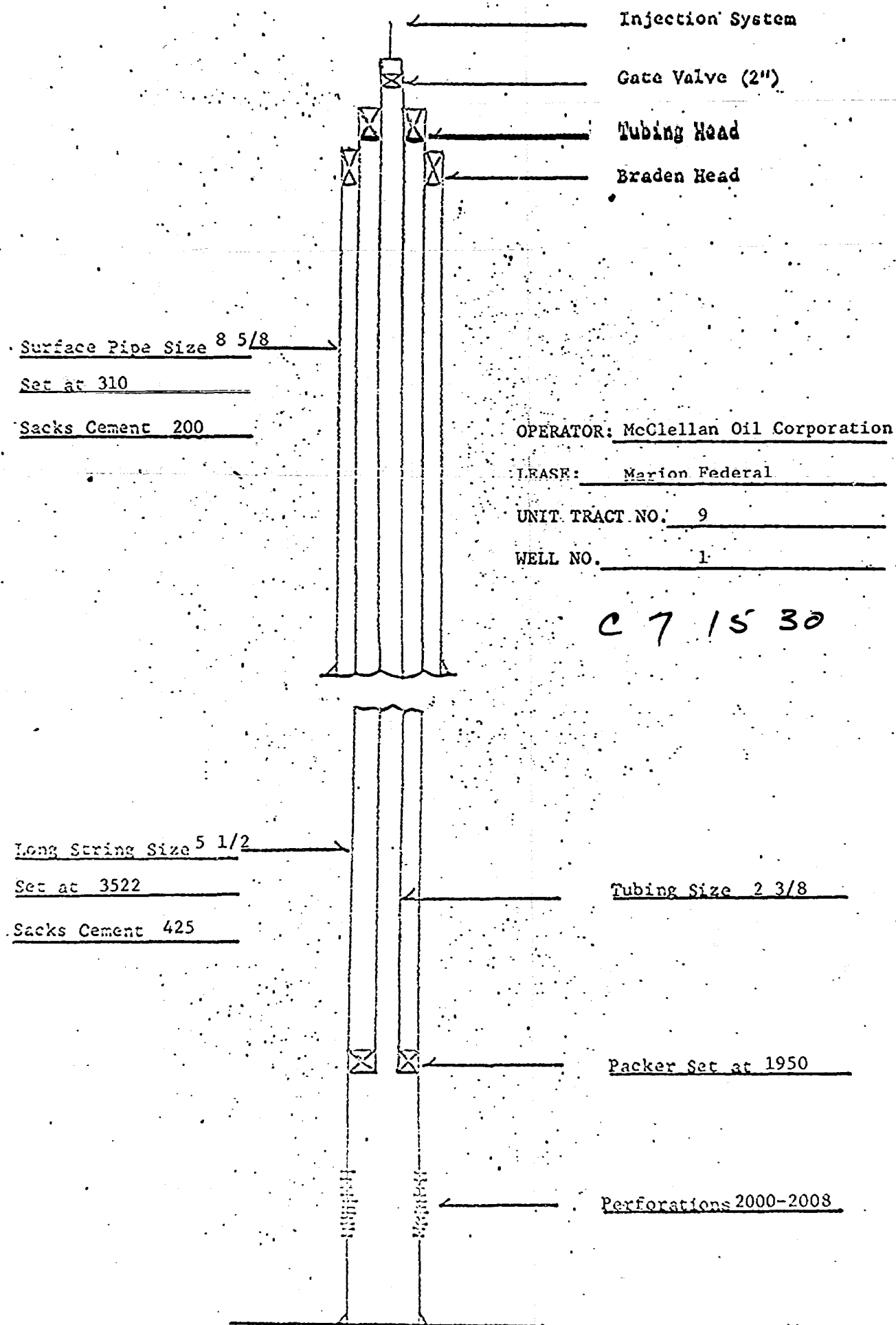
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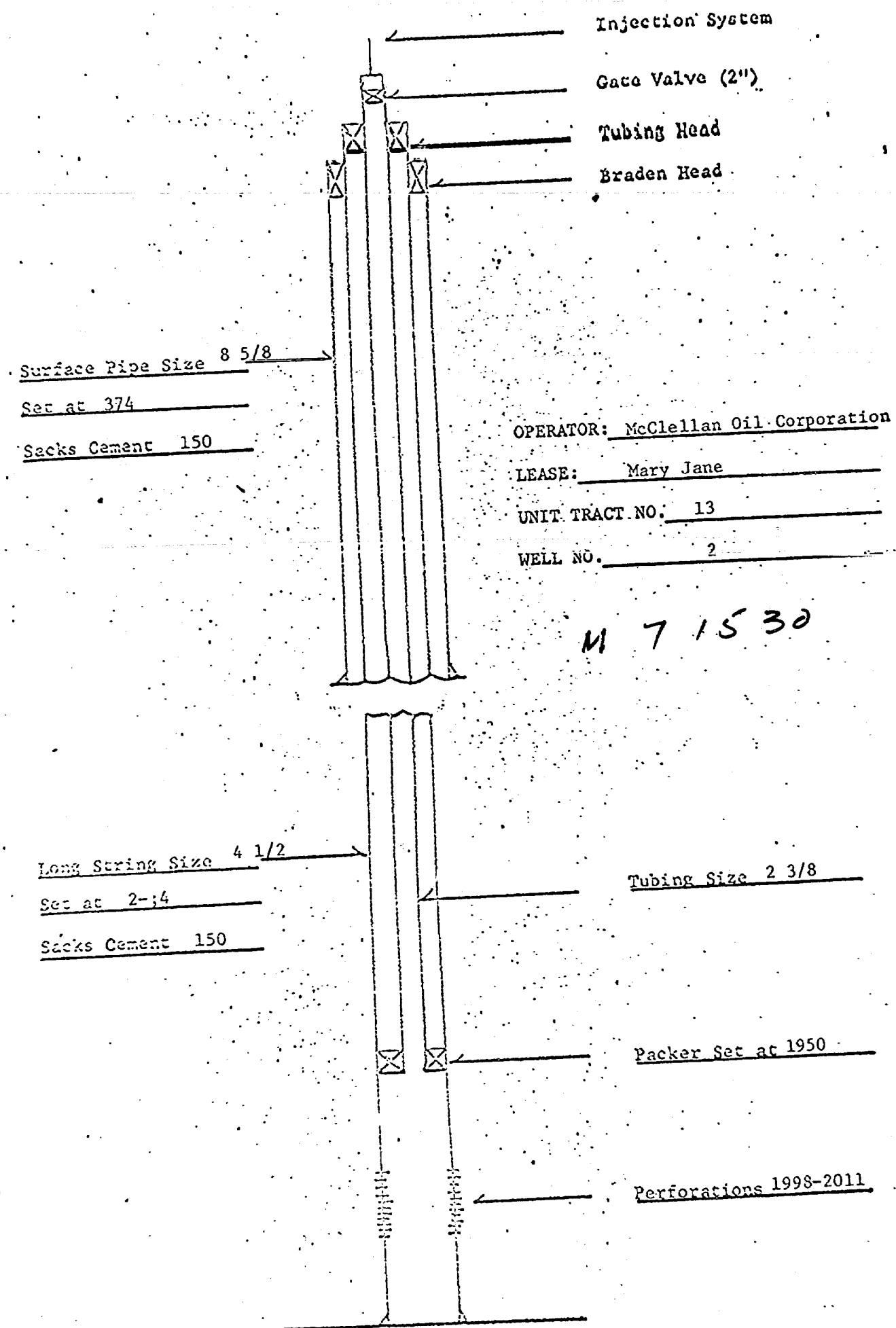
SCHEMATIC DIAGRAM



SCHEMATIC DIAGRAM



SCHEMATIC DIAGRAM



CASE 5457: Application of Texaco Inc., for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the downhole commingling of East Weir-Blinebry, Monument-Tubb, and Skaggs-Drinkard production in the wellbore of its M. B. Weir "B" Well No. 10, located in Unit P of Section 12, Township 20 South, Range 37 East, Lea County, New Mexico.

CASE 5219: (Reopened)

In the matter of Case 5219 being reopened pursuant to the provisions of Order No. R-4784, which order established temporary special pool rules for the South Empire-Wolfcamp Pool, Eddy County, New Mexico, including a provision for 80-acre spacing. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing.

CASE 5458: Application of Continental Oil Co. for two non-standard gas proration units and three unorthodox locations, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the two following described non-standard gas proration units in Township 20 South, Range 37 East, Eumont Gas Pool, Lea County, New Mexico:

A 240-acre unit comprising the SW/4 and S/2 NW/4 of Section 15 to be dedicated to applicant's Britt "B" Well No. 3 at an unorthodox location in Unit L of said Section 15; and

A 280-acre unit comprising the SW/4 NW/4 and SW/4 of Section 10 and the N/2 NW/4 of Section 15 to be dedicated to applicant's Britt "B" Wells Nos. 15 and 25 located, respectively, at unorthodox locations in Units M of Section 10 and C of Section 15.

Dockets Nos. 10-75 and 11-75 are tentatively set for hearing on April 30, and May 14, 1975. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - APRIL 16, 1975

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

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

- ALLOWABLE: (1) Consideration of the allowable production of gas from seventeen prorated pools in Lea, Eddy, Roosevelt and Chaves Counties, New Mexico, for May, 1975;
- (2) Consideration of the allowable production of gas from five prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico, for May, 1975.

CASE 5415: (Continued from the March 19, 1975, Examiner Hearing)

Application of Burk Royalty Co., for a unit agreement, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Double L Queen Unit Area, comprising 2670 acres, more or less, of Federal, State, and fee lands in Townships 14 and 15 South, Ranges 29 and 30 East, Chaves County, New Mexico.

CASE 5454: Application of Burk Royalty Co. for a waterflood project, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Double L-Queen Pool, Chaves County, New Mexico, by the injection of water into the Queen formation through 17 wells located in Sections 23, 24, 25, and 36, Township 14 South, Range 29 East; Section 31, Township 14 South, Range 30 East; Sections 1 and 12, Township 15 South, Range 29 East, and Sections 6, 7, and 18, Township 15 South, Range 30 East.

CASE 5455: Application of Roger C. Hanks for the amendment of Order No. R-4158, as amended, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-4158, which, as amended, authorizes the disposal of produced salt water into the Devonian formation through 2 7/8-inch tubing set in a packer at approximately 10,000 feet via the perforated interval from 10,220 feet to 10,504 feet in his Monsanto Foster Well No. 1, located in Unit D of Section 5, Township 20 South, Range 25 East, Dagger Draw Area, Eddy County, New Mexico. Applicant proposes the amendment of said order to permit setting the packer at 6271 feet or in the alternative, to block squeeze said well from 4000 feet to 6500 feet and set said packer at approximately 4000 feet.

CASE 5456: Application of Southern Union Production Co. for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Shelby Federal Well No. 1, located in Unit H of Section 13, Township 22 South, Range 24 East, Eddy County, New Mexico, in such a manner as to produce undesignated Strawn and Atoka gas through the casing-tubing annulus and tubing, respectively.

Case 5454

JAMES T. JENNINGS
SIM B. CHRISTY IV
ROGER L. COPPLE
BRIAN W. COPPLE
ROBERT G. ARMSTRONG

LAW OFFICES OF
JENNINGS, CHRISTY & COPPLE
1012 SECURITY NATIONAL BANK BUILDING
P. O. BOX 1180
ROSWELL, NEW MEXICO 86201

March 18, 1975

TELEPHONE 622-8432
AREA CODE 505

NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe

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

Re: Double L Queen Unit

Gentlemen:

We enclose herewith in triplicate Application of Burk Royalty Co. for institution of a pilot waterflood project in the Double L Queen Unit, Chaves County, New Mexico.

It would be appreciated if the Application may be set as a companion case for pending case 5415, which is Applicant's request for approval of Unit Agreement.

Respectfully,

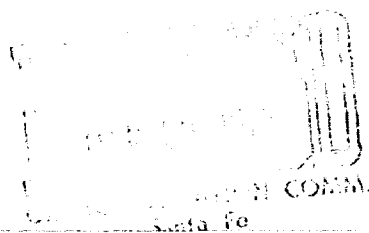
JENNINGS, CHRISTY & COPPLE

By Sim B. Christy IV
S. B. Christy IV

SBC:pv
Encl.
cc: Burk Royalty Co.

DOCKET MAILED

Date



BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION

IN THE MATTER OF THE APPLICATION)
OF BURK ROYALTY CO. FOR APPROVAL)
OF INSTALLATION OF SECONDARY)
RECOVERY OPERATIONS. IN THE DOUBLE L)
QUEEN UNIT, CHAVES COUNTY, NEW MEXICO.)

Case No. 5454

APPLICATION

COMES NOW Burk Royalty Co., proposed Operator of the Double L Queen Unit, Chaves County, New Mexico, and pursuant to Rule 701 hereby makes application for approval of the institution of a secondary recovery waterflood project, and states:

1. There is presently pending before this Commission in Case No. 5415 an Application by Burk Royalty Co. (Applicant) for approval of the Double L Queen Unit Agreement, which Application is incorporated herein by reference.

2. Applicant proposes to institute a pilot waterflood project in the Double L Queen Unit Area and in connection therewith attaches the following:

A. A plat showing the location of the proposed injection wells and the location of all other wells within a radius of two miles from said proposed injection wells and the formation from which said wells are producing or have produced, being the Queen formation. The plat also indicates the lessees, if any there be, within said two-mile radius.

B. A log of all proposed injection wells to the extent available.

C. A diametric sketch of the proposed injection wells showing all casing strings, including diameters and setting depths, quantities used and tops of cement, perforated or open hole intervals, tubing

strings, including diameters and setting depths, and type and location of packers, if any. This includes 16 diagramatic sketches while there are 17 wells indicated on the attached plat; the remaining well being the Spurck #5 was a dry hole and is not now completed.


3. The depth of the producing zone varies to some extent but is approximately 1,900 feet subsurface which zone is in the Queen formation. The fluid to be injected is fresh water. Initial volumes of water are approximately 350 barrels per well per day which, for the present 16 wells, will be approximately 5,600 barrels per day. At such time as an increase in produced water is experienced, the water will be returned to the reservoir and a lesser amount of new water will be injected.

4. In the opinion of Applicant the proposed pilot waterflood project, and any extensions thereof, approved by the Commission, will be in the interest of conservation and the prevention of waste and will not violate the correlative rights of any interested party.

WHEREFORE, Applicant respectfully requests, after notice and hearing, approval of this Application.

BURK ROYALTY CO.

By


S. B. Christy IV, as a member
of the firm of Jennings, Christy
& Copple, P. O. Box 1180,
Roswell, New Mexico 88201
Attorneys for Applicant

cc: McClellan Oil Corporation
cc: L. C. Harris
cc: J. Penrod Toles
cc: Robert M. Patterson
cc: Robert L. Graham
cc: Albert J. Black
cc: Wolfson Oil Company
cc: Exxon Corporation
cc: Amoco Production Company
cc: Dalport Oil Corporation
cc: Burk Royalty Co.

cc: Crown Central Petroleum Corporation
cc: Walters Amusements, Inc.
cc: Roark & Hooker
cc: J. C. Monk
cc: Wall Street Corporation
cc: W. W. LaForce, Jr.
cc: Tom Schneider
cc: A. N. Norwood
cc: George Eng
cc: Alan Q. Norwood
cc: W. B. Perry, Jr.
cc: Charles H. Juni
cc: Wallace G. Comer
cc: Warren D. Barton
cc: G. W. Green
cc: Corinne Grace

cc: U.S.G.S. (Roswell, N.M.)
cc: Commissioner of Public Lands of New Mexico

DRAFT

dr/

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. 5454

Order No. R- 5007

APPLICATION OF BURK ROYALTY CO.
FOR A WATERFLOOD PROJECT, CHAVES COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 16, 195,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this May day of April, 195, 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, Burk Royalty Co.,
seeks authority to institute a waterflood project in the Double L Queen
Unit Area, Double L Queen Pool,
by the injection of water into the Queen formation
through 17 injection wells in Sections 23, 24, 25, and 36,
Township 14 ~~XXXXX~~, South, Range 29 ~~XXXXX~~, East;
Section 31, Township 14 South, Range 30 East;; Sections 1 and 12,
Township 15 South, Range 29 East, and Sections 6, 7, and 18, Township
15 South, Range 30 East, NMPM, Chaves County, New Mexico, Chaves County,

(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 operator 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, Burk Royalty Co.,
is hereby authorized to institute a waterflood project in the
Double L Queen Unit Area, Double L Queen Pool,
by the injection of water into the Queen formation
in Chaves County, New Mexico:
through the following-described wells/

Township 14 South, Range 29 East NMPM

Company	Lease	Well No.	Unit	Section
Amoco	Falgot "A" Federal	1	P	23
McClellan	Sun State	1	M	24
Amoco	State EK	4	E	25
Dalport	Spurck State	9	J	25
Amoco	State EK	1	N	25
Dalport	Spurck State	6	B	36
"	"	4	G	36
"	"	5	J	36

Township 14 South, Range 30 East, NMPM

Company	Lease	Well No.	Unit	Section
Dalport	Amco Federal	2	E	31
McClellan	Elyse Federal	2	J	31

Township 15 South Range 29 East NMPM

Company	Lease	Well No.	Unit	Section
Dalport	Rob State	1	H	1
"	Sunset State	1	H	12
Amoco	Lusk "A"	3	A	6
"	"	2	G	6
McClellan	Marion Federal	1	C	7
"	Mary Jane	2	M	7
"	Lisa "B" Federal	9	F	18