

Case No.

1588

Application, Transcript,
Small Exhibits, Etc.

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

IN THE MATTER OF:

CASE No. 1588

TRANSCRIPT OF HEARING

DEARNLEY - MEIER & ASSOCIATES
GENERAL LAW REPORTERS
ALBUQUERQUE NEW MEXICO
Phone CHapel 3-6691

February 4, 1959

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

IN THE MATTER OF:

Application of Atlantic Refining Company
to commingle the production from several
separate oil pools. Applicant, in the
above-styled cause, seeks an order author-
izing it to commingle the production from
the Ellenburger, McKee, Fusselman, Montoya,
Blinebry, Drinkard, and Queen formations
on its State "Y" Lease comprising the N/2
NE/4 and the SE/4 NE/4 of Section 25,
Township 25 South, Range 37 East, Lea
County, New Mexico. Applicant proposes
to separately meter the production from
each formation except the Queen prior to
being commingled.

CASE NO.

1588

BEFORE:

Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING

MR. UTZ: The next case will be Case No. 1588.

MR. PAYNE: Application of Atlantic Refining Company
to commingle the production from several separate oil pools.

MR. BRATTON: Howard Bratton, Hervey, Dow, and Hinkle,
Roswell, New Mexico, appearing on behalf of the applicant.

We have one witness in the case this morning.

(Witness sworn.)

MR. UTZ: Are there any other appearances to be made

In this case? If not, you may continue.

H. T. F R O S T, a witness called by and on behalf of the Applicant, being first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY: MR. BRATTON:

Q Will you state your name and by whom you are employed and where?

A H. T. Frost, Jr., employed by the Atlantic Refining Company in Midland.

Q In what capacity?

A As assistant regional production engineer.

Q Have you ever appeared before this Commission before as an expert witness?

A No, sir, I have.

Q Will you state briefly to the Commission your educational and professional background?

A I received a BS degree in petroleum engineering from the University of Tulsa and have been production engineer for Atlantic Refining for the past twelve years.

Q And in your capacity as production engineer, have you dealt with matters similar to the matter under consideration in this case?

A Yes, I have.

MR. BRATTON: Are the witness' qualifications acceptable?

MR. UTZ: His qualifications are acceptable.

Q (By Mr. Bratton) Now, Mr. Frost, are you familiar with the application in Case 1588?

A I am.

Q And with the area covered by the application?

A I am.

Q And the proposed installation?

A I am.

Q I refer you to what has been marked as Atlantic's Exhibit 1 and ask you to explain what that exhibit is and what it shows?

A Exhibit 1 shows a portion of the Justis Field; namely, the Atlantic State "Y" lease. We have shown on there the wells which we have completed and two locations which are in the process of drilling right now. This lease is the E/2 and the NW/4 of the NE/4 of Section 25, Township 25 South, Range 37 East. We have two Queen wells; the No. 1, a gas well, and No. 2, oil well. These two wells are not a part of this proposal, and the No. 3 is completed in the Montoya and Ellenberger formations. The No. 4, we are anticipating another Montoya and Ellenberger completion, and the No. 5, a Drinkard and Fussleman. Our legend at the bottom shows the six formations and the approximate tops of these various formations.

Q Turning now to Atlantic's Exhibit 2, 3, and 4, will you explain in order what those exhibits are and what they show?

A These exhibits, 2, 3, and 4, show various stages of development of common storage batteries as the lease is developed. Exhibit 2 is for the first well, which is completed in two zones. Each zone is equipped with a separator and orifice meter for measurement of gas and a dump-type oil meter. Then, there will be commingled the oil, the production will be commingled into common storage after being measured by the dump-type meters. The tanks to be used will be manually gauged to run the oil to the pipeline.

Exhibit 3 shows the completion of a second well completed in the same two zones. Here we've added a test separator so that any zone of each well can be individually tested with the same dump-type meter and orifice meter. At any time on these that the wells start producing water, we propose to install a heater treater between the separator and the dump meter so that the oil still is metered at all times with the dump meter.

Exhibit 4 shows the third well completed in one of the previous zones and an additional third zone. Here we have added another separator and the metering equipment for the third zone. We have two lines coming off of each meter so that a meter can be calibrated at any time without interfering with production from other zones, from other separators.

Q Now, Mr. Frost, your legend on each exhibits shows each installation in the proposed system, is that correct?

A That's right.

Q Is this system and the type of equipment which you propose to install, is it similar to or identical with any equipment and system which has previously been approved by this Commission?

A This is similar to the system approved for the Gulf McBuffington lease in the Justis Field. However, this one which we are proposing is not an automatic custody transfer, it is simply common storage for the oil.

Q Otherwise, the equipment is similar except for these automatic custody transfers?

A Other than that, it is the same type as approved for Gulf.

Q Now, this proposal does not cover the Queen formation, that will go into a separate battery?

A That's correct, the Queen has a separate battery.

Q And you are willing to test the equipment, calibrate it periodically as may be required by the Commission?

A That's correct.

Q Are there provisions for metering the gas from the separator?

A The gas will be metered from each reservoir separately.

Q Where is this tank battery located, Mr. Frost?

A It's in the NE/4 of the NE/4. In fact, the SW/4 of that Quarter Quarter.

Q What section would that be?

A Section 25.

Q That's Township 25 South, Range 37 East?

MR. UTZ: What was that location again?

A The NE/4 of the NE/4.

Q (By Mr. Bratton) Approximately in the Southwest corner of the NE/4 of the NE/4?

A Yes.

Q Is there anything further which you wish to state in connection with this application, Mr. Frost?

A No, I don't believe so.

Q In your opinion, Mr. Frost, will the granting of this application prevent waste and protect correlative rights?

A Yes, I believe it will.

Q If the application is allowed, in your opinion, will the installation of this system allow for a somewhat longer life of the lease before abandonment?

A Yes, I think it will, definitely.

Q Were Exhibits 1 through 4 prepared by you or under your supervision and direction?

A Yes, they were.

MR. BRATTON: I would like to offer in evidence Atlantic's Exhibits 1 through 4 inclusive.

MR. UTZ: Without objection, they will be received.

MR. BRATTON: We have no further questions, Mr.

Examiner.

CROSS EXAMINATION

BY: MR. UTZ:

Q Mr. Frost, how many of these zones that you are requesting actually are productive at the present time?

A Two, at the present time; Montoya and Ellenberger. We are presently producing those two.

Q And your project well into the Fusselman, right?

A At the present time.

Q And you don't have any production in the Drinkard as yet?

A Not as yet. We are anticipating that the No. 5 will be a Drinkard-Fusselman producer.

Q In addition to the two producing zones and the two that you are projected to, you are asking for the same thing for the McKee and the Blinebry in addition, is that correct?

A That's correct.

Q Do you know what type of crudes the Montoya and Ellenberger are producing?

A They are intermediate.

Q Do you have any idea of what the Fusselman and Drinkard will be?

A Only that the pipeline company has said that they would all go in the intermediate line.

Q Even the Drinkard?

A Even the Drinkard so far. That is one thing, if one

one of these zones that we haven't produced as yet turns out to be a sour zone, we would not want to put it in this battery, we would put it in the battery with the Queen, or another battery.

Q You will keep the sweet intermediate and sour crude separately?

A Separately, that's true.

Q And how about the McKee and Fusselman, what do you expect?

A We expect them to be intermediate.

Q The Blinebry?

A Expect it to be intermediate.

Q The Blinebry in some instances is sweet?

A I believe so.

Q In some instances it is sour?

A Yes.

MR. UTZ: Are there any other questions of the witness?

MR. PAYNE: Yes.

MR. UTZ: Mr. Payne.

EXAMINATION BY MR. PAYNE:

Q I would like to clarify one point here. Did you say if the Drinkard is the only formation that appears to be sour, you will commingle it with the Queen production?

A Well, I did say that. It would either be commingled with the Queen or in a separate battery by itself.

Q If it were to be commingled with the Queen -- I notice

in your application you don't propose to separately meter the Queen production.

A The Queen is presently producing in a battery by itself and is not to be produced into this common tank battery. The Queen is sour.

Q But if you did find it necessary to commingle the Queen and the Drinkard and perhaps the Blinebry in one battery, you would separately meter the production from each prior to commingling?

A That's true.

MR. PAYNE: Thank you.

A It would be another battery similar to this.

MR. BRATTON: I believe, Mr. Payne, if the production from the Drinkard were such that we had to put it in with the Queen or commingle it otherwise, we would have to come before the Commission with a new application.

MR. UTZ: In other words, the Queen is entirely outside of the scope of this hearing?

MR. BRATTON: That is correct.

THE WITNESS: That's right.

MR. UTZ: Any other questions? If not, the witness may be excused.

(Witness excused.)

MR. UTZ: Case 1588 will be taken under advisement.

STATE OF NEW MEXICO)
)
 COUNTY OF BERNALILLO) SS

I, Joseph A. Trujillo, Notary Public in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Hearing before the New Mexico Oil Conservation Commission was reported by me in Stenotype and reduced to typewritten transcript, and that the same is a true and correct record, to the best of my knowledge, skill and ability.

WITNESS my Hand and Seal this 5th day of February, 1959, in the City of Albuquerque, County of Bernalillo, State of New Mexico.

Joseph A. Trujillo
 NOTARY PUBLIC

My Commission Expires:

October 5, 1960

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 1508, heard by me on *Feb 4*, 19*59*.
Joseph A. Trujillo, Examiner
 New Mexico Oil Conservation Commission

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

September 4, 1962

**The Atlantic Refining Company
P. O. Box 1978
Roswell, New Mexico**

Attention: Mr. A. D. Kloxin

Gentlemen:

Reference is made to your letter of August 7, 1962, wherein you request approval of certain proposed revisions to your commingling installation constructed on your State "Y" Lease, Justis Field, Lea County, New Mexico, under authority of Commission Order No. R-1377.

Inasmuch as the installation as revised would be in substantial compliance with the Commission's Manual for the Installation and Operation of Commingling Facilities, we have no objection to the revision.

Atlantic is, therefore, hereby authorized to revise said installation in accordance with the diagram submitted which will permit the commingling of production from the Ellenburger, McKee, Fusselman, Montoya, Blinbry, and Drinkard zones underlying the State "Y" Lease, after separately metering the production from all zones except the Montoya zone. Operation of said installation shall be in compliance with the aforesaid manual.

Very truly yours,

**A. L. PORTER, Jr.,
Secretary-Director**

ALP/DSN/esr

cc: Oil Conservation Commission - Hobbs
Oil & Gas Engineering Committee - Hobbs
State Land Office - Santa Fe

THE ATLANTIC REFINING COMPANY

INCORPORATED - 1970

PETROLEUM PRODUCTS

August 7, 1962

DOMESTIC PRODUCING DEPARTMENT
NEW MEXICO DISTRICT

BOONE MACANLAY, DISTRICT MANAGER
R. F. CHAMPION, DISTRICT LANDMAN
W. T. RAKES, DISTRICT GEOPHYSICIST
F. R. BOGGS, DISTRICT GEOLOGIST
A. D. KLOXIN, DISTRICT DESIG. & PROD. SUPT.
W. F. TOLINSON, DISTRICT ENGINEER
B. R. WARE, ADMINISTRATIVE SUPERVISOR

MAILING ADDRESS
P. O. BOX 1978
ROSWELL, NEW MEXICO

Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Jr.
Secretary-Director

Re: Commingle Lease
Atlantic Refining Company
State "Y" Lease, Justis Field
Lea County, New Mexico

Dear Sir:

Reference is made to Case No. 1588, Order No. R-1377 whereby, The Atlantic Refining Company was granted permission to commingle the production from the Ellenburger, McKee, Fusselman, Montoya, Blinbry and Drinkard zones in a common battery. This Order states that each pool should be separately metered prior to commingling.

The Ellenburger zone has since been depleted and is no longer productive on this lease. To facilitate testing and producing of the remaining pools, we propose to revamp our commingling installation and make use of some Ellenburger surface equipment not being used. In revamping this facility, we propose to up-grade the installation to conform with the MANUAL FOR THE INSTALLATION AND OPERATION OF COMMINGLING FACILITIES. We are proposing to use the subtraction method for the Montoya zone. We respectfully request that Order No. R-1377 be amended or that you give us permission to have an unmetered zone whose production will be determined by the subtraction method.

Enclosed is a schematic drawing of our proposed installation which we feel will give us adequate control during both producing and testing periods.

Should any other information or additional copies of these plats be required, please notify the writer.

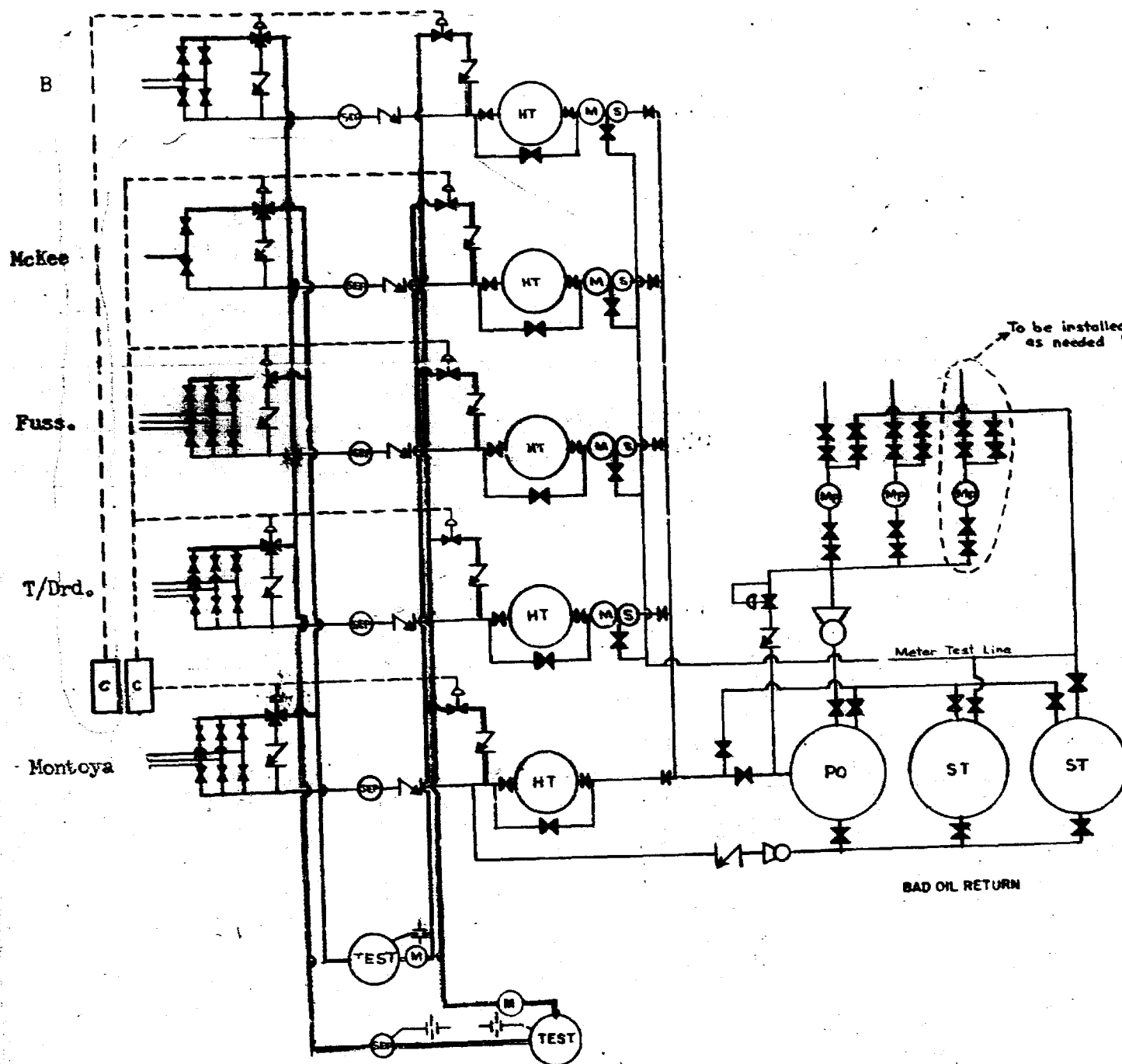
Yours very truly,

The Atlantic Refining Company

A. D. Kloxin
A. D. Kloxin

enc

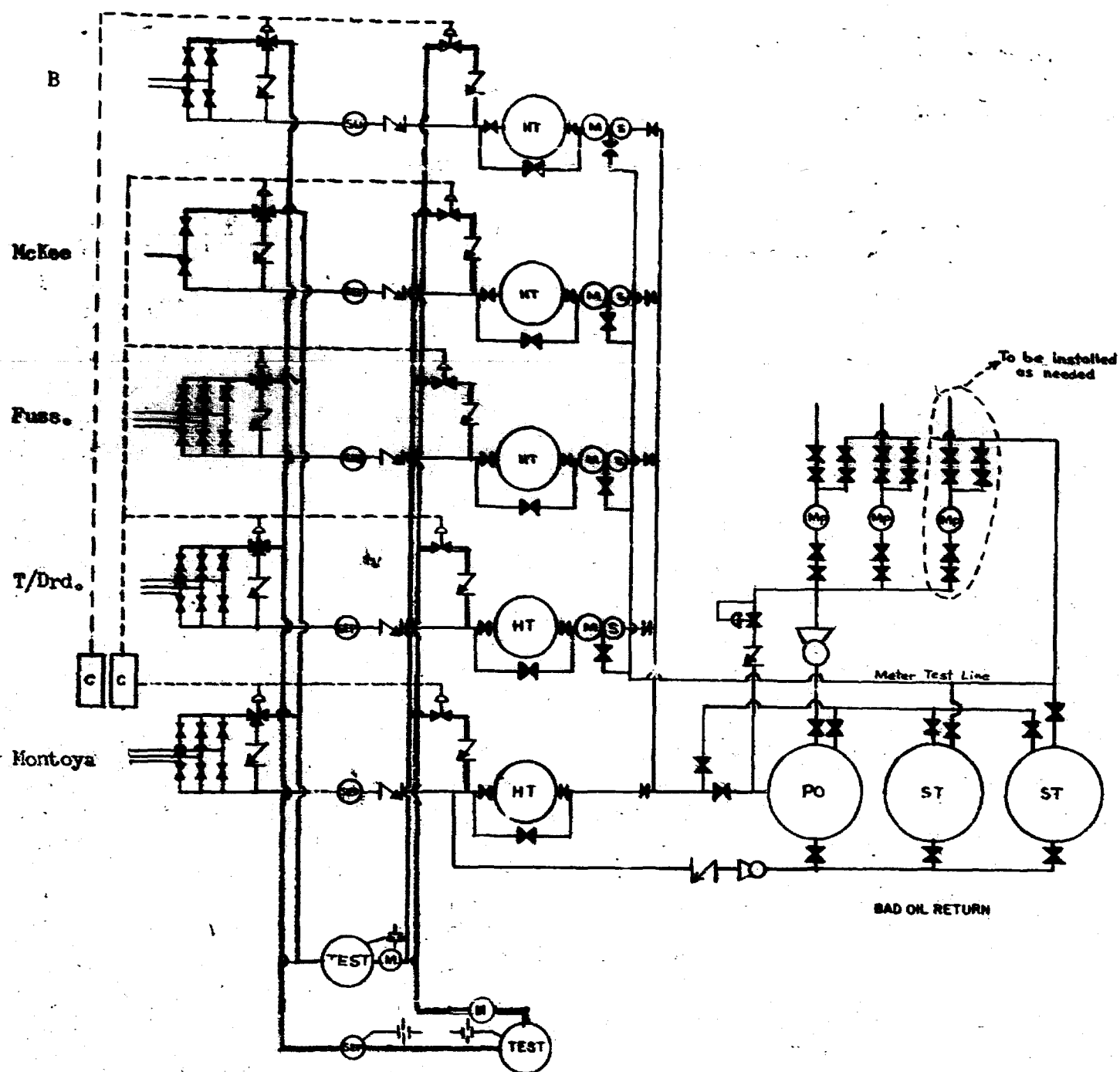
cc: Joe D. Ramey w/enc



SYMBOLS

- CHECK VALVE
- BLOCK VALVE
- 2 WAY VALVE (PNEUMATIC OR ELECTRICALLY CONTROLLED)
- 3 WAY VALVE (MANUAL, PNEUMATIC OR ELECTRICALLY CONTROLLED)
- CONTROL PANEL (PNEUMATIC OR ELECTRICAL)
- GAS METER
- METER
- METER FOR POWER OIL
- TESTING VESSEL (HEATER-TREATER OR SEPARATOR)
- HEATER TREATER
- POWER OIL TANK
- STOCK TANK
- PUMP
- SEPARATOR
- SAMPLER

SCHEMATIC DRAWING
STATE "N" LEASE
JUSTIS FIELD
NEW MEXICO



SYMBOLS

- CHECK VALVE.
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SAMPLER

SCHEMATIC DRAWING
STATE "Y" LEASE
JUSTIS FIELD
NEW MEXICO

THE ATLANTIC REFINING COMPANY

INCORPORATED - 1970

PETROLEUM PRODUCTS

August 7, 1962

DOMESTIC PRODUCING DEPARTMENT
NEW MEXICO DISTRICT

BOONE MACAULA, DISTRICT MANAGER
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E. R. WARE, ADMINISTRATIVE SUPERVISOR

MAILING ADDRESS
P. O. BOX 1978
ROSWELL, NEW MEXICO

Oil Conservation Commission
P. O. Box 871
Santa Fe, New Mexico

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Secretary-Director

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Atlantic Refining Company
State "Y" Lease, Justis Field
Lea County, New Mexico

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Should any other information or additional copies of these plats be required, please notify the writer.

Yours very truly,

The Atlantic Refining Company

A. D. Kloxin
A. D. Kloxin

enc

cc: Joe D. Ramey w/enc

Case 1588

J. M. HERVEY 1874-1953
HIRAM N. DOW
CLARENCE E. HINKLE
W. E. BONDURANT, JR.
GEORGE H. HUNKER, JR.
HOWARD C. GRAYTON
S. B. CHRISTY IV
LEWIS C. COX, JR.
PAUL W. EATON, JR.
ROBERT C. BLEDSOE

LAW OFFICES
HERVEY, DOW & HINKLE
HINKLE BUILDING
ROSWELL, NEW MEXICO

January 8, 1959

TELEPHONE MAIN 2-6510
POST OFFICE BOX 547

Mr. A. L. Porter, Secretary-Director
New Mexico Oil Conservation Commission
Mabry Hall, State Capitol
Santa Fe, New Mexico

Dear Mr. Porter:

We enclose herewith in triplicate Application of The Atlantic Refining Company to commingle the production from separate reservoirs underlying the Atlantic State "Y" lease in the Justis Pool.

We would appreciate your filing this Application and having it set down for an examiner hearing at the earliest possible time, allowing sufficient time for publication of notice. I would appreciate your sending me a copy of the notice of publication in connection with the case.

Please advise whether or not it has been the practice in connection with applications to commingle to give notice to offset owners. I cannot find any requirement in this regard but someone mentioned that they thought it might be necessary.

Yours sincerely,

HERVEY, DOW & HINKLE

By

CEH/bp
Encl.

Docket mailed
1-22-59
BP

Case 1588

OIL CONSERVATION COMMISSION
P. O. BOX 871
SANTA FE, NEW MEXICO

January 9, 1959

*Rule 303
excep.
Humble*

Mr. Clarence Hinkle
Hervey, Dew & Hinkle
P.O. Box 547
Roswell, New Mexico

Dear Mr. Hinkle:

Reference is made to your letter of January 8, 1959,
concerning the necessity of giving notice to offset operators in
commingling cases.

The Commission Rules and Regulations do not so require,
publication by the Commission being deemed sufficient.

However, as a matter of practice most operators do notify
offsets when applying for an exception to Rule 303, presumably as a
comity measure.

Very truly yours,

Oliver E. Payne
Counsel

OEP:bp

C
O
P
Y

SUBJ: CASE OF THE ATLANTIC AIRLINE CO.
CONSIDERING APPLICATION FOR PERMISSION
TO LOANER AIRCRAFT
ATLANTIC AIRLINE CO. LEASE
COURT OF APPEALS, 9TH CIRCUIT, NEW MEXICO

Attached are three schematic drawings of a proposed tank battery on the Atlantic State Highway, just west of this town, Rio County, New Mexico. This proposed battery would be one of a series of batteries with all off and gas pipelines from the proposed battery to the existing battery. The drawings show the battery as attached to the gas pipeline and the gas pipeline. The tank battery as proposed is for one type of tank that is attached to the gas pipeline and the gas pipeline. The other type of tank is attached to the gas pipeline.

As oil and gas separator, pump, blowdown, heater, and an after cooler for gas are provided for each processing separator. When the second well is completed a test separator will be added and oil and gas will be handled as whenever any well begins producing oil, an oil-water separator will be installed between the respective separator and oil pump.

[illegible]

Figure II

Figure II shows the proposed installation when a second well is drilled producing from the same two zones as the first well. Each producing zones has its own separator with meters. A test separator and meters has been added along with a test header. This test header is connected to all zones. Each flow line connected to the header is equipped with a check valve to prevent backflow from one zone to another. Either zone of either well can be tested independently with oil and gas being metered.

Figure III

Figure III shows the proposed tank battery when a third well is drilled. This well is shown to be producing from one of the reservoirs common to the first and second well, and from a third zone which has not been produced before completion of the third well. Here another separator, oil meter and gas meter has been added for the third zone. If additional wells and zones are completed either duals or singles, they will produce through their respective separators. A separator and meters are provided for each producing reservoir. When water production begins on any zone an emulsion breaker will be installed between the separator and oil meter.

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO

APPLICATION OF THE ATLANTIC REFINING
COMPANY TO COMMINGLE PRODUCTION OF
OIL AND GAS FROM SEPARATE RESERVOIRS
UNDERLYING THE ATLANTIC STATE "Y"
LEASE, JUSTIS POOL, LEA COUNTY, NEW
MEXICO, COVERING THE N $\frac{1}{2}$ NE $\frac{1}{4}$ AND THE
SE $\frac{1}{4}$ NE $\frac{1}{4}$ SECTION 25, TOWNSHIP 25 SOUTH,
RANGE 37 EAST, N.M.P.M.

To New Mexico Oil Conservation Commission
Santa Fe, New Mexico

Comes the undersigned, The Atlantic Refining Company, and
hereby makes application to commingle the production of oil and gas
produced from separate reservoirs underlying its Atlantic State "Y"
lease located in the Justis Pool, Lea County, New Mexico, and
embracing the following described lands situated in said county, to-wit:

N $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 25, Township 25
South, Range 37 East, N.M.P.M., con-
taining 120 acres, more or less,

and in support of such application respectfully shows:

1. That The Atlantic Refining Company has completed three
wells on the lease hereinabove referred to, more particularly described
as follows:

(1) Atlantic State Y 1B completed in the
Queen formation located 660' FNL and 1979' FEL
said well being completed in the interval between
2911' and 3238'.

(2) Atlantic State Y 2A completed in the
Queen formation located 330' FNL and 330' FEL,
said well being completed in the interval from
3306' to 3332'.

(3) Atlantic State Y 3B located 330' FNL
and 1650' FEL, said well being a dual completion
in the Montoya formation in the interval from
6821' to 6683' and in the Ellenburger formation
in the interval from 8143' to 8205'.

Applicant is in the process of drilling a fourth well, which
at the present time has attained a depth of approximately 3,000 feet,

known as the Atlantic State Y 4A which said well is located 430' FNL and 660' FEL and applicant contemplates completing the same in the Montoya formation at an interval of approximately 6,810' to 6,880' and in the Ellenburger formation at an interval of approximately 8,100' to 8,200'. There is attached hereto, made a part hereof and for purposes of identification marked Exhibit "A" a plat showing said leasehold interest and the location of the respective wells.

2. That well number 3 above referred to is producing oil and gas from separate reservoirs underlying said leasehold premises, namely the Montoya and Ellenburger formations and it is contemplated that applicant may also secure production from the McKee, Fusselman, Blinebry and Drinkard formations and proposes to commingle the production from said separate reservoirs by producing the same into a common storage where the character of the crude produced is similar.

3. That the oil and gas produced from each reservoir, with the exception of the Queen reservoir, will be metered separately before commingling. An oil and gas separator, a dump-type oil meter and an orifice meter will be provided for each producing reservoir. When the fourth and each additional well is completed a test separator with identical oil and gas meters will be installed and whenever any zone begins producing water an emulsion treater will be installed between the respective separators and oil meters.

4. The installation contemplated for the measuring and production of the oil and gas from each separate reservoir into a common tank battery will include equipment tested and generally recognized by the industry as acceptable for such purpose so that the production from each separate reservoir will be effectively measured. Oil sold as crude of intermediate sulfur content will be commingled into the same tank battery and if any one zone produces another type crude another tank battery will be provided.

known as the Atlantic State Y 4A which said well is located 430' FNL and 660' FEL and applicant contemplates completing the same in the Montoya formation at an interval of approximately 6,810' to 6,880' and in the Ellenburger formation at an interval of approximately 8,100' to 8,200'. There is attached hereto, made a part hereof and for purposes of identification marked Exhibit "A" a plat showing said leasehold interest and the location of the respective wells.

2. That well number 3 above referred to is producing oil and gas from separate reservoirs underlying said leasehold premises, namely the Montoya and Ellenburger formations and it is contemplated that applicant may also secure production from the McKee, Fusselman and Blinebry formations and proposes to commingle the production from said separate reservoirs by producing the same into a common storage where the character of the crude produced is similar.

3. That the oil and gas produced from each reservoir, with the exception of the Queen reservoir, will be metered separately before commingling. An oil and gas separator, a dump-type oil meter and an orifice will be provided for each producing reservoir. When the fourth and each additional well is completed a test separator with identical oil and gas meters will be installed and whenever any zone begins producing water an emulsion treater will be installed between the respective separators and oil meters.

4. The installation contemplated for the measuring and production of the oil and gas from each separate reservoir into a common tank battery will include equipment tested and generally recognized by the industry as acceptable for such purpose so that the production from each separate reservoir will be effectively measured and kept separate. Oil sold as crude of intermediate sulfur content will be commingled into the same tank battery and if any one zone produces another type crude another tank battery will be provided.

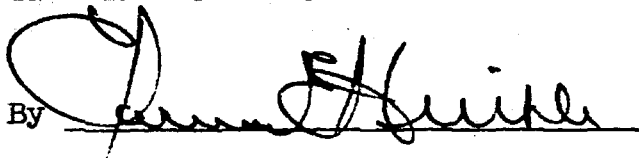
5. That applicant proposes to allocate the production from each of said wells producing from the respective reservoirs on the basis of periodic well tests made at such reasonable times as may be designated by the Oil Conservation Commission.

6. That the production from said reservoirs into a common tank battery will effect a considerable saving in installation and operating costs and it is believed that such installation will be in the interest of conservation and that such installation will not cause waste or impair correlative rights.


WHEREFORE, applicant prays that the Oil Conservation Commission after due notice and hearing as provided by law and the rules and regulations of the Oil Conservation Commission enter an order approving the production of oil and gas as above set forth from the several separate reservoirs underlying the above described lease into a common tank battery.

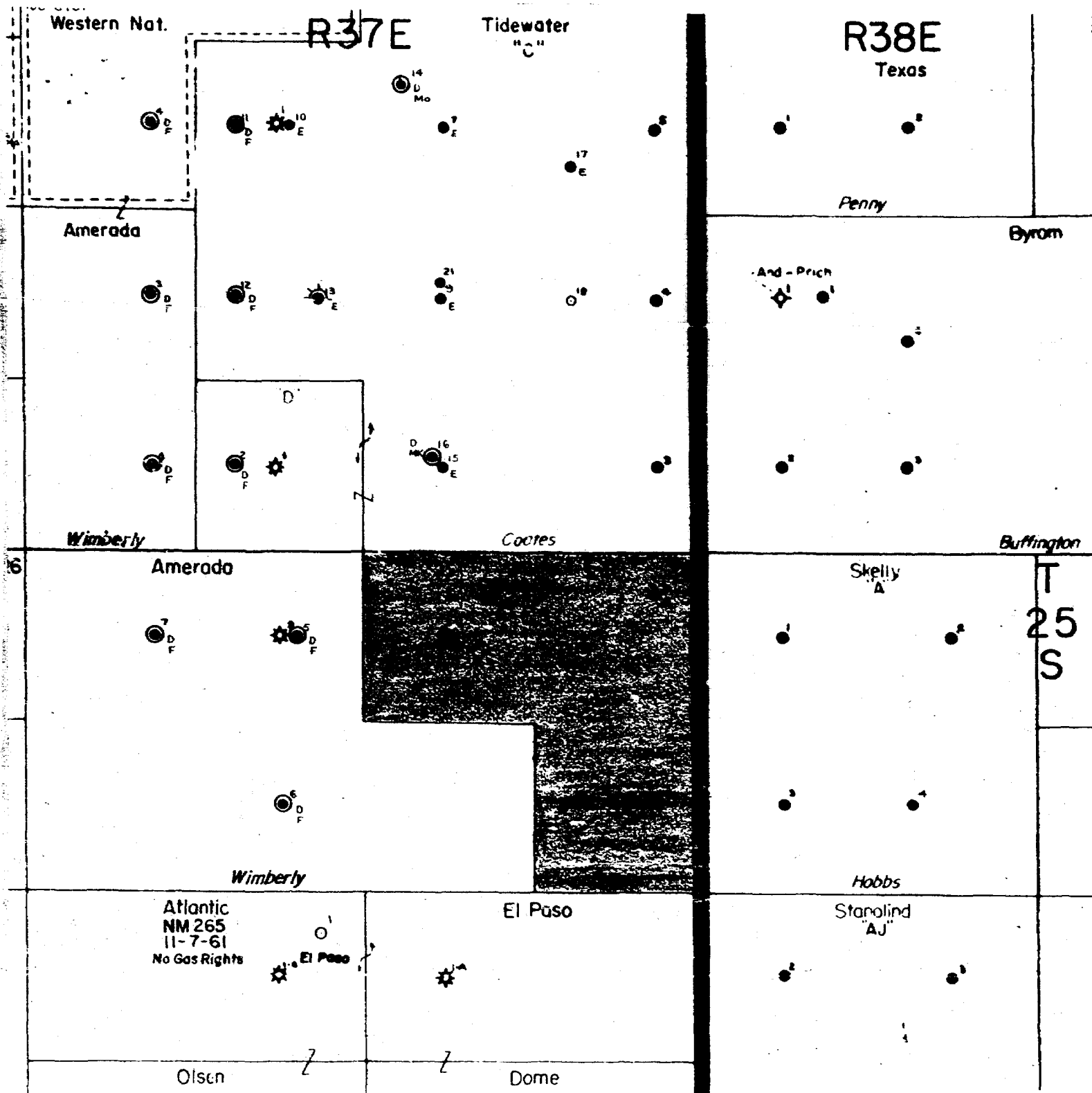
Respectfully submitted,

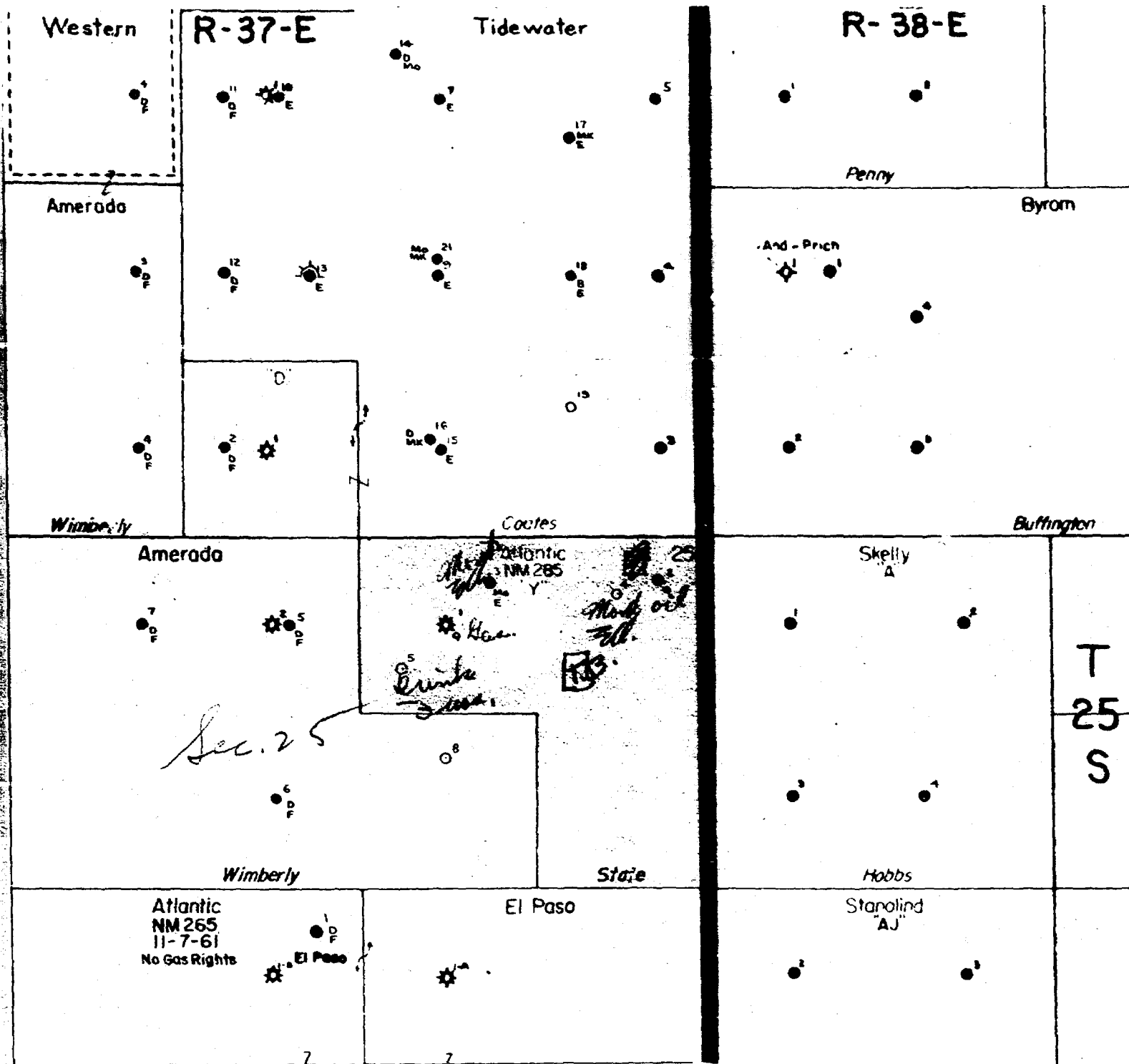
THE ATLANTIC REFINING COMPANY

By 

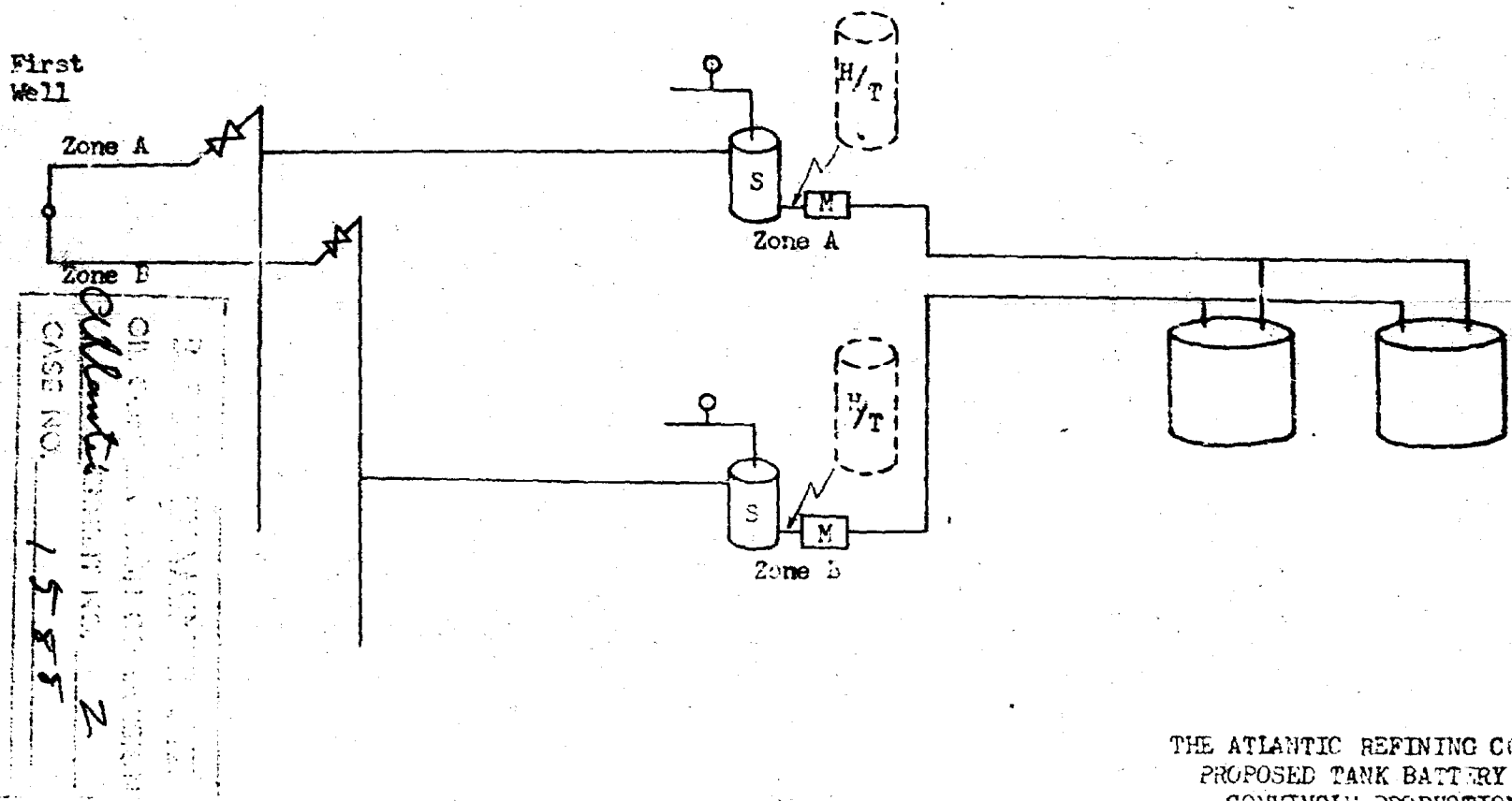
HERVEY, DOW & HINKLE

By 
Roswell, New Mexico
Attorneys for
The Atlantic Refining Company





ATLANTIC EXHIBIT II
Case No. 1588

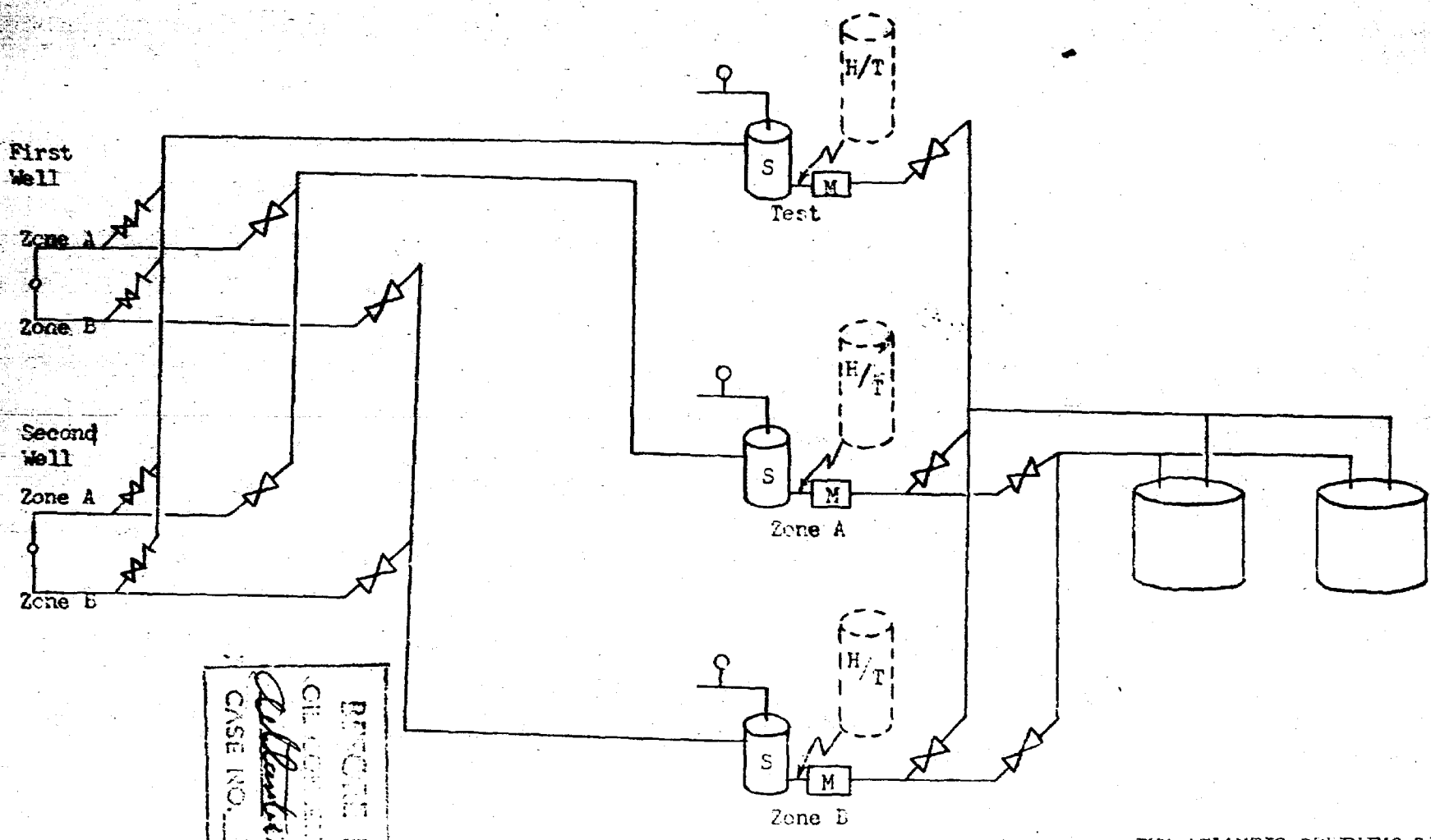


THE ATLANTIC REFINING COMPANY
PROPOSED TANK BATTERY TO
CONTINGLE PRODUCTION

ATLANTIC STATE "Y" LEASE
JUSTIS AREA, LEA COUNTY, NEW MEXICO

FIGURE I
TANK BATTERY FOR FIRST WELL

ATLANTIC EXHIBIT III
Case No. 1588



- LEGEND:
- S - Separator
 - H/T - Emulsion Treater
 - M - Oil Meter
 - ⊖ - Gas Meter
 - ∧ - Manual block valve
 - ∇ - Check valve

PROCEED EXAMINER
 OIL FIELD PRODUCTION
 CASE NO. 1588
 ATTORNEY NO. 5

THE ATLANTIC REFINING COMPANY
 PROPOSED TANK BATTERY TO
 COMBINE PRODUCTION

 ATLANTIC STATE "Y" LEASE
 JUSTIS AREA, LMA COUNTY, NEW MEXICO

 FIGURE II
 TANK BATTERY WITH TWO WELLS

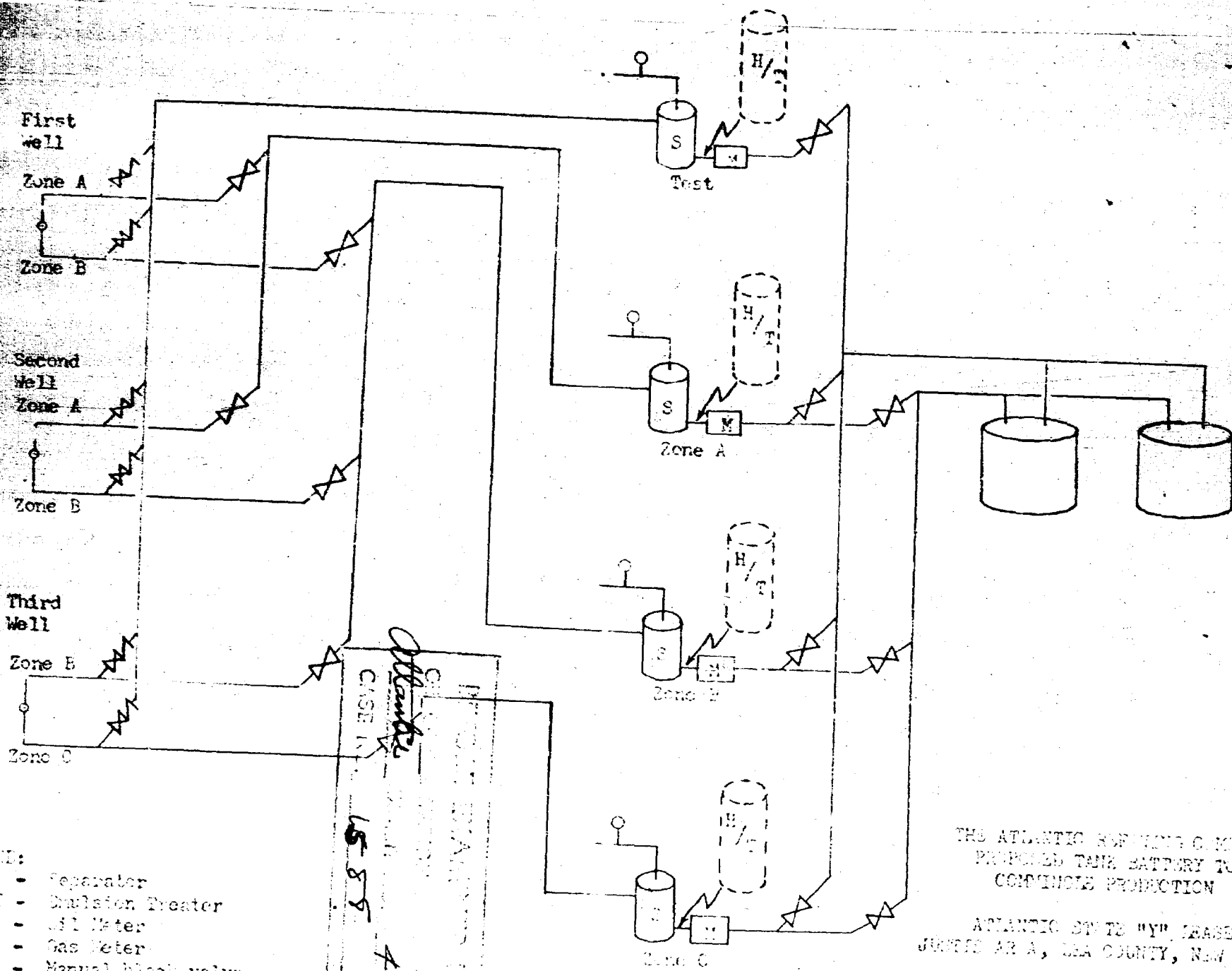


FIGURE III
TANK BATTERY WITH THREE WELLS

SUPPLEMENTAL DOCKET: EXAMINER HEARING FEBRUARY 4, 1959

Oil Conservation Commission 9 a.m., Mabry Hall, State Capitol, Santa Fe, NM.

The following case will be heard before Elvis A. Utz, Examiner:

CASE 1595: Application of John J. Dempsey Associates for the assignment of a minimum allowable to one gas well in the Fulcher Kutz-Pictured Cliffs Gas Pool, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order assigning a minimum allowable to one gas well in the Fulcher Kutz-Pictured Cliffs Gas Pool in order to prevent premature abandonment thereof, said well being the Hutchison Well No. 1 located 660 feet from the North line and 635 feet from the East line of Section 1, Township 29 North, Range 13 West, San Juan County, New Mexico.

DOCKET: EXAMINER HEARING FEBRUARY 4, 1959

OIL CONSERVATION COMMISSION 9 a.m., Mabry Hall, State Capitol, SANTA FE

The following cases will be heard before ELVIS A. UTZ, Examiner:

- CASE 1587: Application of Cabot Carbon Company for an oil-oil dual completion. Applicant, in the above-styled cause, seeks an order authorizing it to dually complete its J. L. Reed Well No. 2 located 660 feet from the North and East lines of Section 35, Township 13 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the King-Wolfcamp Pool and King-Devonian Pool through parallel strings of 1½" tubing.
- CASE 1588: Application of Atlantic Refining Company to commingle the production from several separate oil pools. Applicant, in the above-styled cause, seeks an order authorizing it to commingle the production from the Ellenburger, McKee, Fusselman, Montoya, Blinebry, Drinkard, and Queen formations on its State "Y" Lease comprising the N/2 NE/4 and the SE/4 NE/4 of Section 25, Township 25 South, Range 37 East, Lea County, New Mexico. Applicant proposes to separately meter the production from each formation except the Queen prior to being commingled.
- CASE 1589: Application of Humble Oil & Refining Company for an exception to Rule 16 of Order R-586 and for an exception to Rule 303 of the Commission Rules and Regulations. Applicant, in the above-styled cause, seeks an order permitting the classification of a 43-degree gravity oil well as a gas well in the Tubb Gas Pool, said well being its dually completed State "V" Well No. 11 located in the NE/4 SW/4 of Section 10, Township 21 South, Range 37 East, Lea County, New Mexico. Applicant further seeks permission to commingle the liquid hydrocarbons produced from the Tubb zone of said State "V" Well No. 11 with Tubb oil produced from its State "V" Well No. 7 located in the SE/4 SW/4 of said Section 10. Applicant further seeks permission to commingle the Blinebry condensate produced from said State "V" Well No. 11 with the Blinebry oil produced from its State "V" Well No. 1 located in the SW/4 SW/4 of said Section 10.
- CASE 1590: Application of Rex Moore for an order authorizing a gas injection project in San Juan County, New Mexico, and for the promulgation of special rules and regulations in connection therewith. Applicant, in the above-styled cause, seeks an order authorizing it to inject gas into the Gallup formation of the Bisti-Lower Gallup Oil Pool through its Scott No. 5 Well located 2115 feet from the South line and 2080 feet from the West line of Section 3, Township 24 North, Range 10 West, San Juan County, New Mexico. Applicant further proposes that special rules and regulations be promulgated to govern the above-described project, which rules would provide for the transfer of the allowable from the injection well to producing wells, transfer of allowables from wells which have

been shut-in for observation or to increase the efficiency of the project, operation of the wells on a net gas-oil ratio basis giving allowance for gas injected, and such other rules and regulations as the Commission deems necessary.

CASE 1591:

Application of Angels Peak Oil Company for the assignment of minimum allowables to two gas wells in the Fulcher Kutz-Pictured Cliffs Gas Pool, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks an order assigning minimum allowables to two gas wells in the Fulcher Kutz-Pictured Cliffs Gas Pool in order to prevent premature abandonment thereof, said wells being applicant's Angels Peak Well No. 3 located 595 feet from the North line and 1240 feet from the East line of Section 11 and Angels Peak Well No. 5 located 285 feet from the North line and 1520 feet from the West line of Section 11, both in Township 28 North, Range 11 West, San Juan County, New Mexico.

CASE 1592:

Application of Amerada Petroleum Corporation for an order extending the horizontal limits of the Bagley-Upper Pennsylvanian Gas Pool and for a non-standard gas proration unit. Applicant, in the above-styled cause, seeks an order extending the horizontal limits of the Bagley-Upper Pennsylvanian Gas Pool to include the E/2 of Section 33, and the NW/4 of Section 34, all in Township 11 South, Range 33 East, Lea County, New Mexico. Applicant further seeks the establishment of a 320-acre non-standard gas proration unit in said pool consisting of the NE/4 of said Section 33, and the NW/4 of said Section 34, to be dedicated to the applicant's State BT "M" No. 2 Well located in the SE/4 NE/4 of said Section 33.

CASE 1593:

Application of The Texas Company for a non-standard gas proration unit. Applicant, in the above-styled cause, seeks an order authorizing a 241-acre non-standard gas proration unit in the Eumont Gas Pool consisting of the NE/4 of Section 5, Township 20 South, Range 37 East, and the S/2 SE/4 of Section 32, Township 19 South, Range 37 East, Lea County, New Mexico, said unit to be dedicated to applicant's J. W. Cooper Well No. 5 located 1668 feet from the North line and 1650 feet from the East line of said Section 5.

CASE 1196:

Application of The Ibox Company for permission to expand its water flood project in the Artesia Pool, Eddy County, New Mexico, and for eight unorthodox well locations. Applicant, in the above-styled cause, seeks an order permitting the expansion of its Artesia Water Flood Project No. 2, authorized by Order No. R-966 in the Artesia Pool, Eddy County, New Mexico, to convert to water injection a well in the NW/4 NW/4 of Section 28 and a well in the SW/4 NE/4 of Section 28, both in Township 18 South, Range 28 East. Applicant further seeks approval of eight unorthodox well locations in Sections 21 and 28 of the aforementioned township.

DOCKET: EXAMINER HEARING FEBRUARY 4, 1959

OIL CONSERVATION COMMISSION 9 a.m., Mabry Hall, State Capitol, SANTA FE

The following cases will be heard before ELVIS A. UTZ, Examiner:

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- CASE 1588: Application of Atlantic Refining Company to commingle the production from several separate oil pools. Applicant, in the above-styled cause, seeks an order authorizing it to commingle the production from the Ellenburger, McKee, Fusselman, Montoya, Blinebry, Drinkard, and Queen formations on its State "Y" lease comprising the N/2 NE/4 and the SE/4 NE/4 of Section 25, Township 25 South, Range 37 East, Lea County, New Mexico. Applicant proposes to separately meter the production from each formation except the Queen prior to being commingled.
- CASE 1589: Application of Humble Oil & Refining Company for an exception to Rule 16 of Order R-586 and for an exception to Rule 303 of the Commission Rules and Regulations. Applicant, in the above-styled cause, seeks an order permitting the classification of a 43-degree gravity oil well as a gas well in the Tubb Gas Pool, said well being its dually completed State "V" Well No. 11 located in the NE/4 SW/4 of Section 10, Township 21 South, Range 37 East, Lea County, New Mexico. Applicant further seeks permission to commingle the liquid hydrocarbons produced from the Tubb zone of said State "V" Well No. 11 with Tubb oil produced from its State "V" Well No. 7 located in the SE/4 SW/4 of said Section 10. Applicant further seeks permission to commingle the Blinebry condensate produced from said State "V" Well No. 11 with the Blinebry oil produced from its State "V" Well No. 1 located in the SW/4 SW/4 of said Section 10.
- CASE 1590: Application of Rex Moore for an order authorizing a gas injection project in San Juan County, New Mexico, and for the promulgation of special rules and regulations in connection therewith. Applicant, in the above-styled cause, seeks an order authorizing it to inject gas into the Gallup formation of the Bisti-Lower Gallup Oil Pool through its Scott No. 5 Well located 2115 feet from the South line and 2080 feet from the West line of Section 3, Township 24 North, Range 10 West, San Juan County, New Mexico. Applicant further proposes that special rules and regulations be promulgated to govern the above-described project, which rules would provide for the transfer of the allowable from the injection well to producing wells, transfer of allowables from wells which have

CASE 1564: Application of The Ihex Company for permission to install three separate lease automatic custody transfer systems. Applicant, in the above-styled cause, seeks an order authorizing it to install three separate lease automatic custody transfer systems, one on its Welch Duke State Lease, one on its Rosler Yates State Lease and the other on its McHutt State Lease, all in the Artesia Field, Township 18 South, Range 28 East, NMPM, Eddy County, New Mexico. Applicant further seeks permission to consolidate multiple tank batteries on said Rosler Yates State Lease in exception to Rule 309 of the Commission Rules and Regulations.

CONTINUED CASE

CASE 1573: Application of Southwestern, Inc. Oil Well Servicing for permission to make a "slim hole" completion. Applicant, in the above-styled cause, seeks an order authorizing it to utilize the "slim hole" method of completion for a well located in the SE/4 NW/4 Section 32, Township 16 South, Range 30 East, Square Lake Pool, Eddy County, New Mexico. Applicant proposes to utilize 2 1/2 inch tubing as a substitute for casing in the above-described well.

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Date 2-10-59

CASE NO. 1588

HEARING DATE 2-4-59

My recommendations for an order in the above numbered case(s) are as follows:

Approve comingling as follows:

1. The following formations are approved for comingling on the Atlantic - State "4" lease: ~~(a)~~ Undesignated - Montoya - Productive
(b) " - Ellenburger - "
(c) " - McKee - not productive
(d) " - Dusselman - " "
(e) Juveter - Blinbury - " "
(f) Undesignated - Drinkard - " "
2. Each formations must be metered before comingling into a common tank Battery.
3. Positive displacement ~~or~~ ^{meters} Dump ~~before~~ type meters must be used. Orifice meters to be used for metering Gas.
4. Separate tank batteries should be provided for each grade of crude.


Staff Member

OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Date 2-10-59

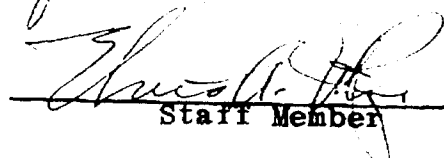
CASE NO. 1588

HEARING DATE 2-4-59

My recommendations for an order in the above numbered case(s) are as follows:

Approve coamingling as follows:

1. The following formations are approved for coamingling on the Atlantic - State "Y" lease:
(a) Undesignated - Montoya - Productive
(b) " " - Ellentager - "
(c) " " - McKee - nat. products
(d) " " - Dusselman - " "
(e) Jiveter - Blinbury - " "
(f) Undesignated - Drinkard - " "
2. Each formations must be metered before coamingling into a common tank Battery.
3. Positive displacement ~~meter~~ or Dump ~~type~~ ~~meter~~ must be used. Orifice meters to be used for metering Gas.
4. Separate tanks batheries should be provided for each grade of crude.


Staff Member

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

February 24, 1959

**Mr. Howard Bratton
Hervey, Dow & Hinkle
P.O. Box 547
Roswell, New Mexico**

Dear Mr. Bratton:

Enclosed herewith please find Order R-1337 entered in Case No. 1588 authorizing the installation of automatic custody transfer equipment on the State "Y" Lease. You will note that this order requires that the meters used in the automatic custody transfer equipment shall be checked for accuracy once each month until further order of the Secretary - Director.

Results of tests shall be filed with the appropriate district office of the Commission and shall be on the meter test report form which is available at all district offices.

Very truly yours,

A. L. Porter, Jr.
Secretary - Director

ALP/DSN:bp
Encls.

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

February 25, 1959

Mr. Howard Bratton
Hervey, Dow & Hinkle
Box 547
Roswell, New Mexico

Dear Howard:

On February 24th, 1959, we mailed you two copies of Order No. R-1337 in Case No. 1588.

I have discovered an error in the subject order in the final paragraph. Please disregard the final paragraph in its entirety. Enclosed are two copies of page two which should be substituted for those on the orders mailed to you yesterday.

Very truly yours,

Oliver E. Payne
General Counsel

OEP:bp
Encls.

CC-OCC, Hobbs

C
O
P
Y

**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. 1588
Order No. B-1237**

**APPLICATION OF THE ATLANTIC REFINING
COMPANY FOR PERMISSION TO COMMINGLE
THE PRODUCTION FROM SEVERAL SEPARATE
OIL POOLS IN LEA COUNTY, NEW MEXICO.**

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on February 4, 1938, at Santa Fe, New Mexico, before Elvis A. Uta, Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this 18th day of February, 1938, the Commission, a quorum being present, having considered the application, the evidence adduced and the recommendations of the Examiner, Elvis A. Uta, 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, The Atlantic Refining Company, is the owner and operator of the State "Y" lease comprising the N/2 NE/4 and the SE/4 NE/4 of Section 25, Township 25 South, Range 37 East, NMPM, Lea County, New Mexico.

(3) That the applicant proposes to commingle the Ellenburger, McKee, Fusselman, and Montoya production, as well as the Blinbry and Drinkard production if they prove to be intermediate grade crudes, from all wells presently completed or hereafter drilled on said State "Y" lease.

(4) That if the production from any of the above-mentioned formations proves to be sour crude, it will not be commingled with the intermediate grade crudes.

(5) That the applicant proposes to separately meter the production from each formation prior to commingling.

-2-

Case No. 1588
Order No. E-1337

(6) That approval of the subject application will not cause waste nor impair correlative rights.

IT IS THEREFORE ORDERED:

That the applicant, The Atlantic Refining Company, be and the same is hereby authorized to commingle the Ellenburger, Helms, Pennsylvanian, and Montoya production, as well as the Hinchey and Brinkard production if they prove to be intermediate grades, from all wells presently completed or hereafter drilled on the State "T" lease comprising the N/2 NE/4 and the SE/4 NE/4 of Section 25, Township 25 South, Range 37 East, NMPM, Lea County, New Mexico.

PROVIDED HOWEVER, That the production from each of said pools shall be separately metered prior to commingling and such meters shall be checked for accuracy once each month until further order of the Secretary-Director and the results of such tests shall be furnished to the Commission.

PROVIDED FURTHER, That the applicant shall install adequate testing facilities to permit the testing of all wells located on said State "T" lease at least once each month to determine the individual production from each zone of each of said wells.

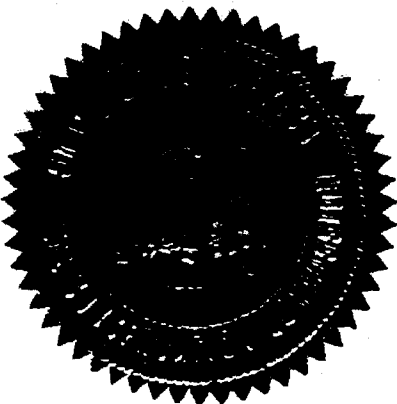
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

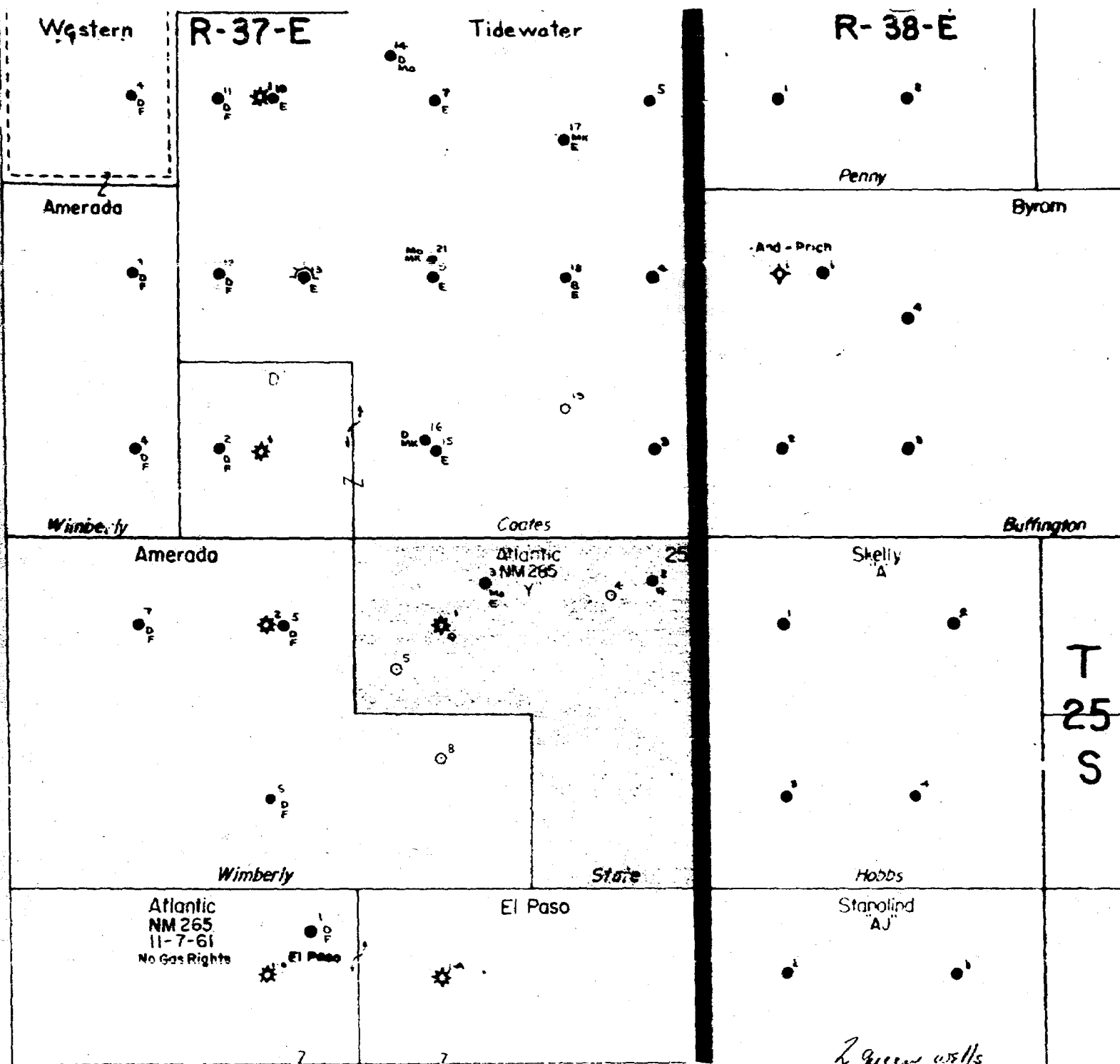
John Burroughes
JOHN BURROUGES, Chairman

Murray E. Morgan
MURRAY E. MORGAN, Member

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



ir/



THE ATLANTIC REFINING COMPANY
West Texas-New Mexico Region
Area of Atlantic State "Y" lease
Justis Pool
Scale: 1" = 1000'

Legend		
B	— Blinebry	-5000'
D	— Drinkard	-5900'
F	— Fusselman	-6700'
Mo	— Montoya	-6800'
Mk	— McKee	-7500'
E	— Ellenburger	-8100'

Atlantic Exhibit I
Case No. 1588

*2 green wells
Montoya - Ellenburger*

First Well

Zone A

Zone B

Zone A

Zone b

H/T

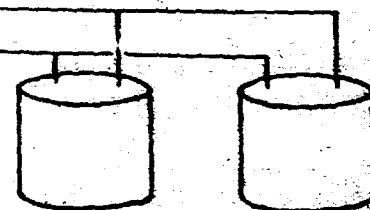
H/T

S

M

S

M



LEGEND:

- S - Separator
- H/T - Emulsion Treater
- M - Oil Meter
- ⊙ - Gas Meter
- X - Manual block valve
- Z - Check valve

THE ATLANTIC REFINING COMPANY
PROPOSED TANK BATTERY TO
COMBINGLE PRODUCTION

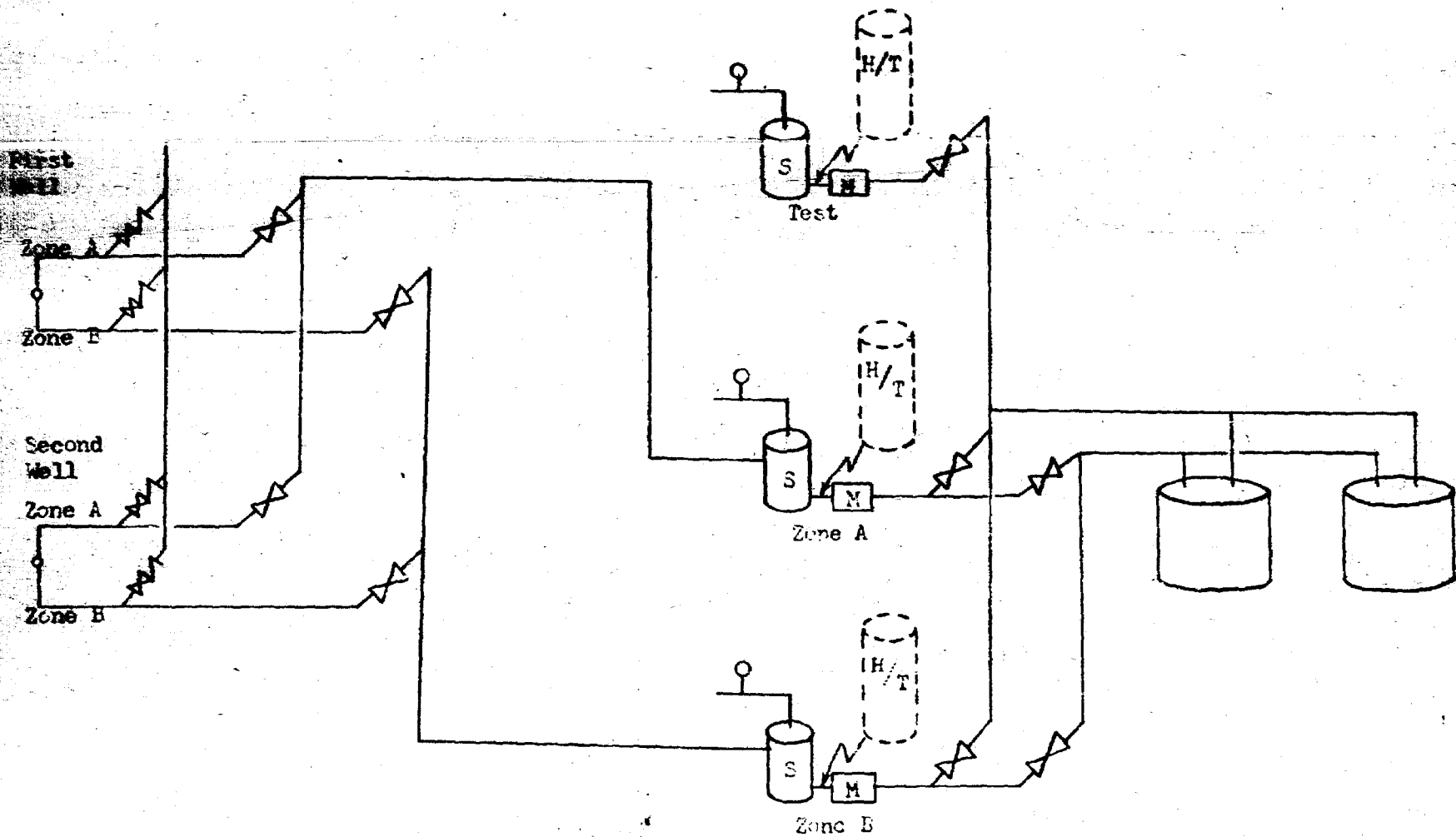
ATLANTIC STATE "Y" LEASE
JUSTIS AREA, LEA COUNTY, NEW MEXICO

FIGURE I
TANK BATTERY FOR FIRST WELL

ATLANTIC EXHIBIT III

LEGEND:

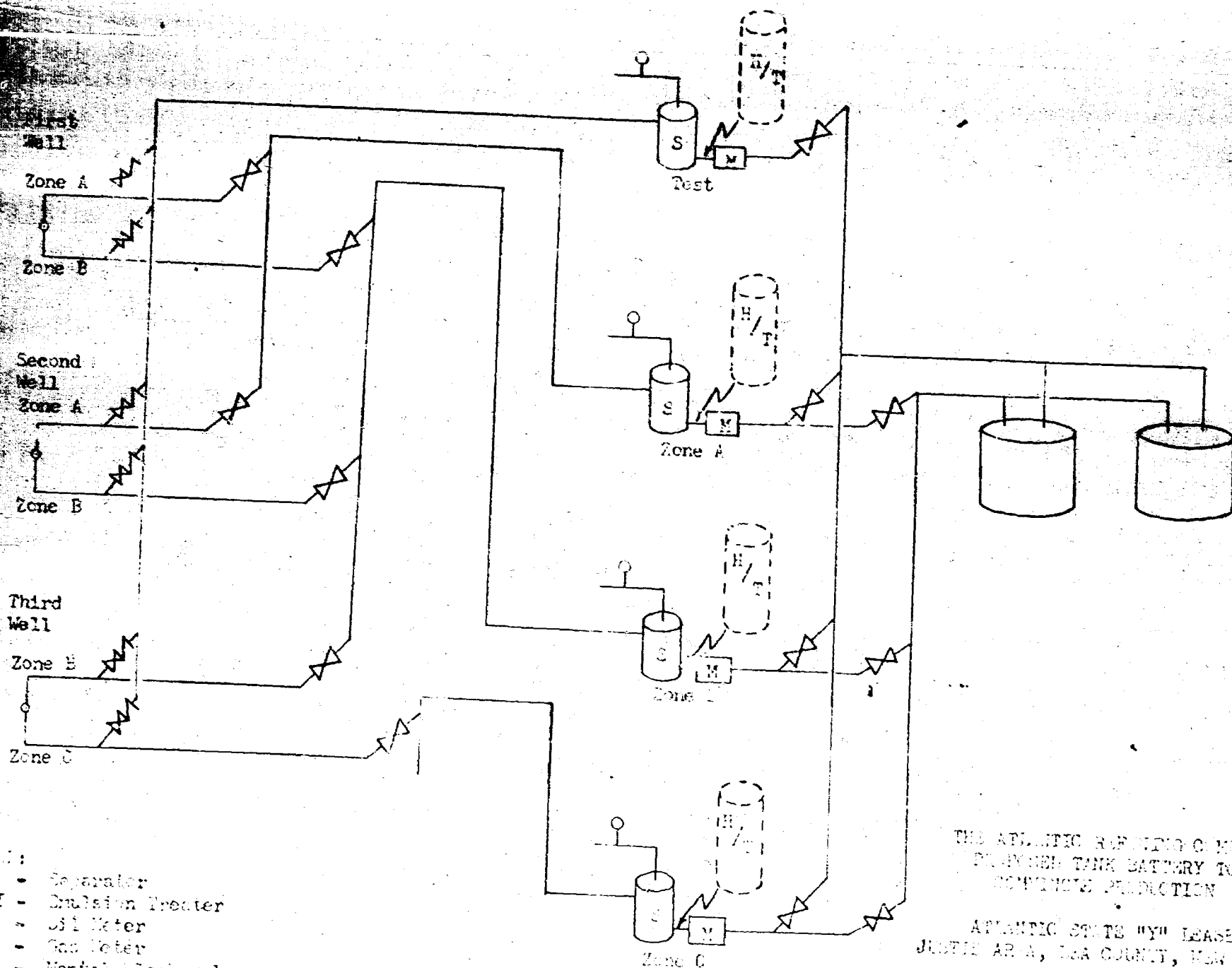
- S - Separator
- H/T - Emulsion Treater
- M - Oil Meter
- ⊙ - Gas Meter
- X - Manual block valve
- ∇ - Check valve



THE ATLANTIC REFINING COMPANY
PROPOSED TANK BATTERY TO
CONSOLIDATE PRODUCTION

ATLANTIC STATE "Y" LEASE
JUSTIS AREA, LEA COUNTY, NEW MEXICO

FIGURE II
TANK BATTERY WITH TWO WELLS



THE ATLANTIC REFINING COMPANY
 EMPLOYED TANK BATTERY TO
 COMBINE PRODUCTION

ATLANTIC STATE "Y" LEASE
 JUSTICE AREA, DELAWARE COUNTY, NEW MEXICO

FIGURE 110
 TANK BATTERY WITH THREE WELLS

PROPERTY OF THE ATLANTIC REFINING CO.
 CASE FILE APPROXIMATE FOR REFERENCE
 TO COMMERCIAL PRODUCTION
 ATLANTIC STATE WYF PLANT
 JUSCO AREA, SRA COUNTY, NEW MEXICO

An oil and gas separator, dump line, oil burner, and effluent meter for gas are provided for each producing wellhead. When the second well is completed a test separator with identical oil and gas flow will be installed. Whenever any zone begins producing water, an isolation valve will be installed between the respective separator and oil burner.

This internal structure of the oil, however, is not important. This plastic coating will reduce the absorption of water and prevent the water and thus prevent the oil from becoming too thick. The tests have shown the superiority of this structure to the other. It is able to withstand the severe testing conditions.

Figure II

Figure II shows the proposed installation when a second well is drilled producing from the same two zones as the first well. Each producing zone has its own separator with meters. A test separator and meters has been added along with a test header. This test header is connected to all zones. Each flow line connected to the header is equipped with a check valve to prevent backflow from one zone to another. Either zone of either well can be tested independently with oil and gas being metered.

Figure III

Figure III shows the proposed tank battery when a third well is drilled. This well is shown to be producing from one of the reservoirs common to the first and second well, and from a third zone which has not been produced before completion of the third well. A new separator, oil meter and gas meter has been added for the third zone. If additional wells and zones are completed either duals or singles, they will produce through their respective separators. A separator and meters are provided for each producing reservoir. When water production begins on any zone an analyzer header will be installed between the separator and oil meter.