

Case No.

405

Application, Transcript,
Small Exhibits, Etc.

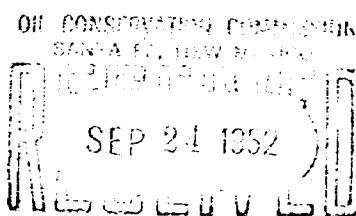
CASE 405: Tide Water application for dual
completion State A No. 4, Eunice Pool,
NE NE 8-21S-36E.

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

TRANSCRIPT OF HEARING

CASE NO. 405

SEPTEMBER 16, 1952



ADA DEARNLEY & ASSOCIATES
COURT REPORTERS
ROOM 12, CHOMWELL BLDG
PHONES 7-9845 AND 5-6546
ALBUQUERQUE, NEW MEXICO

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

SEPTEMBER 16, 1952

In the Matter of:

Tide Water Associated Oil Company's
application for permission to dually
complete (gas-oil) its State "A" No. 4
well, Eunice Pool, NE NE 8-21S-35E.

Case No. 405

(Notice of Publication read by Mr. Graham.)

MR. HOLLOWAY: J. B. Holloway representing Tidewater
Association.

This application for permission to dually complete our State
"A" No. 4 well located in the center of NE/4 NE/4 of Section 8,
Township 21¹/₂ South, Range 36 East, Eunice Pool, Lea County, is
identical in principle to similar applications made under Case
Nos. 375 and 383.

Tide Water Associated Oil Company completed State "A" No.
4 well on April 16, 1935, which initially and presently is pro-
ducing oil from the Grayburg-San Andres formation from open hole
interval 3790 feet (the bottom of 7" casing) to total depth,
3887 feet. An intermediate string of 9-5/8" casing was set and
cemented at 2842 feet.

The well was drilled prior to the time of the general use
of electric logging; however, the driller's log shows gas zones

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ALBUQUERQUE, NEW MEXICO

were penetrated at several intervals commencing at a depth of approximately 3000 feet, which zones are now identified in this area as being the Yates-Seven Rivers formation.

It is our opinion that it is practical and economically feasible to dually complete State "A" No. 4 well in such manner that the Grayburg-San Andres formation would continue to be produced through the tubing, and gas from the Yates-Seven Rivers zones through the annulus between the tubing and casing with no communication between the two producing formations.

If granted permission to dually complete the well, we propose, before doing so, to test the 7" casing with 1500 pounds pressure by running a retrievable cement retainer equipped with a perforation above and bull plug below, to a depth below 3000 feet and test casing above that depth. A radiocativity log would then be run through the gas section to enable us to identify possibly productive gas zones. The casing would then be perforated opposite the most permeable zones. Dual completion would be effected by setting a Baker Model "D" retainer production packer at approximately 3700 feet, and tubing run through the packer for production of the lower zone, or Grayburg-San Andres formation. The well is presently flowing but should artificial lift become necessary, we propose to equip the well with flow valves to eliminate tubing vibration which would possibly cause packer leakage.

We further propose that prior to the time the well is dually completed, to furnish the Commission for its approval a copy of the radioactivity log showing the location and extent of each

separate stratum yielding production above the casing shoe and the vertical footage location of the proposed perforations; and further upon the actual dual completion of the well, we shall submit to the Commission a diagrammatic sketch of the mechanical installation which was used to complete and produce the seal between the producing formations, together with a special report of production, a gas-oil ratio and reservoir pressure determination of each producing zone immediately following completion, and further to comply with any order of the Commission which to the Commission seems necessary for the prevention of waste or protection of correlative rights.

If we are permitted to recomplete the well in the manner here proposed, it will save the use of approximately 77 tons of critical steel in addition to \$27,000-\$30,000 which is the estimated difference between drilling a new well and the proposed dual completion.

This well is jointly owned by Tide Water, the operator, Sun Ray Oil Corporation and the Warren Petroleum Corporation. The two latter companies have approved this applicant's proposal and the method of re-completion of the well.

I believe that is all.

MR. SPURRIER: Anyone have a question of the witness?

MR. MACEY: Do you know whether there is another well producing from the same gas zone in that 160?

MR. HOLLOWAY: No, not in the gas. We have four oil wells and one gas well on the 160. We have made two prior applications, both being on 160-acre units, both have been granted.

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ALBUQUERQUE, NEW MEXICO

We are taking the open flow positions of the oil on Petroleum Number 3. The first well, the initial test showed the well would produce between five and ten million feet; shut-in gas pressure of 1197 pounds. I believe the field has already furnished the Commission with a radio-active log and following the open flow test and everything else, we propose to furnish a complete report.

MR. SPURRIER: Anyone have any further comment in the case? If not, the witness may be excused and the case will be taken under advisement. Next case is No. 406.

(Witness excused.)

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO)

I HEREBY CERTIFY that the foregoing and attached transcript of hearing in Case No. 405 before the Oil Conservation Commission, State of New Mexico, at Santa Fe, on September 16, 1952, is a true and correct record of the same to the best of my knowledge, skill and ability.

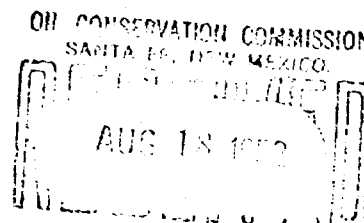
DATED at Albuquerque, New Mexico, this 23 day of September, 1952.

Marianne Meier
REPORTER

ADA DEARNLEY & ASSOCIATES
COURT REPORTERS
ALBUQUERQUE, NEW MEXICO

BEFORE THE OIL CONSERVATION COMMISSION
OF THE
STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF
TIDE WATER ASSOCIATED OIL COMPANY
FOR AN ORDER GRANTING IT PERMISSION
TO DUALY COMPLETE STATE "A" NO. 4 WELL,
EUNICE POOL, NE/4 NE/4, SECTION 8,
TOWNSHIP 21 SOUTH, RANGE 36 EAST, N.M.P.M.
LEA COUNTY, NEW MEXICO.



A P P L I C A T I O N

COMES NOW, Tide Water Associated Oil Company, a Delaware Corporation, operating in New Mexico from a field office in Hobbs, New Mexico, and respectfully represents to the Oil Conservation Commission of the State of New Mexico that on April 16, 1935, it completed State "A" Well No. 4 located in the center of NE/4 NE/4, Section 8, Township 21 South, Range 36 East, N.M.P.M., Eunice Pool, Lea County, New Mexico; that said well is presently producing oil from the Grayburg-San Andres formation from open hole interval 3790 to total depth 3887 feet; that 7" casing was set and cemented at 3779 feet; that an intermediate string of 9-5/8" casing was set and cemented at 2842 feet.

Applicant further represents that a high pressure gas zone exists in the Yates-Seven Rivers formation, present and producing in the open hole interval 2995-3480 feet in Skelly Oil Company's State "B" No. 7 located in the SW/4 NW/4 Section 16, Township 21 South, Range 36 East, and from other Bradenhead or dually completed wells in the area.

Applicant further represents that it is practical and economically feasible to dually complete the State "A" No. 4 well to produce oil from the Grayburg-San Andres formation through the tubing and gas from the Yates-Seven Rivers gas zone through the tubing-casing annulus with proper packer and well head connections, and in such manner that there will be no commingling of fluids between the two reservoirs.

WHEREFORE, Applicant respectfully requests that this matter be set down for hearing on due notice, and that at such hearing it be authorized to dually complete said well in accordance with the foregoing petition and the rules and regulations of the Commission.

Attached hereto is a plat showing the location of the well proposed for dual completion and surrounding wells and leaseholds.

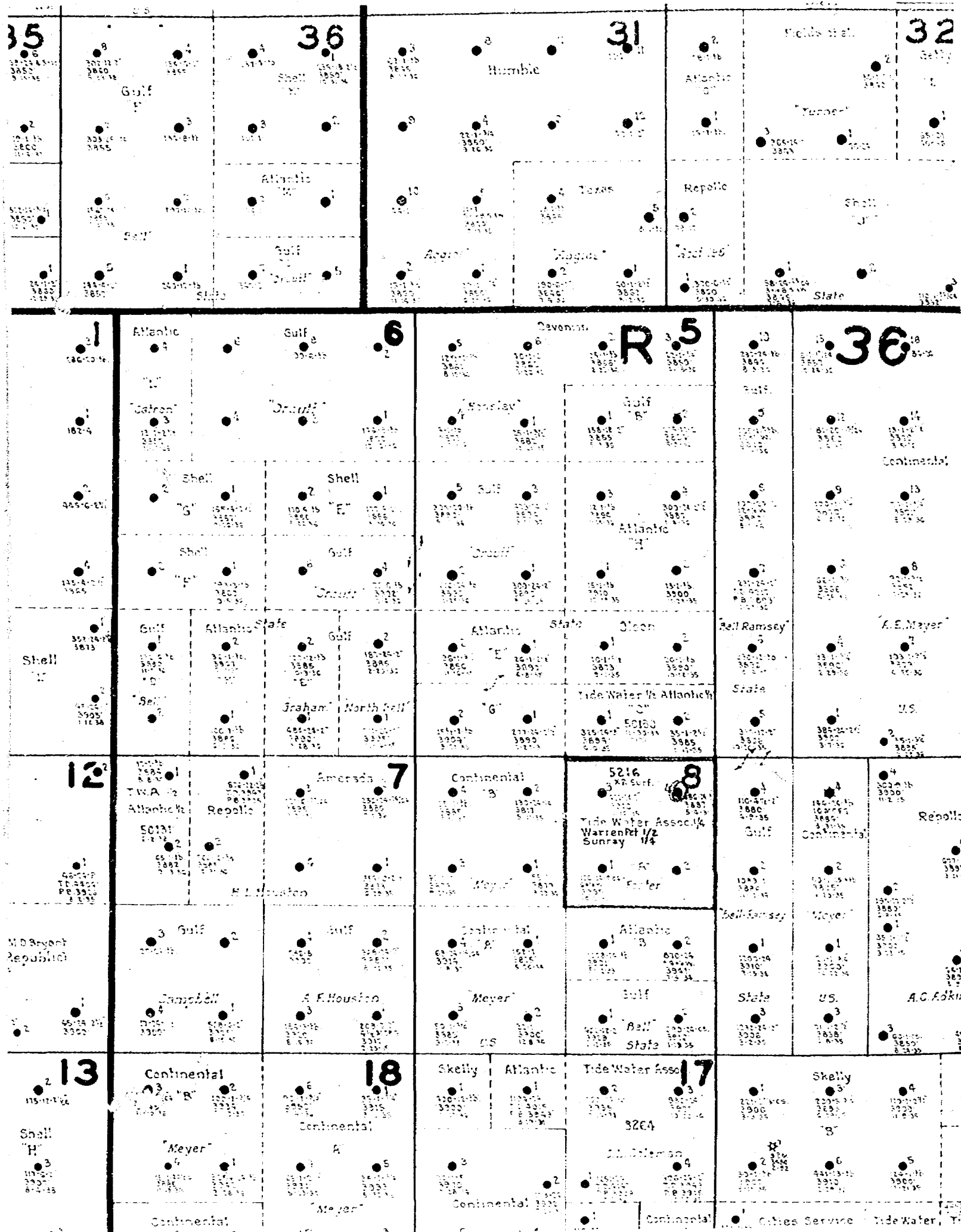
DONE at Houston, Texas, on this the 14th day of August, 1952.

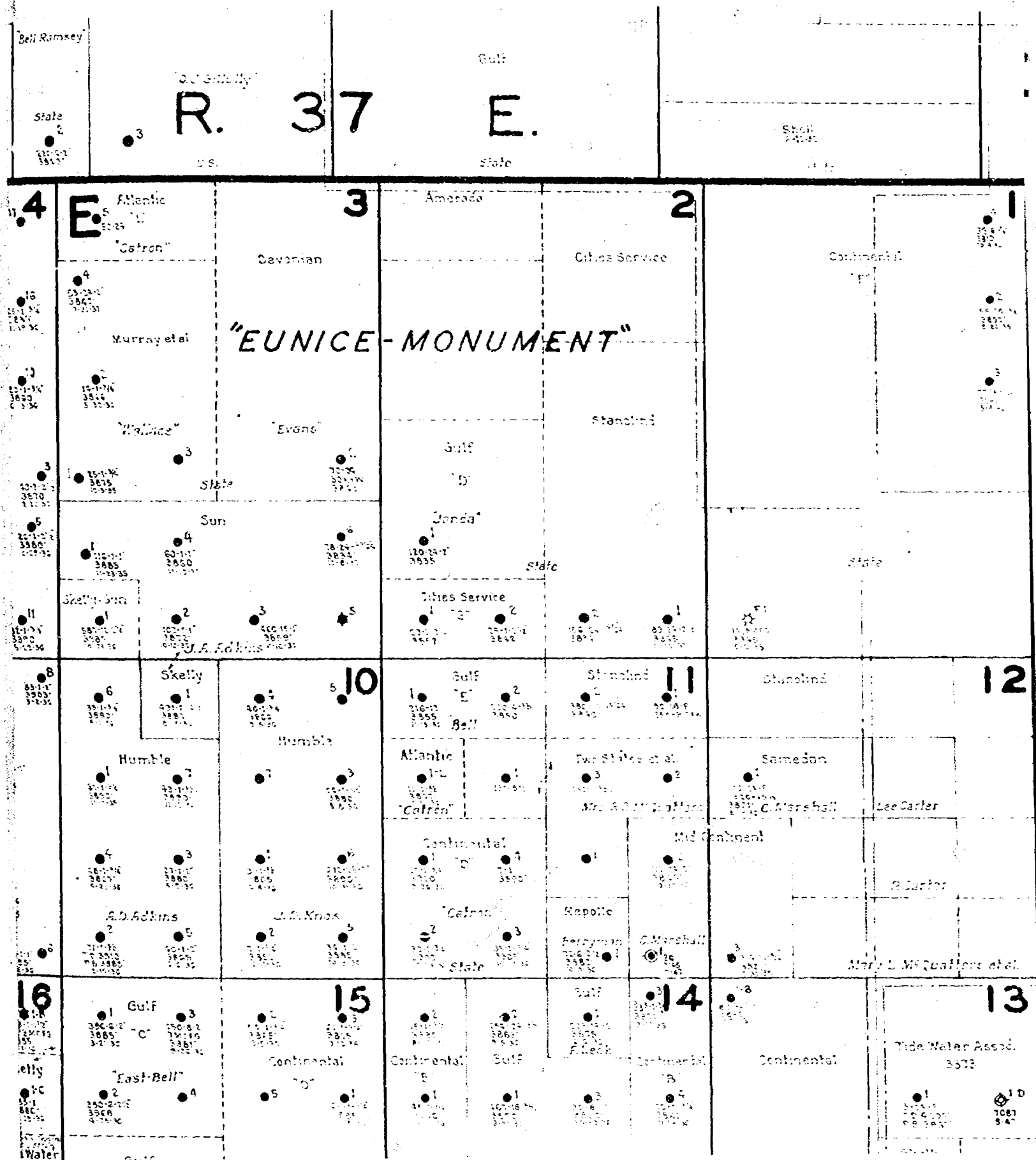
Respectfully submitted

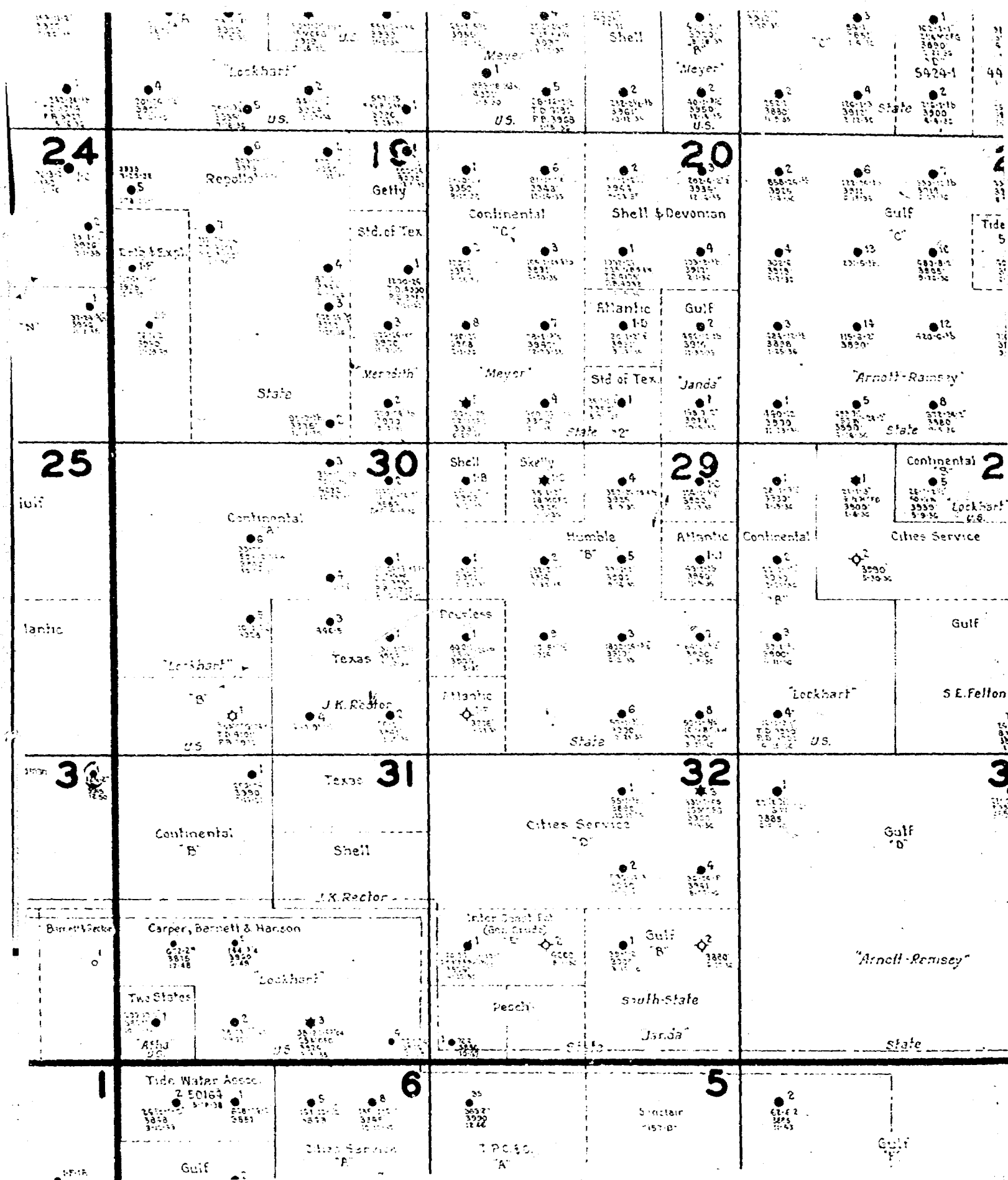
TIDE WATER ASSOCIATED OIL COMPANY

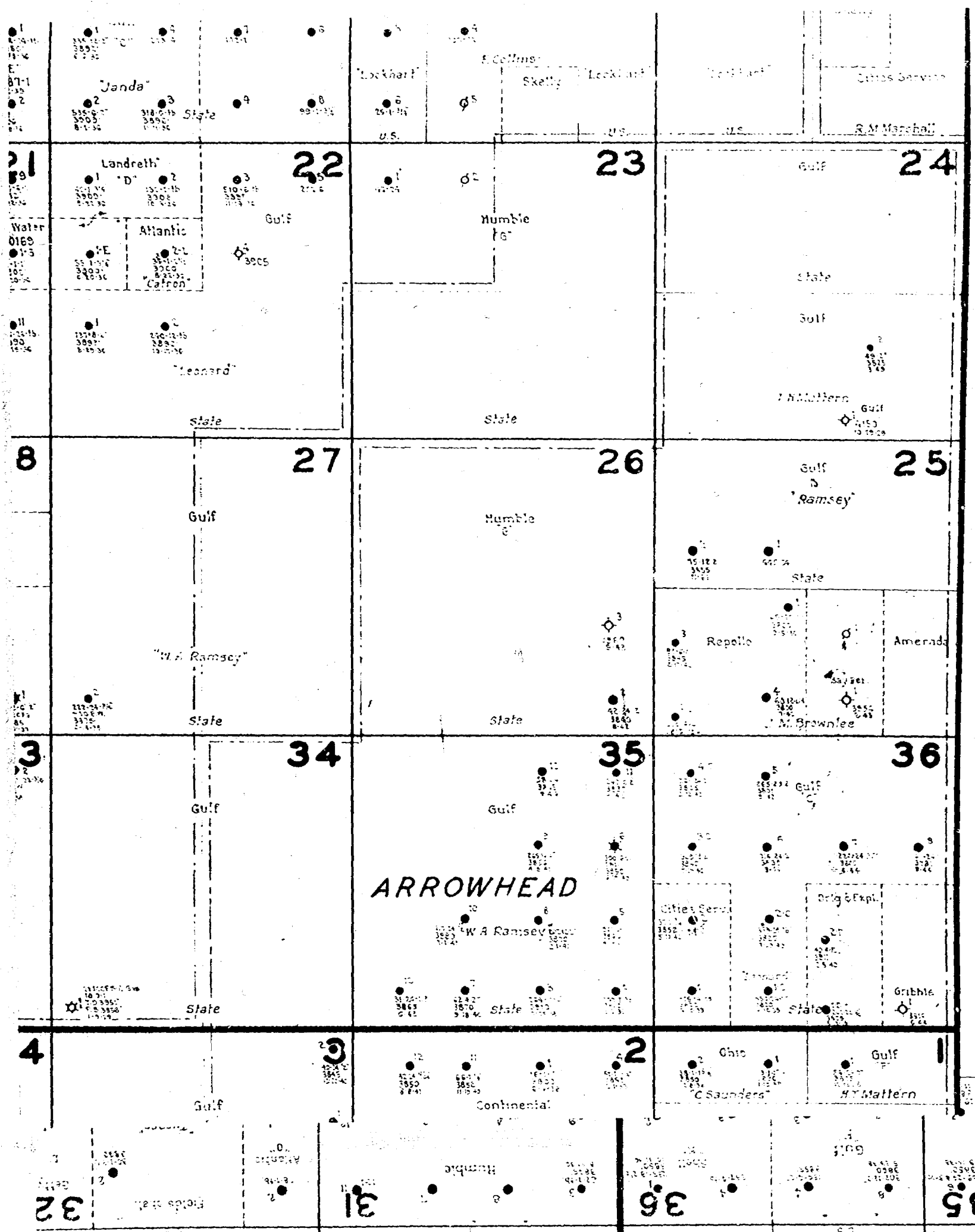
By: 

J. B. Holloway









OIL CONSERVATION COMMISSION

P. O. BOX 871
SANTA FE, NEW MEXICO

October 28, 1952

C
O
P
Y

Mr. J. B. Holloway
Tide Water Associated Oil Company
Box 1404
Houston, Texas

Dear Sir:

We attach herewith two signed copies of Order R-196 as issued
by the Commission in Case 405, heard on September 16, 1952.

Yours very truly,

W. B. Macey
Chief Engineer

WBK:mr

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. 405
ORDER NO. R-196

THE APPLICATION OF TIDE WATER
ASSOCIATED OIL COMPANY FOR AN
ORDER GRANTING PERMISSION TO
DUALY COMPLETE AND PRODUCE
ITS STATE 'A', NO. 4 WELL, IN THE
EUNICE POOL, LOCATED IN THE NE/4
NE/4 SECTION 8, TOWNSHIP 21 SOUTH,
RANGE 36 EAST, NMPM, LEA COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a. m. on September 16, 1952, at Santa Fe, New Mexico, before the Oil Conservation Commission, hereinafter referred to as the "Commission".

NOW, on this 20th day of October, 1952, the Commission, a quorum being present, having considered the records and the testimony adduced, and being fully advised in the premises,

FINDS:

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

(2) That applicant's State 'A', No. 4 well, NE/4 NE/4 Section 8, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico, was completed in April, 1935 as an oil well producing from the Grayburg-San Andres formation in the open-hole interval 3790'-3887', having drilled through the Yates-Seven Rivers gas zone, at an approximate depth of 3000 feet.

(3) That although recent experiments tend to show that mechanical packers and other devices are ordinarily available for successful dual/multiple completions of oil - gas wells, the Commission is unconvinced of the soundness, as a waste-prevention practice, of such dual/multiple completions as a general practice in New Mexico without specific controls over each such project.

IT IS THEREFORE ORDERED:

That the applicant herein, Tide Water Associated Oil Company, be, and it hereby is authorized to dually complete and produce its State 'A', No. 4 well, NE/4 NE/4 Section 8, Township 21 South, Range 36 East, NMPM, in the Eunice Pool, Lea County, New Mexico, in such a manner that gas from the Yates-Seven Rivers formation may be produced through the annular space

between the casing and the tubing, and oil from the Grayburg-San Andres formation through the tubing by proper perforations and installation of a proper packer or packers;

PROVIDED, HOWEVER, That subject well shall be completed, and thereafter produced, in such a manner that there will be no commingling within the well bore, either within or outside the casing of gas, oil and gas, or oil produced from either or both of the separate strata, and,

PROVIDED FURTHER, That said subject well for dual completion and production shall be equipped in such a way that reservoir pressures may be determined separately for each of the two specified strata, and further, be equipped with all necessary connections required to permit recording meters to be installed and used, at any time, as may be required by the Commission or its representatives, in order that natural gas, oil, or oil and gas from each separate stratum may be accurately measured and the gas-oil ratio thereof determined, and,

PROVIDED FURTHER, That the operator applicant shall make any and all tests, including segregation tests, but not excluding other tests and/or determinations at any convenient time and in such manner as deemed necessary by the Commission; the original and all subsequent tests shall be witnessed by representatives of the Commission and by representatives of offset operators, if any there be, at their election, and the results of each test properly attested to by the applicant herein and all witnesses, and shall be filed with the Commission within ten (10) days after the completion of such test, and,

PROVIDED FURTHER, That upon the actual dual completion of such subject well, applicant shall submit to the Commission a diagrammatic sketch of the mechanical installation which was actually used to complete and produce the seal between the strata, and a special report of production, gas/oil ratio and reservoir pressure determination of each producing zone or stratum immediately following completion.

IT IS FURTHER ORDERED, That jurisdiction of this cause is hereby retained by the Commission for such further order or orders as may seem necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of applicant to comply with any requirement of this order after proper notice and hearing, the Commission may terminate the authority hereby granted and require applicant or its successors and assigns to limit its activities to regular single-zone production in the interests of conservation.

DONE at Santa Fe, New Mexico, on the day and year herein-above designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

Edwin L. Mechem

Edwin L. Mechem, Chairman

Guy Shepard

Guy Shepard, Member

R. R. Spurrier

R. R. Spurrier, Secretary

SEAL

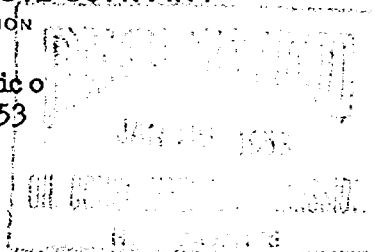
TIDE WATER ASSOCIATED OIL COMPANY

MID-CONTINENT DIVISION

Box 547

Hobbs, New Mexico

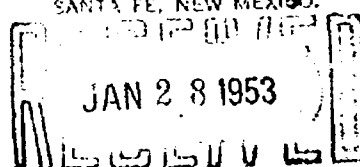
January 23, 1953



New Mexico Oil and Gas Conservation Commission
P.O. Box 2045
Hobbs, New Mexico

NEW MEXICO OIL AND GAS CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

Attention Mr. Roy O. Yarbrough



Dear Sir:

We are enclosing duplicate copies of a radioactivity log run on the Tide Water #4 State "A", section 8-21S-36E, Eunice Field, Lea County, New Mexico. Dual completion operations were commenced on the well on 12-30-52 by authority of the New Mexico Oil Conservation Commission after approval in Case 405, Order #R-196 at the September 16, 1952 hearing.

There is shown on the log a section of the Yates-Seven Rivers gas zone opened by perforations, acidized and tested. We propose to dual complete the upper zone for gas production from the above perforations with the oil productive zone 3758-3876' as outlined in the application.

Upon completion of the mechanical installation for dual completion, communication tests and any other tests deemed necessary by the Commission will be taken.

Immediately upon actual completion of the aforementioned well, a diagrammatic sketch of the mechanical installation used to complete and produce the separate zones along with a report of production, gas-oil ratio and reservoir pressure determinations for each zone will be submitted to the commission.

Yours very truly,

TIDE WATER ASSOCIATED OIL COMPANY

H.P. Shackelford
District Foreman

Encl.

cc - J.B. Holloway
R.H. Coe