

Case No.

527

Application, Transcript,
Small Exhibits, Etc.



CONTINENTAL OIL COMPANY

FAIR BUILDING
FORT WORTH 2, TEXAS

H. L. JOHNSTON
REGIONAL MANAGER OF PRODUCTION
SOUTHWESTERN REGION

March 3, 1953

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

Attention: Mr. R. R. Spurrier

Gentlemen:

We are enclosing three copies of applications to
dually complete the following wells:

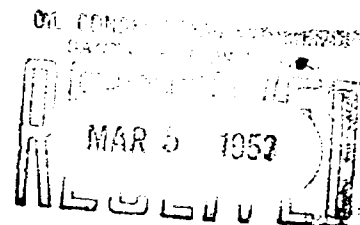
A. M. Lockhart A-27 No. 5

A. M. Lockhart A-27 No. 7

Please set these matters on your docket to be heard
at the earliest convenient date.

Yours very truly,

HLJ-HE
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PIONEERING IN PETROLEUM PROGRESS SINCE 1875

OIL CONSERVATION COMMISSION

P. O. BOX 871

SANTA FE, NEW MEXICO

May 15, 1953

Mr. H. L. Johnston
Continental Oil Company
Fair Building
Ft. Worth 2 - Texas

Dear Sir:

We enclose signed copies of dual completion orders recently issued with your company as principal, as follows:

Order R-319 in Case 527
Order R-320 in Case 528

Very truly yours,

W. B. Mosey
Chief Engineer

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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. 527
ORDER No. R-319

THE APPLICATION OF CONTINENTAL
OIL COMPANY FOR AN ORDER GRANTING
PERMISSION TO DUALY COMPLETE AND
PRODUCE ITS A. M. LOCKHART A-27, WELL
NO. 5, LOCATED IN THE NE/4 NE/4 OF
SECTION 27, TOWNSHIP 21 SOUTH, RANGE 37
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 April 16, 1953, at Santa Fe, New Mexico, before the Oil Conservation Commission, hereinafter referred to as the "Commission".

NOW, on this 11th day of May, 1953, 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 A. M. Lockhart Well No. 5, NE/4 NE/4 Section 27, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, was completed in December 1947 as an oil well producing from the Drinkard formation through casing perforations 6511-6565, having drilled through the Blinebry gas zone at an approximate depth of 5470-5600.

(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, Continental Oil Company, be and it hereby is authorized to dually complete and produce its A. M. Lockhart A-27, Well No. 5, NE/4 NE/4 Section 27, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, in such manner that gas from the Blinebry gas zone of the Blinebry Gas Pool may be produced through the annular space between the casing and the tubing, and oil from the Drinkard formation of the Drinkard Pool through the tubing by proper perforations and the installation of a proper packer;

PROVIDED, HOWEVER, That this approval shall be subject to like approval by the United States Geological Survey and that upon the actual dual completion of such subject well applicant shall submit to the District Office of the Commission in which the well is located an approved copy of the appropriate Federal government form showing the actual work done, plus copies of Oil Conservation Commission Form C-104, Form C-110, and Form C-122 outlining the information required on those forms by existing Rules and Regulations.

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,

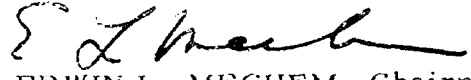
PROVIDED FURTHER, That the operator applicant shall make any and all tests, including segregation tests, but not excluding other tests and/or determinations at any convenient time and in such manner as deemed necessary by the Commission; the original and all subsequent tests shall be witnessed by representatives 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 hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


EDWIN L. MECHEM, Chairman


E. S. WALKER, Member


R. R. SPURRIER, Secretary

S E A L

BEFORE THE
OIL CONSERVATION COMMISSION
SANTA FE, NEW MEXICO

April 16, 1953

CASE 527: In the matter of the application of Continental Oil Company for an order permitting dual completion of its A. M. Lockhart A-27, Well No. 5, NW/4 NE/4 Section 27, Township 21 South, Range 37 East, NEPM, Lea County, New Mexico, in such manner as to permit production of oil from the Drinkard formation of the Drinkard Pool and gas from the Blinobry formation of the Blinobry Gas Pool.

Mr. RANDOLPH: William Randolph, Continental Oil Company. If the Commission please, we'd like to consolidate the two cases - since they are both - - that is, 527 and 528 - - since they are both on the same lease and they are Drinkard-Blinobry duals.

Mr. SPURRIER: The advertisement for Case 528 will be read.

Case 528: In the matter of the application of Continental Oil Company for an order permitting dual completion of its A. M. Lockhart A-27, Well No. 7, NW/4 NW/4 Section 27, Township 21 South, Range 37 East, NEPM, Lea County, New Mexico, to permit production of oil from the Drinkard formation of the Drinkard Pool and gas from the Blinobry formation of the Blinobry Gas Pool.

Mr. RANDOLPH: Continental Oil Company's A-27 No. 5 is located 660' from the north and east lines of Section 27, Township 21 South, Range 37 East, Lea County, New Mexico. I have here a plat of the lease, surrounding lease hole, showing the location of this well. I would like to introduce this as Exhibit A.

Mr. SPURRIER: Without objection, it will be received.

Mr. RANDOLPH: This well was completed in the Drinkard Pool on December the 3rd, 1947 and is presently producing a marginal allowable of 12 barrels oil per day, through perforations opposite the Drinkard section from 6511' to 6565'. I have a radio-activity log on the well I'd like to introduce as Exhibit B.

Mr. SPURRIER: Without objection, it will be received.

Mr. RANDOLPH: Before dually completing this well, it is proposed to perforate some additional pay sections in the Drinkard so as to have all of the productive sections of the Drinkard open prior to the dualing

of the well and thereby eliminating any necessary additional major remedial work below our packer.

After perforating this well in the oil zone, it is proposed to dually complete the well as a Drinkard oil and a Blinberry gas well in the following manner:

Set a 5 $\frac{1}{2}$ " Baker Model "B" Retainer Production Packer at approximately 6430 feet.

Selectively perforate the Blinberry gas section in the interval of 5470' to 5600'.

Run 2 $\frac{1}{2}$ " tubing with side door choke and complete the well so there can be no comingling of well fluids in producing the Blinberry gas from the annulus between the casing and tubing and the Drinkard oil through the tubing. The well head will be equipped with all necessary connections to permit accurate measurement of any natural gas, oil, or oil and gas produced from each separate stratum as may be required by the Commission.

Perform and report the results of any and all surveys and tests including segregation tests, as may be required by the Commission and in such a manner as the Commission may designate.

The mechanical equipment to be used in this dual completion is the same as has been approved previously by the Commission on numerous similar applications.

The bottom hole pressure of this well on August 7, 1952 was 1,101 pounds per square inch. The gas zone is expected to have a pressure of approximately 2,500 pounds per square inch. Therefore, the maximum pressure differential across the packer will not exceed approximately 3,000 pounds per square inch. The proposed mechanical equipment has proven to be of such construction as to withstand much greater pressures and will prevent the comingling of fluids around or through it during the life of the well.

I have here a schematic plat showing the present condition of the well and the condition of the well after the proposed dual completion. I would like to introduce this as Exhibit C.

MR. SPURRIER: Without objection, it will be received.

Mr. RANDOLPH: This -- you will notice on Exhibit A, we have shaded in an area there of 160 acres which is the -- in this particular well is the NW/4 of Section 27 which provides us with a -- 4 160 acres to assign this well a better proration. We also have a market in the state for any high pressure gas produced from this well.

On Case 528, the Lockhart A-27 No. 7 is completed -- was completed in the Brinkard pool on February 5, 1950. It is presently producing a marginal allowable of 37 barrels of oil per day through perforations opposite the Brinkard section from 6515' to 6618'.

It is proposed to perforate the Blinberry gas section at intervals of 5,500' to 5,650'.

The proposed manner of dual completion is identical in all other respects as that presented in the previous well.

The bottom hole pressure of this well on August 7, 1952 was 1,223 pounds per square inch.

We also have 160 acres in specifically the NW/4 of Section 27 that can be assigned this well in the event of proration and a market is available for the sale of any high pressure gas produced from it.

As in the previous well, I have three exhibits, the lease plat, the radio-activity log and the present mechanical condition of the well and the condition of the well after the proposed drilling which I would like to submit as Exhibits A, B and C respectively.

Mr. SPURRIER: Without objection, they will be received.

Mr. RANDOLPH: That's all I have.

Mr. SPURRIER: Does anyone have any questions of the witness? If there are no questions, the witness will be excused. We will take these two cases under advisement and will move on to Case 529.

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

I hereby certify that the foregoing and attached transcript of hearing

in Cases 527 and 528 before the Oil Conservation Commission on April 16, 1953
at Santa Fe, is a true record of the same to the best of my knowledge, skill
and ability.

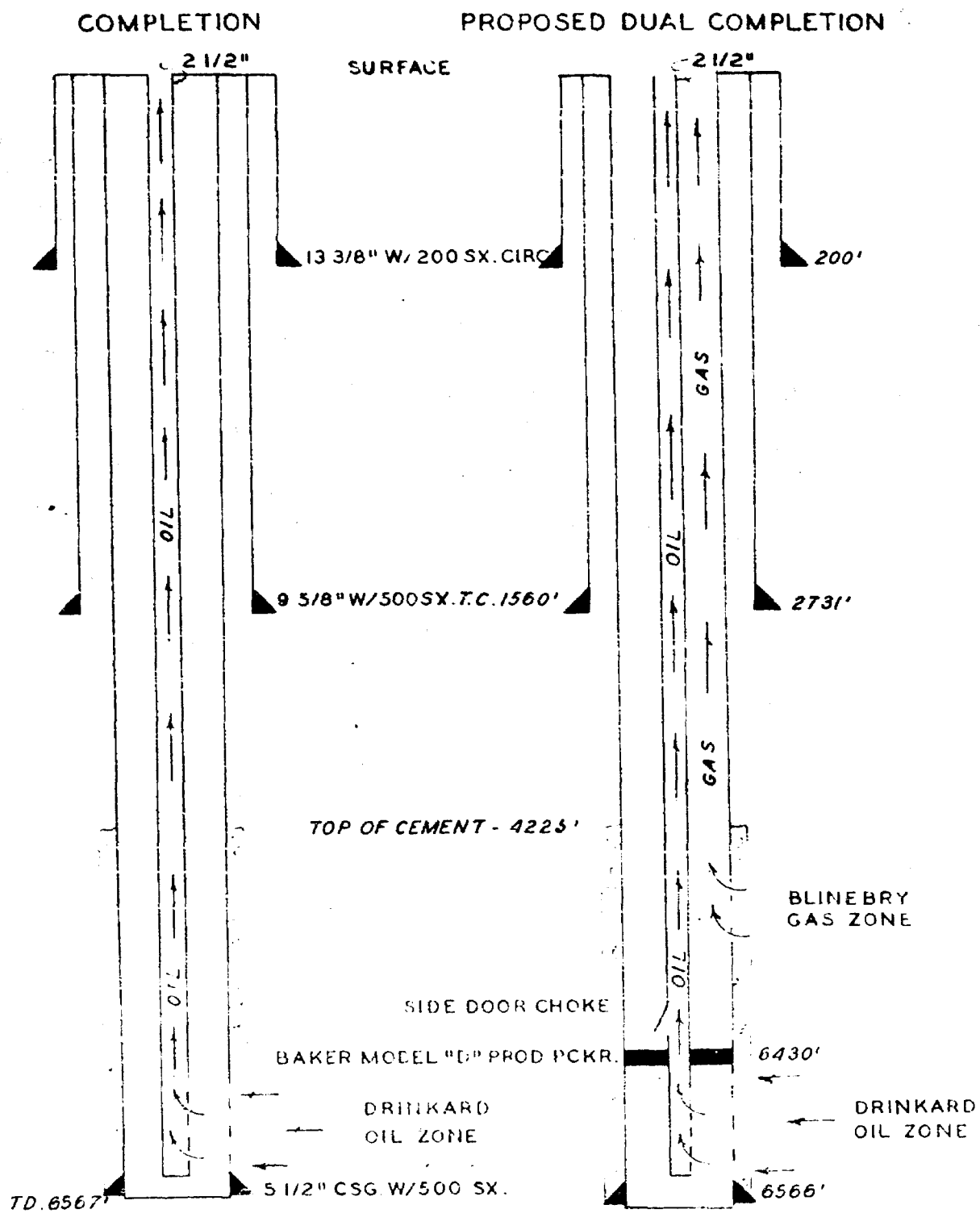
DATED at Santa Fe, this 30th day of April, 1953.


Audrey M. Kenrickson

My commission expires September 30, 1955.

Exhibit in Case 527

CONTINENTAL OIL COMPANY
LOCKHART A-27 NO.5



BEFORE THE OIL CONSERVATION COMMISSION
OF THE
STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF
CONTINENTAL OIL COMPANY FOR AN ORDER
GRANTING IT PERMISSION TO DUALY COMPLETE
A. M. LOCKHART A-27 NO. 5 WELL, DRINKARD
POOL, NE/4 NE/4, SECTION 27 T.21S, R.37E,
N.M.P.M. LEA COUNTY, NEW MEXICO

CASE NO. 547

A P P L I C A T I O N

Comes now CONTINENTAL OIL COMPANY, a Delaware corporation, hereinafter called "Applicant", and respectfully requests the Oil Conservation Commission of the State of New Mexico to issue an order authorizing Applicant to dually complete its A. M. Lockhart A-27 No. 5 well, located 660 feet South of the North line and 660 feet West of the East line of the NE/4, Section 27 T.21S, R.37E, N.M.P.M., Lea County, New Mexico, in the Blinbry formation and the Drinkard formation, and in support thereof would show the following:

Said well was completed December 3, 1947 in the Drinkard formation as an oil well and Applicant now desires to complete the same in the Blinbry formation as a gas well also, and Applicant represents that it is practical and economically feasible to so dually complete said well in such a manner as that there will be no commingling of fluids between the oil and gas reservoirs.

Attached to this Application is a plat showing the location of the subject well and surrounding wells and leaseholds.

WHEREFORE, Applicant respectfully requests that this matter be set down for hearing on due notice and that upon final hearing the Oil Conservation Commission of the State of New Mexico enter its order authorizing Applicant to dually complete said well in accordance with the foregoing application and rules and regulations of the Commission.

DONE at Hobbs, New Mexico, this 5th day of February, 1953.

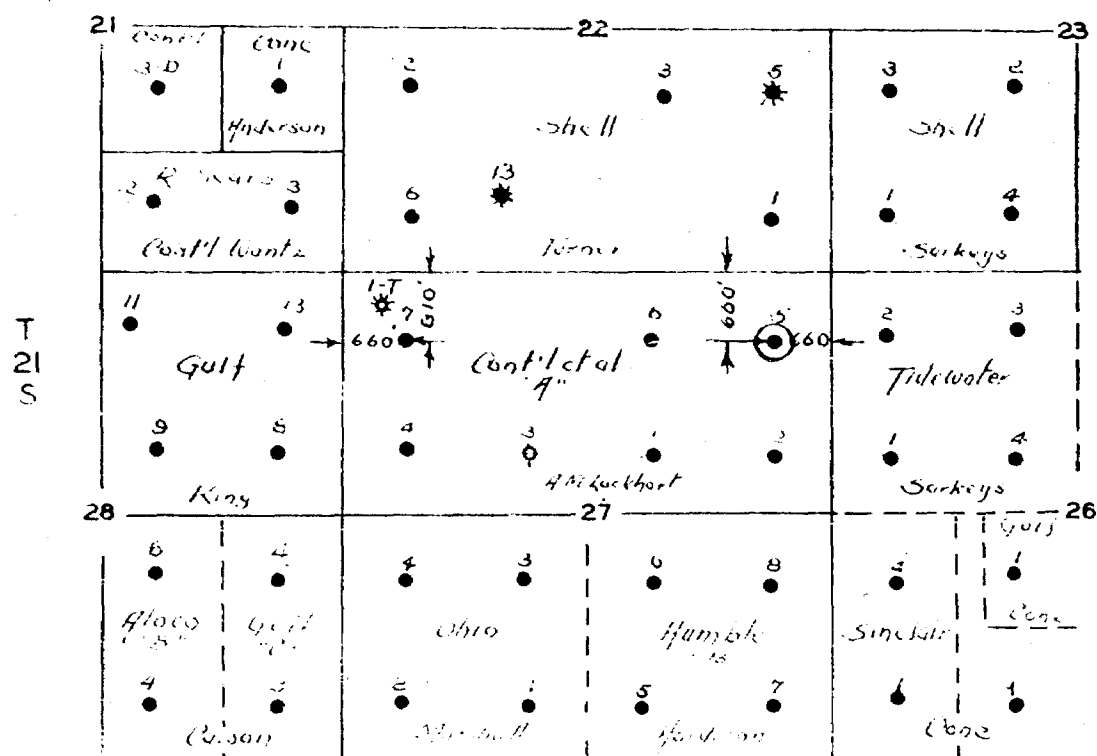
CONTINENTAL OIL COMPANY

By J. R. Chestnol

J. R. CHESTNOLVICK
Asst. Supt., New Mexico Dist.
West Texas-New Mexico Divn.
Production Department

MAR 5 1953

R-37-E



CONTINENTAL OIL COMPANY
LOCATION MAP - DRINKARD AREA

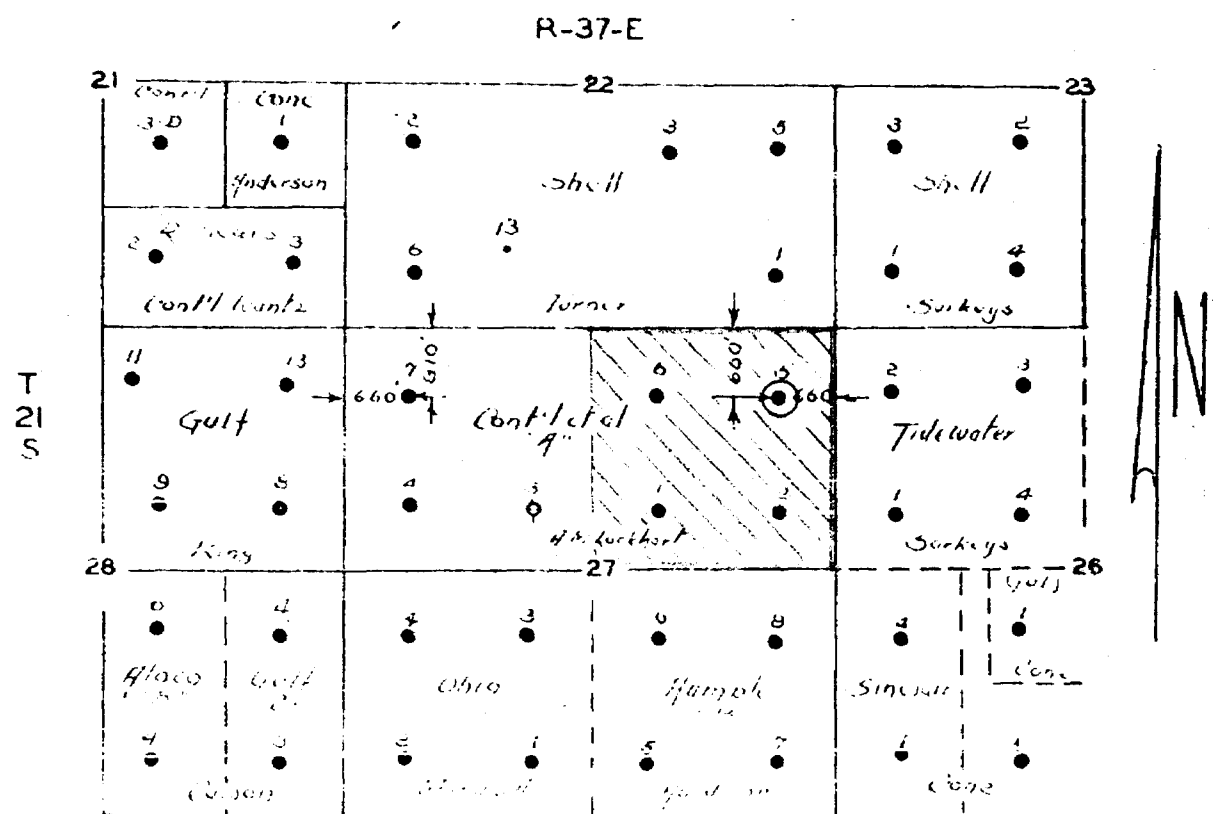
SCALE: 1" = 2000'

N. M. DIST. OFFICE.

FEB. 2 .1953.

Exhibit A - 100000

Area 527



N. M. DIST. OFFICE.

FEB. 2, 1953.