

UNIT AGREEMENT
SOUTH EUNICE UNIT
LEA COUNTY, NEW MEXICO

5-18-70

UNIT AGREEMENT
FOR THE DEVELOPMENT AND OPERATION
OF THE SOUTH EUNICE UNIT
LEA COUNTY, NEW MEXICO

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THIS AGREEMENT, entered into as of the 15th day of June, 1970, by and between the parties subscribing, ratifying or consenting hereto, and herein referred to as "parties hereto".

WITNESSETH: That,

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 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, Chap. 65, Art. 3, Sec. 14, N.M.S., 1953 anno) to approve this Agreement, and the conservation provisions hereof, 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 cooperative or 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 parties hereto hold sufficient interests in the South Eunice Unit Area covering the land hereinafter described to give reasonably effective control of operations therein; and

WHEREAS, it is the purpose of the parties hereto to enable institution and consummation of secondary recovery operations, conserve natural resources, 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. The area described in Exhibit B and depicted on Exhibit A attached hereto is hereby designated and recognized as constituting the Unit Area, containing 2720.00 acres, more or less, in Lea County, New Mexico. Said land is described as follows:

T-22S R-36E

Section 20:	E/2 E/2	160.00 acres
Section 21:	All	640.00
Section 22:	S/2, S/2 N/2, NW/4 NW/4, NW/4 NE/4	560.00
Section 28:	All	640.00
Section 29:	E/2 NE/4, NE/4 SE/4	120.00
Section 33:	N/2, SE/4, N/2 SW/4, SE/4 SW/4	<u>600.00</u> 2720.00 acres

For the purpose of this agreement, the following terms and expressions as used herein shall mean:

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

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

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

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

(e) "Supervisor" is defined as the Oil and Gas Supervisor of the United States Geological Survey.

(f) "Unitized Formation" is defined as the interval between the base of the Queen formation to a point 232 feet above the top of the Queen formation; provided, that in no event shall the Unitized formation extend below a depth of 4000 feet from the surface of the ground. The top and the base of the Queen formation are shown at the depths of 3821' and 4023' respectively, on the Gamma-Ray-Sonic log run in the Continental Oil Company West Arrowhead Deep Unit Well No. 1, located 1980 feet from the North line and 1980 feet from the West line of Section 17, Township 22 South, Range 36 East, N. M. P. M.

(g) "Unitized Substances" is defined as and shall mean all oil, gas, gaseous substances, sulphur contained in gas, condensate, and all associated and constituent liquid or liquefiable hydrocarbons produced from the Unitized Formation of the Unitized Land. However, it shall not include the dry gas and associated hydrocarbons produced from gas wells within the Unit Area which are completed in and produce from the vertical limits of the Jalmat gas pool, as defined by Commission Order No. R-1670.

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

(i) "Tract Participation" is defined as that percentage of Unitized Substances produced from the Unitized Formation which is allocated to a Tract under this Agreement.

(j) "Unit Participation," of each Working Interest Owner, is defined as the sum of the percentages obtained by multiplying such Working Interest Owner's fractional Working Interest in each tract by the Tract Participation of such Tract.

(k) "Working Interest" is defined as 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.

(l) "Working Interest Owner" is defined as and shall mean any party hereto owning a Working Interest, including a carried working interest owner, whether by virtue of a lease, operating agreement, fee title or otherwise, whose 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 operating therefor hereunder. Any interest in Unitized Substances which is a Working Interest as of the date the owner thereof executes or ratifies this Agreement shall thereafter be treated as a Working Interest for all purposes of this Agreement. The owner of oil and gas rights that are free of lease or other instrument conveying the Working Interest to 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.

(m) "Royalty Interest" or "Royalty" is defined as any interest other than a Working Interest in or right to receive a portion of the Unitized Substances or the proceeds thereof and includes the royalty interest reserved by the lessor by an oil and gas lease and any overriding royalty interest, oil payment interest, or any other payment or burden which does not carry with it the right to search for and produce Unitized Substances. "Basic Royalty Interest" is defined as the royalty interest reserved by the lessor by an oil and gas lease.

(n) "Lessee of Record" is defined as the holder of record title under a U.S. Oil and Gas Lease.

(o) "Royalty Owner" is defined as and shall mean the owner of a Royalty Interest.

(p) "Unit Operating Agreement" is defined as and shall mean any agreement or agreements (whether one or more) entered into (separately or collectively) by and between the Unit Operator and the Working Interest Owners as provided in Section 9, infra, and shall be styled "Unit Operating Agreement, South Eunice Unit, Lea County, New Mexico."

(q) "Tract Current Revenue" is defined as the revenue, expressed in dollars, credited to each Tract during the period beginning April 1, 1968, and ending October 1, 1968, from the sale of oil and gas produced

from the Unitized Formation as compiled by the South Eunice Unit Engineering Committee and tabulated on the Schedule of Participation Parameters prepared by said committee.

(r) "Unit Current Revenue" is defined as the sum of "Tract Current Revenue" for all Tracts within the Unitized Area.

(s) "Useable Well" is defined as a cased wellbore which makes the unitized formation available from the surface without obstruction and in such condition that the well may be used either as a producing well or injection well without making repairs to the casing.

(t) "Tract Ultimate Primary Oil Production" is defined as the estimated ultimately recoverable oil, expressed in barrels of 42 U. S. gallons, from each Tract from inception of production to the economic limit of production under primary operations, as determined by the South Eunice Unit Engineering Committee and tabulated on the Schedule of Participation Parameters prepared by said committee.

(u) "Unit Ultimate Primary Oil Production" is defined as the sum of "Tract Ultimate Primary Oil Production" for all tracts within the Unitized Area.

(v) "Tract Remaining Gas Value" is defined as the value, expressed in dollars, of recoverable gas remaining to be produced from the unitized formation on each tract as of October 1, 1968, as determined by the South Eunice Unit Engineering Committee and tabulated on the Schedule of Participation Parameters prepared by said committee.

(w) "Unit Remaining Gas Value" is defined as the sum of "Tract Remaining Gas Value" for all Tracts within the Unitized Area.

(x) "Tract Acreage" is defined as the number of surface acres contained in each tract as determined and tabulated in the Schedule of Participation Parameters prepared by the South Eunice Unit Engineering Committee.

(y) "Unit acreage" is defined as the sum of "Tract Acreage" for all tracts within the Unitized Area.

SECTION 3. EXHIBITS. Exhibit A attached hereto is a map showing the Unit Area and, to the extent known to the Unit Operator, the boundaries and identity of Tracts and leases in said Unit Area. Exhibit B attached hereto is a schedule showing, to the extent known to the Unit

Operator, the acreage comprising each Tract, percentage ownership of each Working Interest Owner in each Tract, and the percentage and ownership of the Record Title in each Tract in the Unit Area, together with the Royalty Interests in each Tract and the ownership thereof, Exhibit C attached hereto is a schedule showing the tract number, description and the percentage of participation of each Tract in the Unit Area. Nothing herein or in said schedules 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.

Exhibits A, B, and C shall be revised by the Unit Operator whenever changes render such revisions necessary or when requested by the Supervisor, and not less than six copies thereof 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 commit such Tract or Tracts hereto shall file an application therefor with Unit Operator requesting such admission.

(b) Unit Operator shall circulate a notice to each Working Interest Owner of the proposed expansion, setting out the basis for admission, the proposed tract participation to be assigned to each such tract, and other pertinent data. After negotiation (at Working Interest Owners' meeting or otherwise), if 90 per cent of the Working Interest Owners (on the basis of unit participation) have agreed to such commitment of such Tract or Tracts, then Unit Operator shall, after preliminary concurrence by the Director

- (1) 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 each such Tract and the effective date thereof, preferably 7:00 a.m. of the first day of the second month following final approval thereof as herein provided; and
- (2) Furnish copies of said notice to the Supervisor, each Working Interest Owner, lessee, and lessor whose interests are affected (mailing copy of such notice to the last known address of each such Working Interest Owner), 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, the following: (i) Evidence as to mailing said notice of expansion; (ii) An application for such expansion in sufficient numbers for appropriate approval and distribution; and (iii) An instrument containing the appropriate joinders in compliance with the participation requirements of Section 14 (Tracts Qualified for Participation) and Section 33 (Non-Joinder and Subsequent Joinder), infra; and (iv) a copy of all objections received.

The expansion shall, after due consideration of all pertinent information and upon approval by the Supervisor and the Commission, become effective as of the date prescribed in the notice thereof. 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 AND UNITIZED SUBSTANCES. 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." Unitized Substances are defined in Section 2(g) of this Agreement.

SECTION 6. UNIT OPERATOR. Continental Oil Company, a Delaware corporation, is hereby designated as Unit Operator, and by signing this instrument as Unit Operator it 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 Unit Operator, such reference means the Unit Operator acting in that capacity and not as an owner of interests in Unitized Substances; and the term "Working Interest Owner" when used herein shall include or refer to Unit Operator as the owner of a Working Interest when such an interest is owned by it.

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, and the Supervisor and until all unit wells are placed in a satisfactory condition for suspension, abandonment, or operations, whichever is required by the Supervisor and the Commission, 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 Unit Operator may, upon default or failure in the performance of its duties or obligations hereunder, be subject to removal by 75 per cent of the committed Working Interest Owners (on the basis of then current Unit Participation) exclusive of the Working Interest Owner who is the Unit Operator. Such removal shall be effective upon notice thereof to the Supervisor.

In all such instances of effective resignation or removal, until a successor to Unit Operator is selected and approved as herein-after provided, 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 conducting the Unit operations and owned by the Working Interest Owners (including any and all data and information which it might have gained or assembled by reason of its operation of the Unitized Land) to the new duly qualified successor Unit Operator or to the Unit Manager if no such new Unit Operator has been elected, to be used for the purpose of conducting Unit Operations hereunder. Nothing herein contained shall be construed to relieve or discharge any Unit Operator who resigns or is removed hereunder for 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 by a majority vote of the Working Interest Owners (on the basis of then current Unit Participation), provided no Working Interest

Owner who has been removed as Unit Operator may vote for self-succession. 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 Supervisor and the Commission. If no successor Unit Operator is selected and qualified as herein provided, the Supervisor at his election, may declare this Agreement terminated.

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; however, no such Unit Operating Agreement shall be deemed either to modify any of the terms and conditions of this Unit 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. Three true copies of any Unit Operating Agreement executed pursuant to this section shall be filed with the Supervisor 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. EASEMENTS OR USE OF SURFACE.

(a) The parties hereto, to the extent of their rights and interests, hereby grant to Working Interest Owners the right to use as

much of the surface of the land within the Unit Area as may reasonably be necessary for Unit operations except a site for a gas injection, processing or other plant site.

(b) Working Interest Owners shall have free use of brine or water or both from the Unit Area for Unit operations, except water from any well, lake, pond, or irrigation ditch of a Surface Owner.

(c) Working Interest Owners shall pay the owner for damages to growing crops, timber, fences, improvements, and structures on the Unit Area that result from Unit operations.

SECTION 12. 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 a secondary recovery project in order to effect the greatest economic recovery of Unitized Substances, prevent waste and conserve natural resources, consistent with good engineering practices expected of a prudent operator. The parties hereto agree that the Unit Operator may, subject to the consent to a plan of operation by the Working Interest Owners and approval by the Supervisor, inject into the Unitized Formation, through any well or wells completed therein, brine, water, air, gas, oil and any one or more other 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 engineering practices and conservation methods. After commencement of secondary operations, Unit Operator shall furnish the Supervisor monthly injection and production reports for each well in the Unit. The Working Interest Owners and the Supervisor shall be furnished periodic reports on the progress of the plan of operation and any revisions or changes thereto; provided, however, that any major revisions of the plan of operation involving a basic deviation from the initial plan of operation shall be subject to the approval of the Working Interest Owners and the Supervisor.

A plan of operation shall be filed with the Supervisor concurrently with the filing of this Unit Agreement for final approval. Said plan of operation and all revisions thereof shall be as complete and adequate as the Supervisor may determine to be necessary for timely

operation consistent herewith. Upon approval of this agreement and the aforementioned plan by the Supervisor, 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. Reasonable diligence shall be exercised 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 operations for the secondary recovery of Unitized Substances from the Unit Area 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. After such operations are commenced, Unit Operator shall carry on such operations as would a reasonably prudent operator under the same or similar circumstances.

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 is the Tract Participation of each Tract in the Unit Area during Phase I and Phase II, as hereinafter defined, calculated on the basis of 100 per cent commitment.

(a) Phase I Participation. Beginning at 7:00 a.m. on the effective date hereof and remaining in effect until 7:00 a.m. on the first day of the month following the date when the cumulative amount of oil produced from the Unitized Formation underlying all of the tracts described in Exhibit "B" from and after October 1, 1968, equals 116,910 barrels, the Tract Participation of each tract shall be as shown under Part I of Exhibit C and shall be determined by the following formula:

$$100 \times \frac{A}{B}$$

Where A = the Tract Current Revenue as defined in Section 2 hereinabove, and B = the Unit Current Revenue as defined in Section 2 hereinabove.

(b) Phase II Participation. Beginning at 7:00 a.m. on the first day of the month following the date the last of the 116,910 barrels referred to above shall have been produced, the Tract Participation of each Tract

shall be as shown under Part II of Exhibit "C" and shall be determined by the following formula:

Tract Participation Percentage equals

$$55 \times \frac{C}{D} \text{ plus } 35 \times \frac{E}{F} \text{ plus } 5 \times \frac{G}{H} \text{ plus } 5 \frac{I}{J}$$

WHERE: C equals the Tract Ultimate Primary Oil Production
D equals the Unit Ultimate Primary Oil Production
E equals the number of "Usable wells" on the tract
F equals the number of "Usable wells" in the Unitized Area
G equals the "Tract Remaining Gas Value" and
H equals the "Unit Remaining Gas Value"
I equals the "Tract Acreage" and
J equals the "Unit Acreage"

as all terms are defined in Section 2 hereinabove.

In the event less than all of the Tracts within the Unit Area are qualified for unit participation as of the effective date hereof. Unit Operator shall, as soon as practicable after said effective date, prepare a revised Exhibit C setting forth the qualified Tracts and showing the revised Tract Participation of each qualified Tract, which Tract Participation shall be calculated and determined by using the factors and formulas set forth above, but applying the same only to the qualified Tracts. Unit Operator shall promptly file copies of such revised Exhibit C with the Supervisor and, unless such revised Exhibit C is disapproved by the Supervisor within thirty (30) days after such filing, the revised Exhibit C shall be effective as of the effective date of this Agreement, and shall thereafter govern the allocation of all Unitized Substances, subject, however, to any further revision or revisions of Exhibit C in accordance with the provisions hereof.

SECTION 14. TRACTS QUALIFIED FOR PARTICIPATION. As the objective of this Unit Agreement is to have the lands in the Unit Area operated and entitled to participation under the terms hereof, it is agreed that, notwithstanding anything herein to the contrary, no joinder shall be considered a commitment to this Unit agreement unless the Tract involved is qualified for participation under this Section 14.

(1) On and after the effective date hereof the Tracts qualified to participate hereunder shall be the Tracts that qualify as follows:

(a) Each tract as to which Working Interest Owners owning 100% of the Working Interest have become parties to this agreement and as to which (i) Royalty Owners under oil and gas leases on fee land owning seventy-five per cent (75%) or more of the Basic Royalty Interest; or (ii) Lessees of Record owning seventy-five per cent (75%) or more of the record title interest, whichever is applicable, have become parties to this Agreement.

(b) Each Tract as to which Working Interest Owners owning one hundred per cent (100%) of the Working Interest have become parties to this Agreement and as to which Royalty Owners under oil and gas leases on fee land owning less than seventy-five per cent (75%) of the Basic Royalty Interest or Lessees of Record owning less than seventy-five per cent (75%) of the record title interest have become parties to this Agreement and as to which (i) all Working Interest Owners in such Tract have joined in a request for the inclusion of such Tract in Unit participation on the basis of such commitment, and as to which (ii) seventy-five per cent (75%) of the combined voting interests of Working Interest Owners in all Tracts that meet the requirements of Section 14(1)(a) have voted in favor of the acceptance of such Tract as qualified for participation.

For the purpose of this Section 14(1)(b), the voting interest of a Working Interest Owner shall be equal to the ratio that its then current Unit Participation attributable to Tracts that qualify under Section 14(1)(a) bears to the total then current Unit Participation of all Working Interest Owners attributable to all Tracts that qualify under Section 14(1)(a).

(c) Each Tract as to which Working Interest Owners owning less than one hundred per cent (100%) of the Working Interest have become parties to this Agreement regardless of the percentage of Royalty or Record interests commitment hereto, and as to which (i) the Working Interest Owner who operates the Tract and all of the other Working Interest Owners in such Tract who have become parties to this Agreement have joined in a request for inclusion of such Tract in Unit Participation and have executed

and delivered 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 Interests in such Tract who are not parties to this Agreement, and which arise out of the acceptance of the Tract as qualified for Unit Participation; and as to which (ii) seventy-five per cent (75%) of the combined voting interest of Working Interest Owners in all Tracts that meet the requirements of Section 14(1)(a) and 14(1)(b) have voted in favor of the qualification of such Tract and acceptance of the indemnity agreement.

For the purpose of this Section 14(1)(c), the voting interest of each Working Interest Owner shall be equal to the ratio that its then current Unit Participation attributable to Tracts that qualify under Section 14(1)(a) and 14(1)(b) bears to the total then current Unit Participation of all Working Interest Owners attributable to all Tracts that qualify under Section 14(1)(a) and 14(1)(b). Upon the qualification of such a Tract under this Unit Agreement, the Unit Participation that would have been attributed to the non-subscribing owners of the 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, in proportion to their respective Working Interest in the Tract.

SECTION 15. ALLOCATION OF UNITIZED SUBSTANCES. All Unitized Substances produced and saved (less, 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 pressure maintenance or which is unavoidably lost) shall be apportioned among and allocated to each of the qualified Tracts in accordance with the then effective Schedule of Participation in Exhibit "C". The amount of Unitized Substances allocated to each Tract (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

be deemed for all intents, uses and purposes, to have been produced from such Tract.

The Unitized Substances allocated to each Tract shall be distributed among, or accounted for to, the parties executing, consenting to or ratifying this Agreement 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; and nothing herein contained shall be construed as requiring any retroactive adjustment for production obtained prior to the effective date of the qualification of any Tract.

If the Working Interest or the Royalty Interest in any Tract are or become divided with respect to separate parcels or portions of such Tract and owned severally by different persons, the Unitized Substances allocated to such Tract 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 the owners of interest in 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 16 (Royalty Settlement) hereof, any extra expenditure incurred by the Unit Operator by reason of

the delivery in kind of any portion of the Unitized Substances shall be borne by the party receiving the same in kind.

In the event any party hereto shall fail to take or otherwise adequately dispose of its proportionate share of the Unitized Substances, Unit Operator, in order to avoid curtailing Unit operations, may sell or otherwise dispose of such production to itself or others on a day-to-day basis at not less than the prevailing market price in the area for like production; and the account of such party 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 party entitled thereto; provided, however, 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.

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), Section 14 (Tracts Qualified for Participation), and Section 33 (Non-Joinder and Subsequent Joinder) hereof, or if any Tract is excluded from the Unit Agreement as provided for in Section 32 (Loss of Title), the schedule of participation as shown in the current Exhibit C shall be revised by the Unit Operator and distributed to the Working Interest Owners and the Supervisor, together with revised exhibits A and B, if appropriate, to show the new percentage participation of all the qualified Tracts; and the revised schedule, upon approval by the Working Interest Owners and the Supervisor shall govern the allocation of Unitized Substances on and after the effective date thereof until the effective date of a new schedule so approved. The Tract Participations of all Tracts participating prior to any such revision shall remain in the same ratio one to the other.

SECTION 16. ROYALTY SETTLEMENT. The United States of America and all Royalty Owners who, under an existing contract, are entitled to take in kind a share of the Unitized 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

conformity with the applicable contracts, laws and regulations. Settlement for Royalty Interest 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 in accordance with the terms of this Unit Agreement.

If gas obtained from lands not subject to this Agreement is introduced into the Unitized Formation for use in repressuring, stimulation or production or increasing ultimate recovery in conformity with a plan approved by the Supervisor, a like amount of gas, less appropriate deductions for loss from any cause, may be withdrawn from the Unitized Formation, royalty-free as to dry gas but not as to the products extracted therefrom; provided such withdrawal shall be pursuant to such conditions and formulas as may be prescribed or approved by the Supervisor, and provided further that such right of withdrawal shall terminate as of the effective date of termination of the Unit Agreement.

Royalty due the United States shall be computed as provided in the operating regulations and paid in value or delivered in kind as to all Unitized Substances on the basis of the amount thereof allocated to unitized Federal land as provided herein at the rates as may be authorized by law or regulation; provided that, for leases on which royalty rate depends on the daily average production per well, said average production shall be determined in accordance with the operating regulations as though the Unitized Land were a single consolidated lease.

Each Royalty Owner (other than the United States of America) that executes this Agreement represents that it is the owner of a Royalty Interest in Tract or Tracts within the Unit Area as its interest appears in Exhibit B attached hereto. Subject to Section 32 hereof, 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 interest of all parties in the affected Tract or Tracts shall be adjusted accordingly.

SECTION 17. 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 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 rental or minimum royalty is waived, suspended, or reduced by law or by approval of the Secretary or his duly authorized representative.

SECTION 18. 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 19. 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.

SECTION 20. 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 shall, and by his approval hereof, or by the approval hereof by his duly authorized representatives, hereby establish, alter, change or revoke the drilling, producing, rental, minimum royalty and royalty requirements of Federal 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 and every 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 secondary recovery operations performed hereunder upon any Tract of Unitized Land shall be accepted and deemed to be performed upon and for the benefit of each and every Tract of Unitized Land, and no lease shall be deemed to expire by reason of failure to drill or produce wells situated on land therein embraced.

(c) Suspension of drilling or producing operations on all Unitized Land pursuant to direction or consent of the Supervisor or his duly authorized representatives shall be deemed to constitute such suspension pursuant to such direction or consent as to each and every Tract of Unitized Land.

(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) Termination of this Agreement shall not affect any lease which, pursuant to the terms thereof or any applicable laws, shall continue in force and effect thereafter.

(f) 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 21. CORRECTION OF ERRORS. It is hereby agreed by all parties to this Agreement that Unit Operator is empowered to correct any mathematical or clerical errors which may exist in the pertinent exhibits to this Agreement; provided, however, that correction of any error other than mathematical or clerical shall be made by Unit Operator only after first having obtained approval of Working Interest Owners and the Supervisor.

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 of 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 of transfer.

SECTION 23. WAIVER OF RIGHT TO PARTITION. Each party hereto covenants that, during the existence of this Agreement, it will not resort to any action to partition the Unitized Land as to the Unitized Formation or the Unit Equipment, and to that extent waives the benefits of all laws authorizing such partition.

SECTION 24. 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 as of 7 a.m. on the first day of the month next following:

(a) The execution or ratification of this Agreement and the Unit Operating Agreement by Working Interest Owners sufficiently to qualify under Section 14 (Tracts Qualified for Participation) hereof 85% (measured by surface area) of the lands comprising the Unit Area; and

(b) The approval of this Agreement by the Secretary and the Commission; and

(c) If (a) and (b) above are not accomplished on or before July 1, 1971, this Agreement shall ipso facto expire on said date (hereinafter called "expiration date") and thereafter be of no further force or effect, unless prior thereto Working Interest Owners owning a combined Phase I Unit Participation of at least 75% have become parties to this Agreement and the Working Interest Owners committed to the Agreement owning at least 65% Unit Participation have decided to extend the expiration date for a period not to exceed six (6) months. If the expiration date is so extended and requirements of Section 24(a) are not accomplished

on or before the extended expiration date, this Agreement shall ipso facto expire on the extended expiration date and thereafter be of no further effect. For the purpose of this section, Unit Participation shall be as shown on the original Exhibit C attached to the Unit Agreement.

(d) Unit Operator shall file at least one counterpart of this Agreement for record in the office of the County Clerk of Lea County, New Mexico. Within thirty (30) days after the effective date of this Agreement Unit Operator shall file for record in the county records where a counterpart 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 or can be produced in quantities sufficient to repay the cost of producing same from the Unitized Land and as long thereafter as drilling, reworking or other operations (including secondary recovery operations) are prosecuted thereon without cessation of more than ninety (90) consecutive days, and so long thereafter as Unitized Substances can be produced as aforesaid.

This Agreement may be terminated by Working Interest Owners owning 90% Unit Participation then current at any time for any other reason, with the approval of the Supervisor. Notice of any such termination shall be given by Unit Operator to all parties hereto.

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.

If not otherwise covered by the leases unitized under this Agreement, Royalty Owners hereby grant Working Interest Owners a period of six (6) 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 25. 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 privately owned lands subject to this Agreement as to the quantity and rate of production 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.

SECTION 26. NON-DISCRIMINATION. In connection with the performance of work under this Agreement, the Operator agrees to comply with all of the provisions of Section 202, (1) to (7) inclusive, of Executive Order 11246 (30 F.R. 12319), which are hereby incorporated by reference in this Agreement.

SECTION 27. APPEARANCES. Unit Operator shall, after notice to other parties affected, have the right to appear for or on behalf of any and all interests affected hereby before the Department, and the Commission, and to appeal from any order issued under the rules and regulations of 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 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 28. NOTICES. All demands, notices, 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 post-paid registered or certified 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 29. NO WAIVER OF CERTAIN RIGHTS. Nothing contained in this Agreement 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 Land is located, or rules 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.

SECTION 30. EQUIPMENT AND FACILITIES - 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 and all 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 and all such equipment and personal property shall be and remain personal property for all purposes.

SECTION 31. UNAVOIDABLE DELAY. All obligations under this Agreement requiring the Unit Operator to commence or continue secondary 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 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 32. 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 Unit

Agreement, such Tract shall be automatically regarded as not committed hereto effective as of 7 a.m. on the first day of the calendar month in which such title failure is determined, and there shall be such re-adjustment 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 Federal land or leases, no payments of funds due the United States of America shall be withheld, but such funds shall be deposited as directed by the Supervisor, 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 33. NON-JOINDER AND SUBSEQUENT JOINDER. Joinder by any Non-Working Interest 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 the Unit 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 committed to this Unit Agreement.

Any oil or gas interest in the Unitized Formation underlying the Unit Area not committed hereto prior to submission of this Agreement 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 on and after the effective date hereof the commitment of a Working Interest in any Tract

within the Unit Area, shall be upon such equitable terms as may be negotiated by Working Interest Owners and the owners of such interests. Except as may be otherwise herein provided, subsequent joinder as to Tracts within the Unit Area shall be effective as of 7 a.m. of the first day of the month following the filing with the Supervisor of duly executed counterparts of any and all documents necessary to establish effective commitment of his interest to this Agreement unless objection to such joinder is made within sixty (60) days by the Supervisor.

SECTION 34. PRODUCTION AS OF THE EFFECTIVE DATE

(a) Oil in Lease Tankage of Effective Date. Unit Operator shall make a proper and timely gauge of all lease and other tanks on Unitized Land in order to ascertain the amount of merchantable oil above the pipe line connection in such tanks as of 7 a.m. on the effective date hereof. All such oil which has then been produced legally shall be and remain the property of the parties entitled thereto the same as if the Unit had not been formed; and such parties 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 parties entitled thereto, subject to the payment of all royalty and other payment under the terms and provisions of the Unit Agreement and any applicable lease or leases and other contracts. Any 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 the effective date hereof.

(b) Overproduction. If, as of the effective date hereof, any Tract of Unitized Land is overproduced with respect to the allowable of the wells on such Tract and the amount of overproduction has been sold or otherwise disposed of, such overproduction 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.

SECTION 35. 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 lands within the above-described Unit Area.

SECTION 36. 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 any lessor who has a contract with a lessee which requires his lessee to pay such taxes.

SECTION 37. CONFLICT OF SUPERVISION. Neither the Unit Operator nor the Working Interest Owners, nor any of them, shall be subject to any forfeiture, termination or expiration of any rights hereunder or under any leases or contracts subject hereto, or to any penalty or liability on account of delay or failure in whole or in part to comply with any applicable provisions thereof to the extent that the said Unit Operator or the Working Interest Owners, or any of them, are hindered, delayed or prevented from complying therewith by reason of failure of the Unit Operator to obtain, in the exercise of due diligence, the concurrence of proper representatives of the United States and proper representatives of the State of New Mexico in and about any matters or things concerning which it is required herein that such concurrence be obtained. The parties hereto, including the Commission, agree that all powers and authority vested in the Commission in and by any provisions of this Agreement are vested in the Commission and shall be exercised by it pursuant to the provisions of the laws of the State of New Mexico and subject in any case to appeal or judicial review as may now or hereafter be provided by the laws of the State of New Mexico.

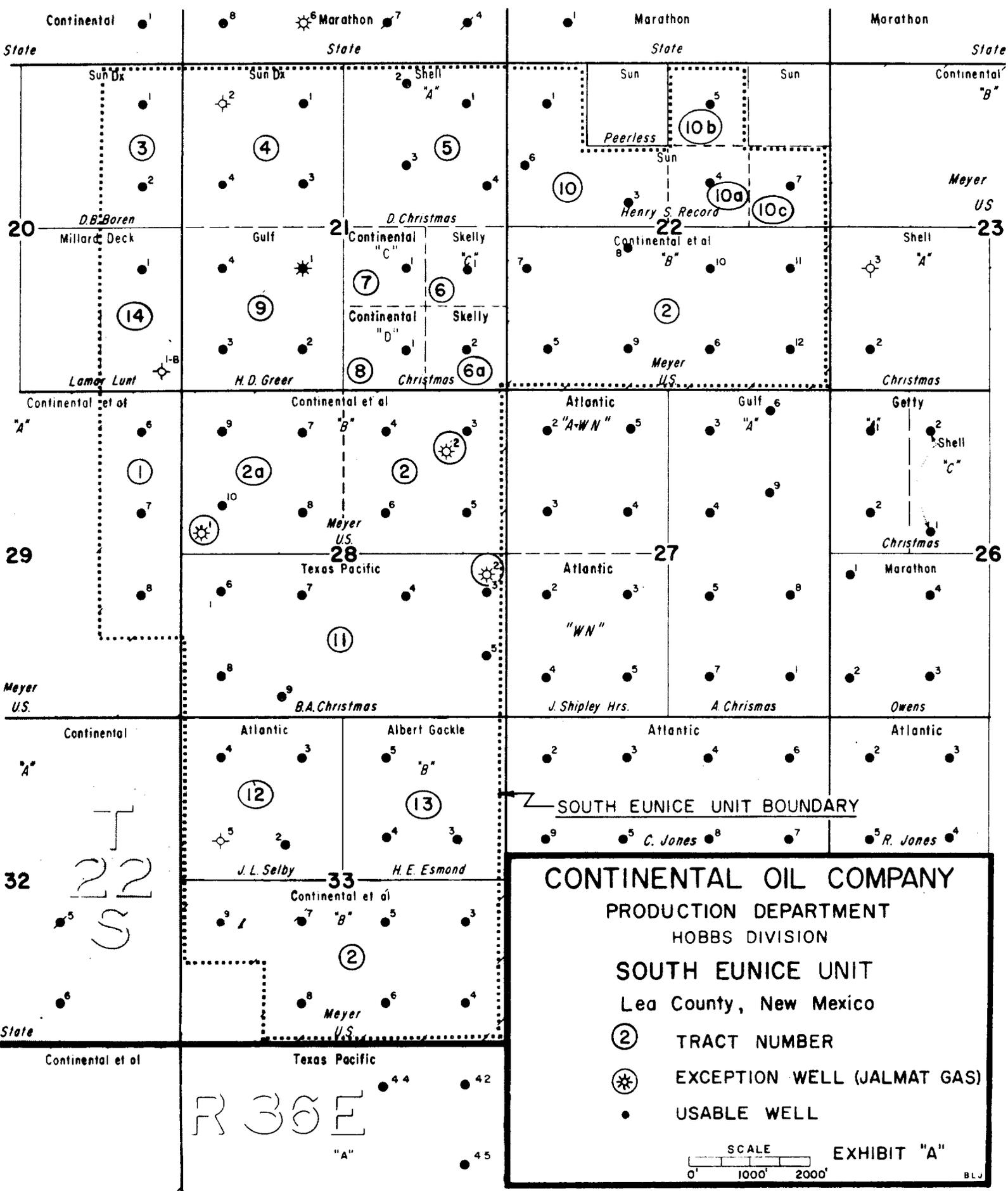
SECTION 38. NO PARTNERSHIP. It is expressly agreed that the relation of the parties hereto is that of independent contractors, and nothing contained in this Agreement, express or implied, or any operations conducted hereunder, shall create or be deemed to have created a partnership or association between the parties hereto or any of them.

SECTION 39. BORDER AGREEMENTS. Subject to the approval of the Supervisor, the Unit Operator, with concurrence of Working Interest Owners having a combined Unit Participation of 75%, may enter into a border-protection agreement or agreements with the Working Interest Owners of adjacent lands with respect to operations designed to increase ultimate recovery, conserve natural resources and protect the parties and their interests.

SECTION 40. LIMITATION OF APPROVALS. Notwithstanding anything herein contained to the contrary, if no Federal lands are committed to this Agreement, then no consents or approvals provided herein shall be required of the Department, the Secretary, the Director, or the Supervisor, and it shall not be necessary to file any instrument hereunder with said officers or agencies unless and until Federal lands are so committed to this Agreement; likewise, if no State Lands are committed to this Agreement, then no consents or approvals provided herein shall be required of the Commissioner, and it shall not be necessary to file any instrument hereunder with said officer unless and until State lands are so committed to this Agreement; likewise, if no fee lands are committed to this Agreement, then no consents or approvals provided herein shall be required of the Commission; and it shall not be necessary to file any instrument hereunder with said office unless and until fee lands are so committed to this Agreement.

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

	CONTINENTAL OIL COMPANY
ATTEST:	BY _____
_____	ITS _____
DATE _____	UNIT OPERATOR AND WORKING INTEREST OWNER



CONTINENTAL OIL COMPANY
 PRODUCTION DEPARTMENT
 HOBBS DIVISION

SOUTH EUNICE UNIT
 Lea County, New Mexico

- ② TRACT NUMBER
- ☼ EXCEPTION WELL (JALMAT GAS)
- USABLE WELL

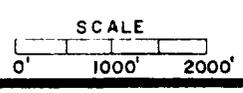


EXHIBIT "A"

BLJ

SOUTH EUNICE UNIT
EXHIBIT "B" TO UNIT AGREEMENT

Tract No.	Description of Land (All in T-22S, R-36E)	No. of Acres	Serial Number and Exp. Date	Basic Royalty % Percentage	Record Lessee and Percentage	Overriding Royalty and Percentage	Working Interest Owner and Percentage
1	Sec. 29: E/2 NE/4, NE/4 SE/4	120.00	LC 030133(a)	USA 100% Schedule C	Continental Oil Co. Atlantic Richfield Co. Chevron Oil Co. Pan American Pet. Corp.	25% 25% 25% 25% (See Appendix, Note No. 1)	Continental Oil Co. Atlantic Richfield Chevron Oil Co. Pan American Pet. Corp.
2	Sec. 22: S/2 Sec. 28: NE/4 Sec. 33: SE/4, E/2 SW/4, NW/4 SW/4	760.00	LC 030133(b)	USA 100%	Continental Oil Co. Atlantic Richfield Co. Chevron Oil Co. Pan American Pet. Corp.	25% 25% 25% 25% None	Continental Oil Co. Atlantic Richfield Chevron Oil Co. Pan American Pet. Corp.
2(a)	Sec. 28: NW/4	160.00	LC 030133(b)	USA 100% Schedule D	Continental Oil Co. Atlantic Richfield Co. Chevron Oil Co. Pan American Pet. Corp.	25% 25% 25% 25% None	Continental Oil Co. Atlantic Richfield Chevron Oil Co. Pan American Pet. Corp.
THREE FEDERAL TRACTS CONTAINING 1040.00 ACRES, OR 38.24% OF THE UNIT AREA							
3	Sec. 20: E/2 NE/4	80.00	HBP	(See Appendix, Note No. 2)	Sun Oil Co. - DX Div.	None	Sun Oil Co. - DX Div.
4	Sec. 21: NW/4	160.00	HBP	(See Appendix, Note No. 3)	Sun Oil Co. - DX Div.	None	Sun Oil Co. - DX Div.
5	Sec. 21: NE/4	160.00	HBP	(See Appendix, Note No. 4)	Wesley McCallister	None	Shell Oil Co. Gulf Oil Corp.
6	Sec. 21: NE/4 SE/4	40.00	HBP	(See Appendix, Note No. 5)	Skelly Oil Company	None	Skelly Oil Co.
6(a)	Sec. 21: SE/4 SE/4	40.00	HBP	(See Appendix, Note No. 6)	Skelly Oil Company	None	Skelly Oil Co.

South Eunice Unit
 Exhibit "B" to Unit Agreement
 Page 2

Tract No.	Description of Land (All in T-22S, R-36E)	No. of Acres	Serial Number and Exp. Date	Basic Royalty % Percentage	Record Lessee	Overriding Royalty and Percentage	Working Interest Owner and Percentage
7	Sec. 21: NW/4 SE/4	40.00	HBP	See Appendix Note No. 7	J. H. Hendrix M. L. Klein	Shell Companies Foundation, Inc. 1.82292%#	Continental Oil Co.
8	Sec. 21: SW/4 SE/4	40.00	HBP	See Appendix Note No. 8	J. H. Hendrix M. L. Klein	Shell Companies Foundation, Inc. 6.25%#	Continental Oil Co.
9	Sec. 21: SW/4	160.00	HBP	See Appendix Note No. 9	Gulf Oil Corp.	None	Gulf Oil Corp.
10	Sec. 22: S/2 NW/4, NW/4 NW/4	120.00	HBP	See Appendix Note No. 10	Sun Oil Company	None	Sun Oil Company
10(a)	Sec. 22: SW/4 NE/4	40.00	HBP	See Appendix Note No. 11	Sun Oil Company	None	Sun Oil Company
10(b)	Sec. 22: NW/4 NE/4	40.00	HBP	See Appendix Note No. 12	Sun Oil Company	None	Sun Oil Company
10(c)	Sec. 22: SE/4 NE/4	40.00	HBP	See Appendix Note No. 13	Sun Oil Company	None	Sun Oil Company
11	Sec. 28: S/2	320.00	HBP	See Appendix Note No. 14	Texas Pacific Oil Company, Inc.	Emma L. Coleman & Levi Cole, Anc. Ex. Est. 0. L. Coleman, deceased 0.048833* Mary Vern Ranson 0.048833*	G. F. Bauerdorf Est. 24.316% Gordon M. Cone 2.734% E. A. Culbertson 6.079% W. W. Irwin 6.079% Reserve Oil & Gas 12.159% Texas Pacific Oil 48.633%

* Until balance of Production Payment in the original sum of \$687.50 is paid, after which this interest reverts to Texas Pacific.

This rate applies when daily average production per well is less than 35 barrels. When daily average production per well is over 35 barrels the royalty rate is double that shown.

Tract No.	Description of Land (All in T-22S, R-36E)	No. of Acres	Serial Number and Exp. Date	Basic Royalty & Percentage	Record Lessee	Overriding Royalty and Percentage	Working Interest Owner and Percentage
12	Sec. 33: NW/4	160.00	HBP	Atlantic Richfield Virginia P. Selby 9.375%	Unleased Texas Pacific Oil Company, Inc.	None Clear Fork Charity Foundation 4.0625% Howard Olson 1.2696% R. Olsen Est. 1.2695% The Prudential Insurance Co. 26.4062%#	Atlantic Richfield Texas Pacific Oil Company, Inc. 50%
13	Sec. 33: NE/4	160.00	HBP	See Appendix Note No. 15	Atlantic Richfield	Atlantic Richfield 4.5573%*	Margaret B. Clay Clay Trusts 20.6597% Gackle Oil Co. 26.3889% Management Tr. 7.2917% Monsanto Co. 25.0000%
14	Sec. 20: E/2 SE/4	80.00	HBP	See Appendix Note No. 16	Millard Deck	Guy A. Swartz 2.400%	Millard Deck

16 FEE TRACTS CONTAINING 1680.00 ACRES OR 61.76% OF THE UNIT AREA

*This represents interest in oil at producing rates below top allowable.
 At top allowable, interest increases to 9.1146%

#Production Payment

SOUTH EUNICE UNIT
APPENDIX TO EXHIBIT "B"

NOTE NO. 1 - Tract No. 1, Overriding Royalty and Percentage

	Col. A*	Col. B*
Albuquerque National Bank, Test. of Frank Andrews, deceased	0.15432	0.23148
Selma E. Andrews	0.17901	0.26851
Charles Francis Bedford	0.01333	0.02000
Helen L. Bedford, Ex/Est. of Edwin M. Bedford	0.01333	0.02000
Henry D. Bedford	0.01333	0.02000
Rachel Bedford Bowen	0.01333	0.02000
Boys Clubs of America	0.01666	0.02500
Lillian H. Coll, Executrix of the estate of Max W. Coll	0.16667	0.25000
Boyce Rush Davis	0.04167	0.06250
Elks National Foundation Trust Dept. Acct 5-5429135	0.01666	0.02500
Frank O. Elliott, Living Trust	0.08333	0.12500
A. N. Etz II	0.20833	0.31250
Robert William Etz	0.20834	0.31250
George Etz	0.41667	0.62500
Edna Ione Hall, Living Trust	0.08333	0.12500
Raymond Hubbard, Raymond E. Hubbard, Jr., Morgan R. Hubbard U/W of G. E. Hubbard, deceased	0.16667	0.25000
Ray E. Hubbard	0.16667	0.25000
W. W. Lechner	0.16667	0.25000
Patrick J. Leonard	0.02778	0.04167
Robert J. Leonard	0.02777	0.04167
Timothy T. Leonard	0.02778	0.04167
J. M. Richardson Lyeth, Jr. & Munro Longyear Lyeth, Joint Tenants	0.30000	0.45000
Marshall & Winston, Inc.	0.33333	0.50000
Mrs. May C. Meyer	0.62500	0.93750
William Joseph Meyer	0.37500	0.56250
Midwest Oil Corporation	0.66667	1.00000
New Mexico Boys Ranch, Inc.	0.01667	0.02500
Regents - University of New Mexico	0.01667	0.02500
Onez Norman Rooney	0.30000	0.45000
Lula S. Rush	0.08333	0.12500
Shattuck School	0.01667	0.02500
Ruth Rush Weaver	0.04167	0.06250
Ellen Anne W. Williams	<u>0.01333</u>	<u>0.02000</u>
 *Column "A" is used when daily average production per well is less than 15 barrels; otherwise column "B" applies.	 5.00000	 7.500000

NOTE NO. 2 - Tract 3, Basic Royalty and Percentage

	<u>Apparent Mineral Interest</u>	<u>Revenue Interest</u>
Atlantic Richfield Company	27.8516	3.48145
Bradley Resources Corporation	0.7812	0.09765
The Chase Manhattan Bank	34.3880	4.29850
Lillian H. Coll ex/est. of M. W. Coll	2.3438	0.29297
First National Bank of Santa Fe	6.2500	0.78125
Florence E. Ernst and Manufacturers & Traders Trust Co., Trustee U/W W. J. Healey	5.3125	0.66406
Olivia W. Etz	1.1719	0.14648
A. N. Etz II	0.5859	0.07324
Robert William Etz	0.5860	0.07325

<u>Note No. 2 (Continued)</u>	<u>Apparent Mineral Interest</u>	<u>Revenue Interest</u>
Grace Healey Greenan	0.9375	0.11719
John H. Healey	6.2500	0.78125
Charles J. Hoffman	0.7812	0.09765
Nathan Calvin	2.3438	0.29297
R. W. Kellough et al	1.0417	0.13021
Oil Finders, Inc.	1.5625	0.19531
Roger B. Owings	0.7812	0.09766
W. L. Pickens	3.1250	0.39063
Texaro Oil Company	0.7812	0.09766
Robert Allen Venable, executor, est. of R. H. Venable	1.5625	0.19531
John H. Wilson	1.5625	0.19531
	<u>100.0000</u>	<u>12.50000</u>

NOTE NO. 3 - Tract 4, Basic Royalty and Percentage

	<u>Apparent Min. Int.</u>	<u>Rev. Int.</u>
Lyman P. Anderson	6.2500	0.78125
C. F. Bedford	0.5000	0.06250
Helen L. Bedford Ex/est. of E. M. Bedford	0.5000	0.06250
Henry D. Bedford	0.5000	0.06250
Rachel B. Bowen	0.5000	0.06250
Hugh Corrigan III	1.5625	0.19531
J. Patrick Corrigan	1.5625	0.19531
Charles A. Dore	1.2500	0.15625
Felmont Oil Corporation	1.1231	0.14039
Fluor Corporation	6.2500	0.78125
Julian W. Glass, Jr., UWO J. Wood Glass, deceased	0.1465	0.01831
Mrs. Etta Greer	3.1250	0.39063
Clarence E. Hinkle	1.5625	0.19531
F. D. Jones estate (see Note #9)	0.5000	0.06250
J. M. Richardson Lyeth, Jr. and Munro L. Lyeth - J. T.	11.2500	1.40625
Petroleum Corporation of Texas	6.6666	0.83333
Phillips Investment Corporation	0.1465	0.01831
W. A. Pruett	0.6250	0.07813
Onez N. Rooney	11.2500	1.40625
Southern Minerals Corporation	13.3333	1.66667
Southern Petroleum Exploration, Inc.	15.6250	1.95312
Sparks-Healey Company	5.0000	0.62500
June D. Speight	6.2500	0.78125
The Superior Oil Company	3.8750	0.48437
Warren Bank and Trust Company, exe./est. of A. W. Goal, deceased	0.1465	0.01831
Ellen Anne W. Williams	0.5000	0.06250
	<u>100.0000</u>	<u>12.50000</u>

NOTE NO. 4 - Tract No. 5, Basic Royalty and Percentage

Atlantic Richfield Company	6.2500	0.78125
Joyce C. Brown	10.4166	1.30208
B. A. Christmas, Jr.	5.2083	0.65104
B. A. Christmas, Jr., Gdn/est. Bradford A. Christmas, a minor	1.3021	0.16276
B. A. Christmas, Jr., Gdn/est. Helen Jane Christmas, a minor	1.3021	0.16276
B. A. Christmas, Jr., Gdn/est. Candy Christmas, a minor	1.3021	0.16276
B. A. Christmas, Jr., Gdn/est. Mary Theresa Christmas, a minor	1.3021	0.16276

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<u>Note No. 4 (Continued)</u>	<u>Apparent Mineral Interest</u>	<u>Revenue Interest</u>
Gordon M. Cone	4.1667	0.52083
Continental Oil Company	3.1250	0.39063
Cities Service Oil Company	3.1250	0.39063
Fluor Corporation	16.6667	2.08333
Gavin R. Garrett	0.6944	0.08680
David E. Goodrich	0.6944	0.08681
Maurine V. Goodrich	4.1667	0.52083
The Fort Worth National Bank & Maurine V. Goodrich, exe. & trustees U/W of R. D. Goodrich, deceased	1.3889	0.17361
Robert R. Goodrich	0.6945	0.08681
Reginald Johnson, Charles G. Schrimmer & John D. Woodfin, jointly	12.5000	1.56250
John F. Malloy	0.3473	0.04341
John F. Malloy, Tr. for John Goodrich Malloy	0.1157	0.01446
John F. Malloy, Tr. for Margaret Cecelia Malloy	0.1157	0.01447
John F. Malloy, Tr. for Paul Malloy	0.1157	0.01447
Southland Royalty Company	25.0000	3.12500
	<u>100.0000</u>	<u>12.50000</u>

NOTE NO. 5 - Tract 6, Basic Royalty and Percentage

Joyce Ann Brown	7.0833	0.88542
Joyce Christmas Brown	17.7083	2.21354
B. A. Christmas, Jr.	17.7083	2.21354
B. A. Christmas, Jr. U/W of B. A. Christmas, deceased	28.3333	3.54167
Gordon M. Cone	2.0833	0.26041
Fluor Corporation	16.6667	2.08333
The Fort Worth National Bank & Maurine V. Goodrich, Trustees U/W of Robert D. Goodrich	1.3889	0.17361
Gavin R. Garrett	0.6945	0.08681
David E. Goodrich	0.6944	0.08680
Maurine V. Goodrich	4.1667	0.52083
Robert R. Goodrich	0.6944	0.08681
Marjorie Cone Kastman, Katherine Cone Keck, S. E. Cone, Jr., Adm/est. of S. E. Cone, Deceased	2.0833	0.26042
John F. Malloy	0.3472	0.04340
John F. Malloy, Tr. for John Goodrich Malloy	0.1158	0.01447
John F. Malloy, Tr. for Margaret Cecelia Malloy	0.1158	0.01447
John F. Malloy, Tr. for Paul Malloy	0.1158	0.01447
	<u>100.0000</u>	<u>12.50000</u>

NOTE NO. 6 - Tract 6(a), Basic Royalty and Percentage

Ella Fulshear Allen	1.5625	0.19531
Lem B. Allen	1.5625	0.19532
William J. Collins, W. C. Stroube and R. L. Wheelock, ind. exe/est. of J. L. Collins, deceased	5.0000	0.62500
The First National Bank, Corsicana, Texas, and Jane Case Wheelock, ind. exe of the estate of R. L. Wheelock	2.5000	0.31250
The First National Bank in Dallas and Vera H. Long, Ind. exe. of the estate of Frank O. Long, deceased	0.0179	0.00224
Mrs. Martha W. Harris	1.0417	0.13021
Dena Ida Koenig, ind. and as exe./est. of E. J. Koenig, deceased	0.2243	0.02804
La Gloria Oil and Gas Company	31.2500	3.90625
E. B. McKean	3.1250	0.39062

<u>Note No. 6 (Continued)</u>	<u>Apparent Mineral Interest</u>	<u>Revenue Interest</u>
Mrs. Exor Megan, Gdn. of Maude Eagle Pfouts, a n/c/m	0.0090	0.00112
Mrs. Clyde W. Miller	1.0417	0.13021
W. D. Lamb, tr./est. of Gertrude S. Pearson	5.0000	0.62500
Elizabeth H. Penn, Tr/U/W of Robert Lee Penn, deceased	6.1112	0.76391
Nancy Elizabeth Penson	18.3379	2.29224
Royalty Roundup, Inc.	0.0304	0.00380
Georgia Ann Stieren, Ind Ex/U/W of Jack Stieren	0.2602	0.03253
H. R. Stroube	5.0000	0.62500
W. C. Stroube	5.0000	0.62500
Nora Walker	0.0090	0.00112
Myrtis Dean Watkins	1.0417	0.13021
Robert L. Wheelock, Jr., and Betty Wheelock Kennaugh, co- exe. of the estate of Maude C. Wheelock	2.5000	0.31250
Elizabeth Woolworth	4.1667	0.52083
May Woolworth	5.2083	0.65104
	<u>100.0000</u>	<u>12.50000</u>

NOTE NO. 7 - Tract No. 7, Basic Royalty and Percentage

Joyce C. Brown	37.2807	6.64063
B. A. Christmas, Jr.	18.6404	3.32031
B. A. Christmas, Jr., Gdn. for Bradford Christmas	4.6600	0.83008
B. A. Christmas, Jr., Gdn. for Candy Christmas	4.6600	0.83007
B. A. Christmas, Jr., Gdn. for Helen Jane Christmas	4.6600	0.83008
B. A. Christmas, Jr., Gdn. for Terri Christmas	4.6600	0.83008
Gordon M. Cone	1.4620	0.26041
Fluor Corporation	16.6667	2.08333
The Fort Worth National Bank & Maurine V. Goodrich, Tr. U/W of Robert D. Goodrich (Acct. 1759)	0.9747	0.17361
Gavin R. Garrett	3.4114	0.60764
David E. Goodrich	0.4874	0.08681
Robert R. Goodrich	0.4874	0.08681
Marjorie Cone Kastman, Katherine Cone Keck, S. E. Cone, Jr, Adm/Est. of S. E. Cone, Deceased	1.4620	0.26042
John F. Malloy	0.2437	0.04340
John F. Malloy, Tr. for John G. Malloy	0.0812	0.01446
John F. Malloy, Tr. for Margaret C. Malloy	0.0812	0.01447
John F. Malloy, Tr. for Paul Malloy	0.0812	0.01447
	<u>100.0000</u>	<u>16.92708</u>

NOTE NO. 8 - Tract 8, Basic Royalty and Percentage

Ella Fulshear Allen	1.5625	0.19532
Lemuel Byron Allen	1.5625	0.19531
S. M. Aronson	0.0045	0.00056
Vernon Carr	0.0003	0.00004
Carl Carr	0.0011	0.00014
W. J. Collins	0.0180	0.00225
W. J. Collins, W. C. Stroube and R. L. Wheelock, Jr., Ind. executors of the Estate of J. L. Collins	5.0000	0.62500
Helen Koenig Graves	0.0561	0.00701
Martha Watkins Harris	1.0417	0.13021
Dena Ida Koenig	0.1122	0.01402
Palmer Koenig	0.0561	0.00701
La Gloria Oil and Gas Company	31.2500	3.90625
W. D. Lamb, Tr. of the Gertrude S. Pearson Trust	5.0000	0.62500

<u>Note No. 8 (Continued)</u>	<u>Apparent Mineral Interest</u>	<u>Revenue Interest</u>
E. B. McKean	3.1250	0.39062
Mrs. Clyde W. Miller	1.0417	0.13021
Elizabeth H. Penn, Tr U/W of Robert Lee Penn	6.1112	0.76391
Nancy E. Penson	18.3378	2.29222
Estate of George Pfouts	0.0090	0.00112
Royalty Roundup, Inc.	0.0180	0.00225
Harry Smith	0.0015	0.00018
Georgia Ann Stieren, ind. exe U/W of Jack Stieren	0.2603	0.03254
H. R. Stroube	5.0000	0.62500
W. C. Stroube	5.0000	0.62500
E. L. Vance	0.0050	0.00063
Mrs. Nora Walker	0.0090	0.00112
Myrtis Dean Watkins	1.0417	0.13021
R. L. Wheelock, Jr., & Betty W. Kennaugh, co-exe. of the estate of Maude C. Wheelock	5.0000	0.62500
Elizabeth Woolworth	4.1666	0.52084
May Woolworth	5.2082	0.65103
	<u>100.0000</u>	<u>12.50000</u>

NOTE NO. 9 - Tract No. 9, Basic Royalty and Percentage

Jacques Peter Adoue, Thomas J. Reilly, W. W. Bland, and the National Bank of Commerce of Houston, Tr. U/W of F. D. Jones	0.2500	0.0312
Charles F. Bedford	0.5000	0.0625
Edwin M. Bedford	0.5000	0.0625
Henry DeGraffenreid Bedford	0.5000	0.0625
Rachel Bedford Bowen	0.5000	0.0625
Hugh Corrigan III	1.5625	0.1953
J. Patrick Corrigan	1.5625	0.1953
Fannie B. Dore	1.2500	0.1563
Felmont Oil Corporation	1.1228	0.1404
First Wisconsin Trust Co., exe/est. Lillian Blanchard Jones	0.2500	0.0313
Fluor Corporation	6.2500	0.7812
Julian W. Glass, Jr., Tr. U/W J. Wood Glass	0.1466	0.0183
Etta Greer	3.1250	0.3906
Clarence E. Hinkle	1.5625	0.1953
J. M. Richardson Lyeth, Jr., and Munro Longyear Lyeth, First National Bank of Denver Trustees	11.2500	1.4062
The Pennsylvania Bank and Trust Co., Tr/Est. Albert Walter Goal, deceased	0.1466	0.0183
Petroleum Corporation of Texas	6.6666	0.8333
Phillips Investment Corporation	0.1466	0.0183
W. A. Pruett	0.6250	0.0781
Onez Norman Rooney	11.2500	1.4063
Agnes C. Smith	6.2500	0.7813
June D. Speight	6.2500	0.7813
Southern Minerals Corporation	13.3333	1.6667
Southern Petroleum Exploration, Inc.	15.6250	1.9531
Sparks Healy Company	5.0000	0.6250
The Superior Oil Company	3.8750	0.4844
Ellen Anne W. Williams	0.5000	0.0625
	<u>100.0000</u>	<u>12.5000</u>

	<u>Apparent Mineral Interest</u>	<u>Revenue Interest</u>
<u>NOTE NO. 10 - Basic Royalty under Tract No. 10</u>		
Atlantic Richfield Company	25.000	3.1250
J. L. Bennett, Estate	18.750	2.3437
The First National Bank in Dallas and Vena H. Long, ind. exe/est. of F. O. Long, dec. (Acct. 222-05963)	0.014	0.0017
Fluor Corporation	37.500	4.6875
Elizabeth Heard Hudson	1.528	0.1910
Jack W. Hudson	1.528	0.1910
Jean Hudson	0.764	0.0955
Mary Helen Hudson	1.528	0.1911
Taylor Hudson	0.764	0.0955
William T. Hudson	1.528	0.1911
Dena Ida Koenig, Ind. Exe/est. of E. J. Koenig, dec.	0.168	0.0210
Mrs. Exor Megan, Gdn. of Est. of Mrs. Maude Eagle Pfouts, n/c/m	0.007	0.0008
Elizabeth H. Penn, Trustee U/W Robert Lee John Penn, deceased	4.584	0.5730
Nancy Elizabeth Penson	4.584	0.5729
Royalty Roundup, Inc.	0.023	0.0029
Georgia Ann Stieren, Ind. Ex U/W of Jack Stieren, Deceased	0.195	0.0244
Barbara Toltz	1.528	0.1911
Nora Walker	0.007	0.0008
	<u>100.000</u>	<u>12.5000</u>

NOTE NO. 11 - Basic Royalty under Tract 10(a)

Martha Watkins Harris	4.167	0.5209
Mary Horne Heath	37.500	4.6875
Mrs. Clyde W. Miller	4.166	0.5208
Lula Horn Rice	12.500	1.5625
Myrtis Watkins	4.167	0.5208
Elizabeth Woolworth	16.667	2.0834
May Woolworth	20.833	2.6041
	<u>100.000</u>	<u>12.5000</u>

NOTE NO. 12 - Basic Royalty Under Tract No. 10(b)

The First National Bank in Dallas and Vena H. Long, Ind. exe/est. of F. O. Long, dec. (Acct. 222-05963)	0.018	0.0022
Elizabeth Heard Hudson	2.038	0.2547
Jack W. Hudson	2.038	0.2547
Mary Helen Hudson	2.038	0.2547
Taylor Hudson	1.019	0.1274
William T. Hudson	2.037	0.2547
Jean Hudson Jenson	1.019	0.1274
Dena Ida Koenig, Ind. Exe/Est. of E. J. Koenig, dec.	0.224	0.0280
La Gloria Oil and Gas Company	25.000	3.1250
Mrs. Exor Megan, Gdn/Estate of Mrs. Maude Eagle Pfouts, n/c/m	0.009	0.0011
New Mexico Baptist Childrens' Home, Inc.	50.000	6.2500
Elizabeth H. Penn, Trustee U/W of Robert Lee John Penn, deceased	6.112	0.7640
Nancy Elizabeth Penson	6.112	0.7640
Royalty Roundup, Inc.	0.030	0.0038
Georgia Ann Stieren, Ind. Ex U/W of Jack Stieren, Deceased	0.260	0.0325
Barbara Toltz	2.037	0.2547
Nora Walker	0.009	0.0011
	<u>100.000</u>	<u>12.5000</u>

	<u>Apparent Mineral Interest</u>	<u>Revenue Interest</u>
<u>NOTE NO. 13 - Basic Royalty Under Tract No. 10(c)</u>		
Atlantic Richfield Company	25.000	3.1250
Rose M. Cottingham	12.500	1.5625
The First National Bank in Dallas and Vena H. Long, Ind. Exe/est. of F. O. Long, dec. (Acct. 222-05963)	0.018	0.0022
Fluor Corporation,	37.500	4.6875
Elizabeth Heard Hudson	2.038	0.2547
Jack W. Hudson	2.038	0.2547
Mary Helen Hudson	2.038	0.2547
Taylor Hudson	1.019	0.1274
William T. Hudson	2.037	0.2547
Jean Hudson Jensen	1.019	0.1274
Dena Ida Koenig, Ind. Exe/Est. of E. J. Koenig, deceased	0.224	0.0280
Mrs. Exor Megan, Gdn/Est. of Mrs. Maude Eagle Pfouts, n/c/m	0.009	0.0011
Elizabeth H. Penn Trustee U/W of Robert Lee John Penn, deceased	6.112	0.7640
Nancy Elizabeth Penson	6.112	0.7640
Royalty Roundup, Inc.	0.030	0.0038
Georgia Ann Stieren, Ind. Ex. U/W of Jack Stieren, Deceased	0.260	0.0325
Barbara Toltz	2.037	0.2547
Nora Walker	0.009	0.0011
	<u>100.000</u>	<u>12.5000</u>

NOTE NO. 14 - Tract 11, Basic Royalty & Percentage

Nathan Appleman and Janet Appleman, % The Bank of New York	12.5000	3.12500
Joyce Ann Brown	0.3125	0.03906
Joyce Christmas Brown	0.7813	0.09766
B. A. Christmas, Jr.	0.7813	0.09766
B. A. Christmas, Jr., Test/Tr. U/W B. A. Christmas, Sr., deceased	1.2500	0.15626
Emma Leora Coleman and William E. Adams, Anc. Co-exe/est. of O. L. Coleman	0.7813	0.09766
Estate of J. L. Collins, deceased	5.0000	1.25000
Fern Cone	4.4141	1.37940
Gordon M. Cone	2.7344	0.34170
S. E. Cone, Jr.,	3.0859	0.89203
Carrie Dean	9.3750	1.17188
H. V. Everett and Margaret Everett	3.1250	0.39063
Fluor Corporation	6.2500	1.56250
Nancy Griffin George	9.3750	1.17188
Elbert H. Griffin	1.5625	0.19532
Errol M. Griffin	1.5625	0.19532
Marjorie Cone Kastman	3.0468	0.88074
W. D. Lamb, Tr est. of - Gertrude S. Pearson	5.0000	1.25000
Mary Vern Ransom	0.7812	0.09766
Adam Rosson, Jr.	12.5000	1.56250
H. R. Stroube and Mary Stroube	5.0000	1.25000
W. C. Stroube and Bessie Watt Stroube	5.0000	1.25000
Estate of Maude C. Wheelock, deceased	2.5000	0.62500
Estate of R. L. Wheelock, deceased	2.5000	0.62500
J. H. Williams and Elizabeth Williams	0.7812	0.24414
	<u>100.0000</u>	<u>19.94900</u>

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	<u>Apparent Mineral Interest</u>	<u>Revenue Interest</u>
<u>NOTE NO. 15 - Tract 13, Basic Royalty and Percentage</u>		
Atlantic Richfield Company	19.2708	2.40885
Bradley Resources Corporation	1.5625	0.19531
Lillie Stovall Esmond	12.5000	1.56250
First National Bank and Trust Co., Okla. City, Tr. No. 09630	2.0833	0.26042
Gackle Oil Co.	2.0833	0.26040
Helen K. Graves	0.0281	0.00351
Dena Ida Koenig	0.0561	0.00701
Palmer E. Koenig	0.0280	0.00351
La Gloria Oil and Gas Company	12.5000	1.56250
Monsanto Company	25.0000	3.12500
Elizabeth H. Penn, ind/exe. of estate of Robert Lee Penn	3.0557	0.38196
Nancy Elizabeth Penson	9.1690	1.14613
Mrs. Exor Megan, gdn. of est. of Maude E. Pfouts	0.0045	0.00056
Royalty Roundup, Inc.	0.0241	0.00301
Georgia Ann Stieren, Ind. Exe./Est. of Jack Stieren, deceased	0.1301	0.01627
Robert Allen Venable, ind. exe. & tr. U/W of R. H. Venable	12.5000	1.56250
Mrs. Nora Walker	0.0045	0.00056
	<u>100.0000</u>	<u>12.50000</u>

NOTE NO. 16 - Tract 14, Basic Royalty and Percentage

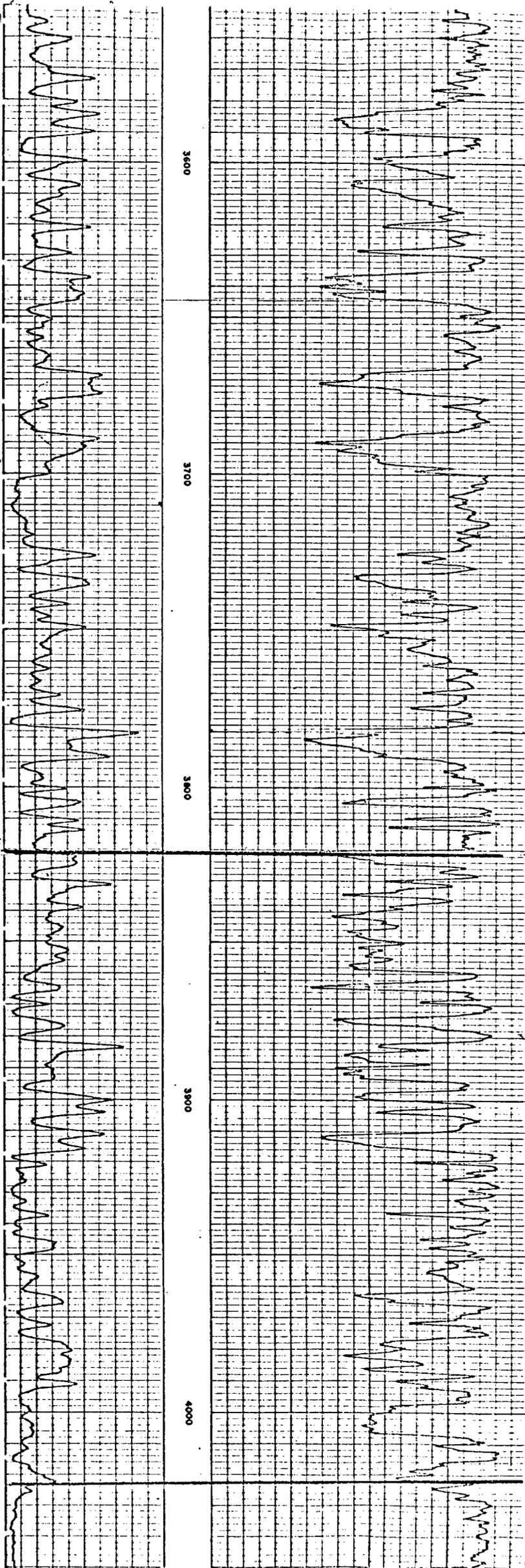
Atlantic Richfield Company	62.2396	11.66992
Bradley Resources Corp.	0.7813	0.14648
Coll Production, Inc.	1.7578	0.32958
Lillian H. Coll, Trustee	0.5859	0.10986
Florence E. Ernest and Manufacturers and Traders Tr. Co. of Buffalo, N. Y. Ex & Tr U/W William J. Healey, deceased	5.3125	1.32813
Dalport Oil Corp.	0.5208	0.13020
Alva N. Etz, II and wife, Jean W. Etz, JT W/ Ros	0.5859	0.10986
Olivia W. Etz	1.1719	0.21972
Robert W. Etz	0.5859	0.10986
First National Bank of Santa Fe, Trustee U/A dated 1-2-65	6.2500	1.56250
Gracy Healey Greenan	0.9375	0.23437
John H. Healey	6.2500	1.56250
Charles J. Hoffman	0.7813	0.19531
Nathan Calvin	2.3438	0.58593
Oil Finders, Inc.	1.5625	0.29296
Roger B. Owings	0.7813	0.19531
W. L. Pickens	3.1250	0.78125
Jay Simmons	0.5208	0.13020
Texaro Oil Co.	0.7812	0.19531
Robert Allen Venable, Ind. Ex & Tr. U/W/ R. H. Venable, dec.	1.5625	0.39062
John H. Wilson	1.5625	0.29296
	<u>100.0000</u>	<u>20.57283</u>

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EXHIBIT "C" TO UNIT AGREEMENT
SOUTH EUNICE UNIT
LEA COUNTY, NEW MEXICO

<u>Tract No.</u>	<u>Description</u>	<u>Phase I Participation</u>	<u>Phase II Participation</u>
1	Sec. 29: E/2 NE/4, NE/4 SE/4	6.24388	3.43588
2	Sec. 22: S/2 Sec. 28: NE/4 Sec. 33: SE/4, E/2 SW/4, NW/4 SW/4	21.89638	26.70781
2(a)	Sec. 28: NW/4	3.69285	4.72238
3	Sec. 20: E/2 NE/4	1.84119	3.67033
4	Sec. 21: NW/4	2.40259	12.63001
5	Sec. 21: NE/4	1.77839	6.48196
6	Sec. 21: NE/4 SE/4	1.00671	1.58512
6(a)	Sec. 21: SE/4 SE/4	0.62515	1.35154
7	Sec. 21: NW/4 SE/4	0.49384	1.10147
8	Sec. 21: SW/4 SE/4	4.53494	2.39248
9	Sec. 21: SW/4	7.25439	5.94656
10	Sec. 22: S/2 NW/4, NW/4 NW/4	7.23821	5.46449
10(a)	Sec. 22: SW/4 NE/4	2.10381	1.51564
10(b)	Sec. 22: NW/4 NE/4	1.83548	1.42864
10(c)	Sec. 22: SE/4 NE/4	7.51701	1.84416
11	Sec. 28: S/2	6.39231	7.85107
12	Sec. 33: NW/4	7.97659	4.95584
13	Sec. 33: NE/4	13.94358	6.03375
14	Sec. 20: E/2 SE/4	1.22270	0.88087

CONTINENTAL OIL COMPANY
West Arrowhead Deep Unit No. 1
Elev. DF: 3569'



Top of Queen 3821'

Base of Queen and
Top of Grayburg 4023'

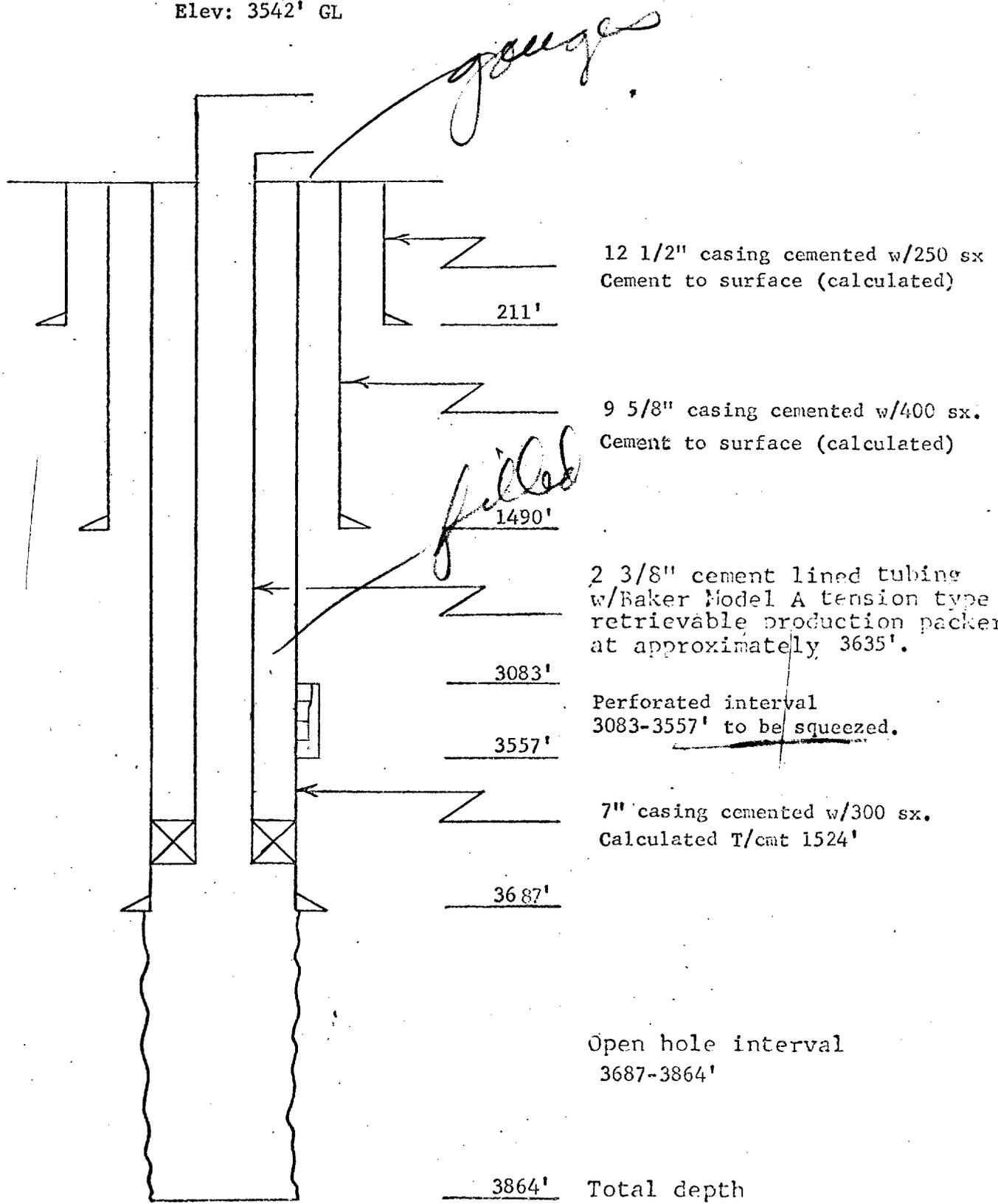
Location: 1980 FN&WL
Section 17, T23S
R36E, Lea County
New Mexico

EXHIBIT

3

Water Well Injection Data

SUN DX
 D. B. Boren No. 1
 660' FNL & 660' FEL, Unit A
 Section 20-22-36
 Elev: 3542' GL

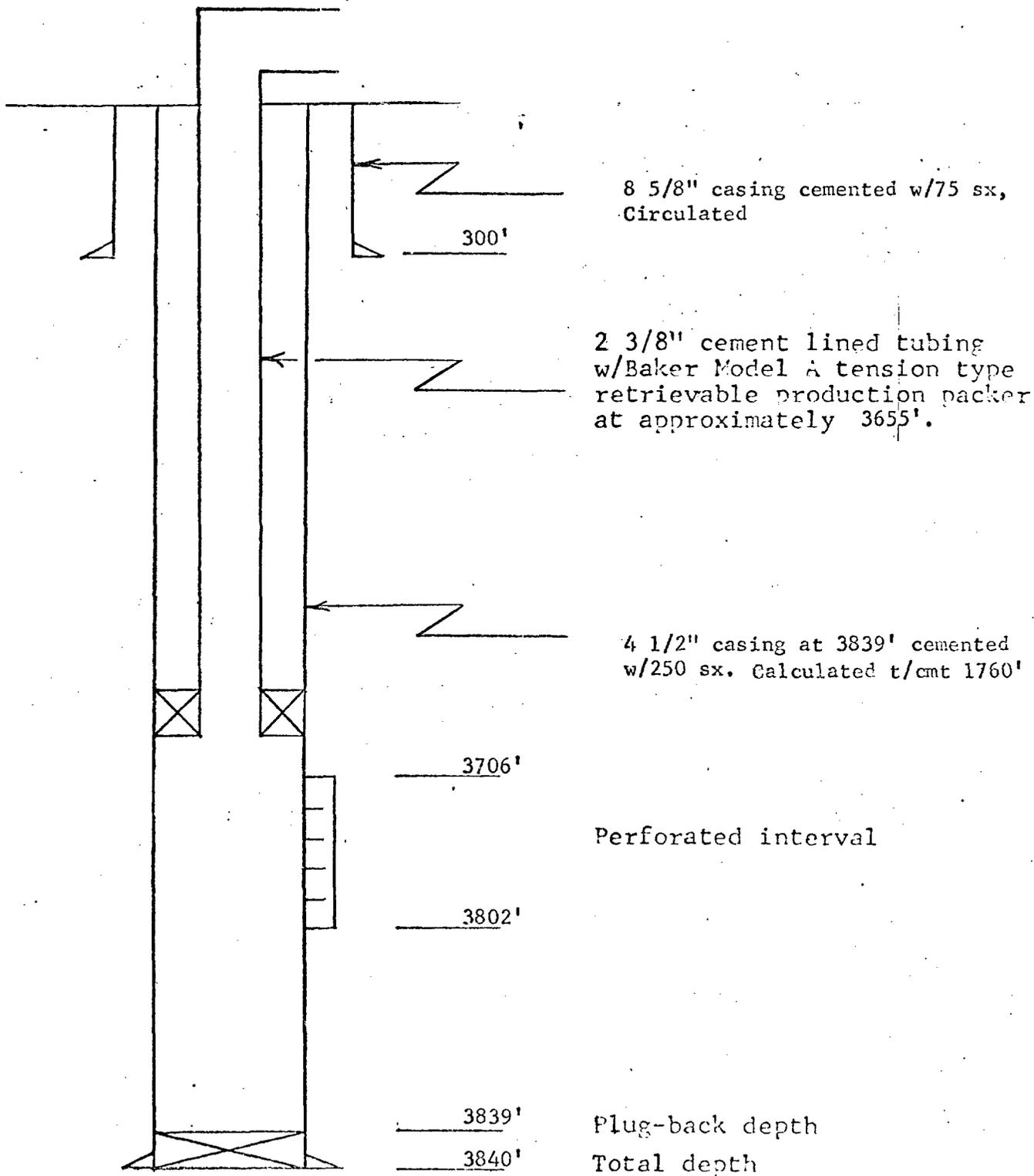


Proposed Procedure

1. Rig up.
2. Squeeze 3083-3557'
3. Drill out bridge plug at 3600', and clean out to TD.
4. Run tubing and set at approximately 3635'.

Water Injection Well Data

MILLARD DECK
 Lamar Lunt No. 1
 1980' FSL & 660' FEL, Unit I
 Section 20-22-36
 Elev: 3542' G.L.

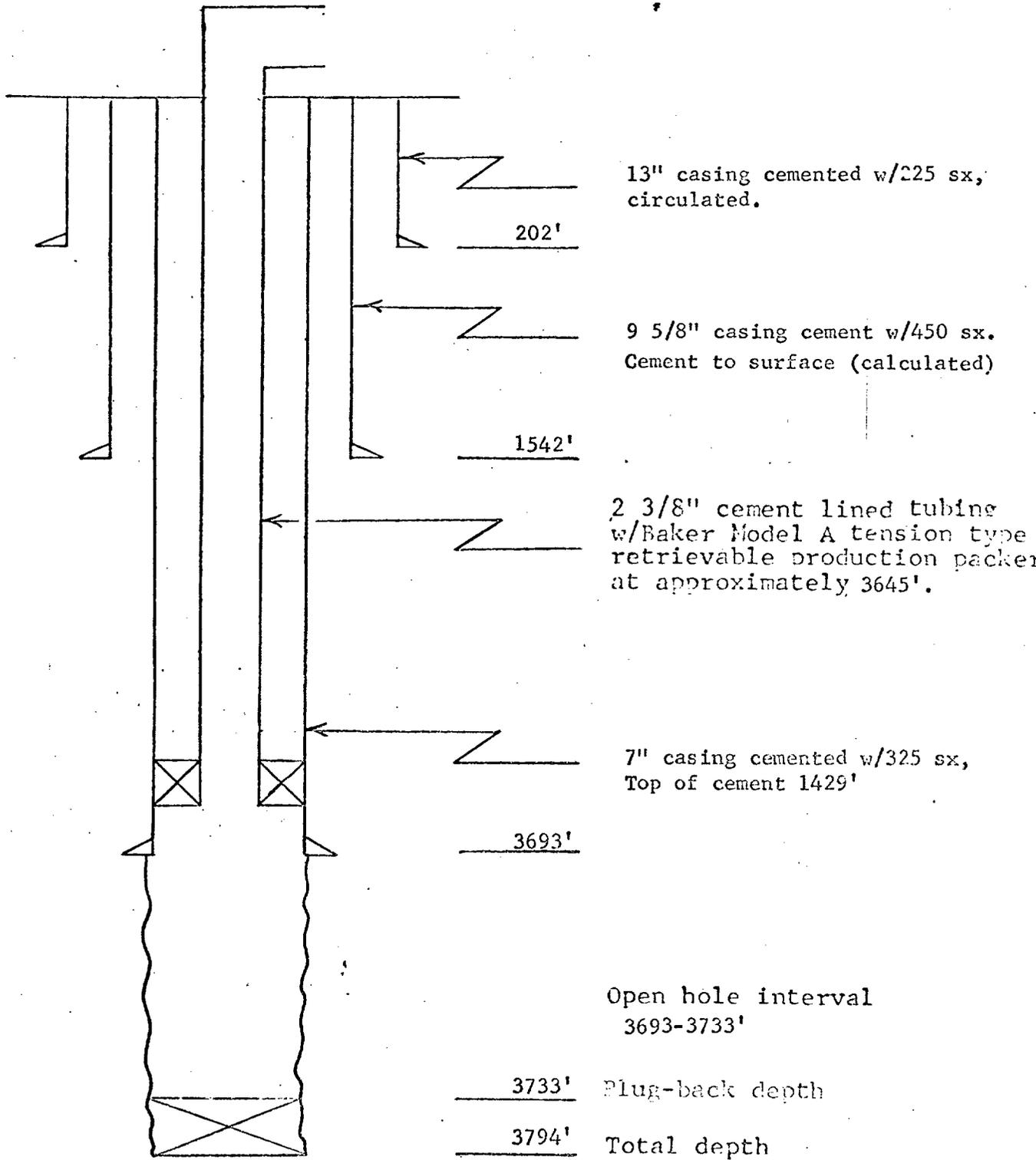


Proposed Procedure

1. Rig up.
2. Tag bottom tally out.
3. If fill above 3802' clean to 3839' (PBD).
4. Run tubing and set at approximately 3655'.

Water Well Injection Data

SUN DX
 H. D. Greer No. 1
 660' FNL & 1980' FWL, Unit C
 Section 21-22-36
 Elevation: 3526' GL

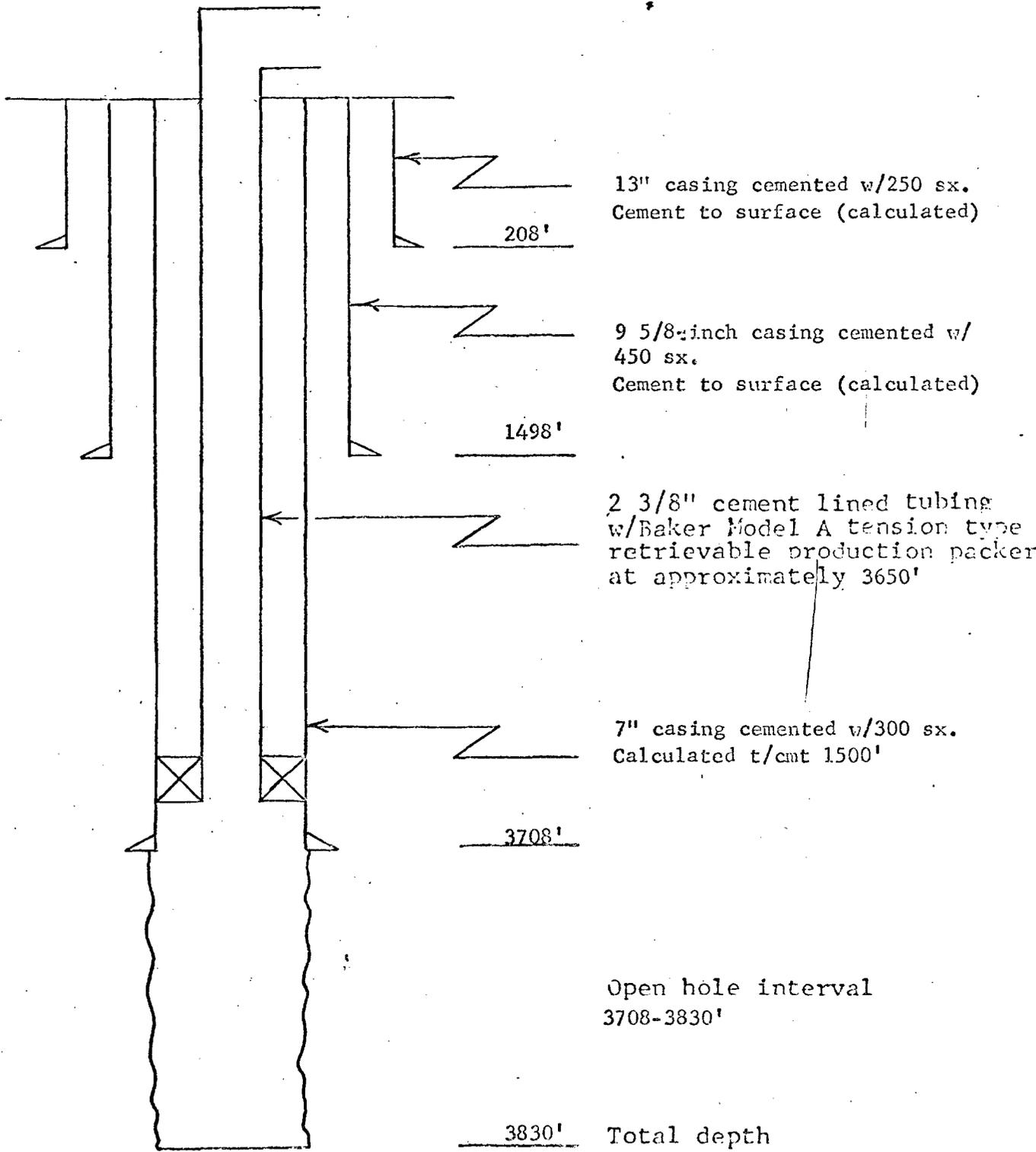


Proposed Procedure

1. Rig up.
2. Pull tubing and Packer. tag fill.
3. Clean out fill if above 3730'.
4. Run tubing and set at approximately 3645'.

Water Well Injection Data

SUN DX
H. D. Greer No. 4
1980' FNL & 660' FWL, Unit E
Section 21-22-36
Elev: 3545 GL

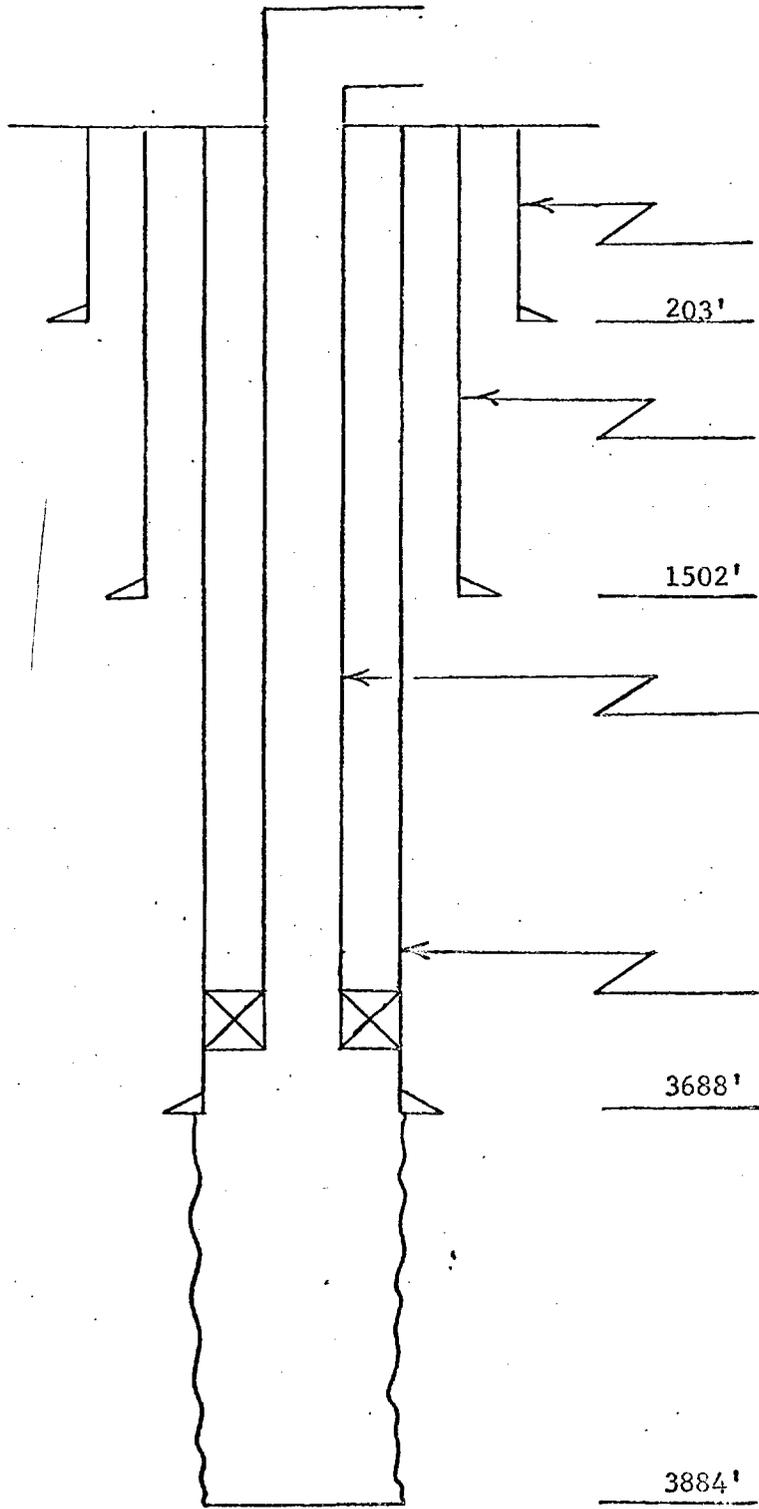


Proposed Procedure

1. Rig up.
2. Pull tubing and packer, tag fill.
3. Clean out fill, if above 3755'.
4. Run tubing and set at approximately 3650'.

Water Well Injection Data

SHELL OIL COMPANY
 D. Christmas No. 1
 660' FNL & 660' FEL, Unit A
 Section 21-22-36
 Elevation: 3539' DF



12 1/2" casing cemented w/150 sx.
 Cement to surface (calculated)

203'

9 5/8" casing cemented w/450 sx.
 Cement to surface (calculated)

1502'

2 3/8" cement lined tubing
 w/Baker Model A tension type
 retrievable production packer
 at approximately 3635'.

7" casing cemented w/150 sx.
 Calculated t/cmt 2185'

3688'

Open hole interval
 3688'-3884'
 Shot hole 3779-3884 w/350 qts.

3884'

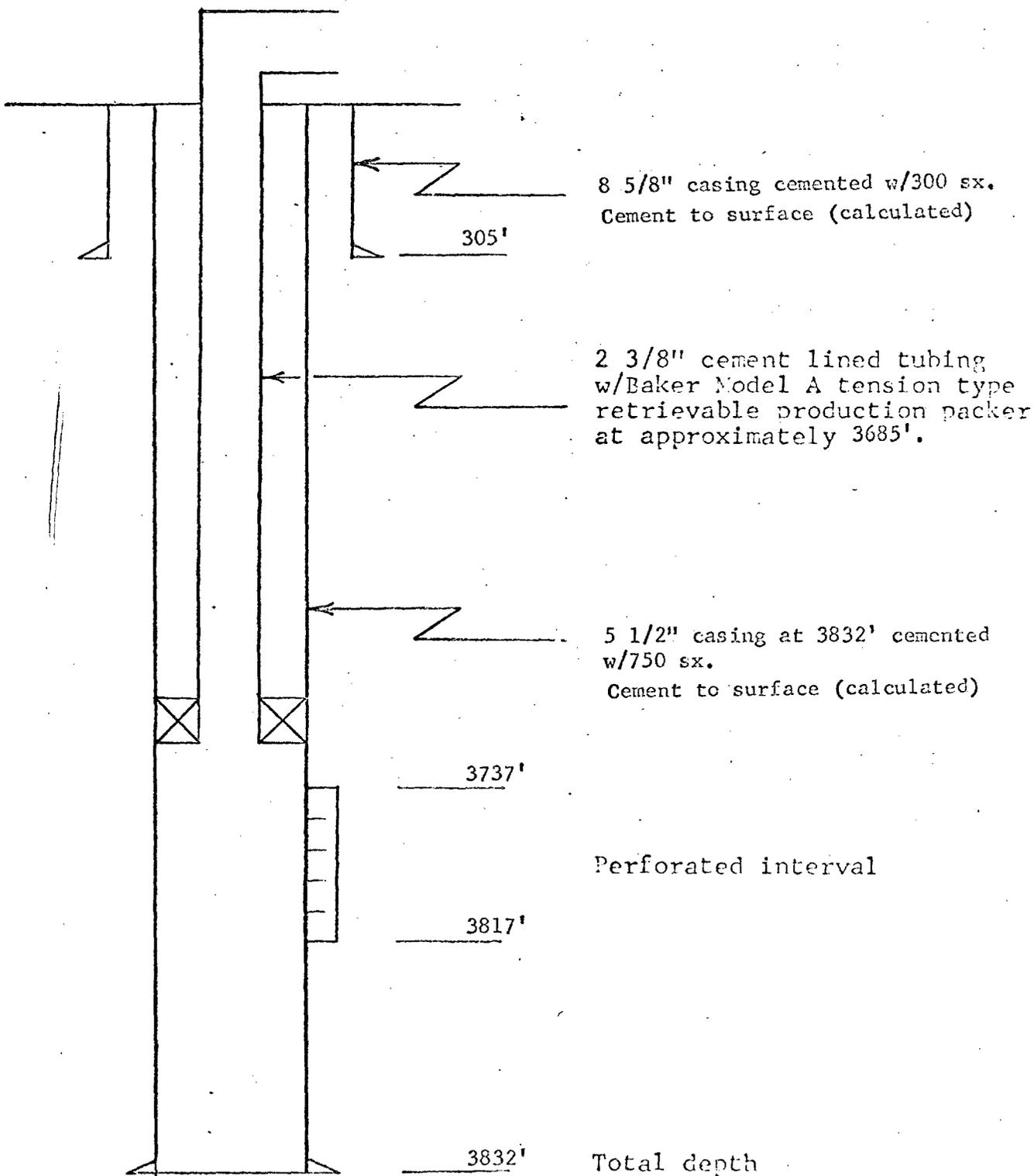
Total depth

Proposed Procedure

1. Pig up.
2. Pull tubing and packer, tag fill.
3. Clean out fill if above 3839'.
4. Run tubing and set at approximately 3635'.

Water Injection Well Data

SHELL OIL COMPANY
D. Christmas No. 3
1650' FNL & 1650' FEL, Unit G
Section 21-22-36
Elev: 3535' DF



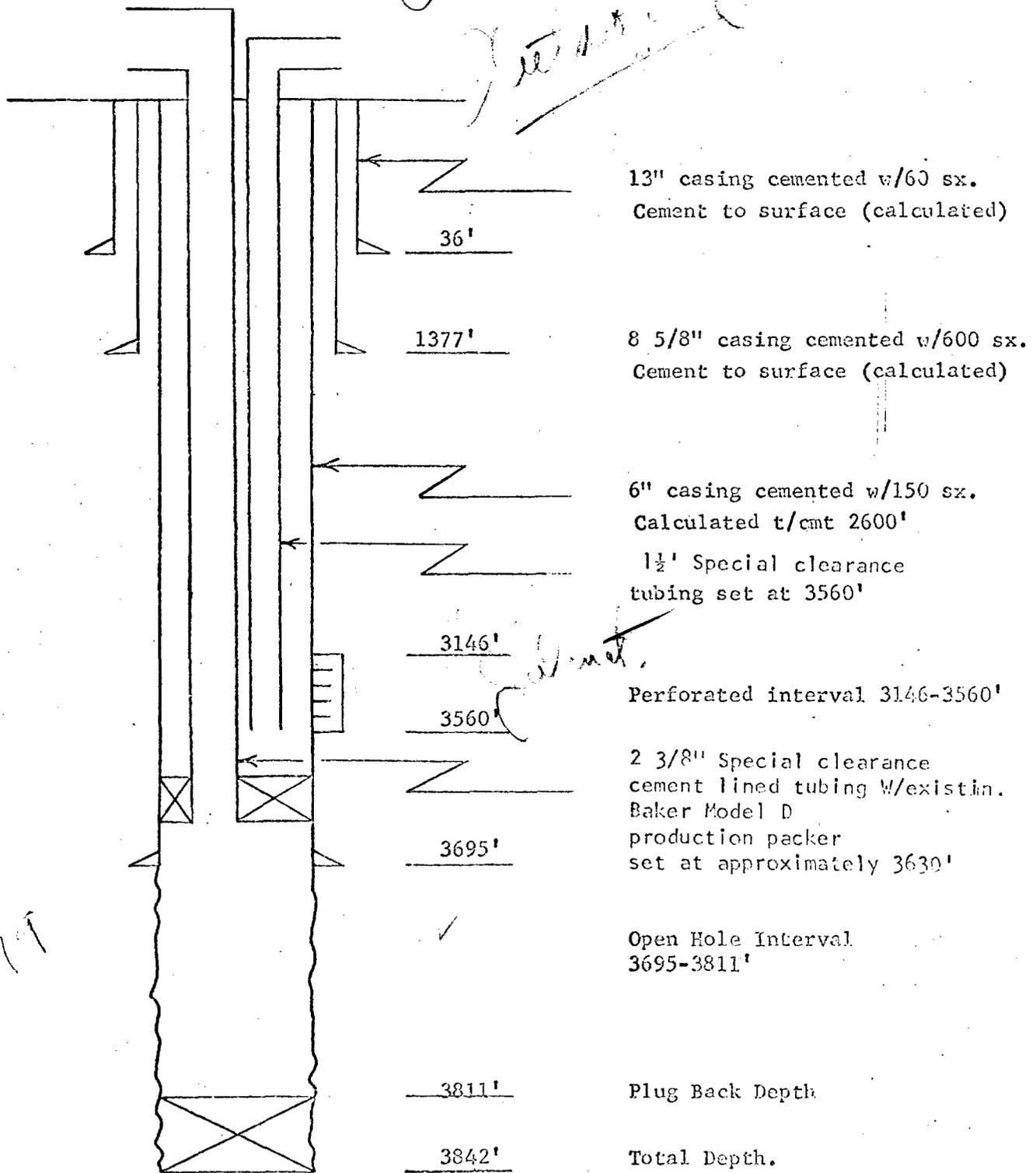
Proposed Procedure

1. Rig up.
2. Tag bottom and tally out.
3. If fill above 3817' clean out to 3832' (TD).
4. Run tubing and set at approximately 3685'.

Exhibit 4-6

GULF OIL CORPORATION
 H. D. Greer No. 1
 1980' FSL & 1980' FWL, Unit K
 Section 21-22-36
 Elev: 3532' GL

Dual
Final

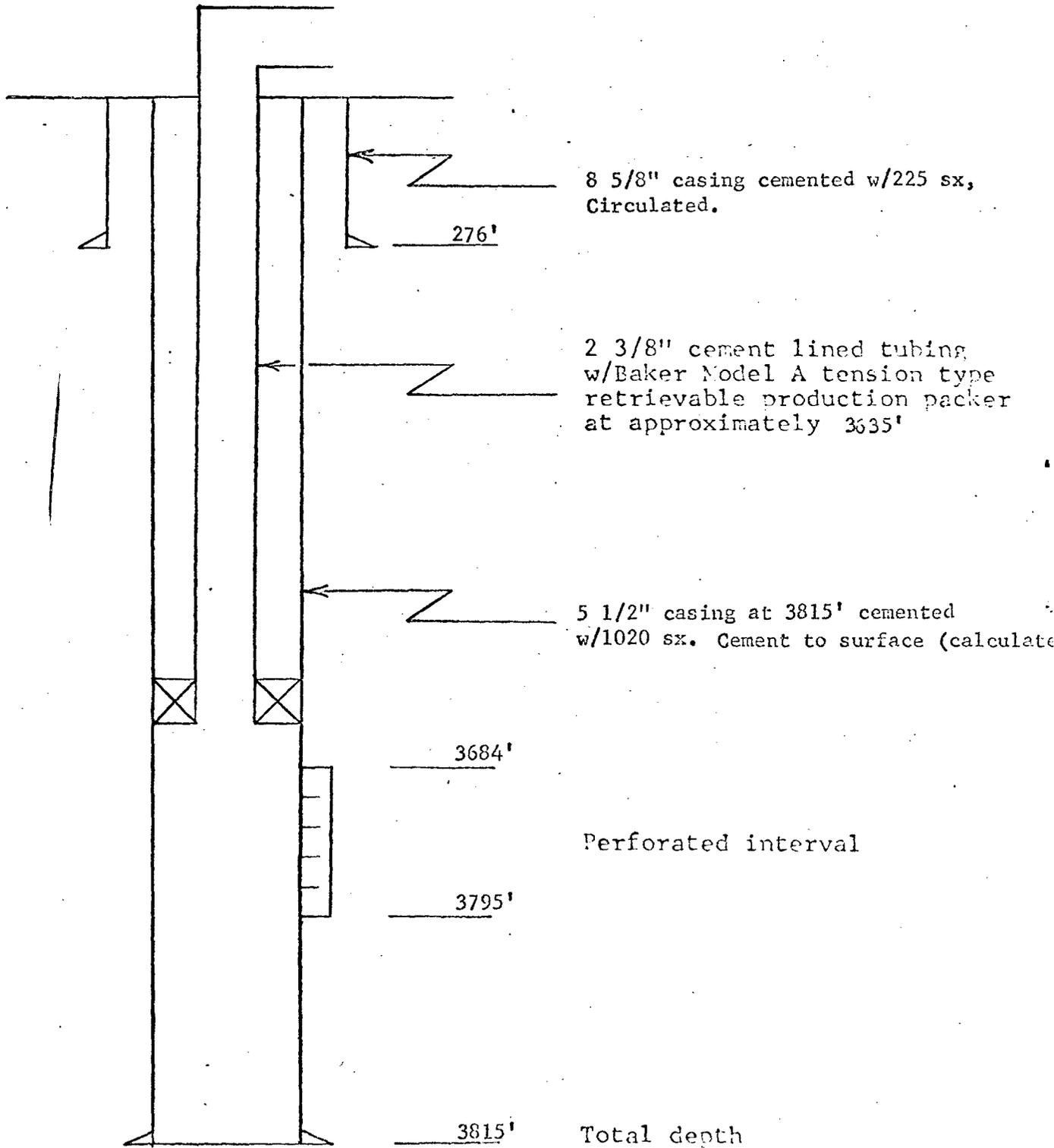


D2379

1. Rig up.
2. Pull tubing.
3. Run 2 3/8" tubing and set in packer at 3630'.
4. Run 1 1/2" special clearance tubing and set at approximately 3560'.

Water Injection Well Data

GULF OIL CORPORATION
H. D. Greer No. 3
660' FSL & 660' FWL, Unit M
Section 21-22-36
Elevation: 3540' DF

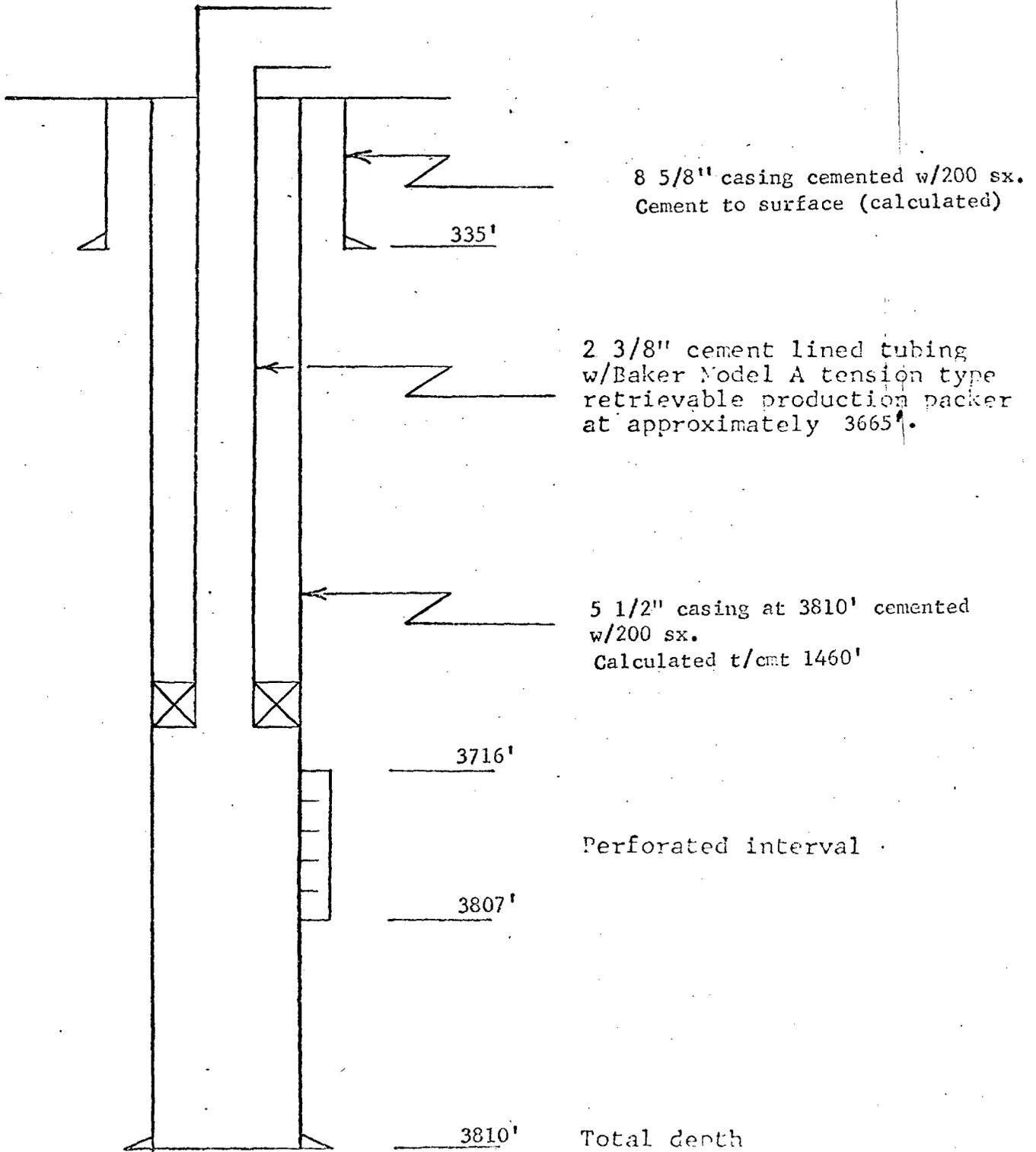


Proposed Procedure

1. Rig up.
2. Tag bottom and tally out.
3. If fill above 3795' clean out to 3811'.
4. Run tubing and set at approximately 3635'.

Water Injection Well Data

SKELLY OIL COMPANY
Christmas "C" No. 1
1980' FSL & 660' FEL, Unit I
Section 21-22-36
Elevation: 3515' GL



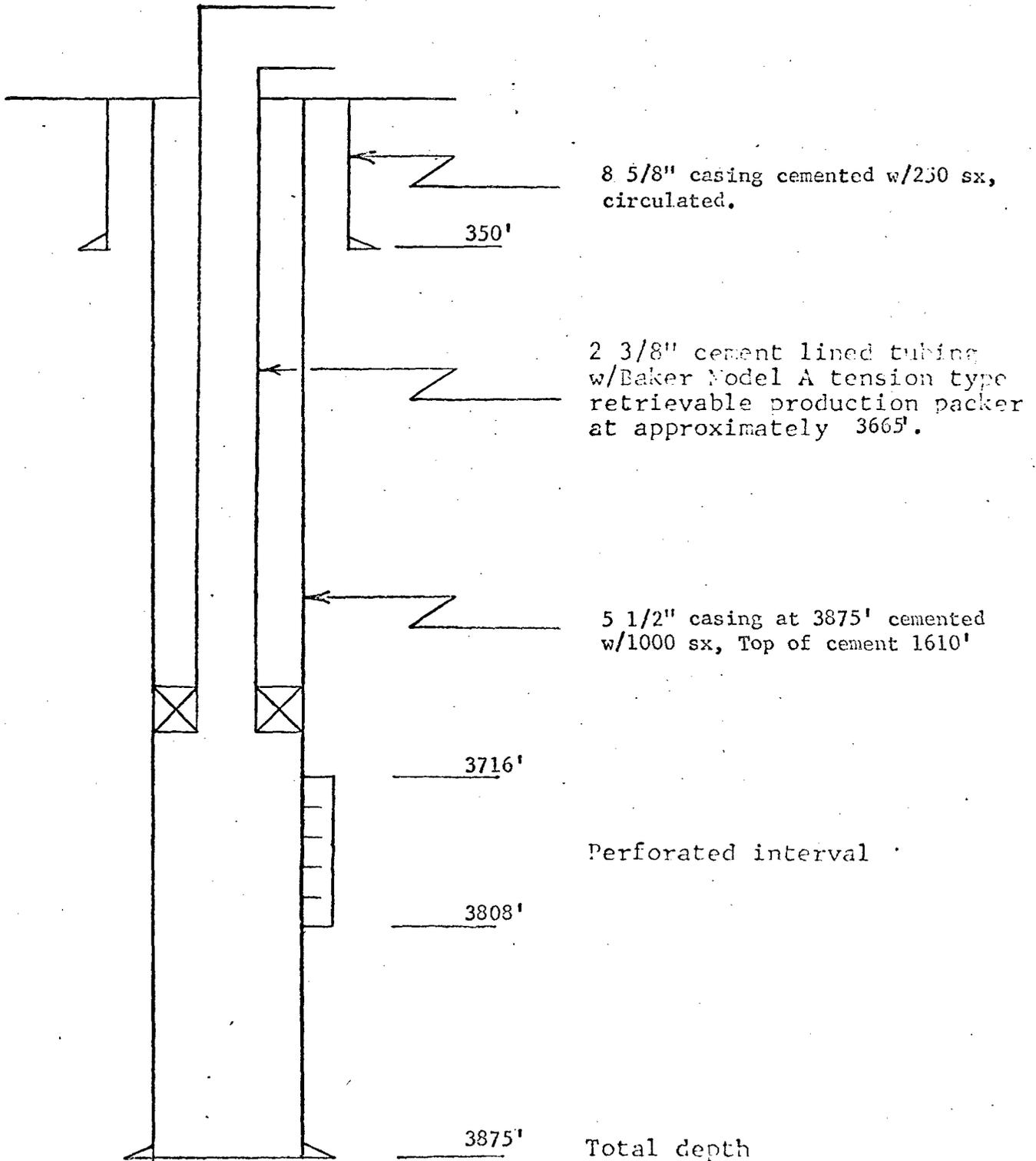
Proposed Procedure

1. Rig up.
2. Tag bottom and tally out.
3. If fill above 3807' clean out to 3810' (TD).
4. Run tubing and set at approximately 3665'.

Exhibit 4-10

Water Injection Well Data

SUN OIL COMPANY
 H. S. Record No. 6
 1650' FNL & 380' FWL, Unit E
 Section 22-22-36
 Elev: 3520' GL



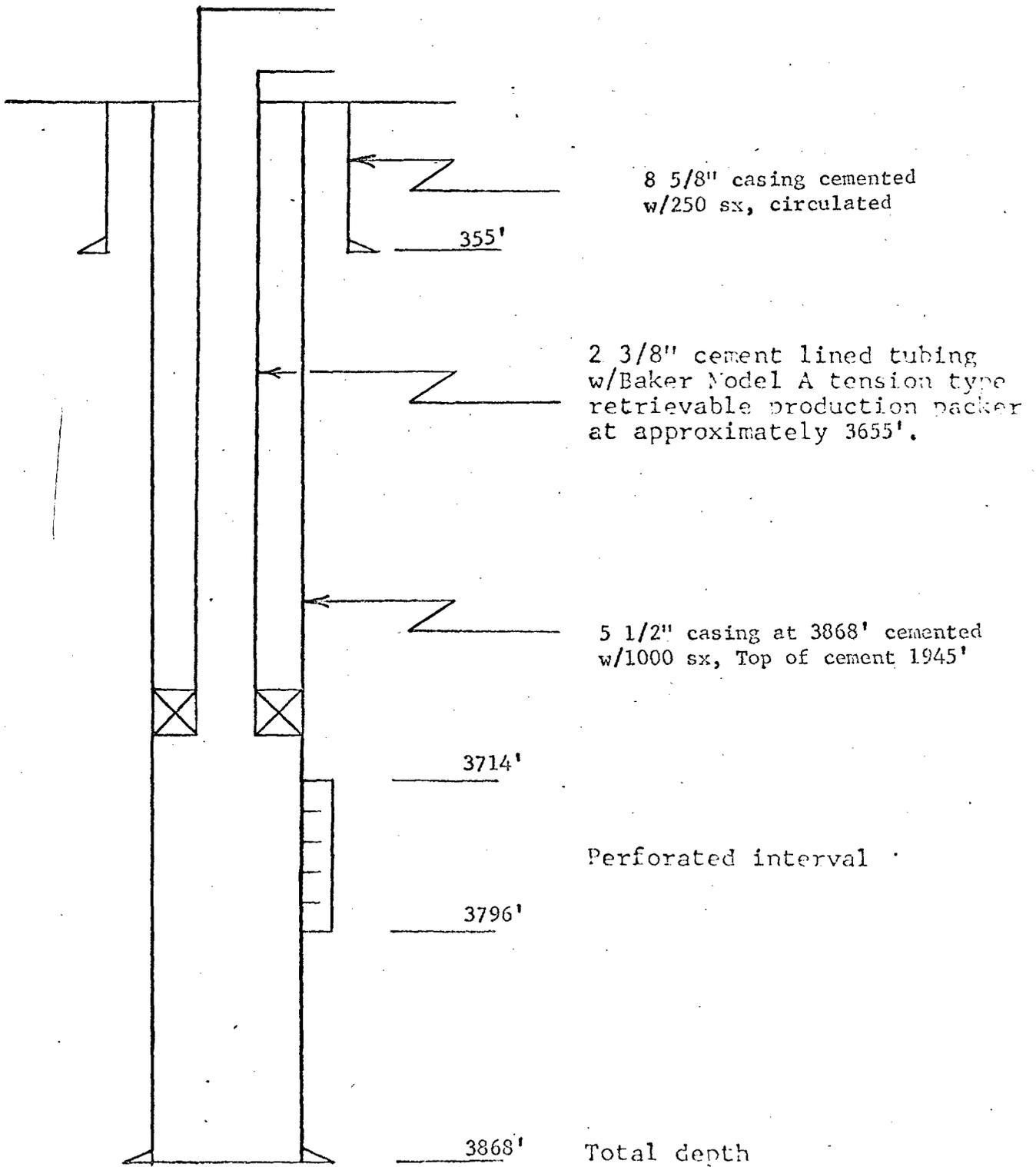
Proposed Procedure

1. Rig up.
2. Tag bottom and tally out.
3. If fill above 3808' clean out to 3825'.
4. Run tbg. and set at approximately

Exhibit 4-11

Water Injection Well Data

SUN OIL COMPANY
H. S. Record No. 4
1980' FNL & 1980' FEL, Unit G
Section 22-22-36
Elev: 3527' GL



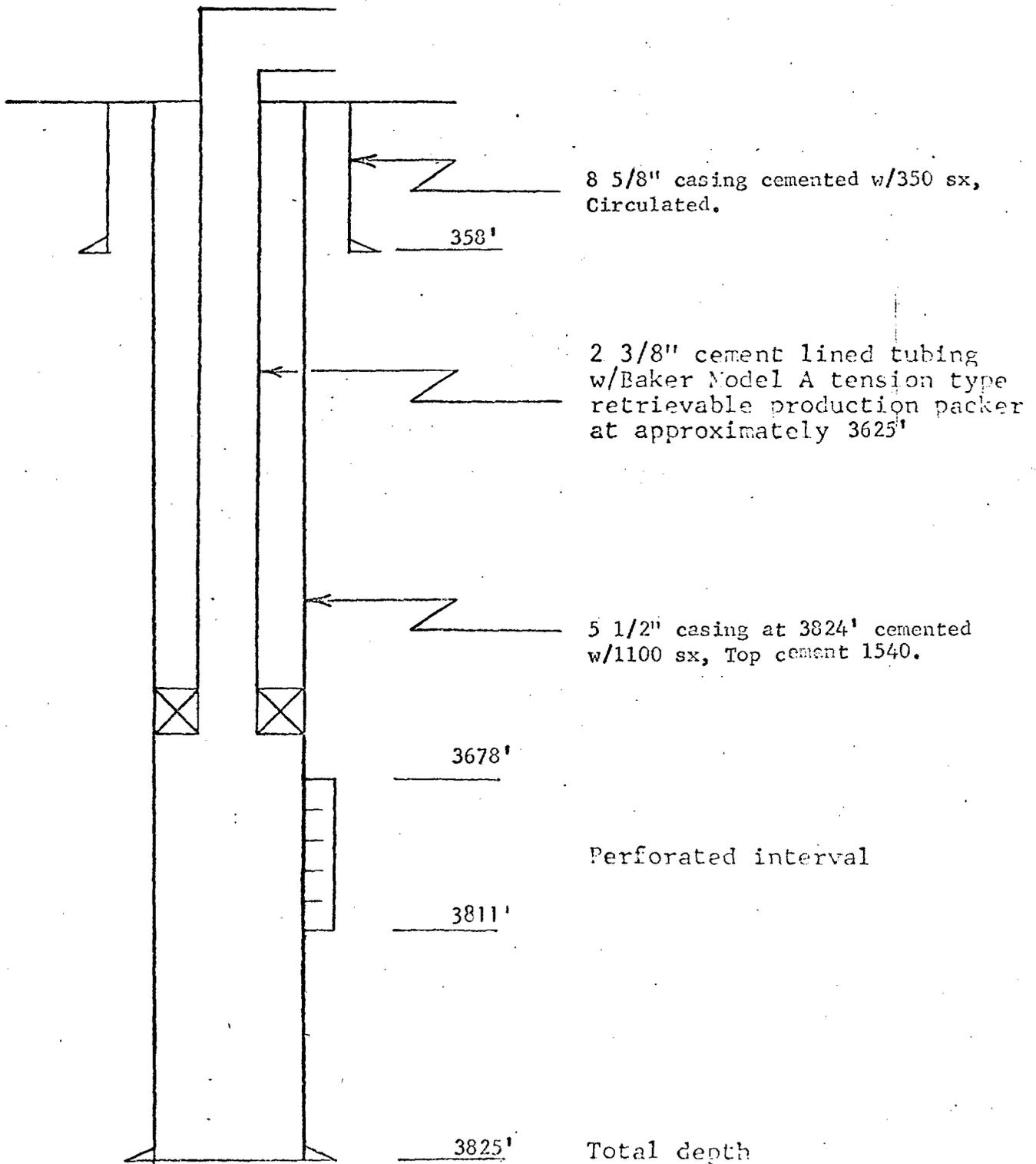
Proposed Procedure

1. Rig up.
2. Tag bottom and tally out
3. If fill above 3796' clean out to 3810'.
4. Run tubing and set at approximately 3655'.

Exhibit 4-12

Water Injection Well Data

CONTINENTAL OIL COMPANY
MEYER B-22 No. 8
2310' FSL & 1980' FWL, Unit K
Section 22-22-36
Elev: 3517' DF

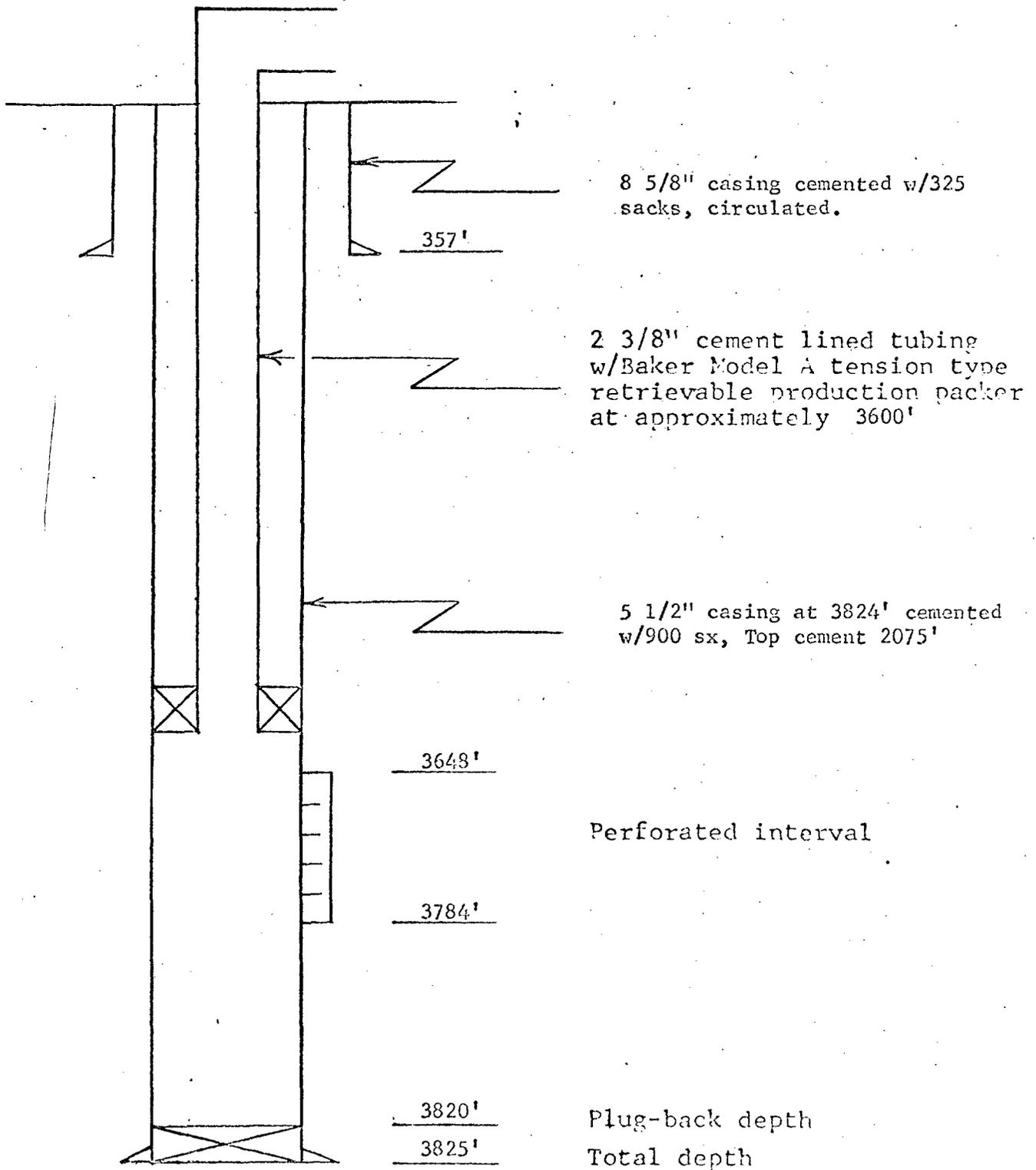


Proposed Procedure

1. Rig up.
2. Tag bottom and tally out.
3. If fill above 3811' clean out to 3825' (TD).
4. Run tubing and set at approximately 3625'.

Water Injection Well Data

CONTINENTAL OIL COMPANY
 Meyer B-22 No. 11
 1980' FSL & 660' FEL, Unit I
 Section 22-22-36
 Elev: 3523' DF



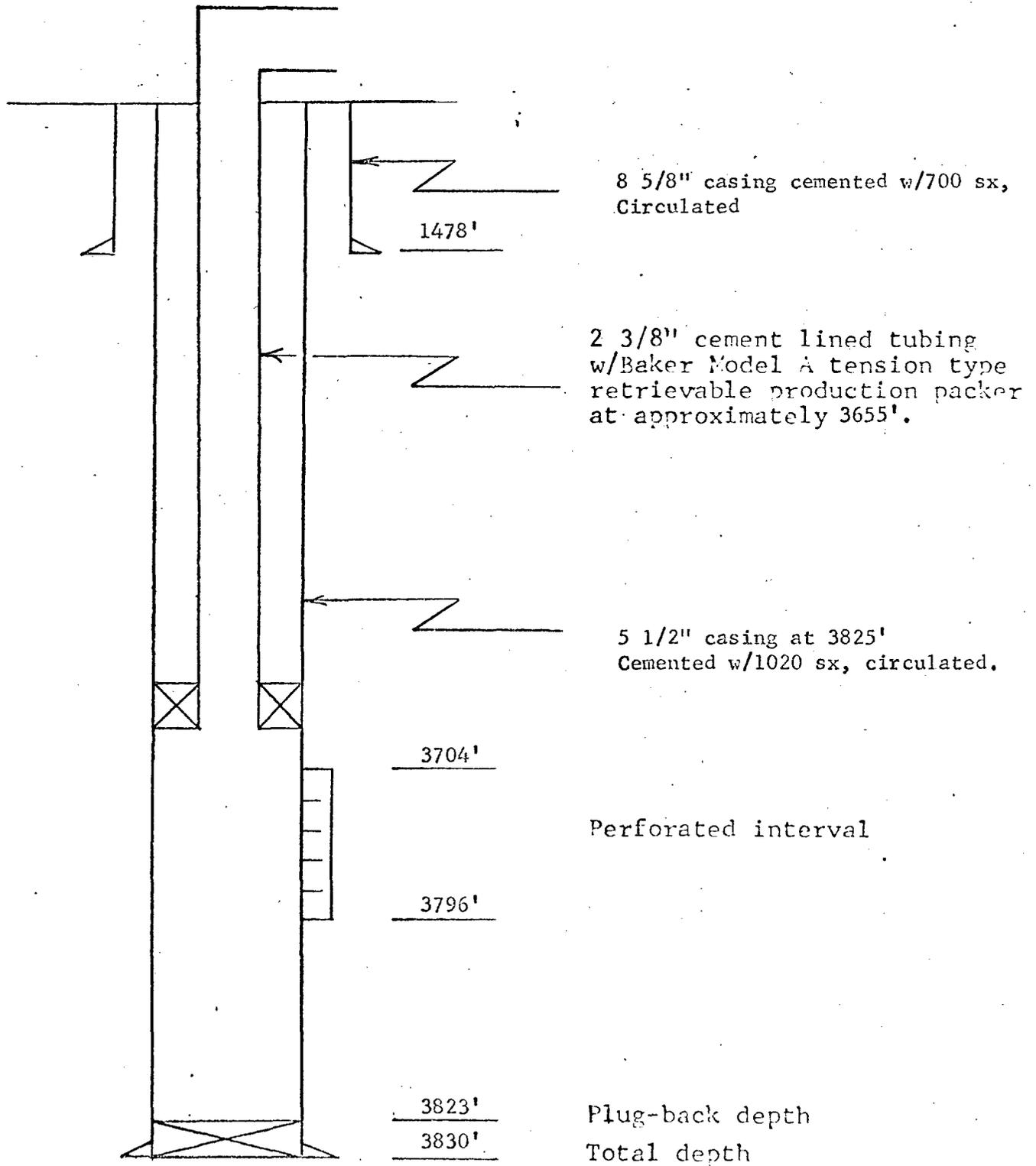
Proposed Procedure

1. Rig up.
2. Tag bottom and tally out.
3. If fill above 3784' clean out to 3000'.
4. Run tubing and set at approximately 3600'.

Exhibit 4-14

Water Injection Well Data

CONTINENTAL OIL COMPANY
Meyer B-22 No. 5
660' FSL & 660' FWL, Unit M
Section 22-22-36
Elev: 3514' DF



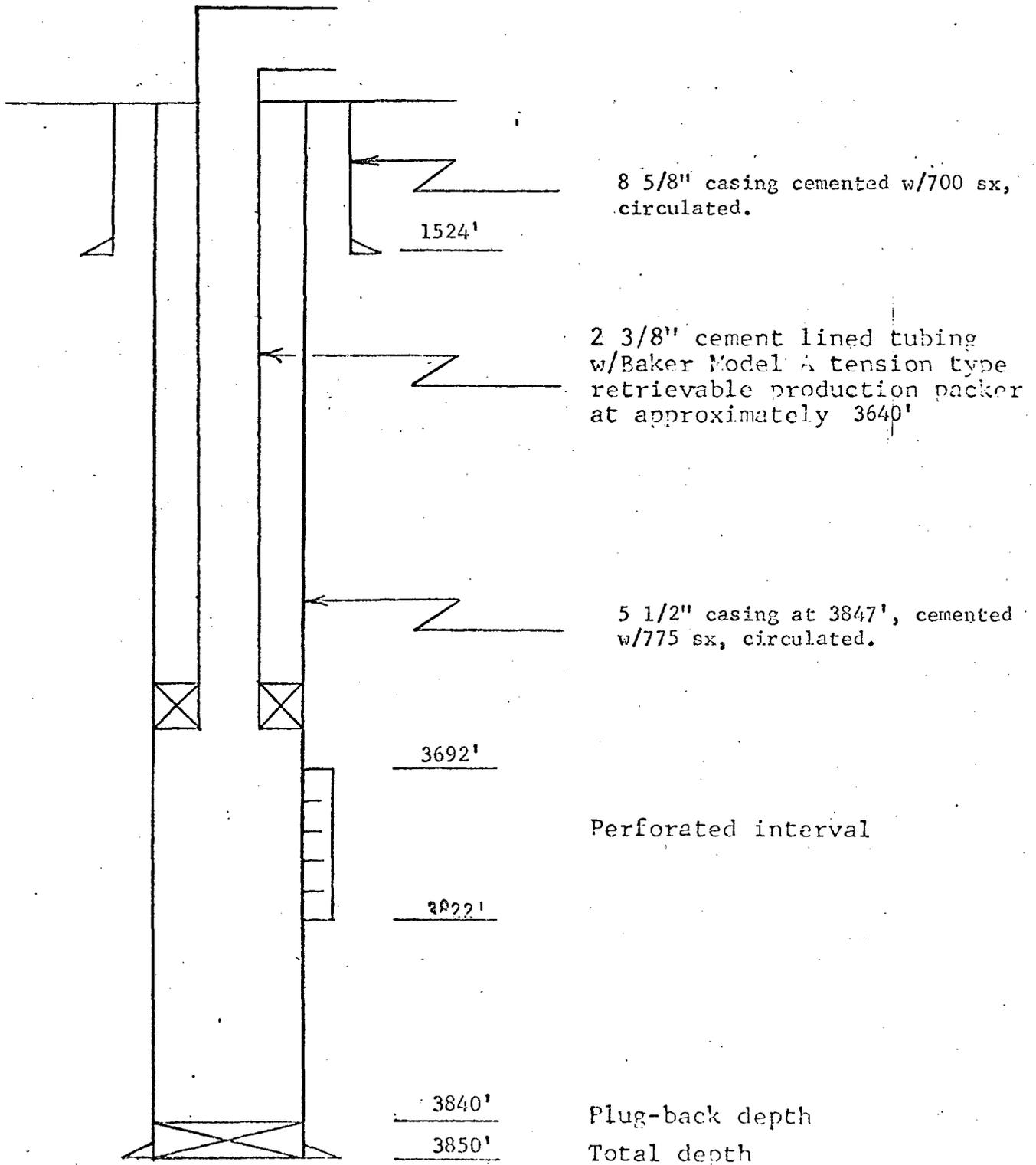
Proposed Procedure

1. Rig up.
2. Tag bottom and tally out.
3. If fill above 3796' clean out to 3823' (PBD).
4. Run tubing and set at approximately 3655'.

Exhibit 4-15

Water Injection Well Data

CONTINENTAL OIL COMPANY
 Meyer B-22 No. 6
 660' FSL & 1980' FEL, Unit O
 Section 22-22-36
 Elev: 3501' GL

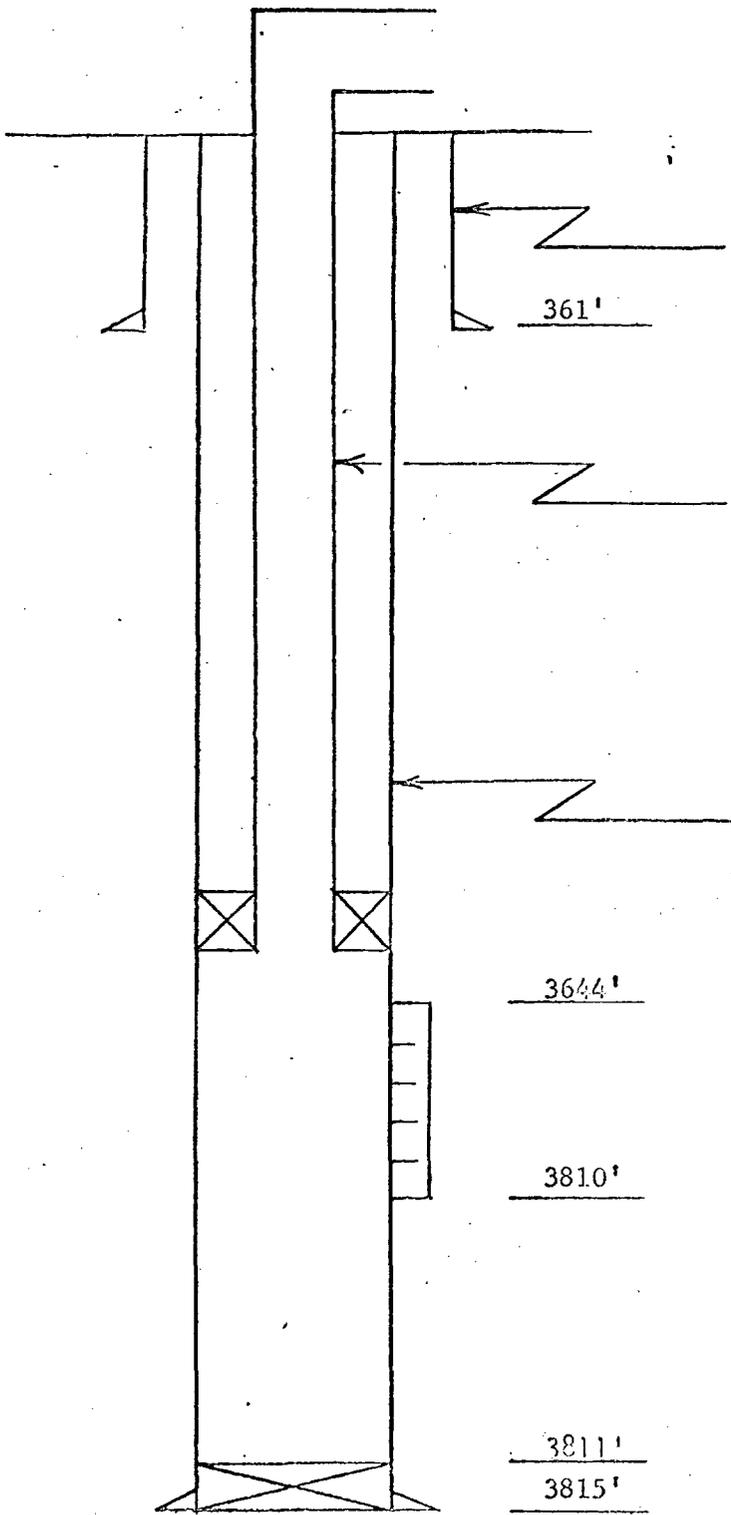


Proposed Procedure

1. Rig up.
2. Tag bottom and tally out.
3. If fill above 3822' clean out to 3840' (PRD).
4. Run tubing and set at approximately 3640'.

Water Injection Well Data

CONTINENTAL OIL COMPANY
 Meyer A-29 No. 6
 660' FNL & 660' FEL, Unit A
 Section 29-22-36
 Elev: 3542' DF



8 5/8" casing cement w/350 sx,
 Circulated.

2 3/8" cement lined tubing
 w/Baker Model A tension type
 retrievable production packer
 at approximately 3595'

5 1/2" casing at 3814' cemented
 w/11.06 sx, Top cement 1325'.

Perforated interval

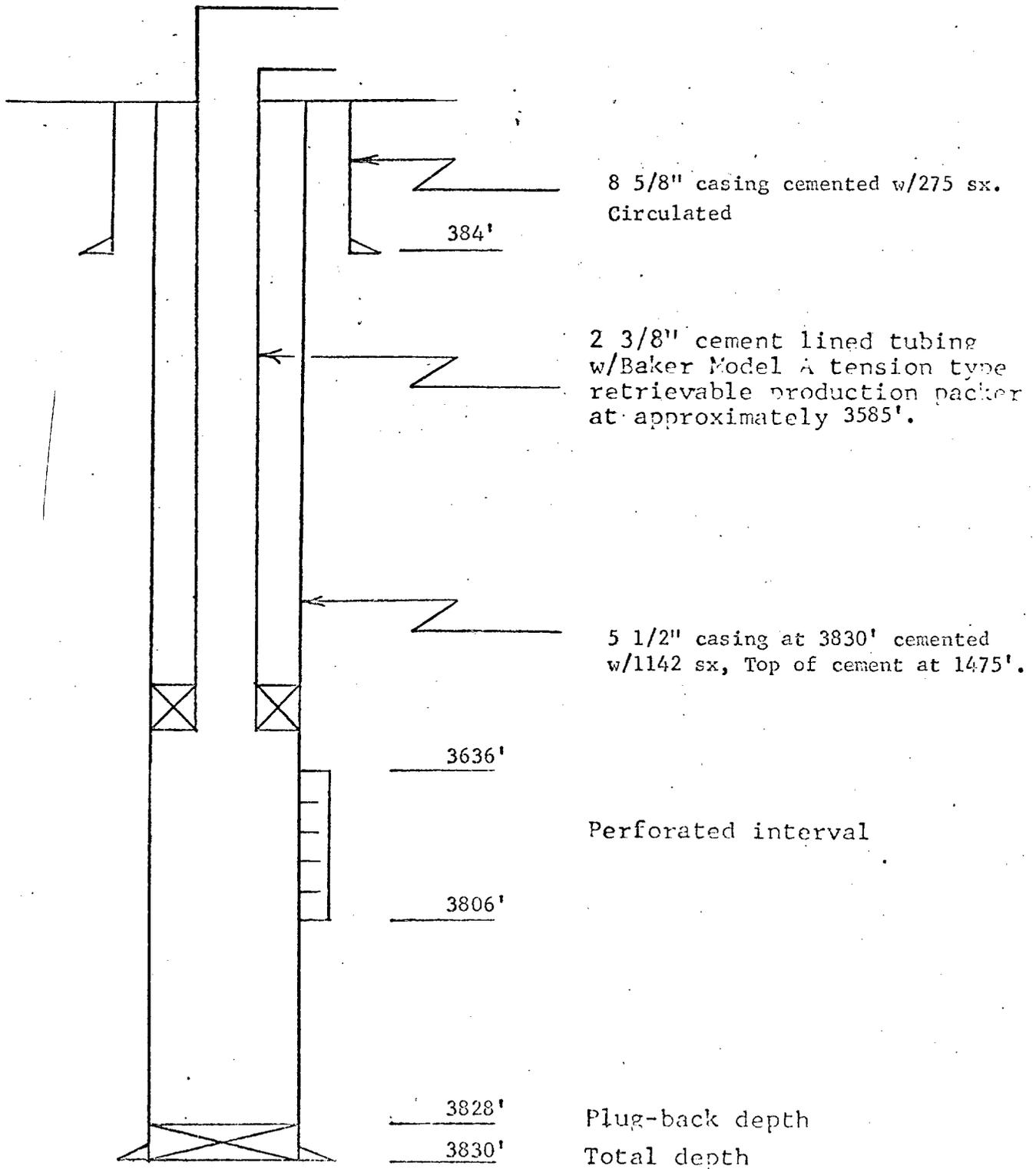
Plug-back depth
 Total depth

Proposed Procedure

1. Rig up.
2. Tag bottom and tally out.
3. If fill above 3810' clean out to 3811' (PBD).
4. Run tubing and set at approximately 3595'.

Water Injection Well Data

CONTINENTAL OIL COMPANY
Meyer A-29 No. 8
1980' FSL & 660' FEL, Unit I
Section 29-22-36
Elev. 3528' DF

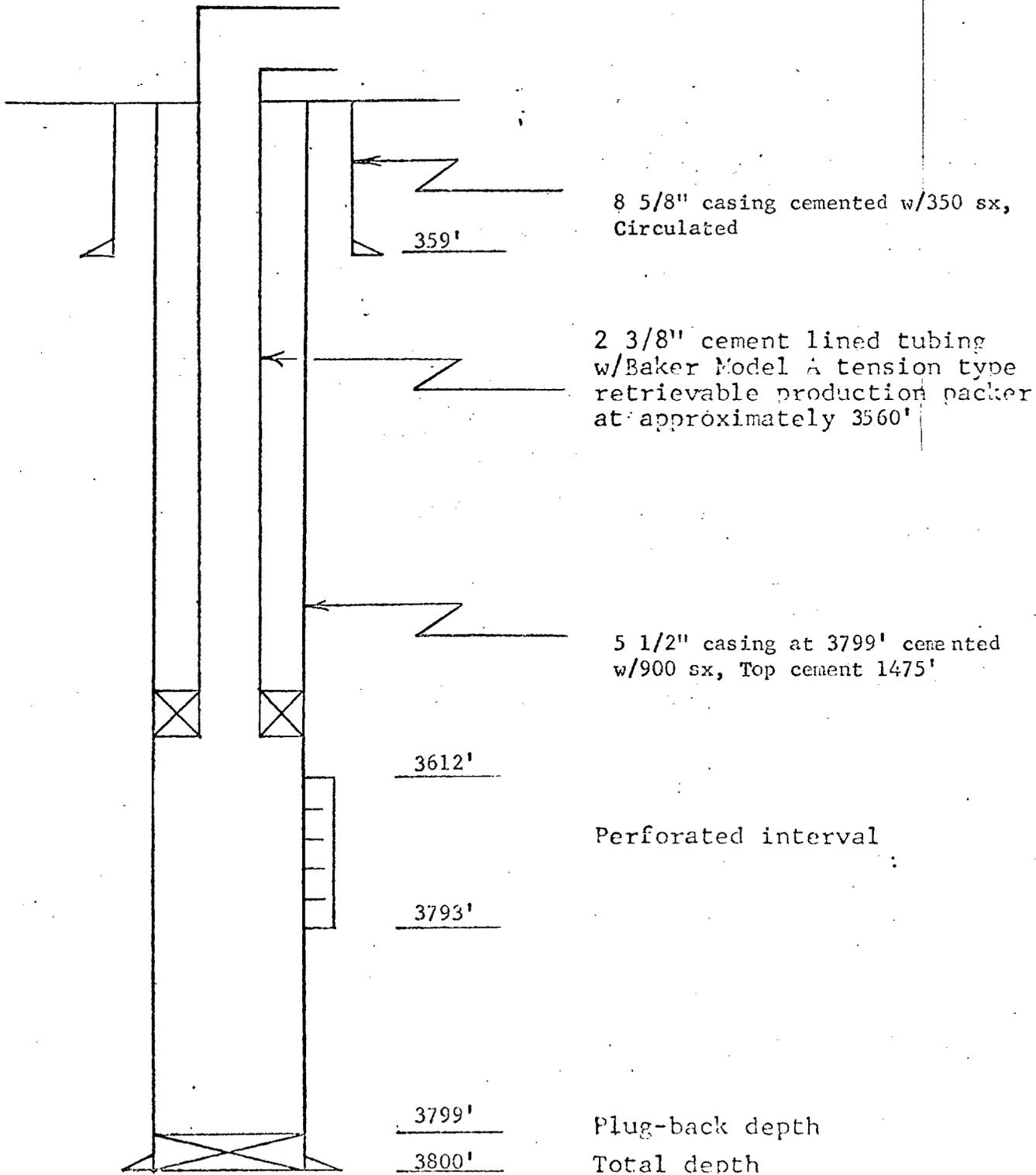


Proposed Procedure

1. Rig up.
2. Tag bottom and tally out.
3. If fill above 3806' clean out to 3828'.
4. Run tubing and set at approximately 3585'.

Water Injection Well Data

CONTINENTAL OIL COMPANY
 Meyer B-28 No. 7
 660' FNL & 1980' FWL, Unit C
 Section 28-22-36
 Elev: 3534' DF

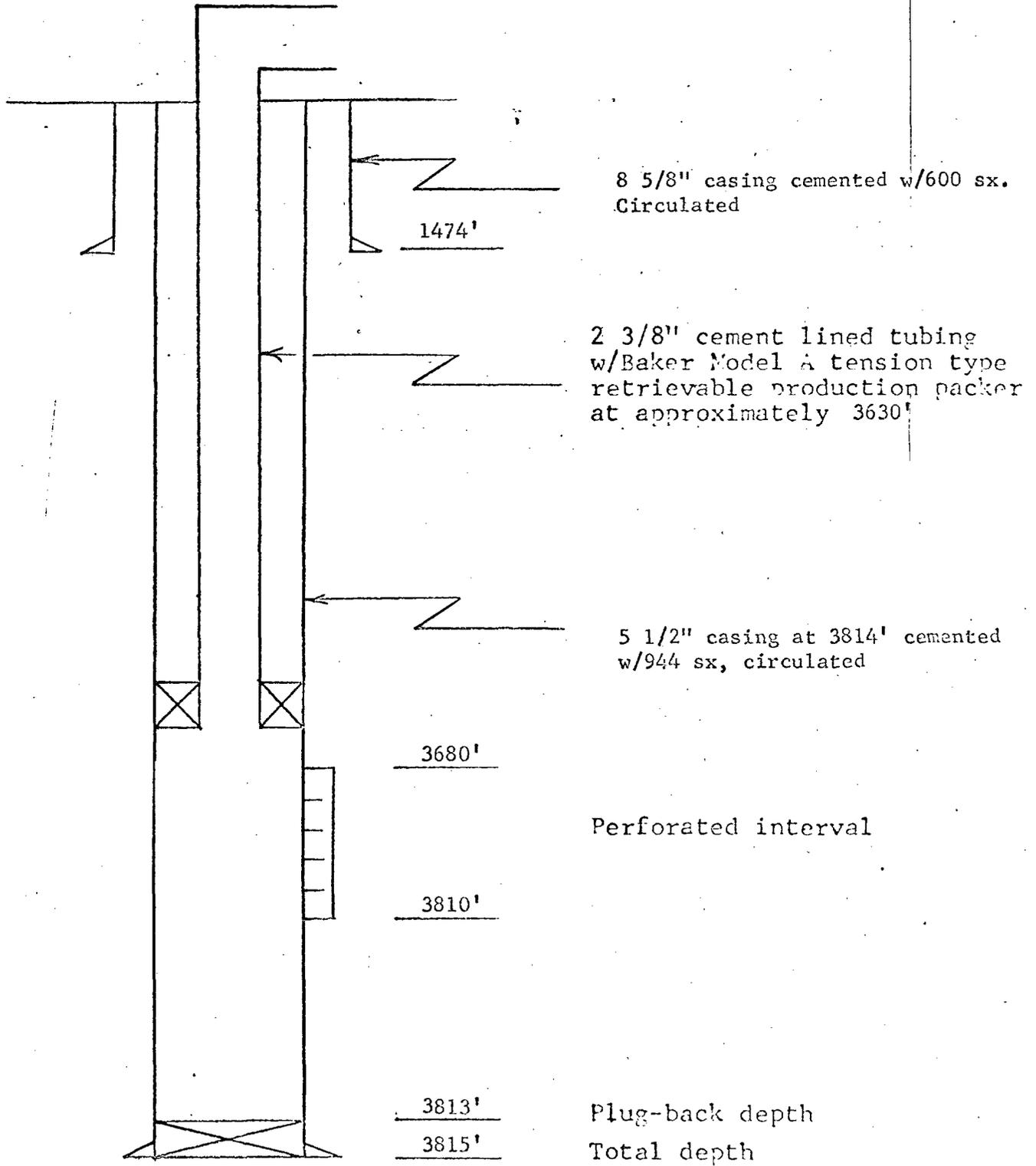


Proposed Procedure

1. Pig up.
2. Tag bottom and tally out.
3. If fill above 3793' clean out to 3799' (PBC).
4. Run tubing and set at approximately 3560'.

Water Injection Well Data

CONTINENTAL OIL COMPANY
 Meyer B-28 No. 3
 660' FNL & 660' FEL, Unit A
 Section 28-22-36
 Elev: 3517' DF



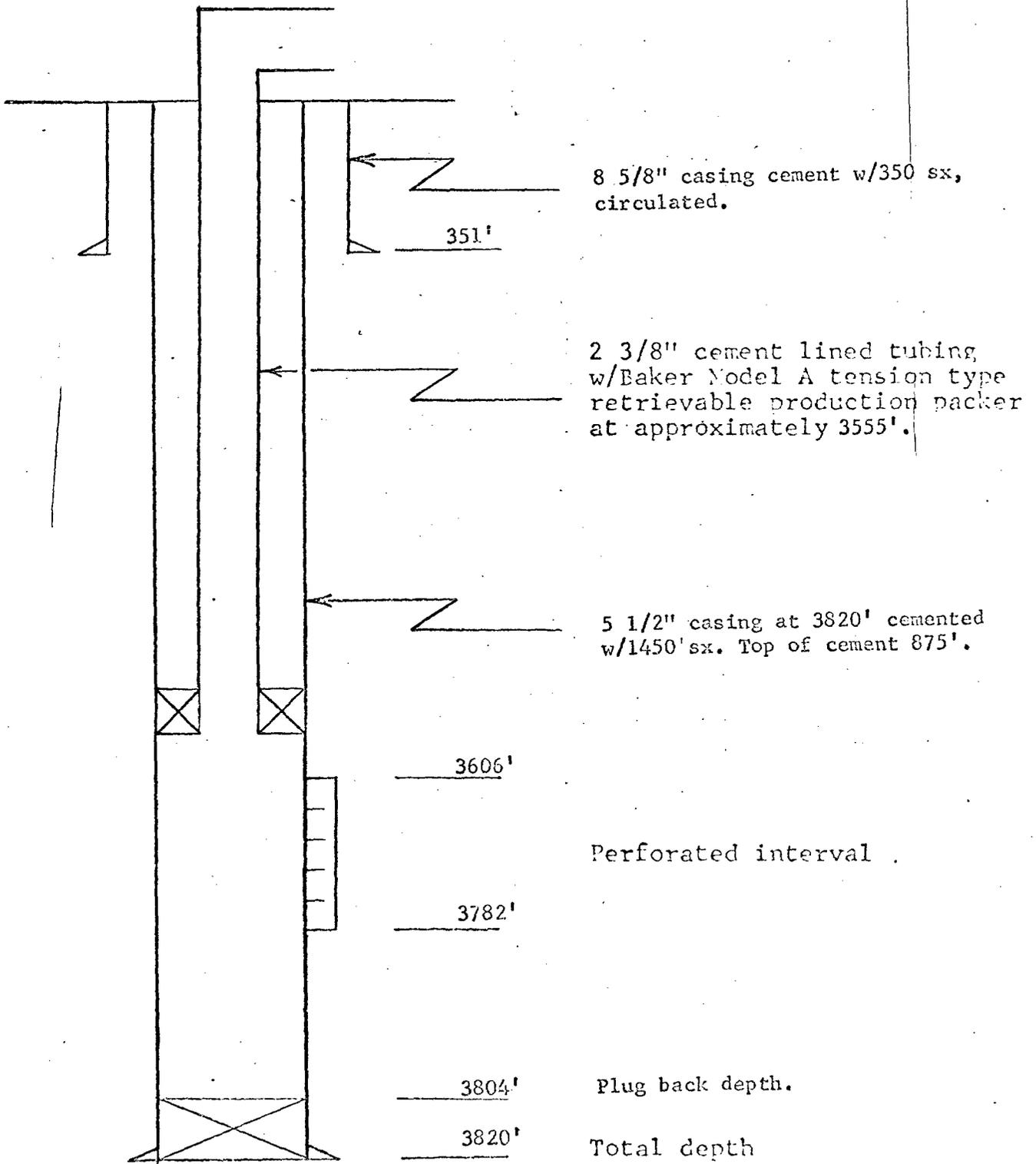
Proposed Procedure

1. Rig up.
2. Tab bottom and tally out.
3. If fill above 3810' clean out to 3813' (PBD).
4. Run tubing and set at approximately 3630'.

Exhibit 4-20

Water Injection Well Data

CONTINENTAL OIL COMPANY
 Meyer B-28 No. 10
 1980' FNL & 660' FWL, Unit E
 Section 28-22-36
 Elev: 3519' DF



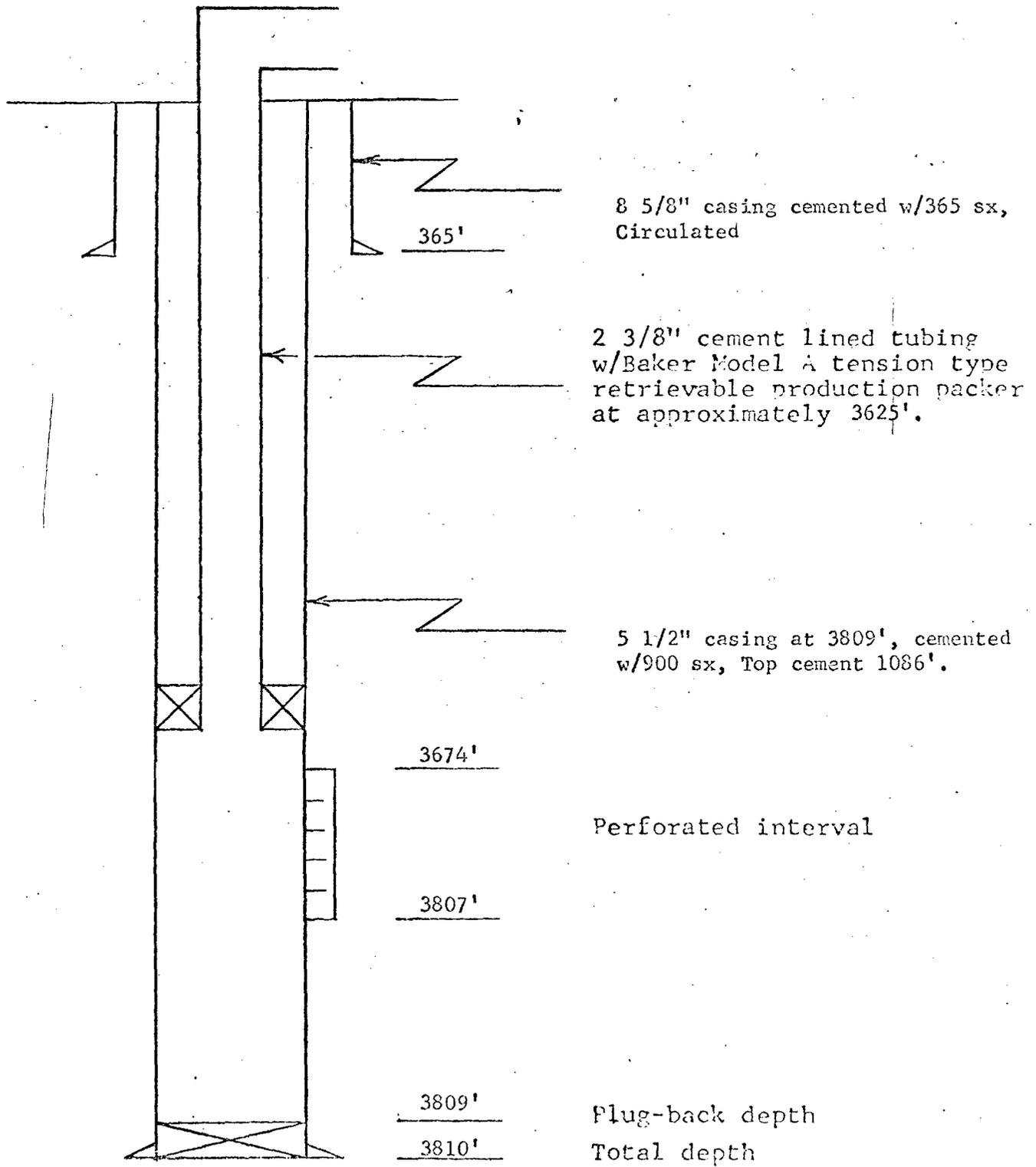
Proposed Procedure

1. Big up.
2. Tag bottom and tally out.
3. If fill above 3782' clean out to 3800'.
4. Run tubing and set. at approximately 3555'.

Exhibit 4-21

Water Injection Well Data

CONTINENTAL OIL COMPANY
 Meyer B-28 No.6
 1980' FNL & 1980' FEL, Unit G
 Section 28-22-36



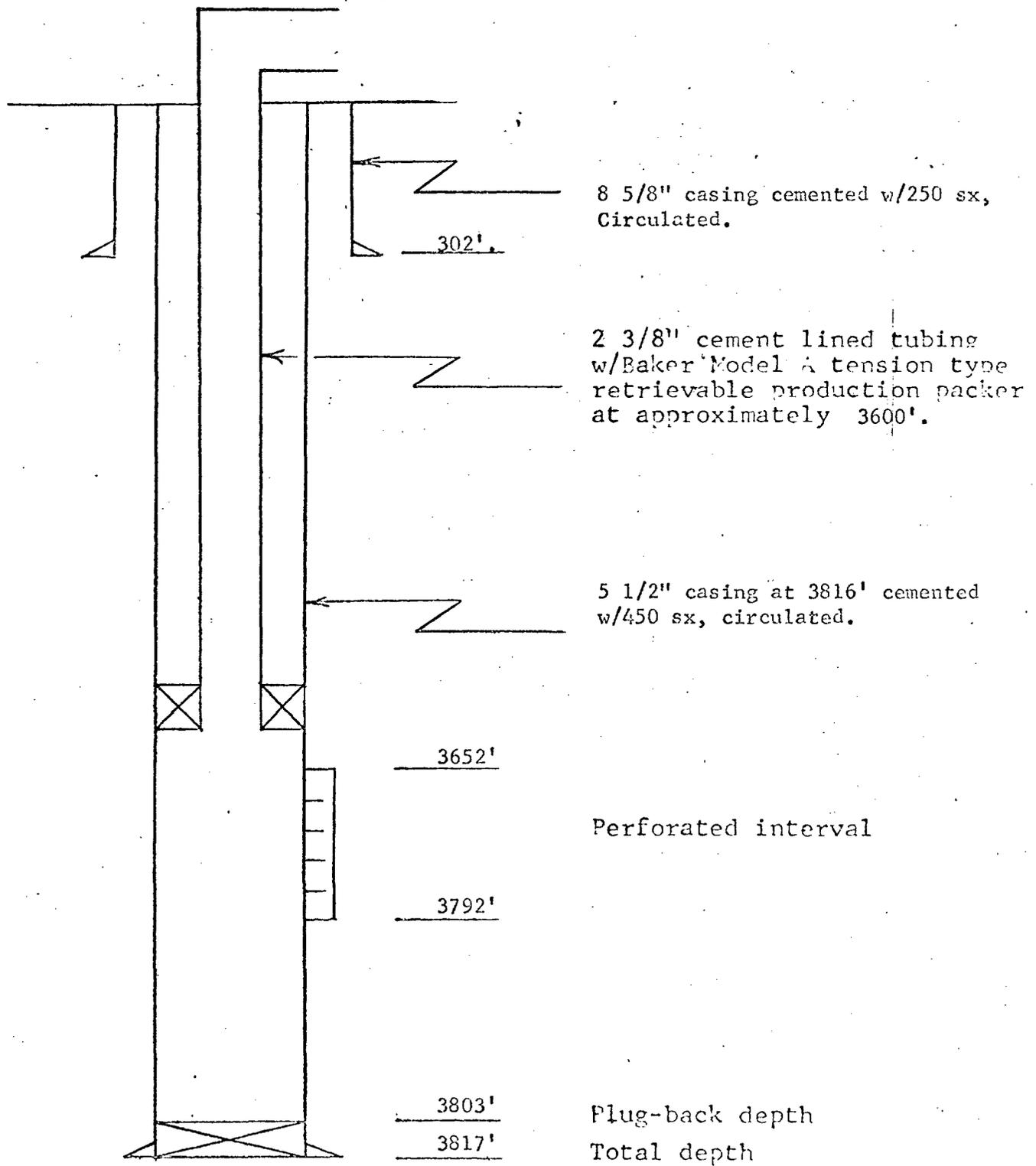
Proposed Procedure

1. Rig up.
2. Tag bottom and tally out.
3. If fill above 3807' clean out to 3809' (PBD).
4. Run tubing and set at approximately 3625'.

Exhibit 4-22

Water Injection Well Data

TEXAS PACIFIC COAL AND OIL COMPANY
B. A. Christmas No. 7
1980' FSL & 1980' FWL, Unit K
Section 28-22-36
Elev: 3521' DF

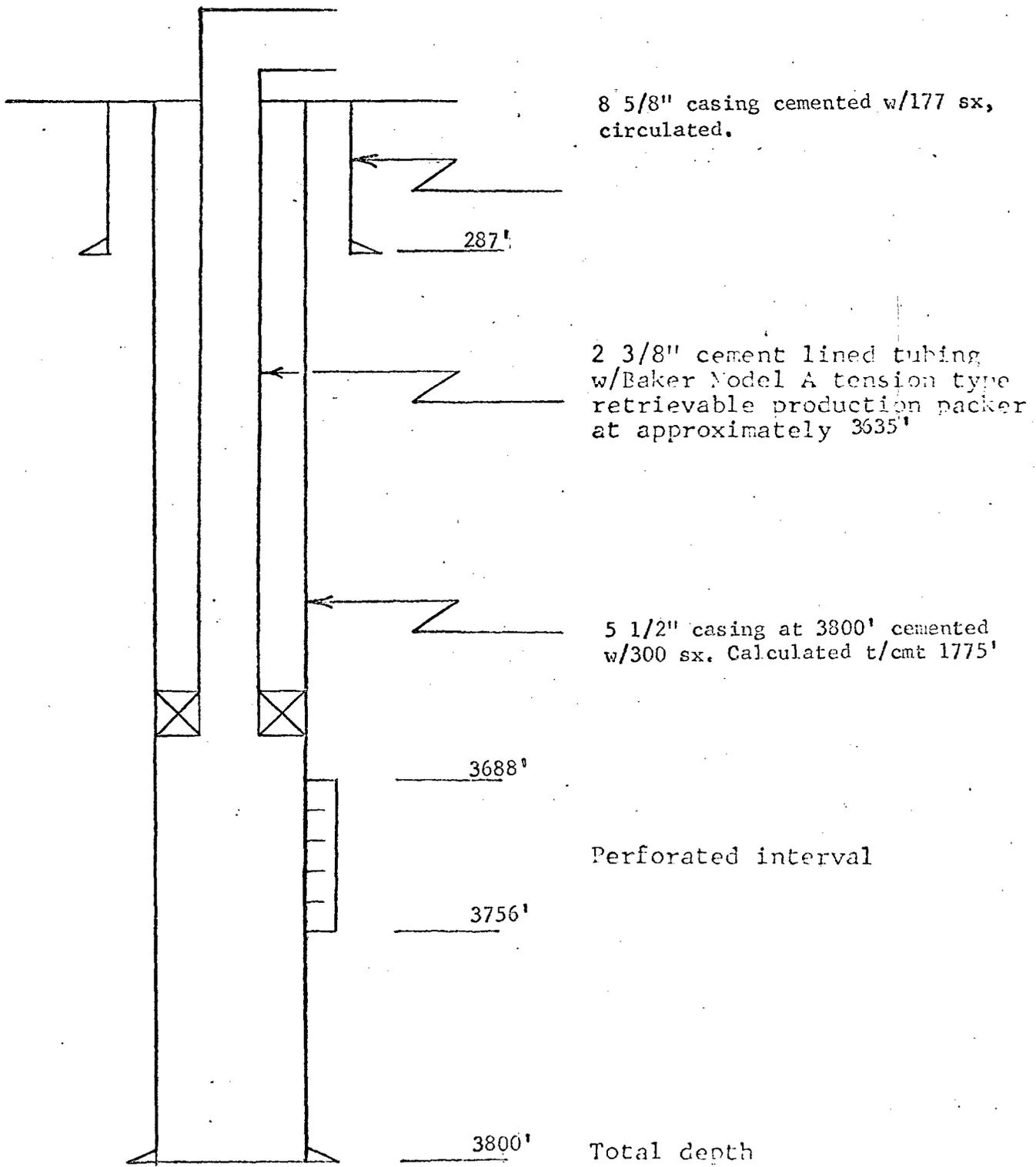


Proposed Procedure

1. Rig up.
2. Tag bottom and tally out.
3. If fill above 3792' clean out to 3803' (PBD).
4. Run tubing and set at approximately 3600'.

Water Injection Well Data

TEXAS PACIFIC OIL COMPANY
B. A. Christmas No. 3
2110' FSL & 330' FEL, Unit I
Section 28-22-36
Elev: 3500' DF



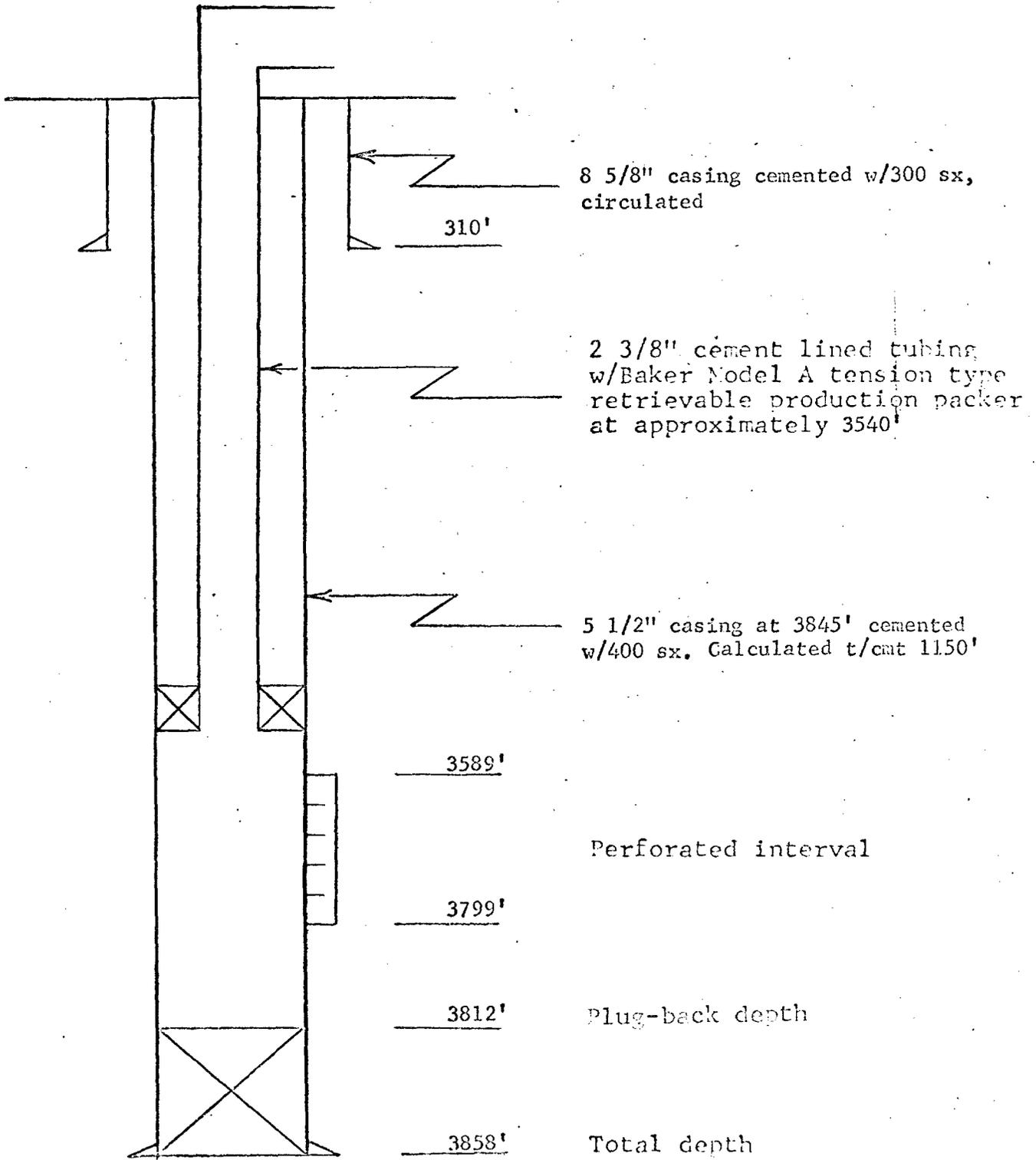
Proposed Procedure

1. Rig up.
2. Tag bottom and tally out.
3. If fill above 3756' clean out to 3775'.
4. Rub tubing and set at approximately 3635'.

Exhibit 4-24

Water Injection Well Data

TEXAS PACIFIC COAL AND OIL COMPANY
 B. A. Christmas No. 8
 660' FSL & 660' FWL, Unit M
 Section 28-22-36
 Elev: 3509' DF

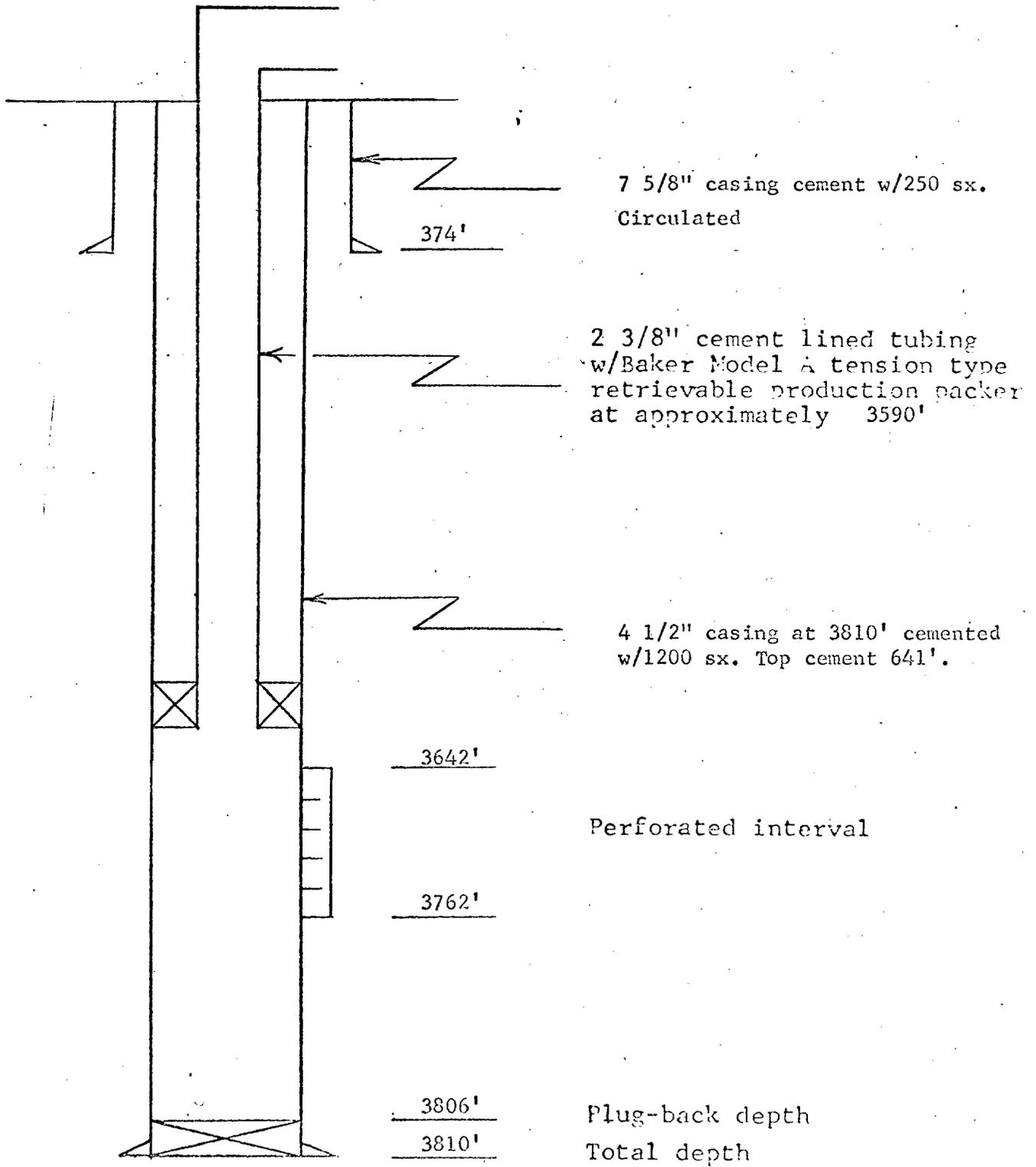


Proposed Procedure

1. Rig up.
2. Tag bottom and tally out.
3. If fill above 3799' clean out to 3812' (PBD).
4. Run tubing and set at approximately 3540'.

Water Injection Well Data

ATLANTIC RICHFIELD COMPANY
 J. L. Selby No. 4
 660' FNL & 660' FWL, Unit D
 Section 33-22-36
 Elev: 3492' DF

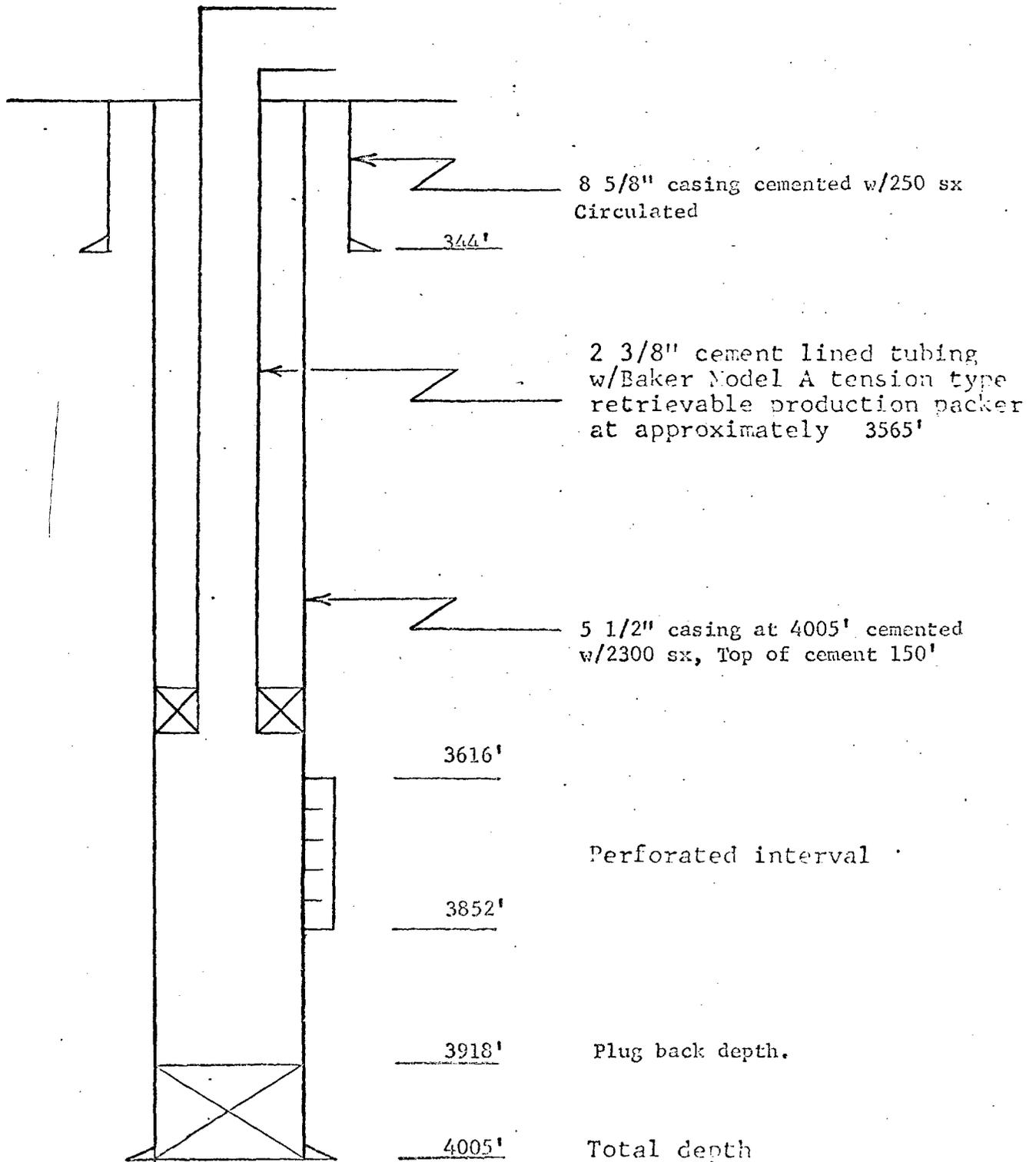


Proposed Procedure

1. Rig up.
2. Tab bottom and tally out.
3. If fill above 3762' clean out to 3780'.
4. Run tubing and set at approximately 3590'.

Water Injection Well Data

ALBERT GACKLE
 H. E. Esmond No. 4
 1980' FNL & 1980' FEL, Unit G
 Section 33-22-36
 Elevation: 3482' GL

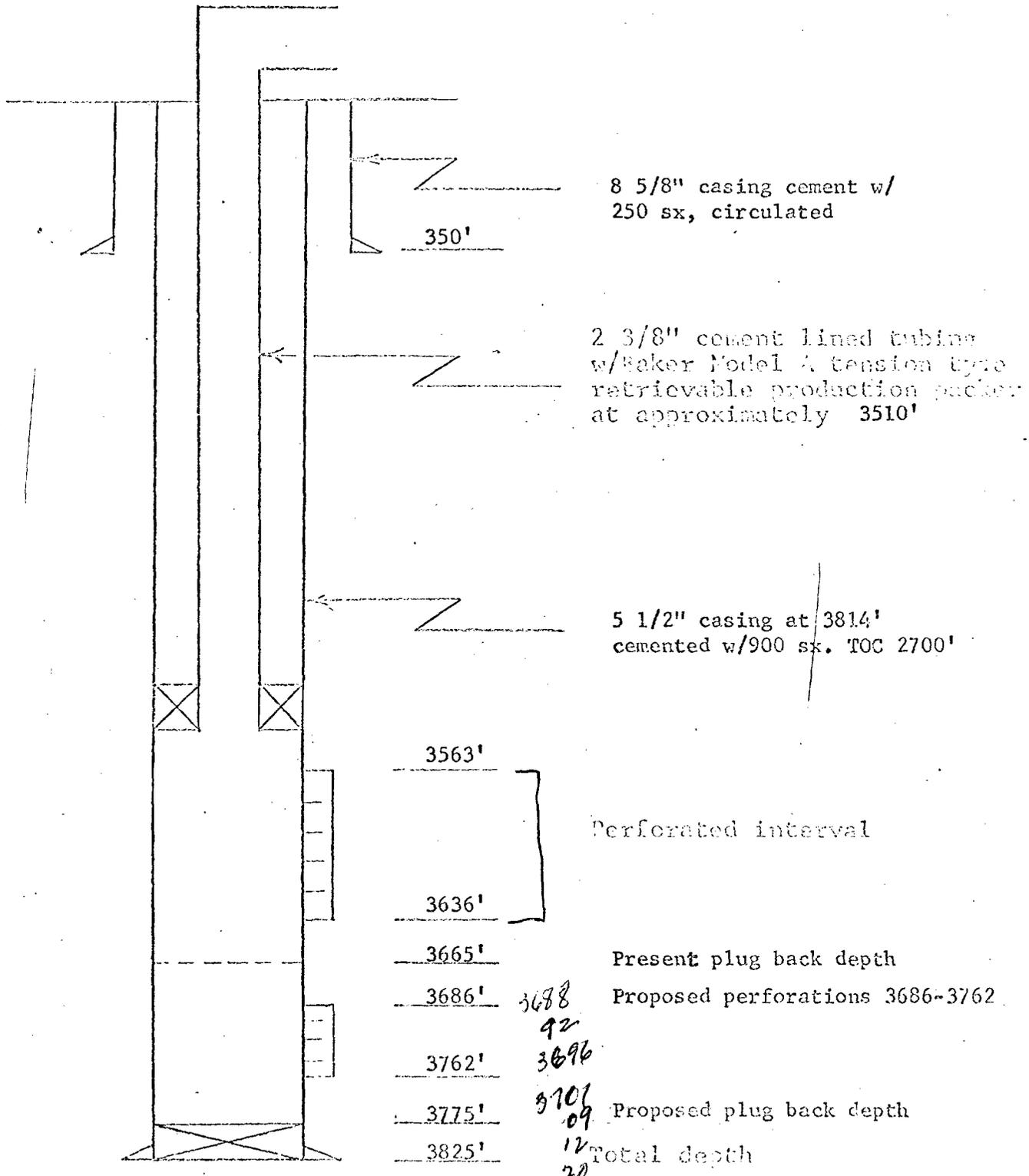


Proposed Procedure

1. Rig up.
2. Tag bottom and tally out.
3. If fill above 3852' clean-out to 3870'.
4. Run tubing and set at approximately 3565'.

Water Injection Well Data

CONTINENTAL OIL COMPANY
 Meyer B-33 No. 9
 1980' FSL & 660' FWL, Unit L
 Section 33-22-36
 Elev: 3485 DF

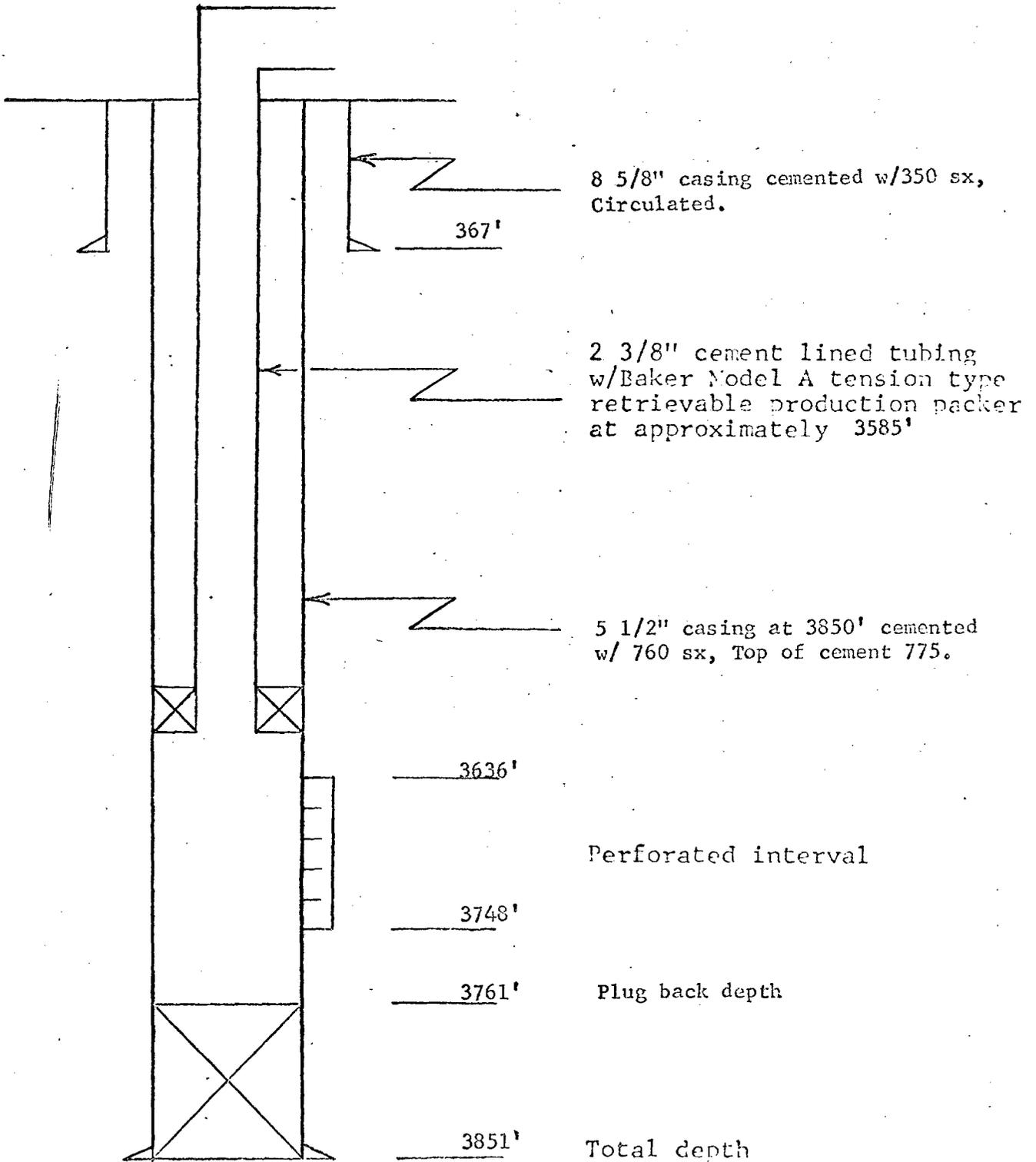


Proposed Procedure

1. Rig up.
2. Pull tubing.
3. Drill out to 3775'.
4. Perforate 3686-3702, 3710-22, 3742-46 & 3756-62.
5. Treat w/1000 gallons acid.
6. Run tubing and set at approximately 3510.

Water Injection Well Data

CONTINENTAL OIL COMPANY
Meyer B-33 No. 3
1980' FSL & 660' FEL, Unit I
Section 33-22-36
Elev: 3495' DF

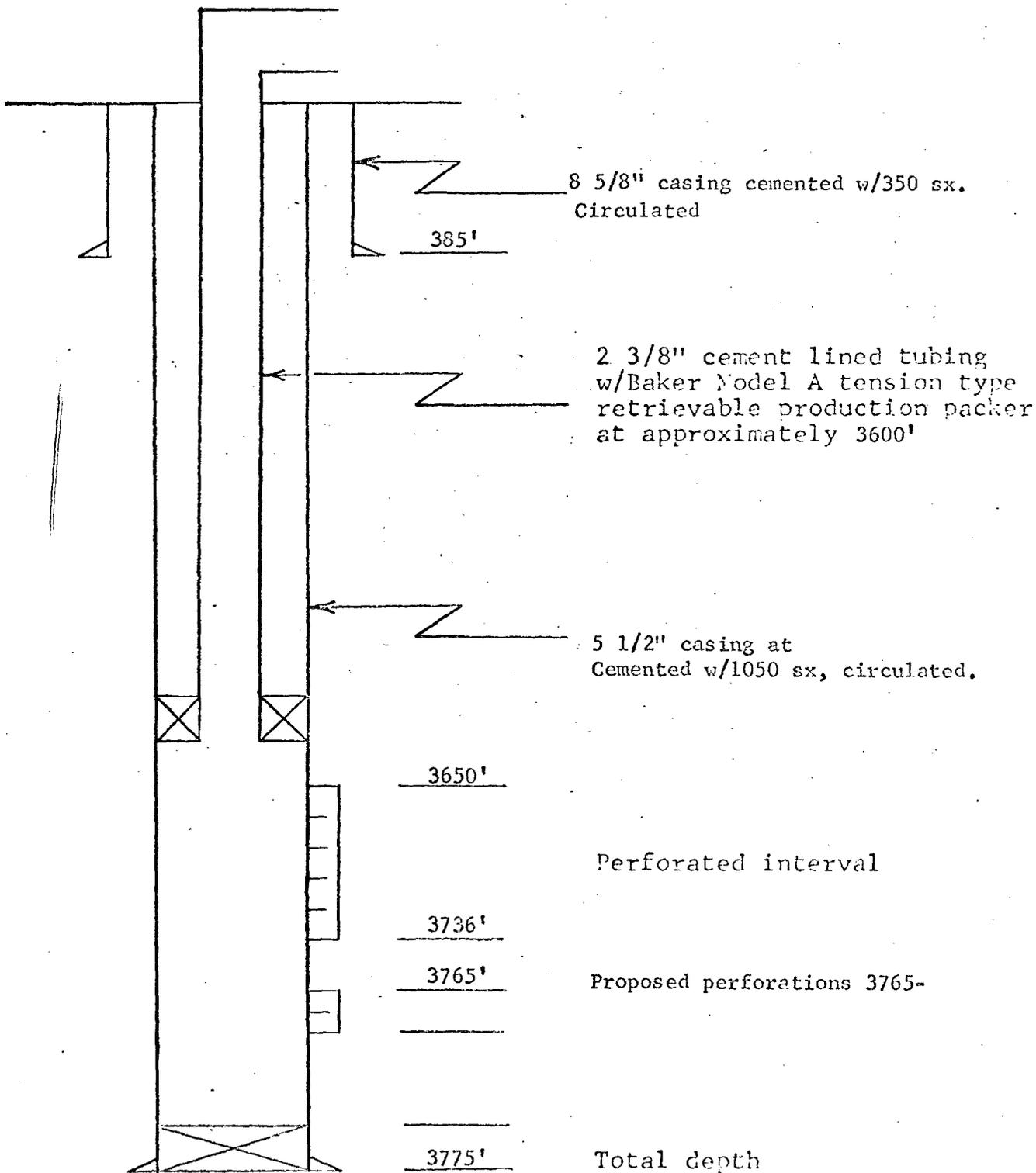


Proposed Procedure

1. Rig up.
2. Tag bottom and tally out.
3. If fill above 3748' clean out to 3761' (PBD).
4. Run tubing and set at approximately 3585'.

Water Injection Well Data

CONTINENTAL OIL COMPANY
 Meyer B-33 No. 8
 660' FSL & 1980' FWL, Unit N
 Section 33-22-36
 Elev: 3477 GL



Proposed Procedure

1. Rig up.
2. Tag bottom and tally out.
3. If any fill, clean out to 3774' (PBD).
4. Perforate 3765'-3770'.
5. Treat 3765'3775' w/1000 gallons acid.
6. Run tubing and set at approximately 3600'.

20-22-56

WELL NO. _____ COMPANY SUNRAY OIL COMPANY

WELL BOUCH NO. 1

FIELD SOUTH EUNICE

COUNTY LEA STATE NEW MEXICO

SECTION NE 7/4 McFIVER Other Services SM

SFC. 20 Twp. 22. S. R. 10. E. S. 24. E.

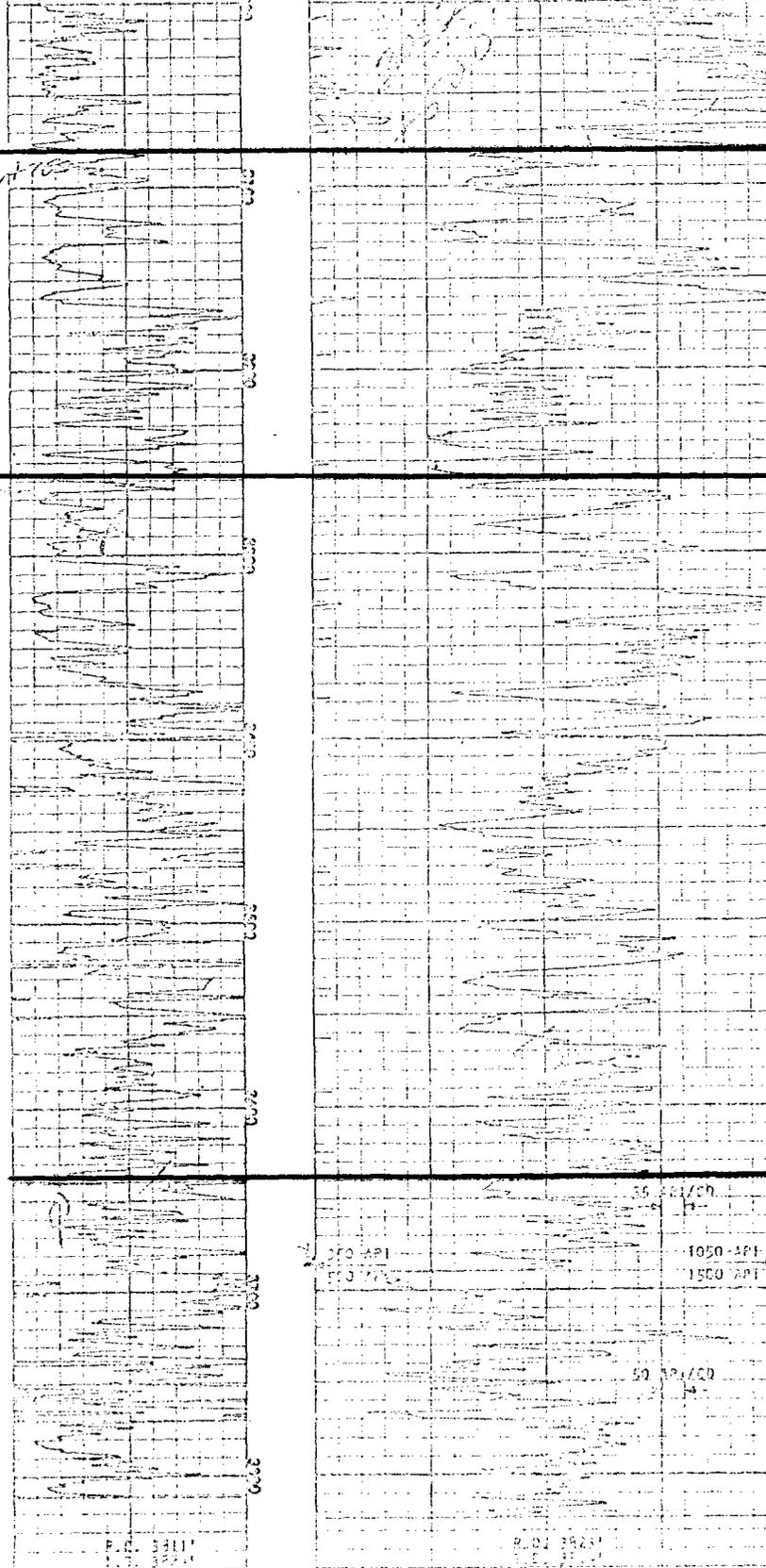
Permanent Datum CASING HEAD FLANGE Elev. 3582

Log Measured from 10 ft. Above Permanent Datum

Drilling Measured from 01

Date	3/13/54	2/17/54
Run No.	011	012
12 1/2" Log	3774	3775
Drill-Driller	3774	3775
Drill-Logger	3774	3775
Section Log and Interval	3774	3775
Top Logged Interval	1500	1500
Type Fluid in Hole	OIL	OIL
Subsidiary Log Cl.		
Density 15. Gal.		
Level		
Min. Temp. in Hole Deg. F		
Time Log Time		
Recorded By	ELMORE	ELMORE
Checked By	MR. ROBINSON	MR. ROBINSON

Run No.	Date Made Record		Log No.	Section	Interval	To
	From	To				
3897	3774	3775				



T
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7-R

T
Queen

EXHIBIT 5-1

LOG

COMPANY BOULDER-SHERMAN

WELL LUMT # 1

FIELD JAL-BAT

COUNTY LEA STATE NEW MEXICO

Location 1930 FSL 660 FSL Other Section CU-HSG

Sec. 20 Twp. 22-S Rge. 36-E

Permanent Datum Ground Level Elev. 3542 Elev. K.M. 3550

Log Measured From K. H. 8 Ft. Above Perm. Datum DF 2529

Depth Measured From Kelly Rushing GL 3542

Date	<u>11-5-64</u>				
Driller	<u>- One -</u>				
Shot	<u>3840</u>				
Shot	<u>3836</u>				
Shot	<u>3830</u>				
Shot	<u>Surf.</u>				
Shot	<u>2-5/8" 799</u>				
Shot	<u>-</u>				
Shot	<u>7-7/8"</u>				
Shot	<u>10-4"</u>				
Shot	<u>10-4 26</u>				
Shot	<u>8 ml</u>				
Shot	<u>-</u>				
Shot	<u>- @ *F</u>				
Shot	<u>- @ *F</u>				
Shot	<u>- @ *F</u>				
Shot	<u>- 1 *F</u>				
Shot	<u>- 2 *F</u>				
Shot	<u>- *F @</u>				
Shot	<u>7.21 Hobbs</u>				
Shot	<u>G. E. Avres</u>				
Shot	<u>Mr. Bean</u>				

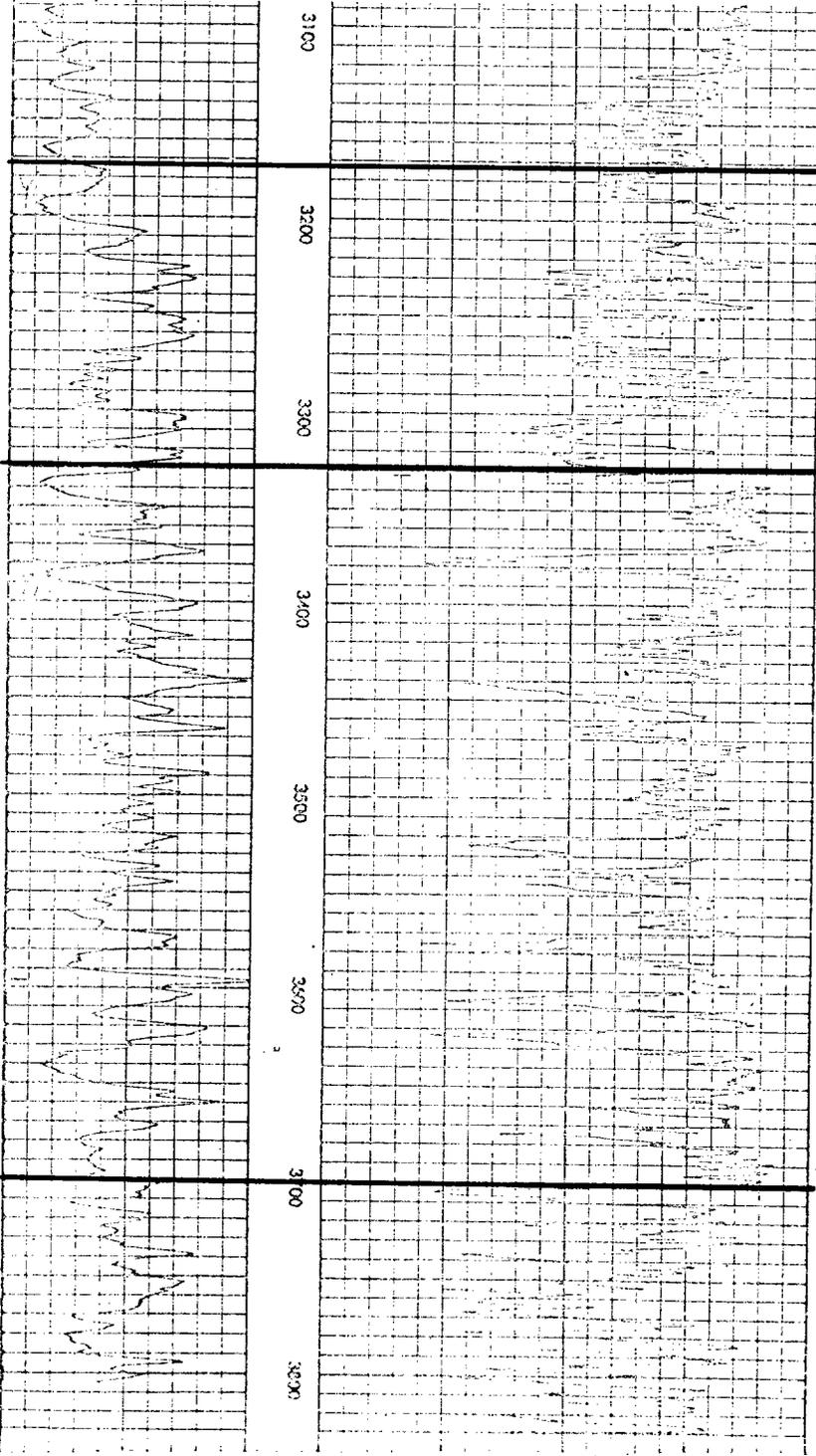


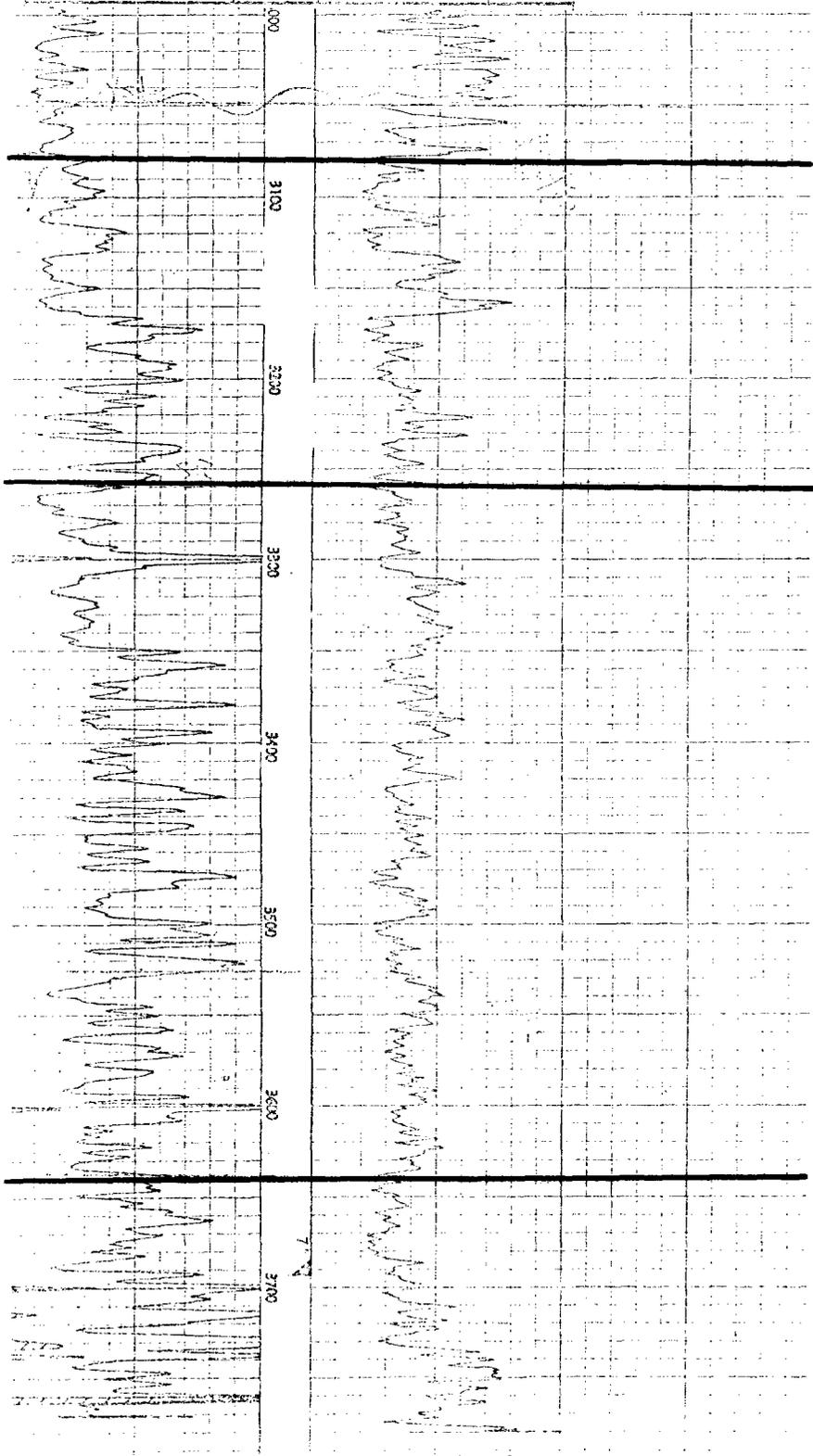
EXHIBIT 5-2

C. H. [Signature]

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WESTERN ELECTRICAL ENGINEERING SERVICE
ROSWELL DIV.
S. W. REGION
 REFERENCE NO. A 5927 -D

WELLS COMPANY *Radioactivity Log*

COMPANY: WELLS COMPANY WELL: H. D. CRANE NO. 1 FIELD: SOUTH EL PASO LOCATION: 6601 15th St. El Paso, Texas COUNTY: EL PASO STATE: TEXAS	COMPANY: WELLS COMPANY WELL: H. D. CRANE NO. 1 FIELD: SOUTH EL PASO LOCATION: 6601 15th St. El Paso, Texas COUNTY: EL PASO STATE: TEXAS	Well Location 3536 DF
LOG ZERO: 6601 15th St. El Paso, Texas D.P.G. ZERO: 6601 15th St. El Paso, Texas PERM. DATUM: 6601 15th St. El Paso, Texas		ELEV. 5054.4 D.E.V. 5054.4 ELEV. 5054.4
TYPE OF LOG: Radioactivity RUN NO.: 25-61 DATE: 11-2-55 TOTAL DEPTH (DRILLER): 312 EFFECTIVE DEPTH (DRILLER): 312 TOP OF LOGGED INTERVAL: 0 BOTTOM OF LOGGED INTERVAL: 312 TYPE OF FLUID IN HOLE: Oil # 2 FLUID LEVEL: 0 MINIMUM RECORDED TEMP.: 72 SOURCE STRENGTH & TYPE: 1500000 SOURCE SPACING - IN.: 15 LENGTH OF MEAS. DEVICE - IN.: 15 G.D. OF INSTRUMENT - IN.: 3 7/8 TIME CONSTANT - SECONDS: 1.5 LOGGING SPEED FT./MIN.: 25-45 STATISTICAL VARIATION - IN.: 100% CALIBRATION REFERENCE: 074 LOGGED BY: W. H. [Signature] WITNESSED BY: C. H. [Signature]		



Reproduced By
West Texas Electrical Log Service
 1305 Commerce Street
 Dallas 1, Texas

REFERENCE NO A 2034 -A

LANE RADIOACTIVITY LOG WELLS COMPANY

Location of Well COMPANY: SHELL OIL COMPANY WELL: CERRITOS NO. 1 FIELD: 30TH FLOOR COUNTY: LRA STATE: TEXAS LOCATION: 60th EA & R. LINES OF SEC. 21 22-3, 36-3 3539PF	COMPANY: SHELL OIL COMPANY WELL: CERRITOS NO. 1 FIELD: 30TH FLOOR COUNTY: LRA STATE: TEXAS LOCATION: 60th EA & R. LINES OF SEC. 21 22-3, 36-3
LOG MEAS. FROM: DERRICK FLOOR ELEV. 3572	
DRLG. MEAS. FROM: DERRICK FLOOR ELEV. 3500	
PERM. DATUM: GROUND LEVEL ELEV. 3573	

TYPE OF LOG	COUNT RATE	COUNT RATE	
RUN NO.	00000	00000	
DATE	10-2-53	10-2-53	
TOTAL DEPTH (DRILLER) - FEET	3500	3500	
EFFECTIVE DEPTH (DRILLER)	3500	3500	
TOP OF LOGGED INTERVAL	3500	3500	
BOTTOM OF LOGGED INTERVAL	3500	3500	
TYPE OF FLUID IN HOLE	OIL	OIL	
FLUID LEVEL	478	473	
MAXIMUM RECORDED TEMP.			
NEUTRON SOURCE STRENGTH & TYPE	COO1	COO1	
SOURCE SPACING - IN.	35"	35"	
LENGTH OF MEASURING DEVICE - IN.	1 5/8"	1 5/8"	
O.D. OF INSTRUMENT - IN.	5.2	5.2	
TIME CONSTANT - SECONDS	20-20	20-10	
LOGGING SPEED FT. MIN.			
STATISTICAL VARIATION - IN.			
SENSITIVITY REFERENCE	24	45	
RECORDED BY	EMLEY	EMLEY	
WITNESSED BY	EMLEY	EMLEY	

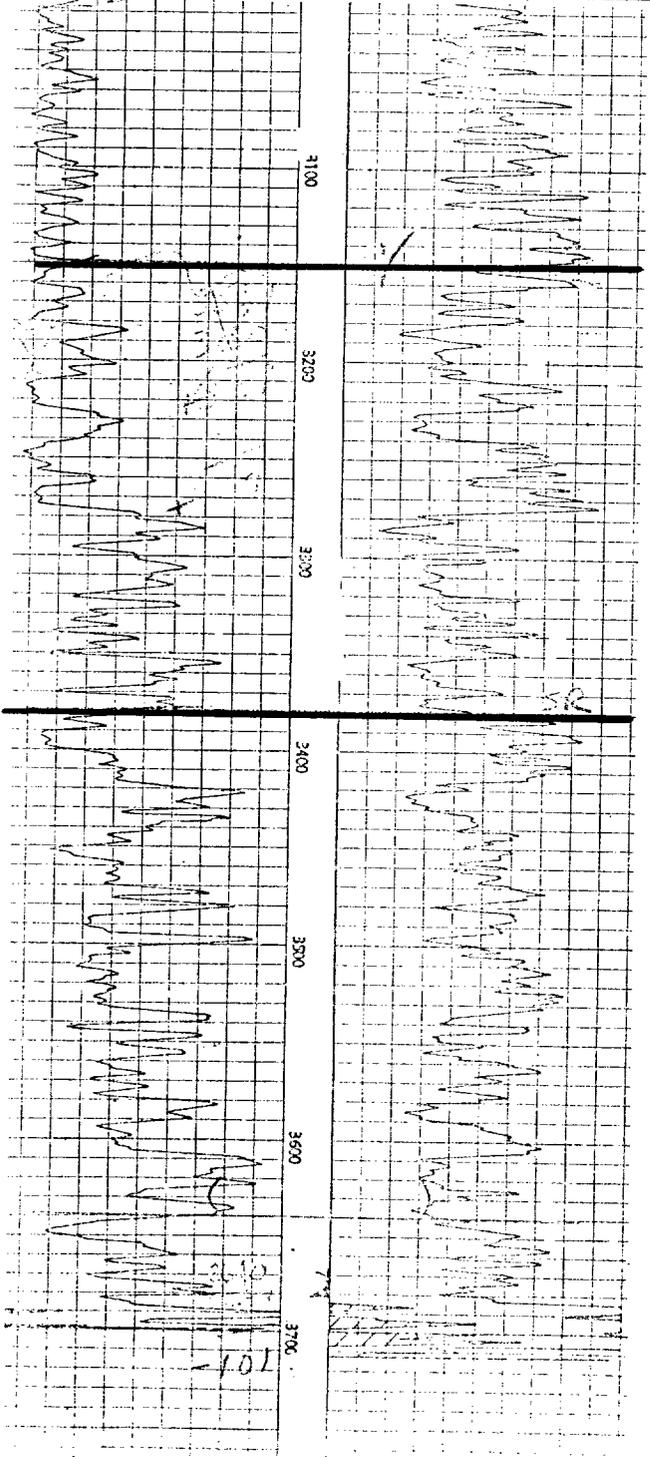


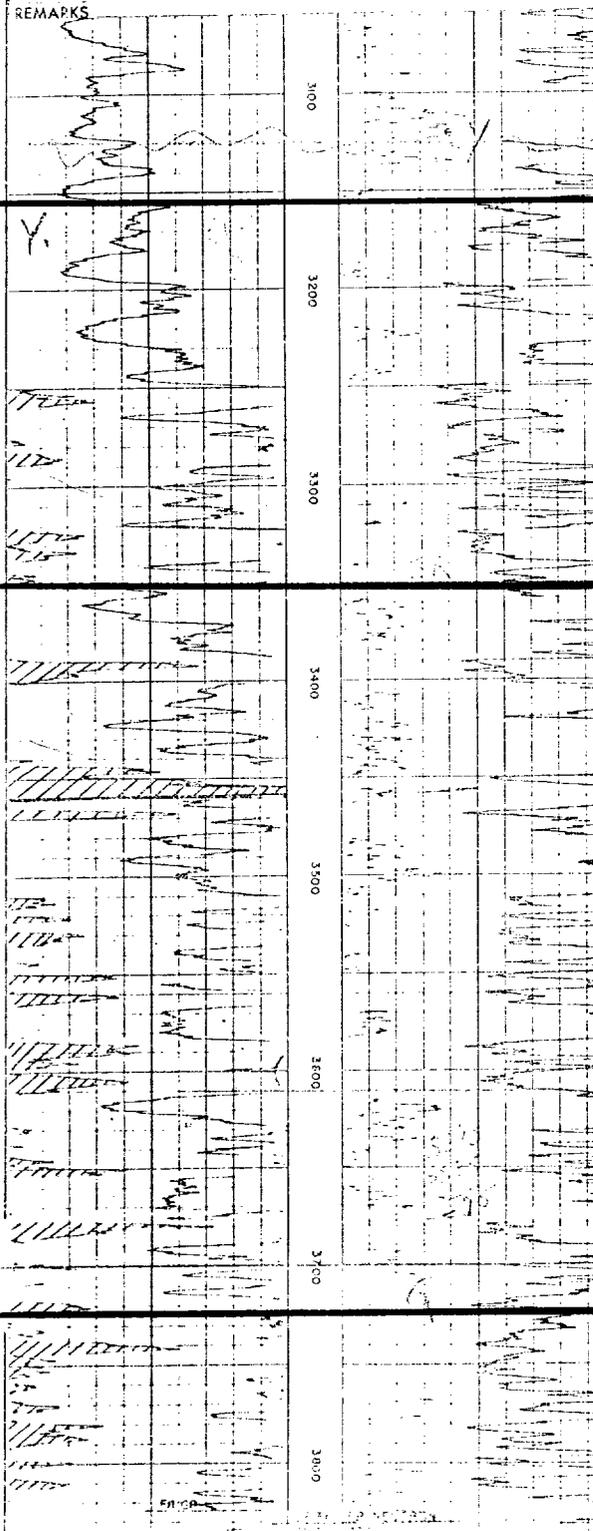
EXHIBIT 5-5

SCHLUMBERGER WELL SURVEYING CORPORATION



COUNTY - Lea FIELD or LOCATION - S. EUNICE WELL - CHRISTMAS 3-A COMPANY - Shell Oil Co.	COMPANY SHELL OIL CO.	Location of Well 1,350' T. N. E. / L. Sec. 21-22S-36E
	WELL CHRISTMAS 3-A	GRN (LL)
	FIELD S. EUNICE	Elevation: D.F. 3535 K.B. or G.L.
	LOCATION SEC. 21-22S-36E	FILING No.
	COUNTY LEA	
STATE NEW MEXICO		

RUN NO.	1
Date	1-15-55
Depth Reference	KB
First Reading	3831
Last Reading	0
Footage Measured	3831
Max. Depth Reached	3832
Bottom Driller	3830
Maximum Temp. F.	110
Mud: Nature	Salt Gcl
Density	10.2
Viscosity	38
Resistivity	0.65 @ 65 F.
Casing Size & I	8 5/8" to 300
Weight	2 to
Open Hole	7 7/8" to 3832
Fluid Level	
Recording Speed (ft. hr)	2000 & 4000
Sensitivity Top	GR) 100 N) 260/400 GR) N)
Time Constant	1.4
Panel	SNP-B 7.42
Corr. Rig Time	1.5 ft s.
Scale Size & Type	3 5/8"
Truck No.	1752 Hobbs
Observer	WILSON

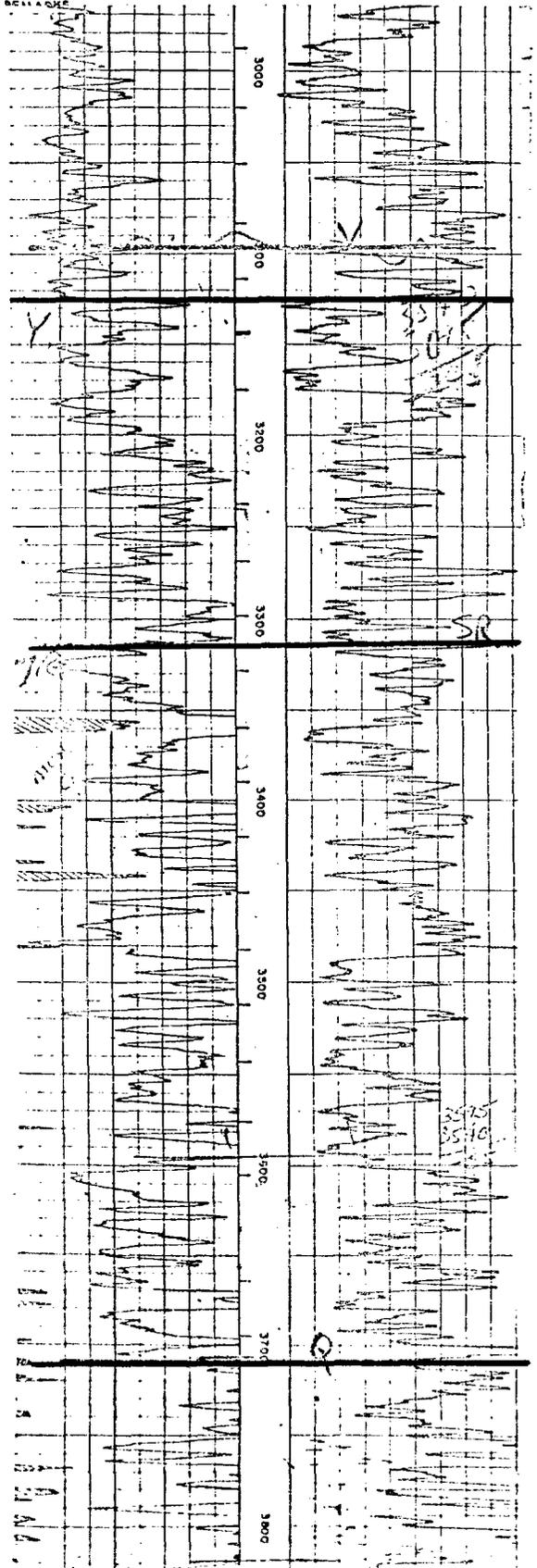


SCHLUMBERGER WELL SURVEYING CORPORATION

Sumner Ray

COUNTY LEA FIELD or LOCATION S. EUNICE WELL H.D. GREER # 1 COMPANY GULF OIL CORP.	COMPANY GULF OIL CORP.	Location of Well 800' f NL 1000' f WL Sec. 21-22S-36E 198015812
	WELL H.D. GREER # 1	
	FIELD S. EUNICE	GRN
	LOCATION SEC. 21-22S-36E	
	COUNTY LEA	RT 3540 Elevation: D.F. K.B. or G.L.
STATE NEW MEXICO	FILING No.	

Run No.	3-19-54
Date	3-19-54
Depth Reference	8.41 A.D. GL
First Reading	3819
Last Reading	50
Footage Measured	3769
Max. Depth Reached	3820
Bottom Driller	3842
Maximum Temp. F.	102
Mud: Nature	Water
Density	
Viscosity	
Resistivity	
Casing Size & Weight	8 5/8" to 1377
Open Hole	6" to 3695
	7 7/8" to 3842
Fluid Level	730'
Recording Speed (ft/hr)	2000 & 4000
Sensitivity Tap	GR) 200 N) 400 GR) NI)
Time Constant	1
Panel	GNP # 13A
Onr. Rig Time	24 Hrs
Sand Size & Type	3 5/8"
Truck No.	1759-Jabbs
Operator	Hinkler



21-1-57

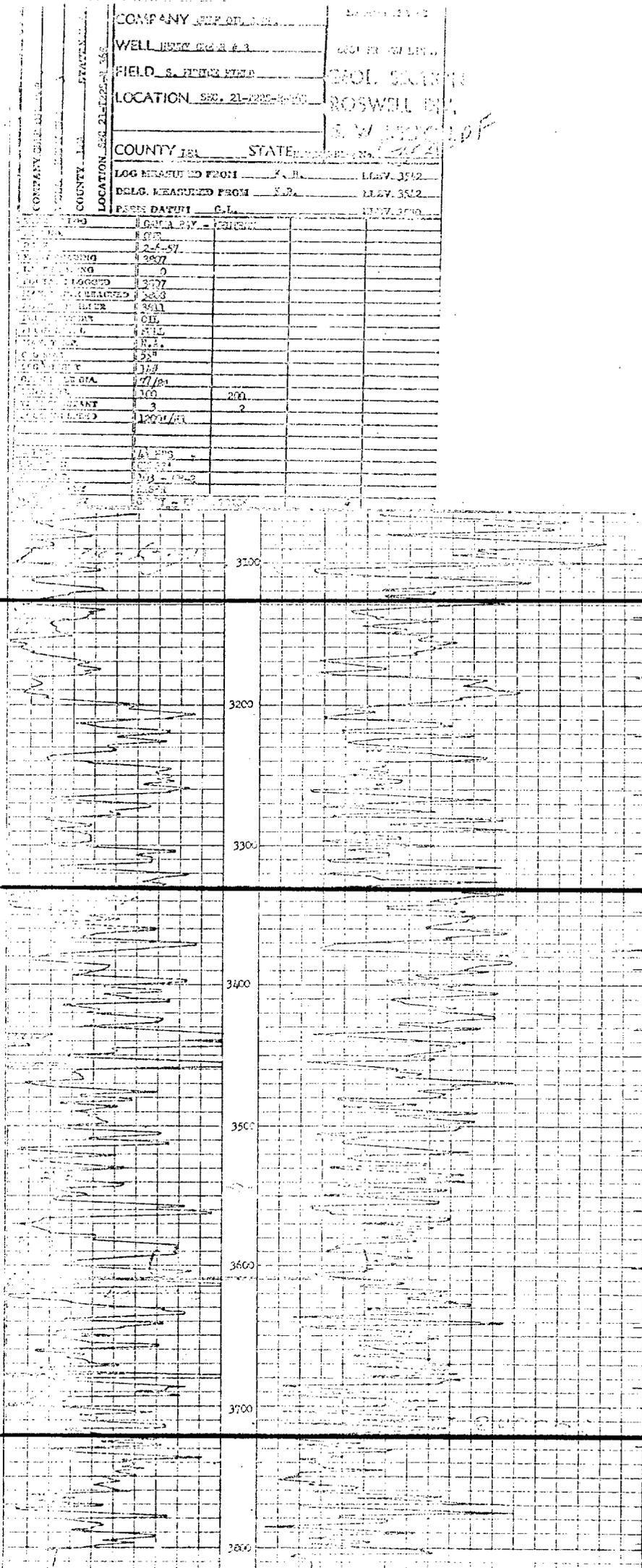


EXHIBIT 5-8

21-22-36

Reproduced By

West Texas Electrical Log Service

COAL SECTION
ROSWELL DIV.

Dallas, Texas

S. W. REFERENCE

NO A 4231 -E

LOCATION

COMPANY: W. H. C. OIL COMPANY

WELL: ANNIE J. CHRISTMAS D. 21

FIELD: SOUTH BRICK

COUNTY: LEA STATE: NEV.

LOCATION: 660' PSL 1650' PVL, SEC 21

FILE NO. _____

LOG NO. T22S R36E

LOG MEAS. FROM: KELLY DRIVE BUSHING ELEV. 3534

LOG MEAS. FROM: KELLY DRIVE BUSHING ELEV. 3534

PERM. DATUM: DERRICK FLOOR ELEV. 3535

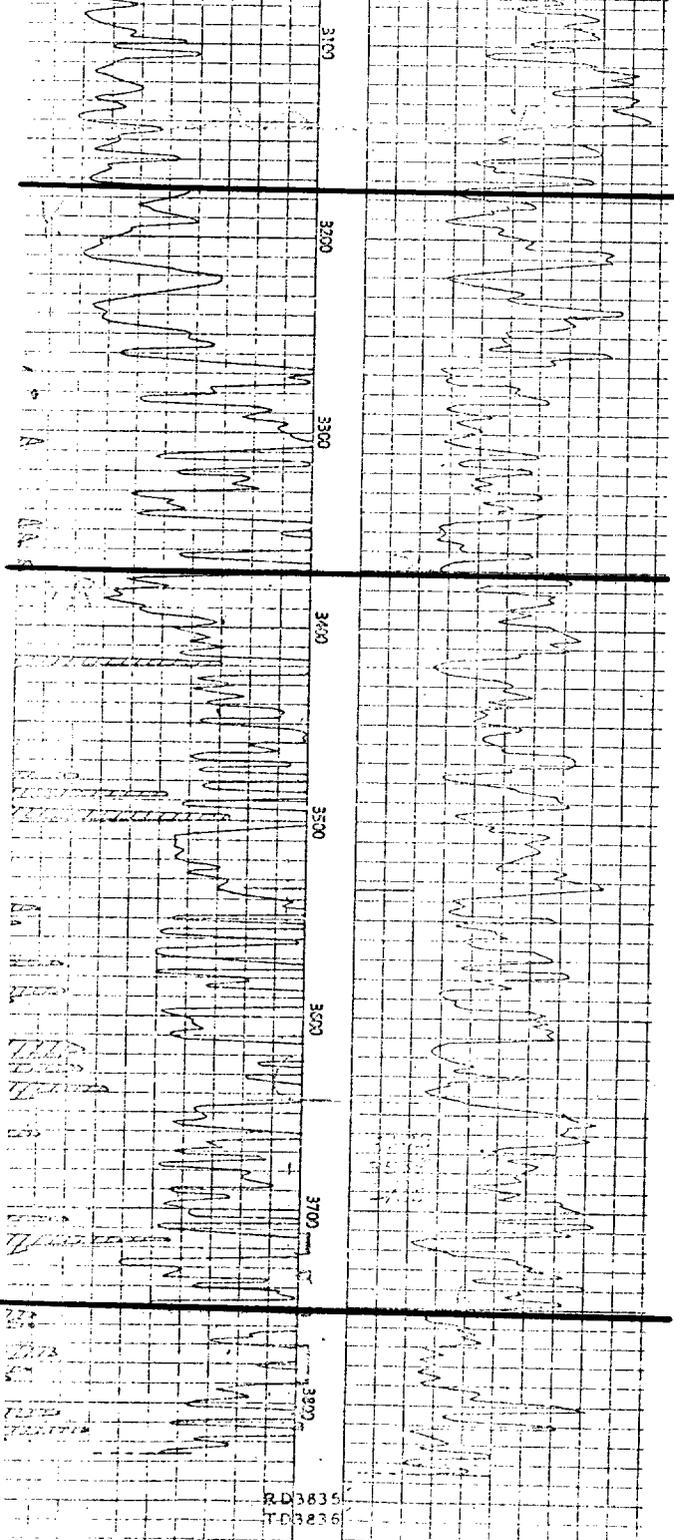
WELL: ANNIE J. CHRISTMAS D. 21

COUNTY: LEA STATE: NEV.

LOCATION: 660' PSL 1650' PVL, SEC 21

LOG NO. T22S R36E

LOG NO.	CRS	CNR
TYPE OF LOG	GAMMA	NEUTRON
DATE	9-15-55	9-15-55
TOTAL DEPTH (OPERATOR)	3834	3834
EFFECTIVE DEPTH (OPERATOR)	3834	3834
EFFECTIVE DEPTH (WESTERN)	3836	3836
TOP OF LOGGED INTERVAL	1000	1000
FOOT OF LOGGED INTERVAL	3826	3835
TYPE OF FLUID IN HOLE	MUD	MUD
NEUTRON SOURCE TYPE	SWL	SWL
SOURCE SPACING IN.	30	30
LENGTH OF DETECTOR IN.	30	0.1
Q.D. OF INSTRUMENT IN.	3.57	3.27
TIME CONSTANT SEC.	3	2.5
LOGGING SPEED FT./MIN.	22-40	22-40
STATISTICAL VARIATION IN.	125	205
SENSITIVITY REFERENCE	274	275
RECORDED BY	J. C.
INTERPRETED BY	M. J.



R.D. 3835
T.D. 3836

EXHIBIT 5-9

LANE RADIOACTIVITY LOG WELLS COMPANY

Location of Well

COMPANY: KELLY OIL COMPANY
 WELL: CHRISTMAS NO. 1
 FIELD: SOUTH SWICE
 COUNTY: LEA STATE: N. MEX.
 LOCATION: 19°0' EOL & 660' FEL OF SECTION 21, T-22-S, R-36-E

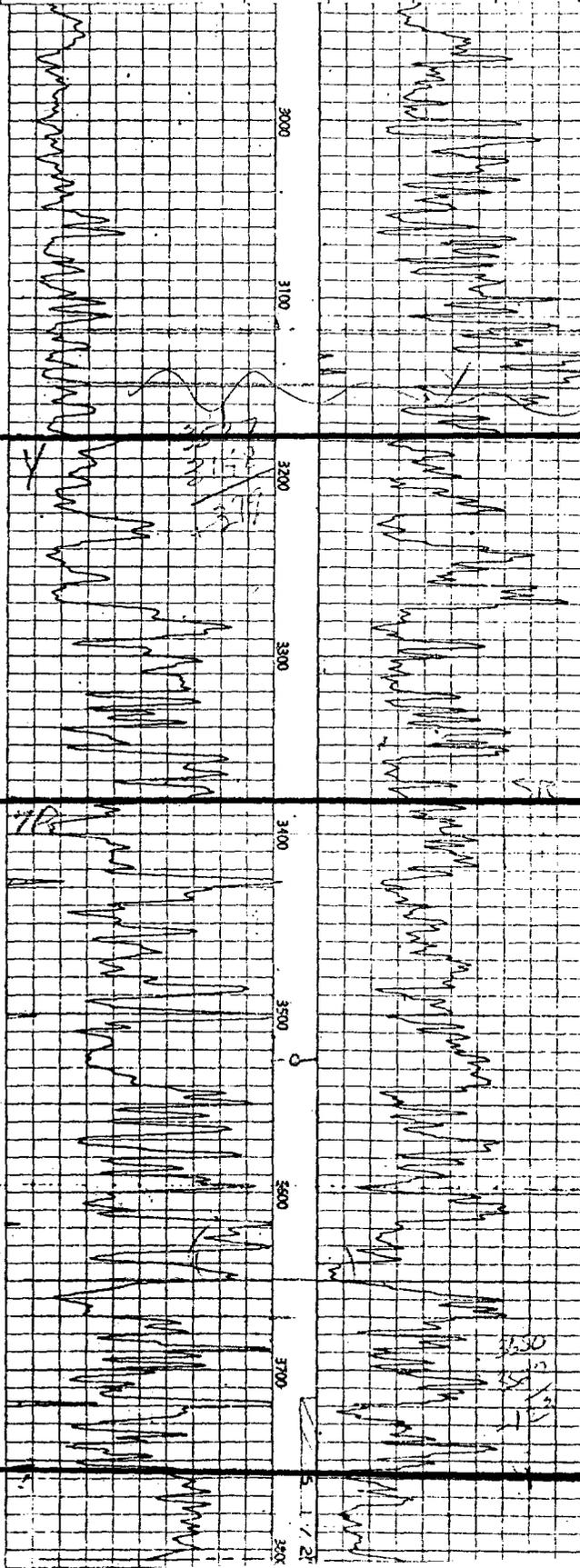
3526 DF

FILE NO.

COMPANY: KELLY OIL COMPANY
 WELL: CHRISTMAS NO. 1
 FIELD: SOUTH SWICE
 COUNTY: LEA
 LOCATION: STATE: N. MEX.

LOG MEAS. FROM KELLY DRIVE BUSHING ELEV. 3527
 DRIG. MEAS. FROM KELLY DRIVE BUSHING ELEV. 3527
 PERM. DATUM GROUND LEVEL ELEV. 3535.60

TYPE OF LOG	LANCIA RAY	NEUTRON	RECORDED BY: J. CALHOUN
RUN NO.	ONE-NW	ONE-NW	
DATE	12-26-54	12-26-54	
TOTAL DEPTH (DRILLER) STRAIN	3510	3510	
EFFECTIVE DEPTH (DRILLER)	3510	3510	
TOP OF LOGGED INTERVAL	SURFACE	SURFACE	
BOTTOM OF LOGGED INTERVAL	3406	3406	
TYPE OF FLUID IN HOLE	MUD	MUD	
FLUID LEVEL	233'	233'	
MAXIMUM RECORDED TEMP.		600N	
NEUTRON SOURCE STRENGTH & TYPE		3.25	
SOURCE SPACING - IN.		9.1"	
LENGTH OF MEASURING DEVICE - IN.	36"	3 5/8"	
O.D. OF INSTRUMENT - IN.	5.0	4.0	
TIME CONSTANT - SECONDS	23-40	20-40	
LOGGING SPEED FT. MIN.			
STATISTICAL VARIATION - IN.			
SENSITIVITY REFERENCE	274	275	
RECORDED BY	ELLIS	DAWSON	
WITNESSED BY	CALHOUN	CALHOUN	



GEOL. SECTION
 ROSWELL DIV.
 S. W. REGION

22-22-3R

PERFORATING GUNS AND SUPPLY CORPORATION

Simultaneous

Radiation Log

LOG NO. 16553	COMPANY SUN OIL COMPANY
STATION HOBBS	WELL H.S. RECORD # 6
TRUCK NO. GR-22	FIELD SOUTH EUNICE
	COUNTY LEA, NEW MEXICO
	STATE LEA, NEW MEXICO
	LOCATION 1650' F.W.L. 366' F.W.L. SEC. 22
	TAP. 22 S RGE. 36 E
	LOG MEAS FROM 8' ABOVE G.L. ELEV. 3527
	DRLG MEAS. FROM 9' ABOVE G.L. ELEV. 3526
	PERMANENT DATUM G.L. ELEV. 3519

CASING RECORD				BORE HOLE RECORD		
SIZE - WT.	FROM	TO	BIT SIZE -	FROM	TO	
8 5/8	SUFF	350				
5 1/2 14E	"	3675	7 7/8			

TYPE OF LOG	GAMMA RAY - NEUTRON
RUN NO.	ONE
DATE	6-4-57
TOTAL DEPTH - DRILLER	3640
TOTAL DEPTH - P.G.A.C.	3640
FLUID IN HOLE	WATER
FLUID LEVEL	
MAXIMUM TEMPERATURE °F.	
INSTRUMENT O.D. AND NO.	3 5/8 - 287
INSTRUMENT TYPE	T - PH - 125
NEUTRON SOURCE TYPE	RB - 680
CPS FOR CALIB. STD. - GR	180
- N	190
REC'D R SENS. 4"/100 SNU	212

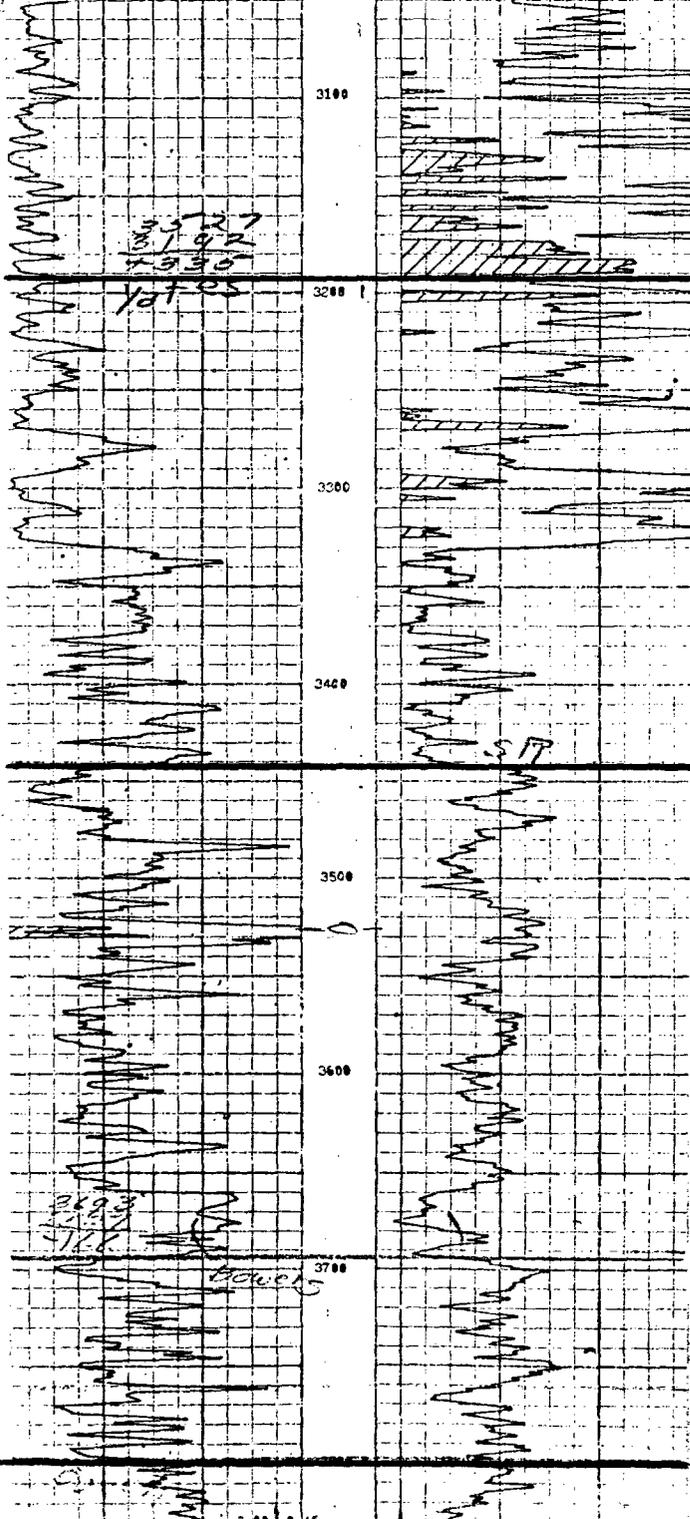


EXHIBIT 5-11

22-22-36

PERFORATING GUNS ATLAS CORPORATION

Simultaneous

Radiation Log

LOG NO.	15317	COMPANY	SUN OIL COMPANY
STATION	HOBSBS	WELL	H.S. RECORD # 4
TRUCK NO.	GR-24	FIELD	SOUTH EUNICE
COMPANY SUN OIL COMPANY WELL H.S. RECORD # 4 FIELD SOUTH EUNICE COUNTY LEA STATE NEW MEXICO	COUNTY	LEA	NEW MEXICO
	STATE	NEW MEXICO	
	LOCATION	1900' FN & EL SEC. 22	
	LOG MEAS FROM	9' ABOVE B.H.F. ELEV. 3532 D.F.	
	PERMANENT DATUM B.H.F.	ELEV. 3523	
CASING RECORD		BORE HOLE RECORD	
SIZE - WT. #	FROM	TO	BIT SIZE -
10 3/4	SURF	355	
5 1/2 - 14	"	3832	7 7/8
TYPE OF LOG		GAMMA RAY - NEUTRON	
RUN NO.	ONE		
DATE	2-25-57		
TOTAL DEPTH - DRILLER	3832		
TOTAL DEPTH - P.G.A.C.	3832		
FLUID IN HOLE	WATER		
FLUID LEVEL	200		
MAXIMUM TEMPERATURE °F.			
INSTRUMENT O.D. AND NO.	3 5/8 - 211		
INSTRUMENT TYPE	TA - PH - 125		
NEUTRON SOURCE TYPE	RB - 600		
CPS FOR CALIB. STD. - GR	119		
" " " " " " " "	198		

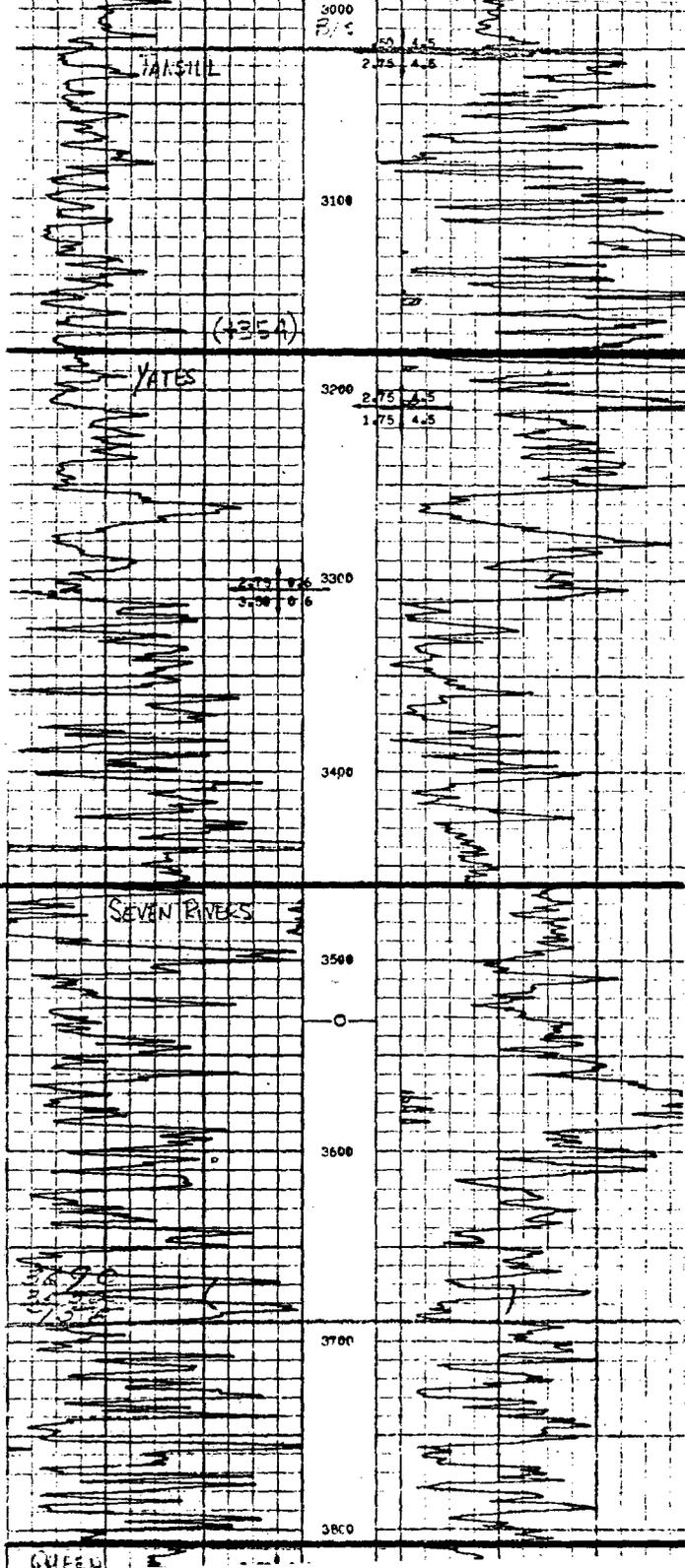


EXHIBIT 5-12

REFERENCE N° A 5119 -B



RADIOACTIVITY LOG
WELEX JET SERVICES, Inc.

LICENSED BY: WELL SURVEYS, INC. FILE NO.

Location of Well	COMPANY	WELLSURVEYS, INC.
	WELL	M. C. MOYER 2 - 22 NO. 8
	FIELD	SOUTH BRIDGE
	COUNTY	DEA STATE OF TEXAS
	LOCATION	2310' 200' & 100' P.M. OF S.C. 25, T - 22, R - 36.

COMPANY
WELL NO. M. C. MOYER 2 - 22 NO. 8
FIELD SOUTH BRIDGE
COUNTY DEA
STATE OF TEXAS
LOCATION 2310' 200' P.M. OF S.C.
25, T - 22, R - 36.

LOG MEAS. FROM 1' ABOVE ROTARY TABLE	ELEV. 3519'
DRLG. MEAS. FROM 1' ABOVE ROTARY TABLE	ELEV. 3519'
PEPM. DATUM 5 1/2" CASING FLANGE	ELEV. 3510'

TYPE OF LOG	WELLSURVEYS	NEUTRON
RUN NO.	1	1
DATE	7/30/56	7/30/56
JOB NO.	203-1006 &	275-69
TOTAL DEPTH (DRILLER)	3825	3825
EFFECTIVE DEPTH (DRILLER)	3822	3822
TOTAL DEPTH (R. A. LOG)	3826	3826
TOP OF LOGGED INTERVAL	50	50
BOTTOM OF LOGGED INTERVAL	3815	3824
TYPE OF FLUID IN HOLE	WT	OIL
FLUID LEVEL		
MAXIMUM RECORDED TEMPERATURE		
NEUTRON SOURCE STRENGTH & TYPE		600 N
SOURCE SPACING—IN.		3.75
LENGTH OF MEASURING DEVICE—IN.	30	9.1
O.D. OF INSTRUMENT—IN.	3 5/8	3 5/8
TIME CONSTANT—SECONDS	1.3	3.2
LOGGING SPEED FT. MIN. 2"	20-40	20-40
5"	20	20
STATISTICAL VARIATION—IN.	0.75	0.35
SENSITIVITY REFERENCE	274	275
RECORDED BY	WILLIS	WILLIS
WITNESSED BY	WILLIS	WILLIS

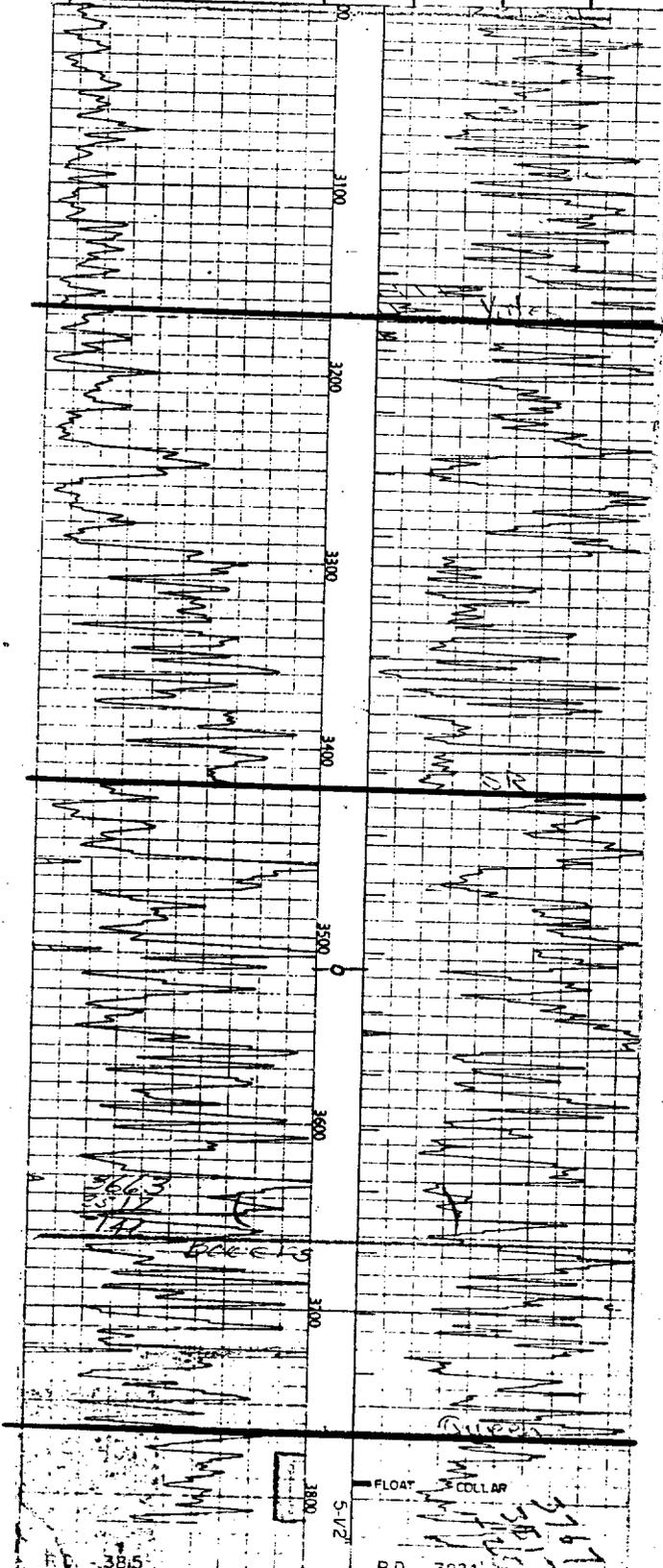


EXHIBIT 5-13

REFERENCE N° A 5620 -B

SIMULTANEOUS RADIATION LOG

LOCATION SEC. 22 TWP. 22S RGE. 36E 1960 FSL 660 FEL	COUNTY LEA	TOWNSHIP 22S	RANGE 36E	STATE NEW MEXICO	
LOG NO. 74522	LOG MEASURED FROM 9' ABV. 5 1/2" CSG. FLGE.	ELEVATION 3522	CONTINENTAL OIL COMPANY WELL NO. MEYERS B-22 # 11 SOUTH EUNICE NEW MEXICO		
DRILLING MEASURED FROM SAME	ELEVATION 3522				
PERMANENT DATUM TOP OF 5 1/2" CSG. FLGE.	ELEVATION 3513				
TYPE OF LOG GAMMA RAY	TYPE OF LOG BROS. NEUTRON				
RUN NUMBER ONE	RUN NUMBER ONE				
DATE 8-20-56	DATE 8-20-56				
TOTAL DEPTH DRILLED 3820	TOTAL DEPTH DRILLED 3820				
EFFECTIVE DEPTH P. O. C. 3820	EFFECTIVE DEPTH P. O. C. 3820				
TOP OF LOGGED INTERVAL SURFACE	TOP OF LOGGED INTERVAL SURFACE				
BOTTOM OF LOGGED INTERVAL 3815	BOTTOM OF LOGGED INTERVAL 3815				
TYPE FLUID IN HOLE OIL	TYPE FLUID IN HOLE OIL				
FLUID LEVEL 200	FLUID LEVEL 200				
MAXIMUM RECORDED TEMP 3 5/8	MAXIMUM RECORDED TEMP 3 5/8				
D. O. OF INSTRUMENT - INCHES 3 5/8	D. O. OF INSTRUMENT - INCHES 3 5/8				
TIME CONSTANT - SECONDS 15-60	TIME CONSTANT - SECONDS 15-60				
LOGGING SPEED - FEET/MINUTE F	LOGGING SPEED - FEET/MINUTE PH				
STATISTICAL VARIATION - INCHES COUNTER	STATISTICAL VARIATION - INCHES COUNTER				
RECORDED BY WITNESSED BY	ELKINS MOELLER				

CASING RECORD		OPEN HOLE RECORD	
RUN NO. ONE	DIAMETER 3 5/8	RUN NO. ONE	DIAMETER 7 7/8 B.H.
THD	24	THD	TO
WEIGHT, LB	INTERVAL	WEIGHT, LB	INTERVAL
	SURFACE TO SURFACE		
	357 TO 3820		

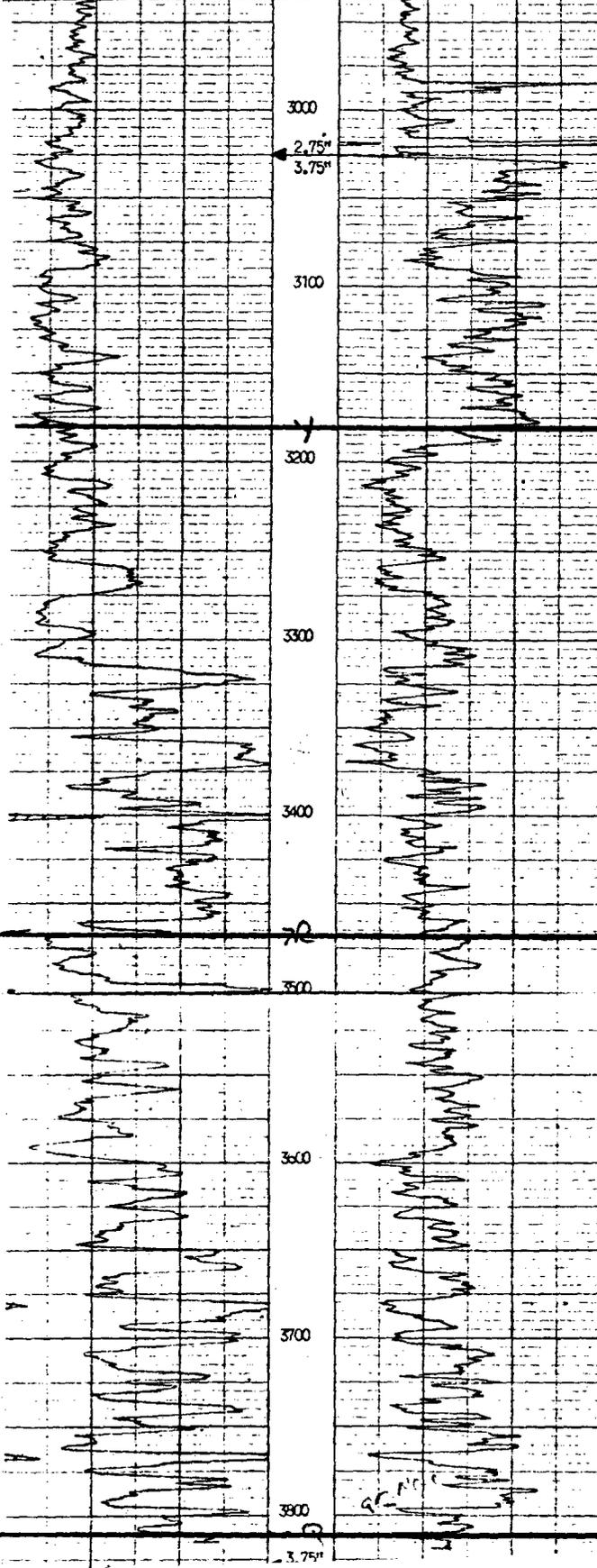


EXHIBIT 5-14

GEOL. SECTION
 SOUTHWEST DIV.
 S. W. REGION

RADIOACTIVITY LOG		WELEX JET SERVICES, INC.	
		LICENSED BY: WELL SURVEYS, INC.	
Location of Well COMPANY CONTINENTAL OIL COMPANY WELL METER B 22 NO. 5 FIELD SOUTH EUNICE COUNTY IZA STATE N. MEX. LOCATION 660' PSL & 660' PVL OF SEC. 22 T-22-S R-36-E.		FILE NO. COMPANY CONTINENTAL OIL COMPANY WELL METER B 22 NO. 5 FIELD SOUTH EUNICE COUNTY IZA STATE N. MEX. LOCATION 660' PSL & 660' PVL OF SEC. 22 T-22-S R-36-E.	
LOG MEAS. FROM DERRICK FLOOR ELEV. 3514' DRLG. MEAS. FROM DERRICK FLOOR ELEV. 3514' TOP OF 8 5/8" SURFACE PERM. DATUM CASING FLANGE ELEV. 3504'			
TYPE OF LOG RUN NO. DATE JOB NO. TOTAL DEPTH (DRILLER) EFFECTIVE DEPTH (DRILLER) TOTAL DEPTH (W/A LOG) TOP OF LOGGED INTERVAL BOTTOM OF LOGGED INTERVAL TYPE OF FLUID IN HOLE FLUID LEVEL MAXIMUM RECORDED TEMPERATURE NEUTRON SOURCE STRENGTH & TYPE SOURCE SPACING—IN. LENGTH OF MEASURING DEVICE—IN. O.D. OF INSTRUMENT—IN. TIME CONSTANT—SECONDS LOGGING SPEED FT./MIN.	GAMMA RAY - 1 - 7/13/55 375-478 3830 3823 3823 30 3512 WATER 100 600 M 3-75 9-1 3 5/8 3-1 40 20 0.4 274 INGRAM MR. THORNTON	NEUTRON - 1 - 7/13/55 359-688 3830 3823 3823 30 3821 WATER 100 600 M 3-75 9-1 3 5/8 3-1 40 20 0.4 275 INGRAM MR. THORNTON	

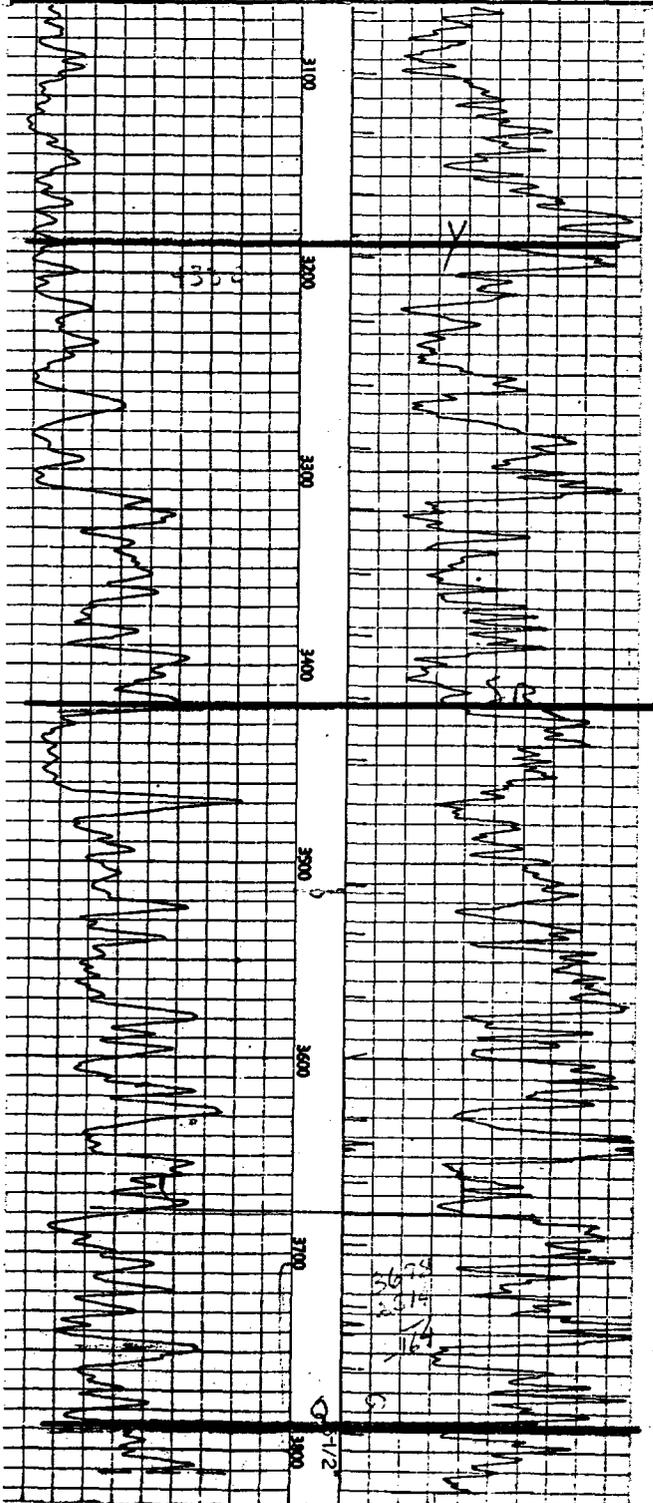


EXHIBIT 5-15

ANE RADIOACTIVITY LOG WELLS REGION

COMPANY: CONTINENTAL OIL CO.
 WELL: W-22 #6
 FIELD: SOUTH SIDE
 COUNTY: LEA STATE: N.M.
 LOCATION: 560 T-22-6, 1980 FE.,
 SEC 22 T-22-6, R-36-4

COMPANY: CONTINENTAL OIL CO.
 WELL: W-22 #6
 FIELD: SOUTH SIDE
 COUNTY: LEA STATE: N.M.

LOG MEAS. FROM ROTARY TABLE
 ORIG. MEAS. FROM ROTARY TABLE
 CORR. DATUM OR WTD LEVEL

MAY 1951
 MAY 1951
 MAY 1951

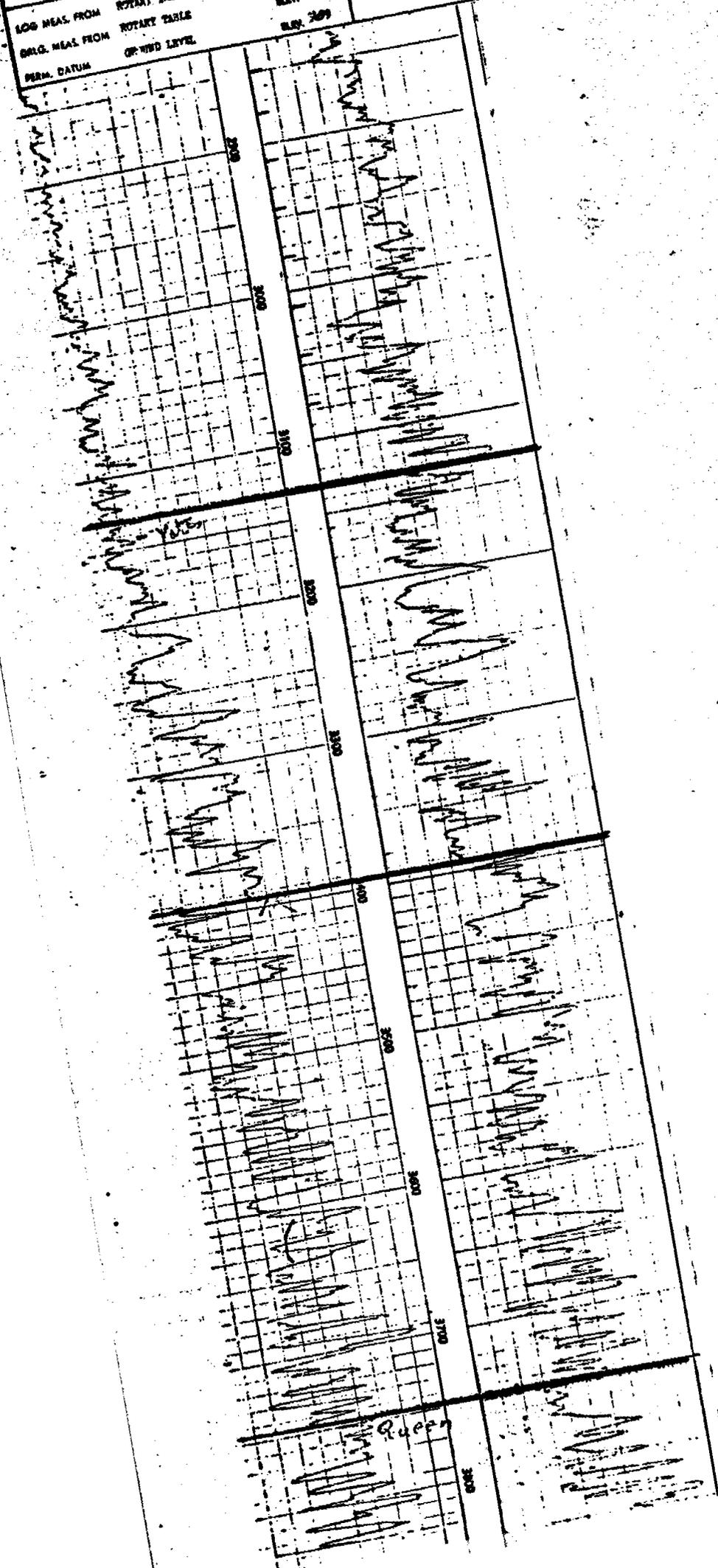


EXHIBIT 5-16

29-22-36



COMPANY: CONTINENTAL OIL CO. LOCATION

WELL: MEYERS A-25 # 6

FIELD: S. JUNICE

COUNTY: LEA STATE: N. MEX.

LOCATION: 660' FN & EL. SEC. 29. FILE NO.

T-22-S, R-36-E LOG NO. 55726

LOG MEAS. FROM: 10' ABOVE CASING HEAD ELEV. 3542.

DRILG. MEAS. FROM: 10' ABOVE CASING HEAD ELEV. 3542.

PERM. DATUM: TOP OF 5 1/2" CASING H. ELEV. 3532.

TYPE OF LOG	G/R	N/N
RUN NO.	1-NW	1-NW
DATE	5-25-57	5-25-57
TOTAL DEPTH (DRILLER)	3815	3815
EFFECTIVE DEPTH (DRILLER)	3811	3811
EFFECTIVE DEPTH (WESTERN)	3811	3811
TOP OF LOGGED INTERVAL	SURF.	SURF.
BOTTOM OF LOGGED INTERVAL	3758	3805.5
TYPE OF FLUID IN HOLE	OIL	OIL
FLUID LEVEL	FULL	FULL
SOURCE STRENGTH & TYPE		S10A3
SOURCE SPACING		13.5
DETECTOR CLASS	SCINT.	SCINT.
DETECTOR TYPE	04G1	D6N1
DETECTOR LENGTH	4"	4"
O.D. OF INSTRUMENT IN.	2 5/8	2 5/8
TIME CONSTANT SEC.	2.0	2.0
LOGGING SPEED FT./MIN.	30	30
STATISTICAL VARIATION	RECORDED	RECORDED
SENSITIVITY REFERENCE	C-533	D-368
RECORDED BY	CARROLL & ROSS	
INTERPRETED BY	MR. BILL WHEELER	

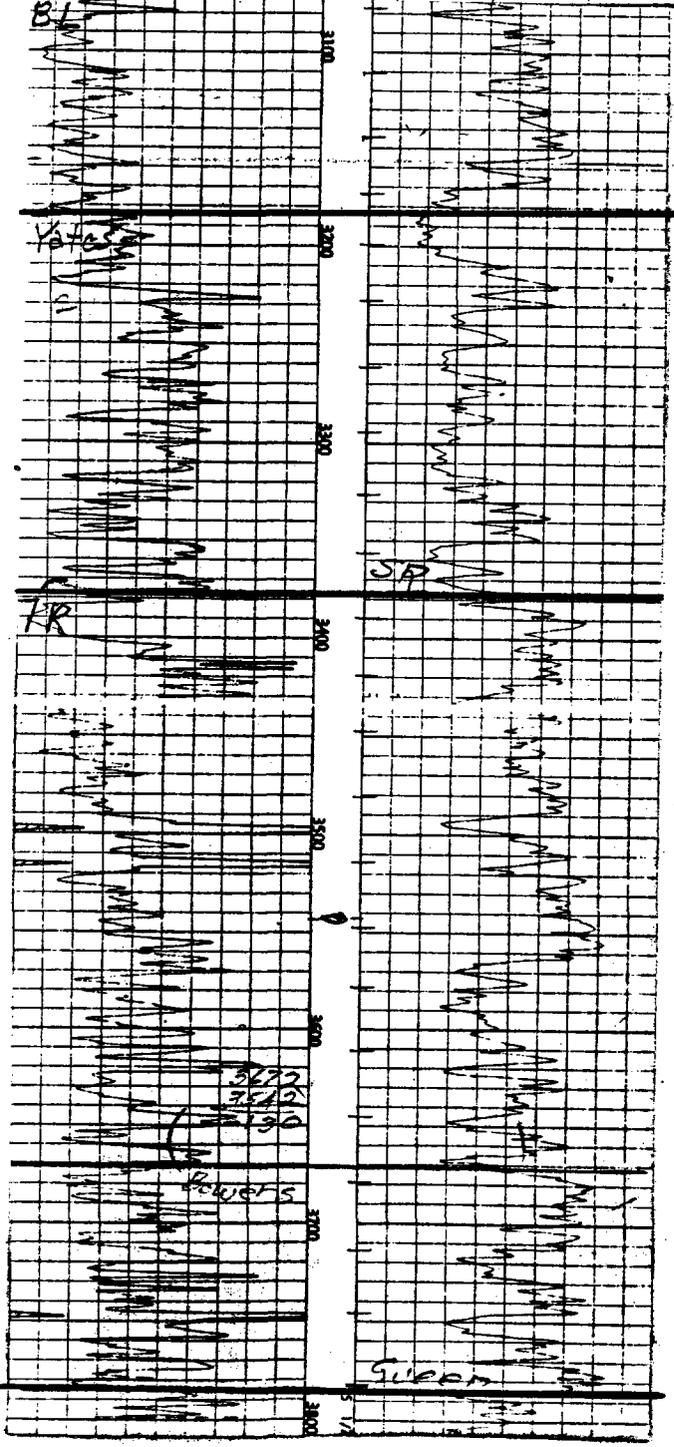


EXHIBIT 5-17



RADIOACTIVITY LOG
WELEX JET SERVICES, Inc.

FILE RM 21597R

Location of Well: COMPANY CONTINENTAL OIL COMPANY
 WELL NO. 8
 FIELD SOUTH BUNDE
 COUNTY LEA STATE TEXAS
 LOCATION 1530' FEL & 660' FEL, SEC. 29, T. 22 - S. R. 3 - E.
 LOG MEAS. FROM 10' ABOVE BRAKEN HEAD FLANGE ELEV. 3528'
 ORIG. MEAS. FROM 10' ABOVE BRAKEN HEAD FLANGE ELEV. 3528'
 PERM. DATUM TOP BRAKEN HEAD FLANGE ELEV. 3518'

GEOL. SEC. 21
 ROSWELL DIV.
 S. W. RECORD

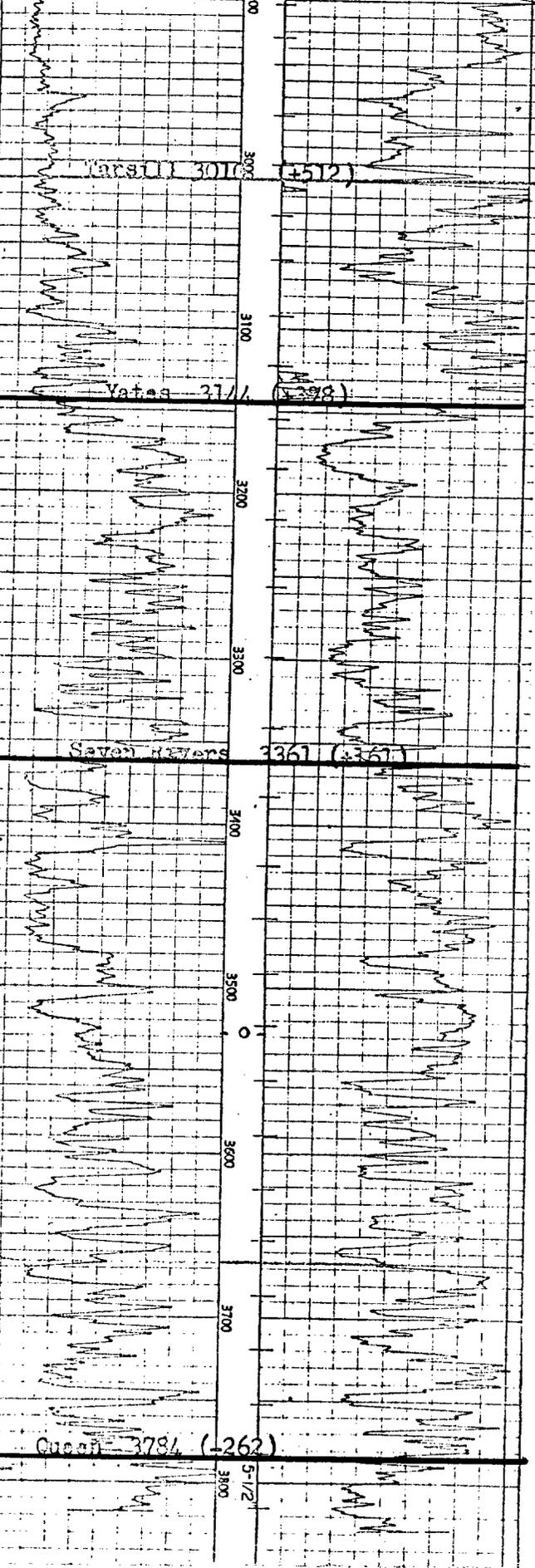


EXHIBIT 5-18

ROSWELL DIV
S. W. P. ONY

8-22-36

Reproduced By
West Texas Electrical Log Service

Dallas 2, Texas

REFERENCE N° A 5816 -E



RADIOACTIVITY LOG
WELEX JET SERVICES, Inc.

FILE NO.

Location of Well <i>Elev. 35310 35240</i>		COMPANY CONTINENTAL OIL COMPANY	WELL MEYER B - 28 HO. 7
WELL MEYER B - 28 HO. 7		FIELD SOUTH EUNICE	FIELD SOUTH EUNICE
COUNTY LEA		STATE TEXAS	COUNTY LEA
LOCATION 660' P.M. & 1980' P.M. OF SEC. 28 T - 22 - N, R - 36 - E.		STATE TEXAS	LOCATION 660' P.M. & 1980' P.M. OF SEC. 28 T - 22 - N, R - 36 - E.
LOG MEAS. FROM 10' ABV 5 1/2" CSG HD FLG	ELEV. 3534'	PERM. DATUM 5 1/2" CSG HEAD FLANGE	ELEV. 3524'
DRLG. MEAS. FROM 10' ABV 5 1/2" CSG HD FLG	ELEV. 3534'		
TYPE OF LOG RUN NO. 1		GAMMA RAY - 1 -	H - GAMMA - 1 -
DATE 11/15/56		64-2012 &	11/15/56
JOB NO.		3800	625-690
TOTAL DEPTH (DRILLER)		3800	3800
EFFECTIVE DEPTH (DRILLER)		3799	3799
TOTAL DEPTH (R/A LOG)		3799	3799
TOP OF LOGGED INTERVAL		50	50
BOTTOM OF LOGGED INTERVAL		3797	3797
TYPE OF FLUID IN HOLE		OIL	OIL
FLUID LEVEL		FULL	FULL
MAXIMUM RECORDED TEMPERATURE			600 H
NEUTRON SOURCE STRENGTH & TYPE			13.75
SOURCE SPACING-IN.			C 209
DETECTOR CLASS		CHAMBER	
DETECTOR TYPE		E 127	C 209
LENGTH OF MEASURING DEVICE-IN.		3 6	9.1
O.D. OF INSTRUMENT-IN.		3 5/8	3 5/8
TIME CONSTANT-SECONDS		1.5	1.0
LOGGING SPEED FT./MIN.		20-40	20-40
		20	20
STATISTICAL VARIATION-IN.		0.2	0.35
SENSITIVITY REFERENCE		274	D 368
RECORDED BY		LITE	LITE
WITNESSED BY		MR. BILL WHEELER	

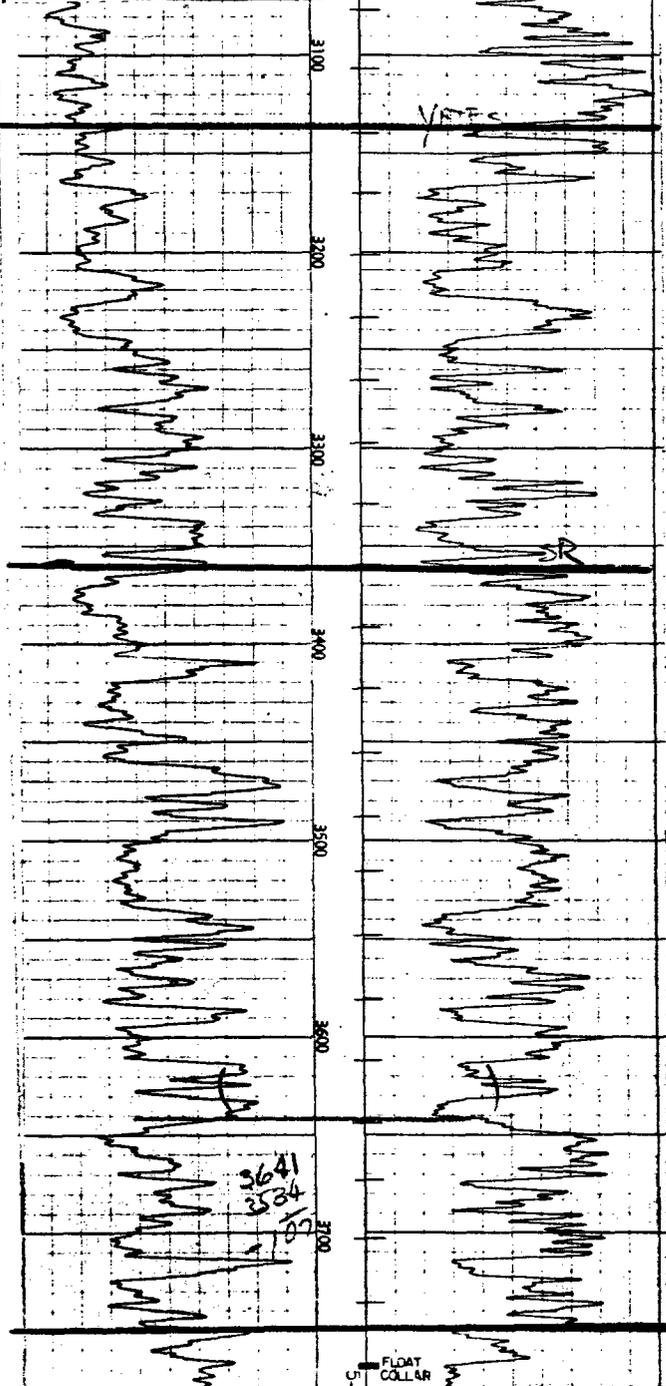


EXHIBIT 5-19

UP
1
FLOAT COLLAR

GEOLOGICAL SECTION
 ROSWELL L...
 S. W. REGION

Reproduced By
 West Texas Electrical Log Service
 Dallas, Texas

REFERENCE No A 4412 -A

RADIOACTIVITY LOG	
WELEX JET SERVICES, Inc.	
LICENSED BY: WELL SURVEYS, INC. FILE NO.	
Location of Well	COMPANY: CONTINENTAL OIL COMPANY
WELL	METER B - 28 NO. 3
FIELD	SOUTH EUNICE POOL
COUNTY	IRA STATE N. MEX.
LOCATION	660' PBL & 660' PBL OF SEC. 28, T-22-S, R-36-E
LOG MEAS. FROM	1' ABOVE ROTARY TABLE ELEV. 3517'
DRLG. MEAS. FROM	KELLY DRIVE BUSHING ELEV. 3517'
PERM. DATUM	8 5/8" SURF. CSO. PLANCE ELEV. 3505'
TYPE OF LOG	GAMMA RAY NEUTRON
RUN NO.	- 1 -
DATE	11/7/55
JOB NO.	466-478
TOTAL DEPTH (DRILLER)	3815
EFFECTIVE DEPTH (DRILLER)	3811
TOTAL DEPTH (R/A LOG)	3815
TOP OF LOGGED INTERVAL	600
BOTTOM OF LOGGED INTERVAL	3802
TYPE OF FLUID IN HOLE	OIL
FLUID LEVEL	
MAXIMUM RECORDED TEMPERATURE	
NEUTRON SOURCE STRENGTH & TYPE	600 W
SOURCE SPACING-IN.	3-75
LENGTH OF MEASURING DEVICE-IN.	30
O.D. OF INSTRUMENT-IN.	3 5/8
TIME CONSTANT-SECONDS	5.3
LOGGING SPEED FT./MIN.	10
STATISTICAL VARIATION-IN.	20
SENSITIVITY REFERENCE	0.3
RECORDED BY	27L
WITNESSED BY	BIJES
	MR. COOK

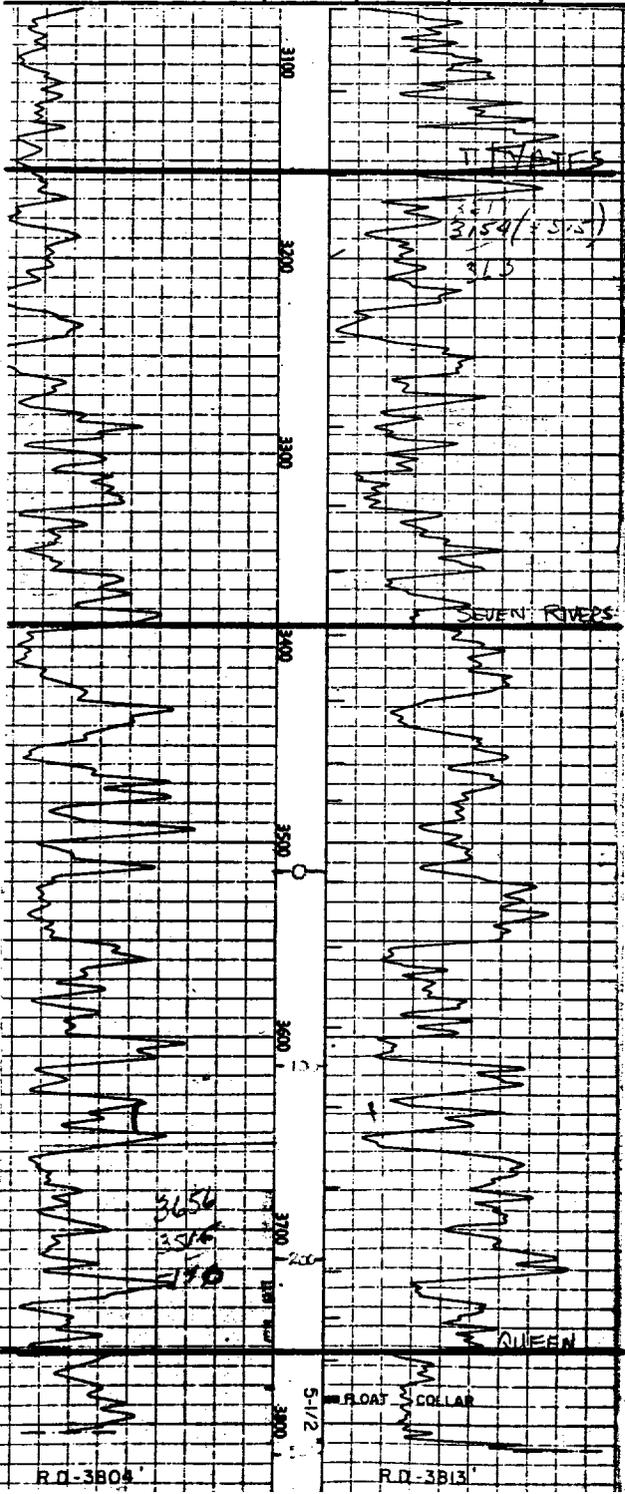


EXHIBIT 5-20

GEOLOGICAL SECTION
 ROSWELL DIV.
 S. W. REGION

28-22-36

PERFORATING GUNS ATLAS CORPORATION

Simultaneous

Radiation Log

LOG NO. 16313	COMPANY CONTINENTAL OIL COMPANY
STATION MO888	WELL MEYERS B - 28 # 18
TRUCK NO. GR-24	FIELD SOUTH EUNICE POOL
	COUNTY LEA, NEW MEXICO
	STATE LEA, NEW MEXICO
	LOCATION 1980' F.M. 668' F.M. SEC. 28 Twp. 22 S RGE. 36 E
	LOG MEAS. FROM 1' ABOVE R.T. ELEV. N.A.
	DRLG. MEAS. FROM SAME ELEV. N.A.
	PERMANENT DATUM 8 1/2" C.S.F. ELEV. N.A.
	CASING RECORD
	BORE HOLE RECORD
	SIZE - WT. FROM TO BIT SIZE - FROM TO
	8 5/8 - 24 SURF 351 12 1/4
	5 1/2 - 14 SURF 3819 7 7/8
TYPE OF LOG RUN NO. DATE TOTAL DEPTH - DRILLER TOTAL DEPTH - P.G.A.C. FLUID IN HOLE FLUID LEVEL MAXIMUM TEMPERATURE ° F. INSTRUMENT O.D. AND NO. INSTRUMENT TYPE NEUTRON SOURCE TYPE CPS FOR CALIB. STD. - GR - N	GAMMA RAY - NEUTRON ONE 2-28-57 3816 3884 OIL FILL 3 5/8 - 211 TA - PH - 125 RB - 608 148 288
RECORDED BY WITNESSED BY	J. B. BRAUNER R. C. LAMMEN

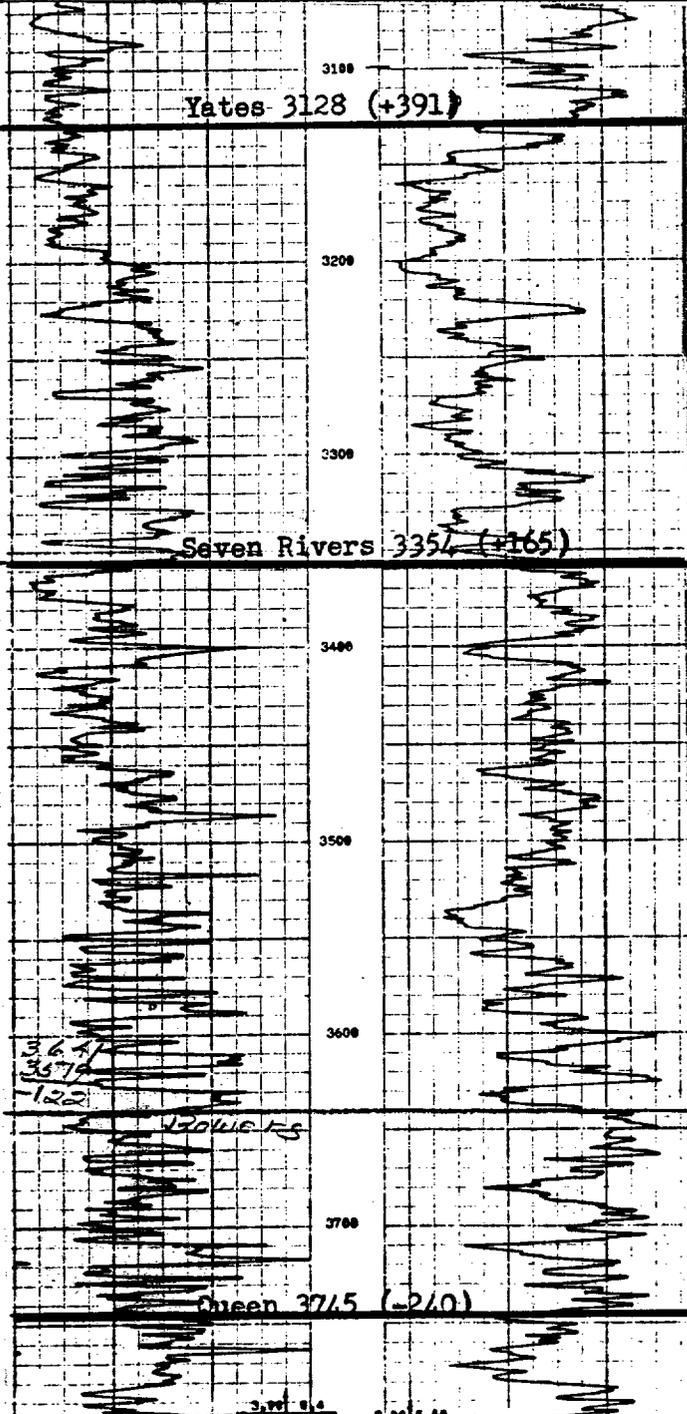


EXHIBIT 5-21

28-22-36

Reproduced By
WEST TEXAS ELECTRICAL LOG SERVICE
 GEOL. SECTION
 ROSWELL DIV.
 S. W. REGION
 Dallas 2, Texas
 REFERENCE No A 5421 -C

 McCULLOUGH TOOL COMPANY RADIATION LOG			
Location of Well 1960 th FR. N. & E. LINES SEC. 28-22S-35E ELEV. S. L. 3503 3510 DF		COMPANY CONTINENTAL OIL COMPANY WELL METER B-28 #6 FIELD SO. FRONT COUNTY LEA STATE NEW MEXICO LOCATION	
Log Meas. From 10' ABOVE 5 1/2" CASING FLANGE Elev. 3115 Drig. Meas. from SAME Elev. 3015 Perm. Datum 5 1/2" CASING FLANGE Elev. 3015		WIRE METER B-28 #6 NO. 50. 500000 COUNTY LEA STATE NEW MEXICO LOCATION	
Rec. Trk. No. 1190 Trk. No. 996 Trk. Oper. ALLMAN Log Ticket No. A-10045 Date 6-24-56 Maximum Recorded Temp. Total Depth (Driller) 3811.5' Effective Depth (McCullough) 3811.5' Type of Fluid in Hole OIL Fluid Level 410' O.D. of Instrument 2.5" Length of Device - Overall 11' Neutron Source # N-241 Spacing 19.5" 2.5 Setting Recorded By XREST-MANNING Witnessed By MR. SHEPHERD		COMMENTS: CONTINENTAL OIL COMPANY LOGGING UNIT OPERATING	
Type of Log	GAMMA RAY	GAMMA RAY	NEUTRON
Run No.	ONE-5"-2"	ONE-5"-2"	ONE-5"-2"
Top of Logged Interval	2800'-5" 0'-2"	2800'-5" 0'-2"	2800'-5" 0'-2"
Bottom of Logged Interval	3802'-5" 3900'-2"	3802'-5" 3900'-2"	3802'-5" 3900'-2"
Time Constant	3S-125-250CTS. (0-4) 5"-2"	3S-122-500CTS. (0-4) 5"-2"	
Logging Speed Ft./Min.	22-5" 60-2"	22-5" 60-2"	
Statistical Variation			
Sensitivity-Micro-Roentgens Per Hr. Per. Inch	2.0		

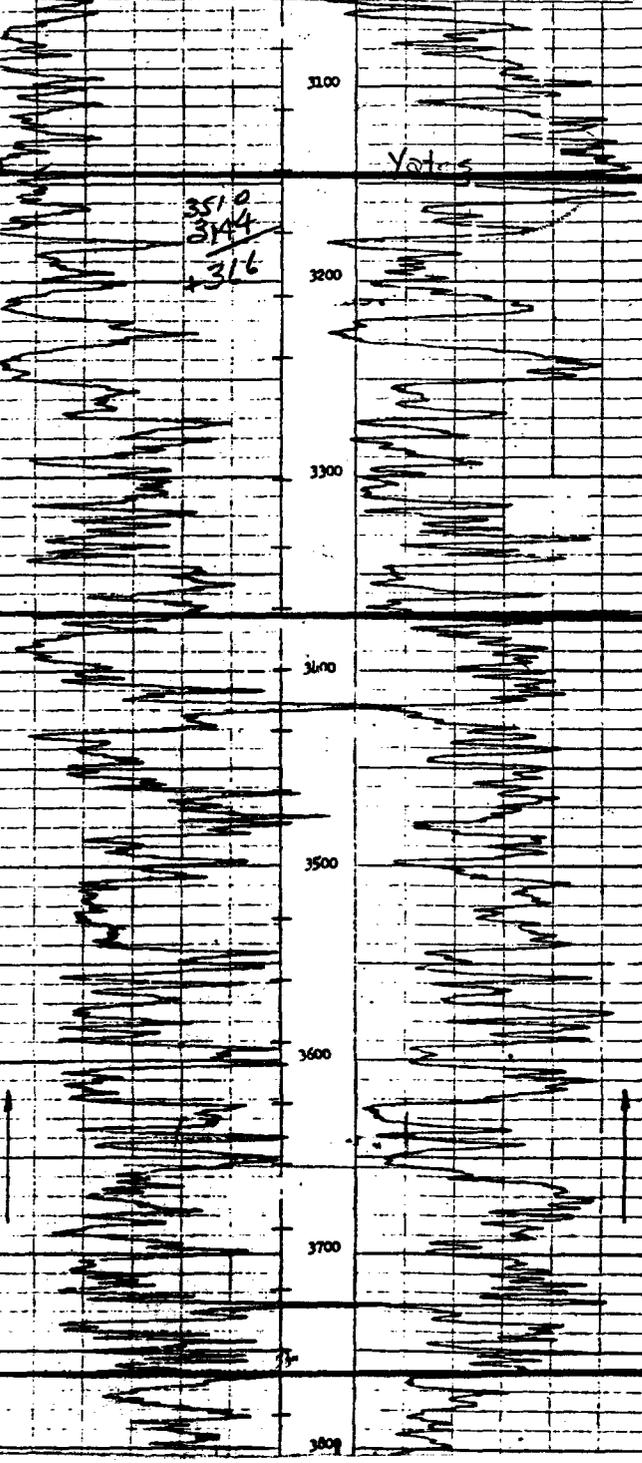


EXHIBIT 5-22

GEOL SECTION
 ROSWELL DIV.
 S. W. REGION

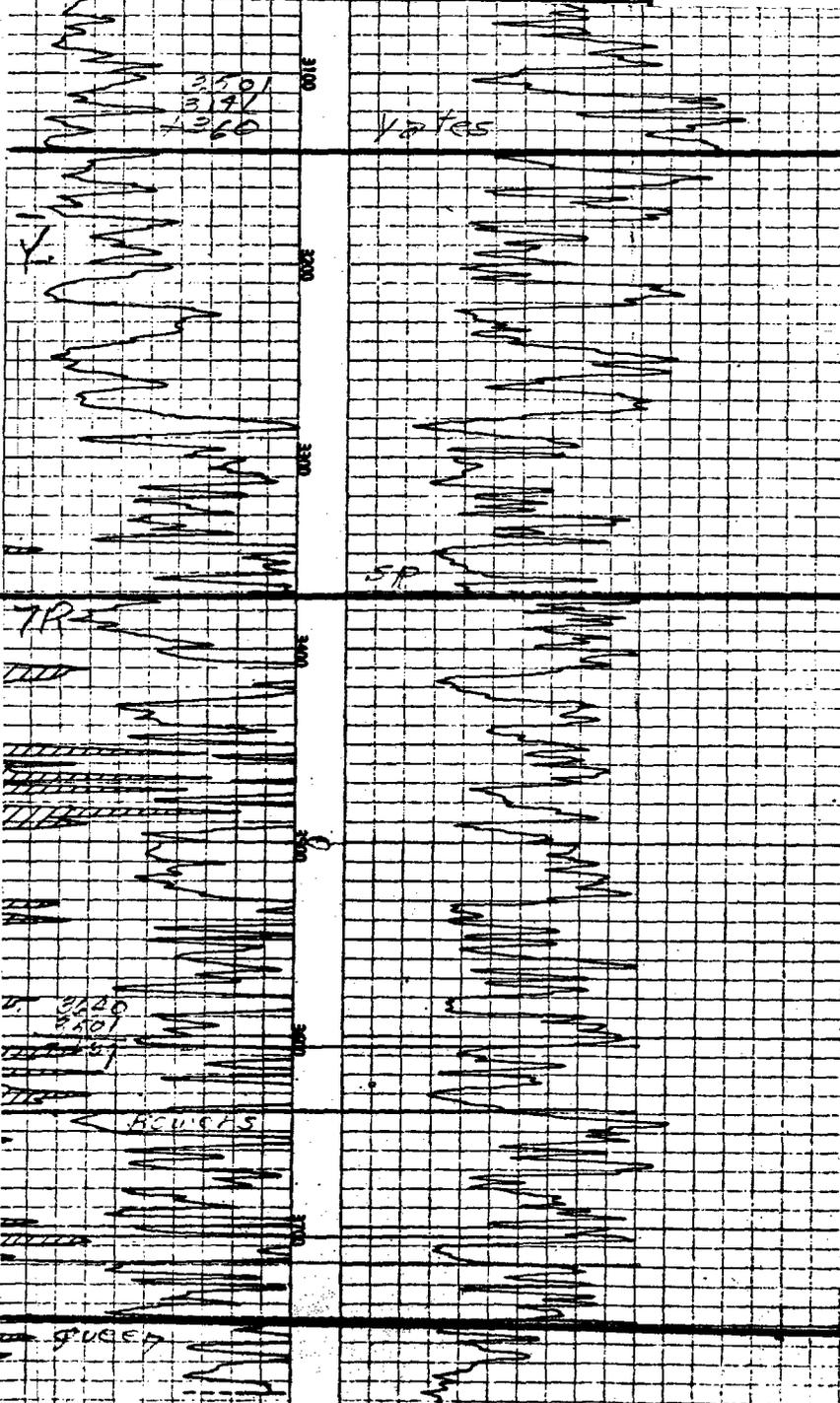
28-22-36

THE WESTERN COMPANY
GAMMATRON
Simultaneous Radioactivity Log

LOCATION: *2110 FSL 330 FEL SEC*
 COMPANY: **TEXAS PACIFIC**
 WELL: **CHRISTMAS # 3**
 FIELD: **SOUTH EUNICE**
 COUNTY: **LEA** STATE: **N. MEX.**
 LOCATION: **2110' FSL 330' FEL, SEC.**
 LOG NO: **7565** 20, T-22-S, R-36-E

LOG MEAS FROM: **1' ABOVE R.T.** ELEV. **3501**
 ORIG MEAS FROM: _____ ELEV. _____
 PERM. DATUM: **GROUND LEVEL** ELEV. **3493.5**

RUN NO.	ONE	ONE
TYPE OF LOG	GAMMA	NEUTRON
DATE	7-1-36	7-1-36
TOTAL DEPTH (OPERATOR)	3802	3802
EFFECTIVE DEPTH (OPERATOR)		
EFFECTIVE DEPTH (WESTERN)	3796	3796
TOP OF LOGGED INTERVAL	SURF	SURF
BOTTOM OF LOGGED INTERVAL	3786	3795
TYPE OF FLUID IN HOLE	MUD	MUD
FLUID LEVEL	60	60
NEUTRON SOURCE TYPE		600N
SOURCE SPACING IN.		3.75
LENGTH OF DETECTOR IN.	30	5.1
O.D. OF INSTRUMENT IN.	3 5/8	3 5/8
TIME CONSTANT SEC.	3.0	2.5
LOGGING SPEED FT/MIN.	18-35	18-35
STATISTICAL VARIATION IN.		
SENSITIVITY REFERENCE	274	275
RECORDED BY	MR. KEVIN WATSON & MR. JOHNNY FRENCH	
WITNESSED BY		



R.D. 3795
 T.D. 3796
 R. OLSEN PERSONAL
 CHRISTMAS

EXHIBIT 5-24

GEOLOGICAL SECTION
 ROSWELL DIV.
 S. W. REGION

33-22-36

WELEX



RADIOACTIVITY LOG

COMPANY ATLANTIC REFINING COMPANY & R. OLSEN WELL J. L. SELBY #4 FIELD SOUTH EUNICE COUNTY LEA STATE NEW MEXICO	COMPANY ATLANTIC REFINING COMPANY & R. OLSEN	
	WELL J. L. SELBY #4	
	FIELD SOUTH EUNICE	
	COUNTY LEA STATE NEW MEXICO	
Location 660' N/L 660' W/L		Other Logs
Sec. 33 Twp. 22-S Rge. 36-E		Elevation KB. 3493' DF. 3492' GL.
Permanent Datum 7 5/8" CASING HEAD FLANGE 3483' Log Measured From TOP DRIVE BUSHING Drilling Measured From TOP DRIVE BUSHING		
Type Log	G/R	N/Y
Run No.	ONE	ONE
Date	2-27-59	2-27-59
Total Depth Driller	3810'	3810'
Present Depth Driller	3810'	3810'
Total Depth Welex	3778'	3778'
Survey Begins	3765'	3777'
Survey Ends	0'	0'
Mud Data	OIL BASE-STARCH	
Type Fluid in Hole	MUD	MUD
Salinity PPM Cl	190,000	190,000
Weight lb./gal.	10.3	10.3
Fluid Level		
Max. Hole Temp.		
Recorded By	DEPUK SMITH & LADWIG	
Witnessed By		

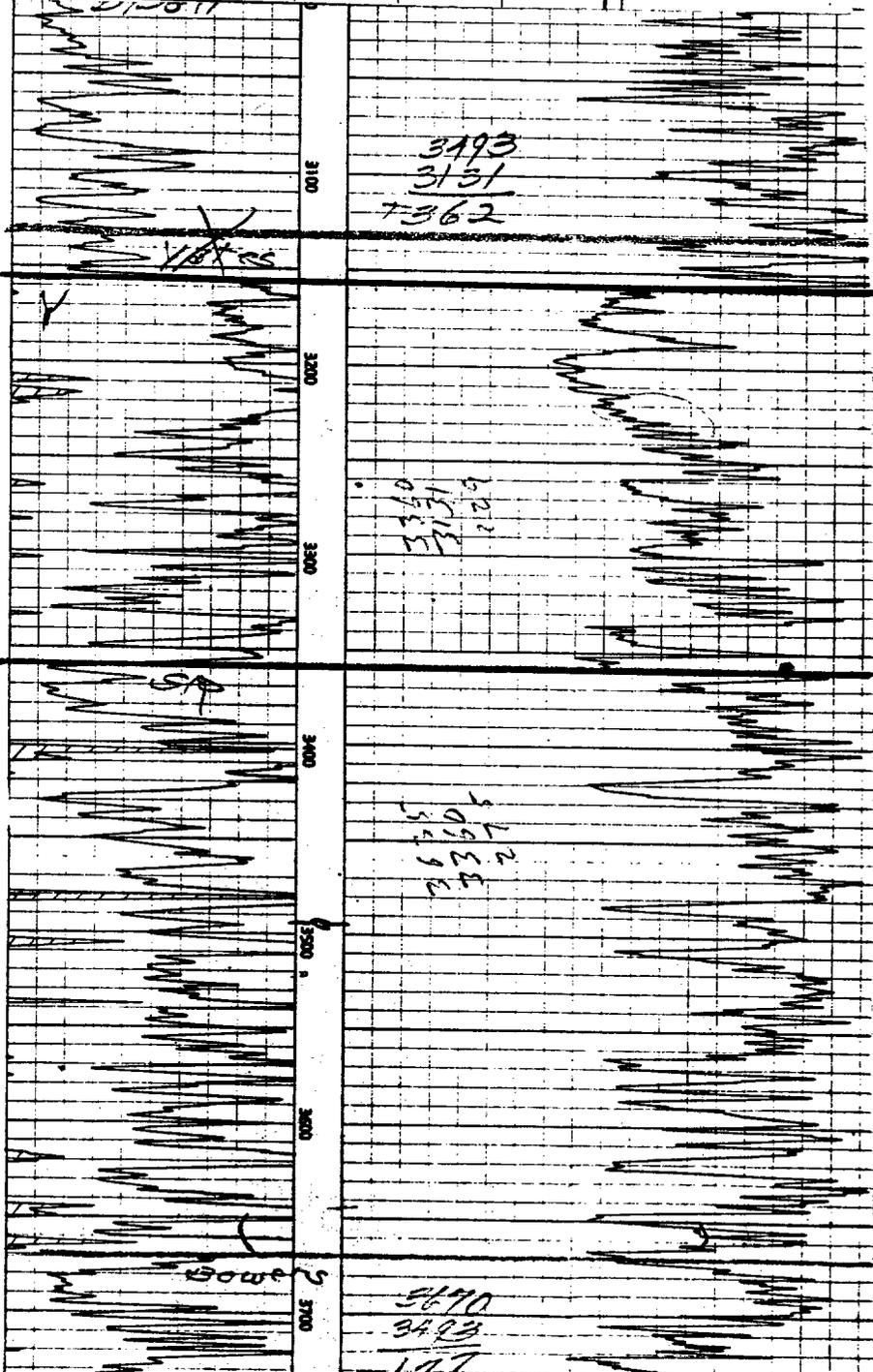


EXHIBIT 5-26

GEO. SECTION
 ROSWELL DIV.
 S. W. REGION

33-22-36



COMPANY ALBERT GACKLE, OPERATOR
 WELL ESMOND #4
 FIELD SOUTH EUNICE
 COUNTY LEA STATE NEW MEXICO

Location
 1980' FNL
 1980' FEL

Other Logs
 GUARD
 CALIPER

Sec. 33 Twp. 22-S Rgn. 36-E

Permanent Datum GROUND LEVEL Elev. 3492'
 Log Measured From 11' ABOVE GROUND LEVEL
 Drilling Measured From 11' ABOVE GROUND LEVEL

Type Log	G/R	N/G
Run No.	ONE	ONE
Date	9-14-58	9-14-58
Total Depth Driller	4005'	4005'
Present Depth Driller	4005'	4005'
Total Depth Well	3991'	4001'
Survey Begins	3991'	4001'
Survey Ends	0'	0'
Mud Data	STARCH-OIL	GEL

Type Fluid in Hole MUD
 Safety RPM C
 Weight lb./gal.
 Fluid Level 27'
 Max. Hole Temp. 105° F

Recorded By AVRES
 Witnessed By MR. SOUTHERLAND

3482 DF
 3475 gu.

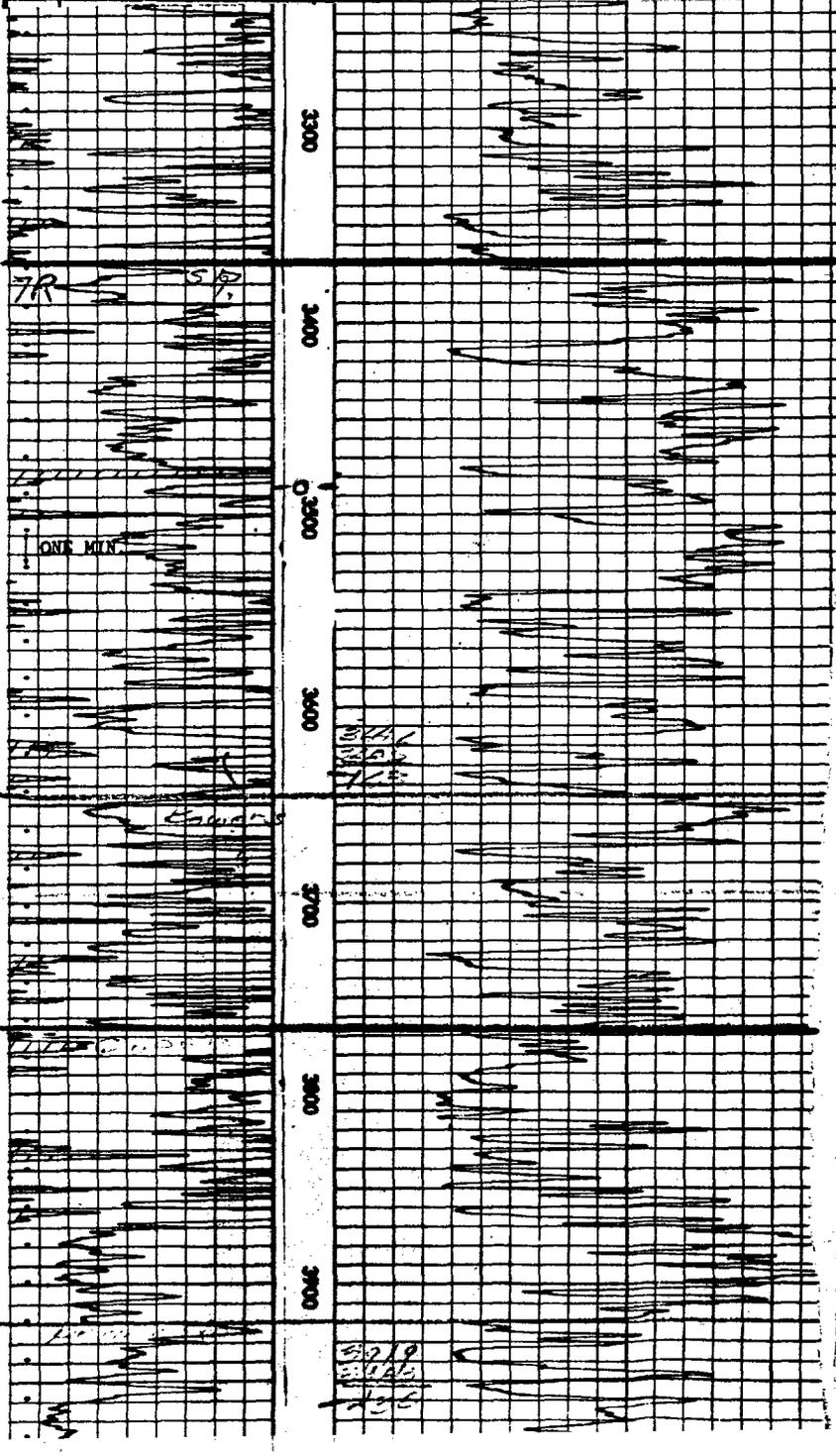


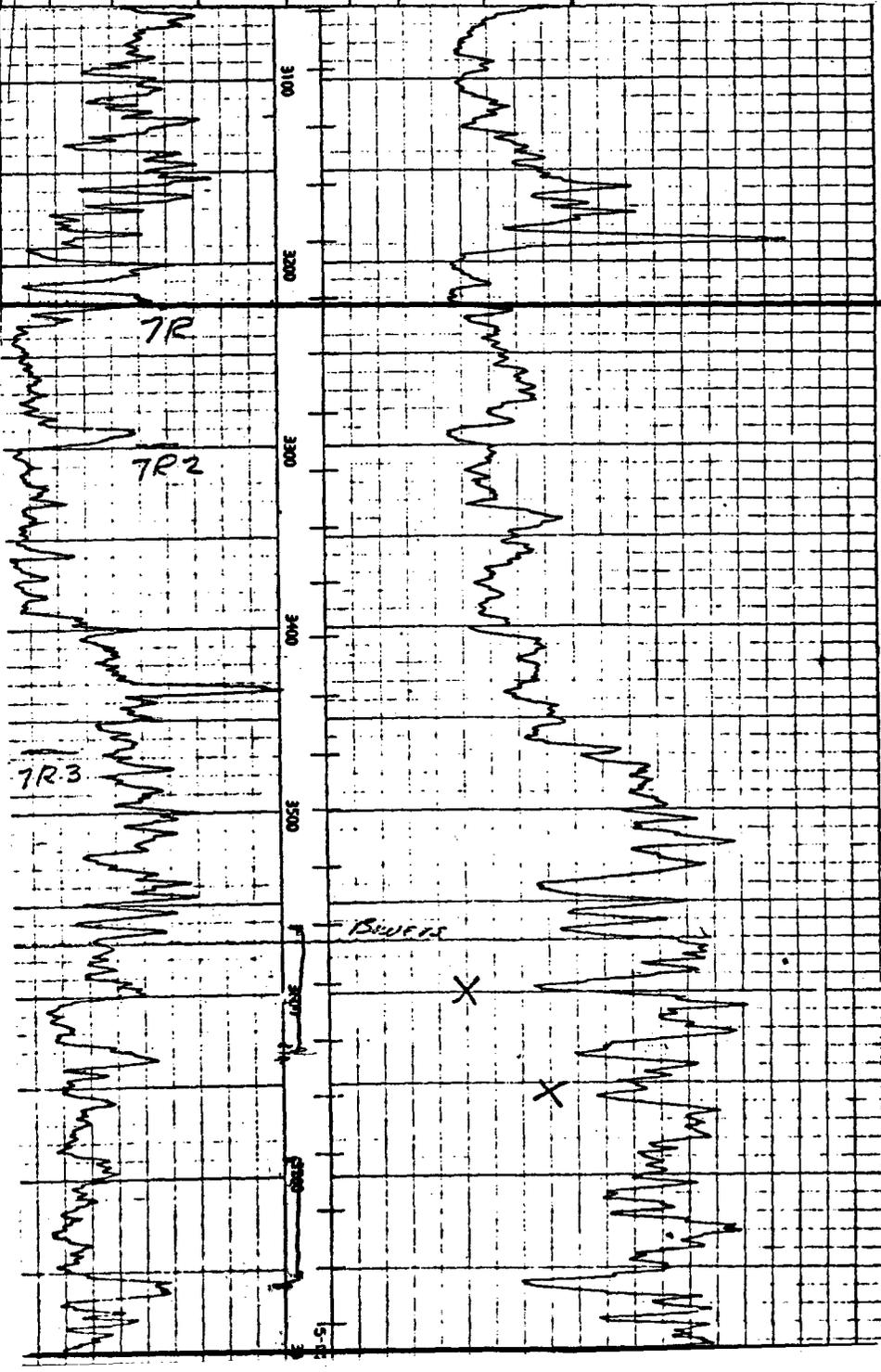
EXHIBIT 5-27

WELEX



RADIOACTIVITY LOG

COMPANY CONTINENTAL OIL COMPANY WELL NO. 33 # 9 FIELD SOUTH EUNICE COUNTY LEA STATE NEW MEXICO	COMPANY CONTINENTAL OIL COMPANY																																	
	WELL METER B-33 # 9																																	
	FIELD SOUTH EUNICE																																	
	COUNTY LEA STATE NEW MEXICO																																	
Location		Other Logs																																
1980' FSL 660' FAL SEC. 33 TWP. 22 RGE. 36																																		
Permanent Datum 12' ABOVE GEORGE LEY. Elev. 3486		Elevation KB 3486																																
Log Measured From KELLY BUSHING		DF																																
Drilling Measured From KELLY BUSHING		GL 3474																																
Type Log	GANGA	M - N																																
Run No.	-	-																																
Date	11-6-59	11-6-59																																
Total Depth Driller	3814	3814																																
Present Depth Driller	3814	3814																																
Total Depth Welex	3808	3808																																
Survey Begins	3795	3807																																
Survey Ends	10	10																																
Mud Data																																		
Type Fluid in Hole	WATER	WATER																																
Salinity PPM Cl.																																		
Weight lb./gal.	55	55																																
Fluid Level																																		
Max. Hole Temp.																																		
Recorded By	KEN SMITH																																	
Witnessed By	R. BRIEN																																	
<table border="1"> <thead> <tr> <th colspan="4">BORE HOLE RECORD</th> <th colspan="4">CASING RECORD</th> </tr> <tr> <th>Run</th> <th>Bit</th> <th>From</th> <th>To</th> <th>Size</th> <th>Wgt.</th> <th>From</th> <th>To</th> </tr> </thead> <tbody> <tr> <td></td> <td>12-1/8"</td> <td>0</td> <td>369</td> <td>8-5/8"</td> <td></td> <td>0</td> <td>369</td> </tr> <tr> <td></td> <td>7-7/8"</td> <td>369</td> <td>3814</td> <td>5-1/2"</td> <td></td> <td>0</td> <td>2814</td> </tr> </tbody> </table>			BORE HOLE RECORD				CASING RECORD				Run	Bit	From	To	Size	Wgt.	From	To		12-1/8"	0	369	8-5/8"		0	369		7-7/8"	369	3814	5-1/2"		0	2814
BORE HOLE RECORD				CASING RECORD																														
Run	Bit	From	To	Size	Wgt.	From	To																											
	12-1/8"	0	369	8-5/8"		0	369																											
	7-7/8"	369	3814	5-1/2"		0	2814																											



GEOL. SECTION
 ROSWELL DIV.
 S. W. REGION

33-22-36

PERFORATING GUNS ATLAS CORPORATION

Simultaneous

Radiation Log

LOG NO.	16368	COMPANY	CONTINENTAL OIL COMPANY
STATION	MOBBS	WELL	MEYER B-33 & 3
TRUCK NO.	GR-22	FIELD	SOUTH EUNICE
CONTINENTAL OIL COMPANY MEYER B-33 & 3 SOUTH EUNICE LEA	COUNTY	LEA, NEW MEXICO	
	STATE	NEW MEXICO	
	LOCATION	1960' FSL 660' FEL SEC. 33	
		TWP. 22 S RGE. 36 E	
	LOG MEAS. FROM	1' ABOVE R.T.	ELEV. 3495
DRUG. MEAS. FROM	SAME	ELEV. 3495	
PERMANENT DATUM	5/8" B.M.F.	ELEV. 3485	
CASING RECORD		BORE HOLE RECORD	
SIZE - WT. #	FROM	TO	BIT SIZE -" FROM TO
6 5/8 - 24	SUPP	362	
5 1/2 - 14		3850	7 3/4

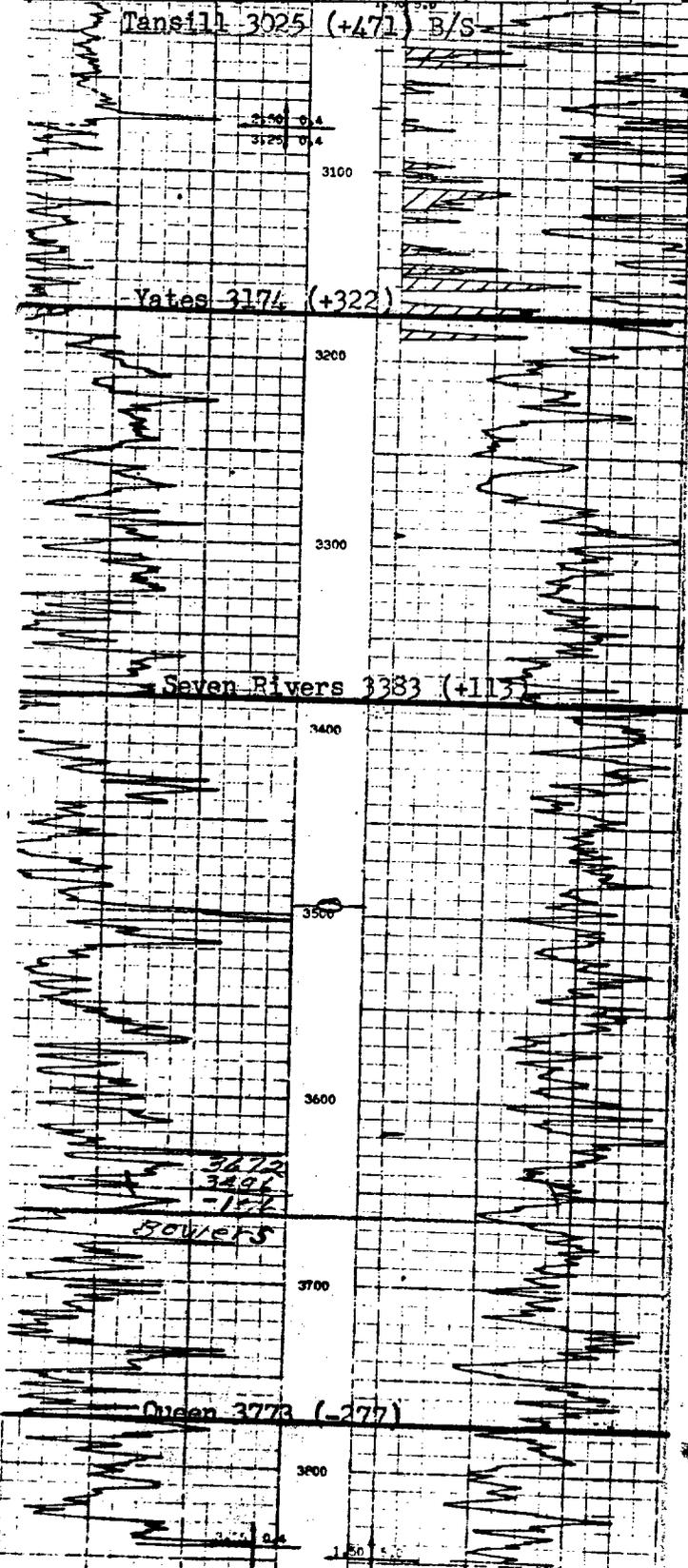


EXHIBIT 5-29

GEOLOGICAL SECTION
 ROSWELL DIV.
 S. W. REGION

33-22-36

SCHLUMBERGER WELL SURVEYING CORPORATION
ESTD 1915

Multaneous
Gamma Ray Neutron

COUNTY LEA FIELD or LOCATION S. EUNICE WELL MEYER 3-48 COMPANY CONTINENTAL OIL COMPANY	COMPANY CONTINENTAL	Other Surveys
	OIL COMPANY	
	WELL MEYER 3-48	Location of Well 660' FSL 1980' FWL
	FIELD S. EUNICE	
	LOCATION SEC 23 T. 22S R-30E	Elevation F. 477 K.B. or G.L. 477
COUNTY LEA		FILING No.
STATE NEW MEXICO		

Log Depths Measured From 10' Ft. above 8 5/8 CHF

RUN NO. _____
 Date 2-27-58
 First Reading 5771
 Last Reading _____
 Footage Measured 771
 Max. Depth Reached 5772
 Bottom Driller 772
 Maximum Temp. °F. _____
 Fluid Nature WATER
 Fluid Level _____
 Casing Size 5 1/2 in. in. 1
 Casing Weight 14 lb./Sur. to T.U. lb. f to
 Casing Size 6.1 in. 1
 Casing Weight lb. f to
 Bit Size 7 7/8 in. to in. to
 Bit Size in. to in. to
 No. Counters Used 2
 Type Equipment GNAH-5
 Type Panel UNP-C-265
 Opr. Rig Time 2 HOURS
 Truck No. 1578-ANDREWS
 Observer MCGILLUM
 Witness _____

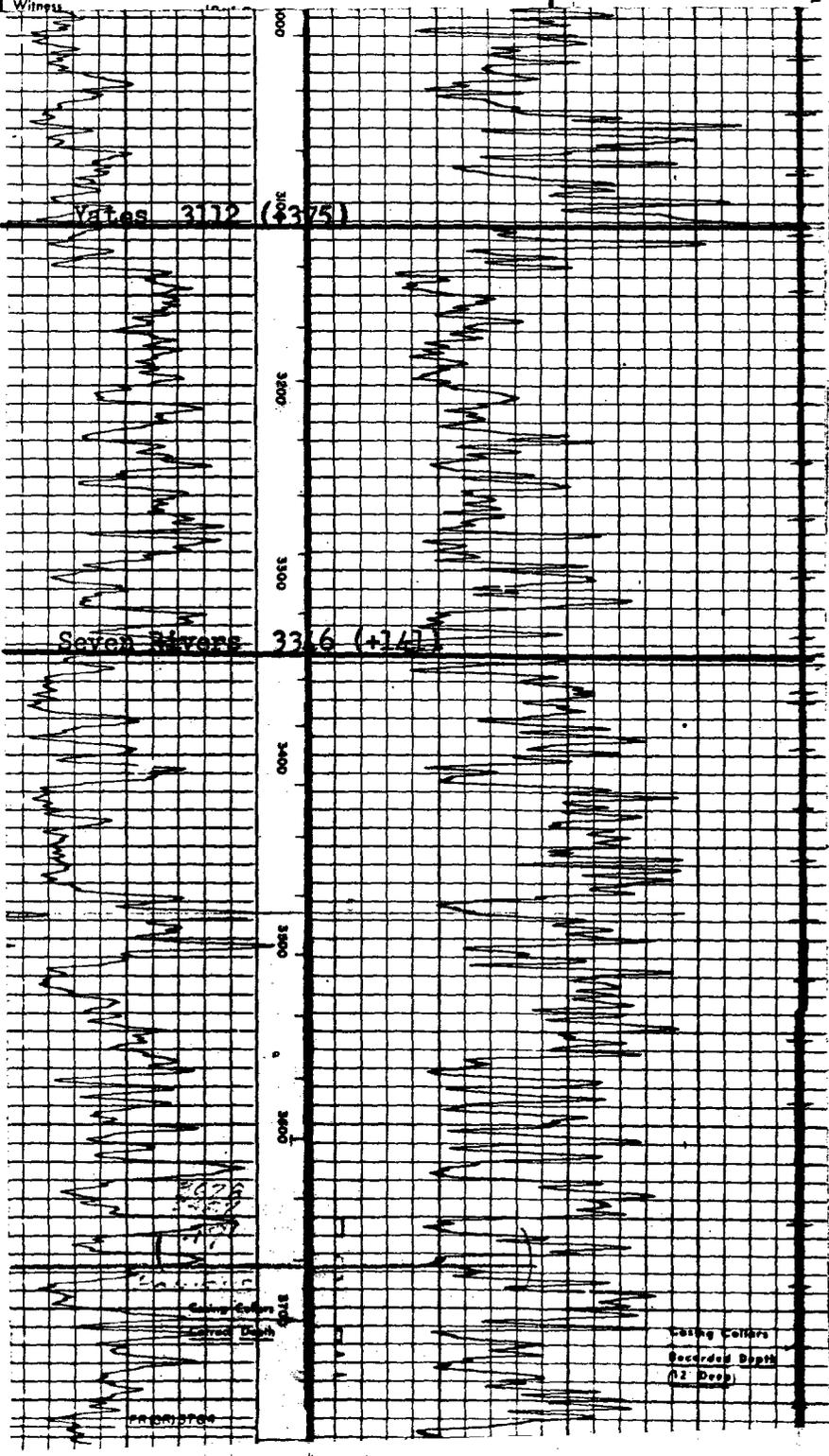
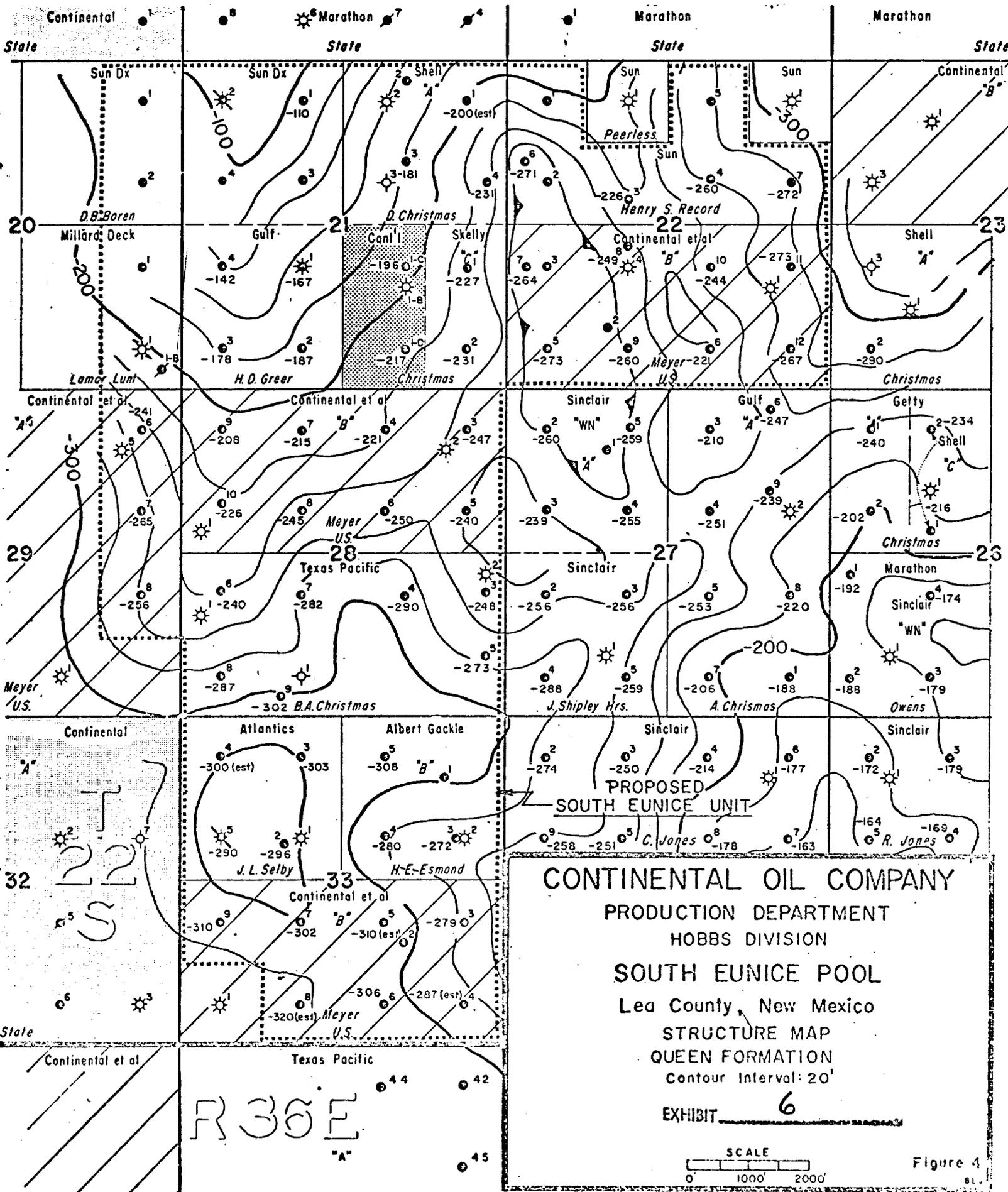


EXHIBIT 5-30



CONTINENTAL OIL COMPANY
 PRODUCTION DEPARTMENT
 HOBBS DIVISION
 SOUTH EUNICE POOL
 Lea County, New Mexico
 STRUCTURE MAP
 QUEEN FORMATION
 Contour Interval: 20'
 EXHIBIT 6

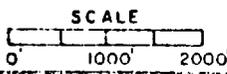
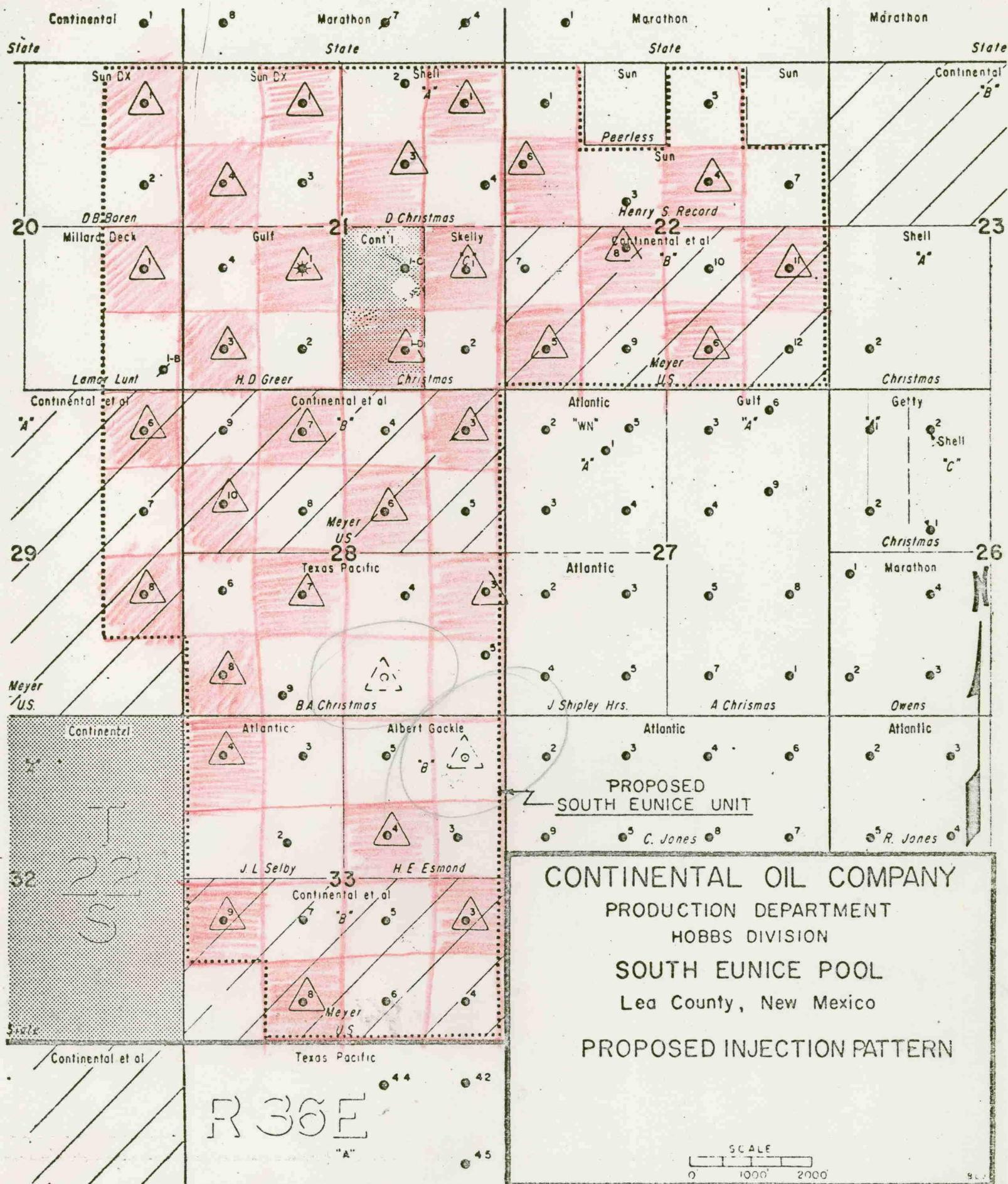


Figure 4



CONTINENTAL OIL COMPANY
 PRODUCTION DEPARTMENT
 HOBBS DIVISION
SOUTH EUNICE POOL
 Lea County, New Mexico
PROPOSED INJECTION PATTERN

SCALE
 0 1000' 2000'

- WATER INJECTION WELL TO BE DRILLED
- PROPOSED WATER INJECTION WELL

SUMMARY DATA SHEET

SOUTH EUNICE UNIT

GENERAL

1. Area, Acres	2720
2. Number of Producing Oil Wells	46
3. Number of Shut In Wells	17
4. Cumulating Oil Production to 9-1-70, bbls	3,135,218
5. Average Daily Oil Production Per Well, August 1970, bbls	1.5
6. Average Daily Water Production Per Well, August 1970, bbls	1.6
7. Average Gas-Oil Ratio, August 1970	23,024

GEOLOGICAL DATA

1. Producing Formation	Queen-Seven Rivers
2. Average Depth, Feet	3725
3. Type Structure	Flank of Anticline
4. Primary Pore Volume, Acre-Feet	40,800
5. Secondary Pore Volume, Acre-Feet	35,625

RESERVOIR PROPERTIES

1. Estimated Original Reservoir Pressure, Est., psi	1440
2. Estimated Reservoir Pressure At Waterflood, psi	300
3. Average Porosity	18.2
4. Reservoir Saturation	
a) Initial Water, %	35
b) Initial Reservoir Oil, %	65
c) Reservoir Oil at Waterflood, %	49.5
d) Residual Reservoir Oil After Sweep, %	33
5. Reservoir Oil Properties	
a) Initial Formation Volume Factor	1.16
b) Waterflood Formation Volume Factor	1.07
c) API Gravity	36.0
6. Estimated Original Oil in Place	
a) Stock Tank Barrels	30,500,000
b) Stock Tank Barrels Per Acre-Feet	748

RESERVE ESTIMATES

1. Primary Recovery, Percent of Stock Tank Oil in Place	10.4
2. Estimated Waterflood Recovery	
a) Barrels of Stock Tank Oil	3,310,000
b) Barrels of Stock Tank Oil Per Acre-Feet	93
c) Percent of Initial Stock Tank Oil in Place	10.8

TELEPHONE: HOBBS 393-7751
 AREA CODE - 505



UNITED CHEMICAL CORPORATION
 OF NEW MEXICO

601 NORTH LEECH

P. O. BOX 1499

HOBBS, NEW MEXICO 88240

Company Continental Oil Company

Field Jalmat - YATES SEVEN RIVERS

Lease Lynn A #4 Sampling Date 10-21-70

Type of Sample _____

WATER ANALYSIS

IONIC FORM	me/l *	mg/l *
Calcium (Ca ⁺⁺)	32.93	660
Magnesium (Mg ⁺⁺)	52.88	63
Sodium (Na ⁺)	(Calculated) 163.47	3,758
Carbonate (HCO ₃ ⁻)	22.40	1366
Carbonate (CO ₃ ⁻)	NOT	FOUND
Hydroxide (OH ⁻)	NOT	FOUND
Sulphate (SO ₄ ⁻)	8.33	400
Chloride (Cl ⁻)	218.55	7750
7.5ph c 68 °F		
Dissolved Solids on Evap. at 103° - 105° C		
Hardness as Ca CO ₃	85.81	4,291
Carbonate Hardness as CaCO ₃ (temporary)	22.40	1,120
Non-Carbonate Hardness as CaCO ₃ (permanent)	63.41	3,171
Alkalinity as CaCO ₃	22.40	1,120
Specific Gravity c 68° F	1.010	

MOORE BUSINESS FORMS, INC. LA

* mg/l = milligrams per Liter

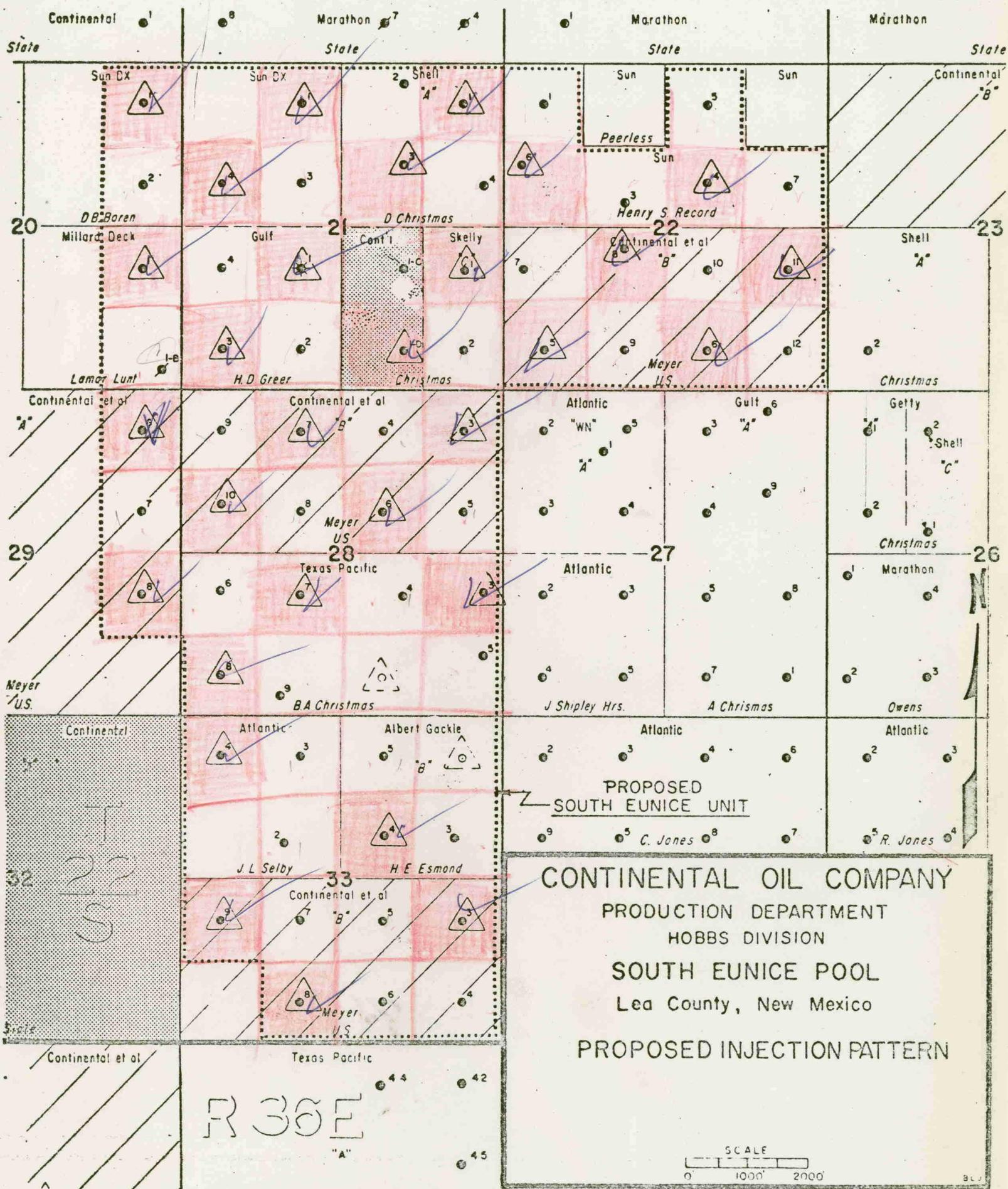
* me/l = milliequivalents per Liter

Calcium carbonate scaling index positive at 86°F

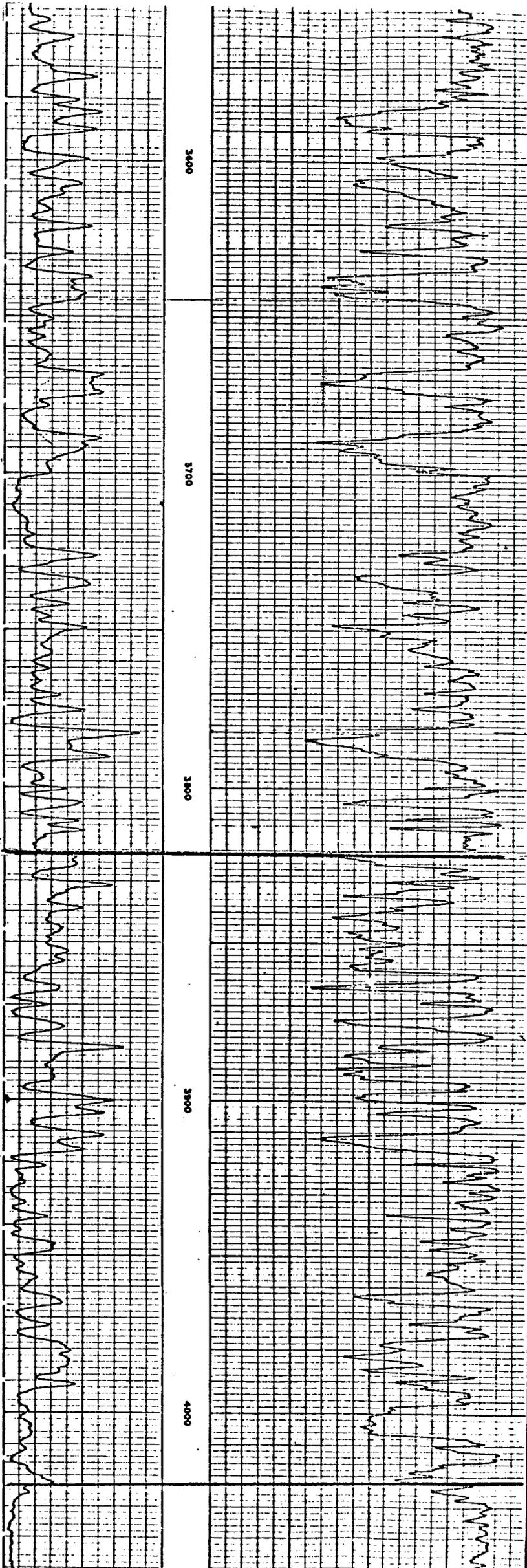
Calcium sulfate scaling index negative

EXHIBIT 9

Makes Water Work



CONTINENTAL OIL COMPANY
West Arrowhead Deep Unit No. 1
Elev. DF: 3569'



Top of Queen 3821'

Base of Queen and
Top of Grayburg 4023'

Location: 1980 FN&WL
Section 17, T22S
R36E, Lea County
New Mexico

SOUTH EUNICE UNIT - INJECTION WELL DATA

COMPANY, LEASE AND WELL NO.	TD PBD	SURFACE CASING		INTERMEDIATE CASING		PRODUCING CASING		PRODUCING INTERVAL				
		SIZE	DEPTH	CEMENT	SIZE	DEPTH	CEMENT		SIZE	DEPTH	CEMENT	
Sun DX D. B. Boren No. 1 660' FNL & 660' FEL Section 20-22-36	3830 3600	✓	12 1/2	211	250	9 5/8	1490	400	7	3687	300	3083-3557
MidHard Deck Lamar Lunt No. 1 1980' FSL & 660' FEL Section 20-22-36	3840 3839	✓	8 5/8	300	75	None			4 1/2	3839	250	3706-3802
Sun DX H. D. Greer No. 1 660' FNL & 1980' FWL Section 21-22-36	3794 3733	✓	13	202	225	9 5/8	1542	450	7	3693	325	OH 3693-3733
Sun DX H. D. Greer No. 4 1980' FNL & 660' FWL Section 21-22-36	3830	✓	13	208	250	9 5/8	1498	450	7	3708	300	OH 3708-3830
Shell Oil Company D. Christmas No. 1 660' FNL & 660' FEL Section 21-22-36	3884	✓	12 1/2	203	150	9 5/8	1502	450	7	3688	150	OH 3688-3884 Shot 3779-3884
Shell Oil Company D. Christmas No. 3 1650' FNL & 1650' FEL Section 21-22-36	3832	✓	8 5/8	305	300	None			5 1/2	3832	750	3737-3817
Gulf Oil Corporation H. D. Greer No. 1 1980' FSL & 1980' FWL Section 21-22-36	3842 3811	✓	13	32	35	8 5/8	1377	600	6	3695	150	OH 3695-3811 PERF 3146-3560

COMPANY, LEASE AND WELL NUMBER	TD PBD	SURFACE CASING			INTERMEDIATE CASING			PRODUCING CASING			PRODUCING INTERVAL
		SIZE	DEPTH	CEMENT	SIZE	DEPTH	CEMENT	SIZE	DEPTH	CEMENT	
Gulf Oil Corporation H. D. Greer No. 3 660' FSL & 660' FWL Section 21-22-36 <i>M</i>	3815	8 5/8	276	225	None	None	5 1/2	3815	1020	3684-3795	
Continental Oil Company Christmas D No. 1-D 660' FSL & 1650' FEL Section 21-22-37 <i>O</i>	3836 3835	9 5/8	305	200	None	None	5 1/2	3835	650	3614-3815	
Skelly Oil Company Christmas "C" No. 1 1980' FSL & 660' FEL Section 21-22-36 <i>I</i>	3810	8 5/8	335	200	None	None	5 1/2	3810	200	3716-3807	
Sun Oil Company H. S. Record No. 6 1650' FNL & 380' FWL Section 22-22-36 <i>EF</i>	3875	8 5/8	350	250	None	None	5 1/2	3875	1000	3716-3808	
Sun Oil Company H. S. Record No. 4 1980' FNL & 1980' FEL Section 22-22-36 <i>ES</i>	3868	8 5/8	355	250	None	None	5 1/2	3868	1000	3714-3796	
Continental Oil Company Meyer B-22 No. 8 2310' FSL & 1980' FWL Section 22-22-36 <i>K</i>	3825	8 5/8	358	350	None	None	5 1/2	3824	1100	3687-3811	
Continental Oil Company Meyer B-22 No. 11 1980' FSL & 660' FEL Section 22-22-36 <i>I</i>	3825 3820	8 5/8	357	325	None	None	5 1/2	3824	900	3648-3784	
Continental Oil Company Meyer B-22 No. 5 660' FSL & 660' FWL Section 22-22-36 <i>M</i>	3830 3823	8 5/8	1478	700	None	None	5 1/2	3825	1020	3704-3796	

COMPANY, LEASE AND WELL NUMBER	TD	SURFACE CASING			INTERMEDIATE CASING			PRODUCING CASING			PRODUCING INTERVAL
		PBD	SIZE	DEPTH	CEMENT	SIZE	DEPTH	CEMENT	SIZE	DEPTH	
Continental Oil Company Meyer B-22 No. 6 660' FSL & 1980' FEL Section 22-22-36	3850 3840	8 5/8	1524	700	None	5 1/2	3847	775	3648-3822		
Continental Oil Company Meyer A-29 No. 6 660' FNL & 660' FEL Section 29-22-36	3815 3813	8 5/8	361	350	None	5 1/2	3814	574	3644-3810		
Continental Oil Company Meyer A-29 No. 8 1980' FSL & 660' FEL Section 29-22-36	3828	8 5/8	384	275	None	5 1/2	3830	1142	3636-3806		
Continental Oil Company Meyer B-28 No. 7 660' FNL & 1980' FWL Section 28-22-36	3800 3799	8 5/8	359	350	None	5 1/2	3799	900	3612-3793		
Continental Oil Company Meyer B-28 No. 3 660' FNL & 660' FEL Section 28-22-36	3815 3813	8 5/8	1474	600	None	5 1/2	3814	944	3680-3810		
Continental Oil Company Meyer B-28 No. 10 1980' FNL & 660' FWL Section 28-22-36	3820 3804	8 5/8	351	350	None	5 1/2	3820	1450	3606-3782		
Continental Oil Company Meyer B-28 No. 6 1980' FNL & 1980' FEL Section 28-22-36	3810 3809	8 5/8	365	365	None	5 1/2	3809	900	3674-3807		

COMPANY, LEASE AND WELL NO.	TD PBD	SURFACE CASING			INTERMEDIATE CASING			PRODUCING CASING			PRODUCING INTERVAL
		SIZE	DEPTH	CEMENT	SIZE	DEPTH	CEMENT	SIZE	DEPTH	CEMENT	
Texas Pacific Coal & Oil Co. ✓ B. A. Christmas No. 7 1980' FSL & 1980' FWL Section 28-22-36	3817 3803	8 5/8	302	250	None	None	5 1/2	3816	450	3654-3790	
Texas Pacific Coal & Oil Co. ✓ B. A. Christmas No. 3 2110' FSL & 330 FEL Section 28-22-36	3802 3800	8 5/8	287	177	None	None	5 1/2	3800	300	3688-3756	
Texas Pacific Coal & Oil Co. ✓ B. A. Christmas No. 8 660' FSL & 660' FWL Section 28-22-36	3858 3812	8 5/8	310	300	None	None	5 1/2	3845	400	3589-3700	
Atlantic Richfield ✓ J. L. Selby No. 4 660' FNL & 660' FWL Section 33-22-36	3810 3806	7 5/8	374	250	None	None	4 1/2	3810	1200	3642-3762	
Albert Gackle ✓ H. E. Esmond No. 4 1980' FNL & 1980' FEL Section 33-22-36	4005 3918	8 5/8	344	250	None	None	5 1/2	4005	2300	3616-3852	
Continental Oil Company ✓ Meyer B-33 No. 9 1980' FSL & 660' FWL Section 33-22-36	3825 3665	8 5/8	370	250	None	None	5 1/2	3814	900	3563-3636	
Continental Oil Company ✓ Meyer B-33 No. 3 1980' FSL & 660' FWL Section 33-22-36	3851 3761	8 5/8	367	350	None	None	5 1/2	3850	760	3636-3748	
Continental Oil Company ✓ Meyer B-33 No. 8 660' FSL & 1980' FWL Section 33-22-36	3775	8 5/8	385	350	None	None	5 1/2	3775	1050	3650-3736	