JOSEPH I. O'NEILL, JR.
Midland, Texas

The engineering data for the Culwin Yates Reservoir is outlined as follows:

1. The physical properties of the reservoir rock

   a. Average porosity taken from Gamma Ray Neutron logs -- 22%

   b. Average permeability -- Undetermined

   c. Average oil and interstitial water saturations -- Undetermined

2. The structure features of the reservoir

   a. Cross section -- See Exhibit #3

   b. Structure maps -- See Exhibit #1

   c. Water-oil and gas-oil contacts -- Not known

   d. Ratio of gas-cap volume to oil-zone volume -- no gas cap found as yet

   e. Average net effective oil pay thickness -- 22 feet

   f. Dip of producing zone -- 100 feet per mile

3. The characteristics of the reservoir fluids

   a. Average gravity of oil -- 36° at 60° F

   b. Salinity of water -- 67,000 ppm chlorides

   c. Oil-gas saturation pressure or bubble point, formation volume factor, viscosity, and gas solubility at various pressures -- No data

   d. Corrosion -- very limited

4. Pressures and temperatures

   a. Isobaric maps -- None

   b. Original reservoir pressure and temperature in Joseph I. O'Neill, Jr. Federal "E" #3 well -- 900 psi at +915 equals 2593

      Shut in 19-1/2 hours - BHT 80° @ 2520 feet.

   c. Productivity index, build up and interference tests -- None

5. Statistical data

   a. Oil production -- No history except original tests which indicated an allowable well.

   b. Average gas-oil ratios -- 1117-1

   c. Water production (per cent of liquids) -- 20%

   d. Number of flowing, artificial lift, and abandoned wells -- 1 pumping if this application is granted.

   e. Well completion methods and results of workovers or other mechanical repairs and changes -- Set thru, perforate and frac with 10,000 oil and 10,000 pounds of sand. No workovers to date.

   f. Proven oil acreage both developed and undeveloped --160 acres estimate

   g. Average well density in acres per well -- 40 acres per well

   h. Volumes of gas flared or vented -- None. Well shut in.

   i. Volumes of gas, air or water injected into the reservoir -- None

   j. Stage of depletion of reservoir -- No production to date.

   k. Gas-oil ratio and water percentage maps -- None

6. Individual well problems

   a. Water coning -- None

   b. Gas coning -- None

   c. Sand production -- None

   d. Casing leaks -- None

7. General reservoir mechanics

   a. Effectiveness of water drive -- No data

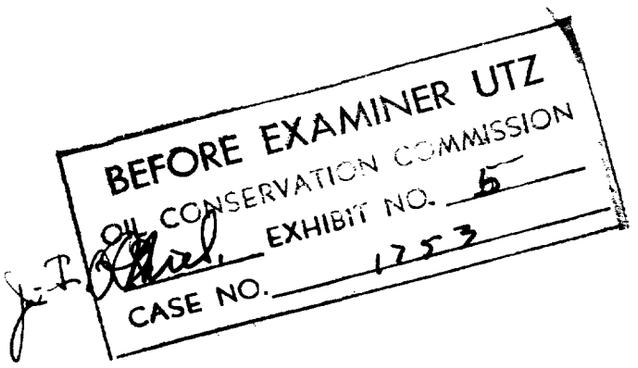
   b. Effectiveness of gas-cap expansion drive -- No gas cap

   c. Effectiveness of segregation or gravity drive -- No data

d. Relative permeability data -- None available

e. Capillary pressure data -- None available

f. Material balance calculations -- None



JOSEPH I. O'NEILL, JR.
Midland, Texas

The engineering data for the Culwin Queen reservoir is outlined as follows:

1. The physical properties of the reservoir rock.

   a. Average porosity -- 18% from Gamma Ray-Neutron logs.

   b. Average permeability -- Undetermined

   c. Average oil and interstitial water saturations -- Undetermined

2. The structure features of the reservoir.

   a. Cross sections -- Exhibit #3

   b. Structure maps -- Exhibit #2

   c. Water-oil and gas-oil contacts -- Not known

   d. Ratio of gas-cap volume to oil-zone volume -- No gas cap found as yet

   e. Average net effective oil pay thickness -- 27 feet

   f. Dip of producing zone -- 100 feet per mile

3. The characteristics of the reservoir fluids

   a. Average gravity of oil and gas -- 36.4° at 60° F

   b. Salinity of water -- 68,000 ppm chlorides

   c. Oil-gas saturation pressure or bubble point, formation volume factor, viscosity, and gas solubility at various pressures -- No data

   d. Corrosion -- Very limited

4. Pressures and temperatures

   a. Isobaric maps -- None

   b. Original reservoir pressure and temperature from Joseph I. O'Neill, Jr. Federal "E" #1 north offset to this dual well -- 1060 psi at datum of +425 equals 3091 feet. Shut in 72 hours before survey, BHT equals 84° at 3090 feet.

   c. Productivity index, build up, and interference tests -- None

5. Statistical data

   a. Oil Production -- Federal "E" #1: Effective date January 18, 1959 - accumulative production to July 1 - 6253 barrels of oil

      Federal "E" #2 - Effective date May 14, 1959 - accumulative production to July 1 - 2339 barrels of oil

      Federal "E" #3 - Effective date August 1, 1959 - Potentialed 47.25 barrels of oil and 9 barrels of water -

      Total production from three wells = 8592 barrels of oil to date.

   b. Average gas-oil ratios -- 265-1

   c. Water production (per cent of liquids) -- 30%

   d. Number of flowing, artificial lift, and abandoned wells -- 3 pumping

   e. Well completion methods and results of workovers or other mechanical repairs and changes -- Set thru, perforate and frac with 10,000 oil and 10,000 pounds of sand. No workovers to date.

   f. Proven oil acreage both developed and undeveloped -- 640 estimated acres

   g. Average well density in acres per well -- 40 acres per well

   h. Volumes of gas flared or vented -- 574 MCF per month.

   i. Volumes of gas, air, or water injected into the reservoir -- None

   j. Stage of depletion of reservoir -- Early primary

   k. Gas-oil ratio and water percentage maps -- None

6. Individual well problems

   a. Water coning -- None

   b. Gas coning -- None

   c. Sand production -- None

   d. Casing leaks -- None

7. General reservoir mechanics

   a. Effectiveness of water drive -- No data

b. Effectiveness of gas-cap expansion drive -- No gas cap

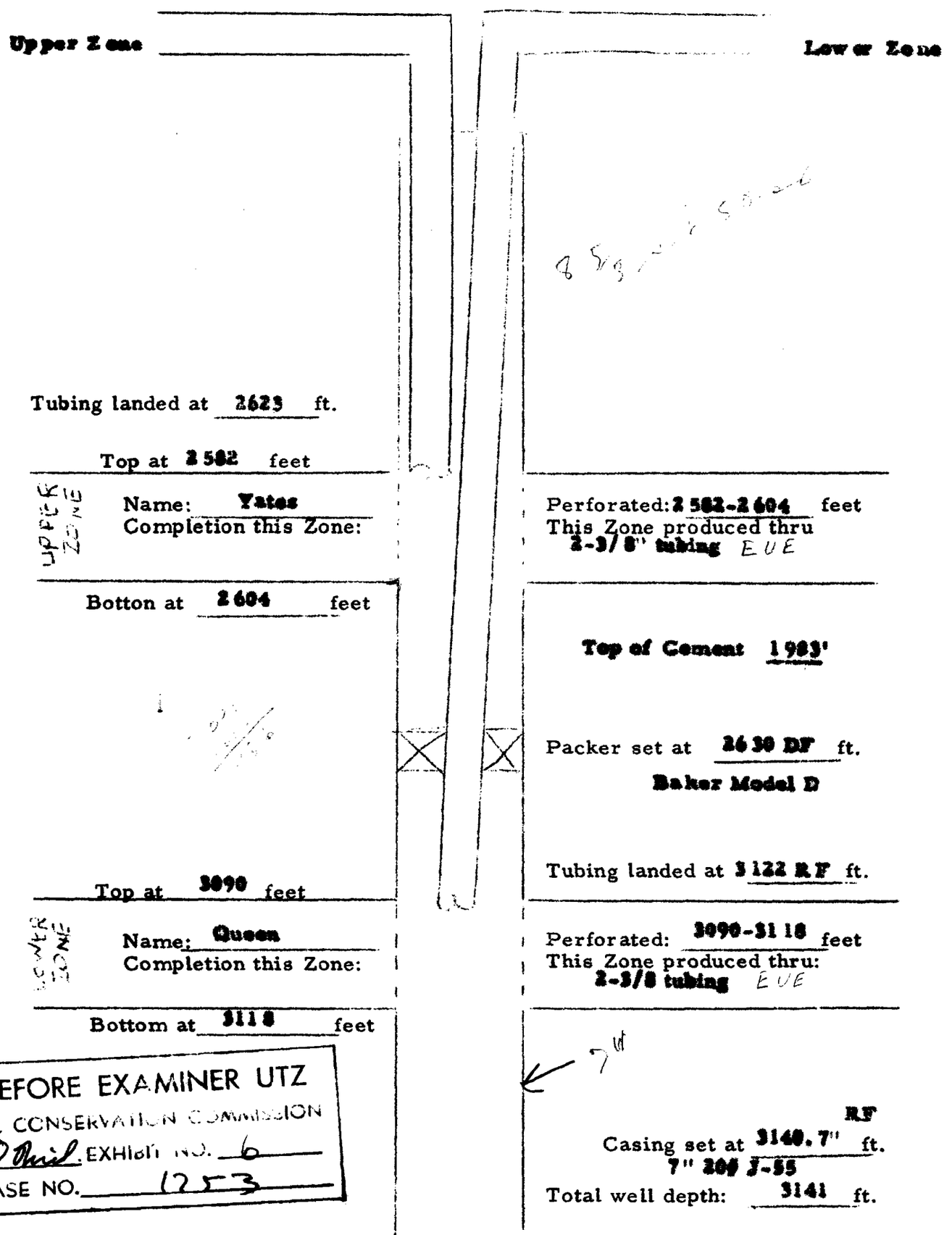
c. Effectiveness of segregation or gravity drive -- No data

d. Relative permeability data -- None available

e. Capillary pressure data -- None Available

f. Material balance calculations -- None

DIAGRAMMATIC SKETCH SHOWING DUAL COMPLETION INSTALLATION



BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
J.I. O'Neil EXHIBIT NO. 6
CASE NO. 1253

Date 8-5-59

Field Culwin County Eddy RRC Dist.

Operator Joseph I. O'Neill, Jr Lease Federal "E" Well No. 3

NEW MEXICO OIL CONSERVATION COMMISSION

SANTA FE, NEW MEXICO 7-3-58

APPLICATION FOR DUAL COMPLETION

Field Name: CULWIN		County: Eddy		Date: 8-5-59
Operator: Joseph I. O'Neill, Jr.		Lease: Federal "E"		Well No.: 3
Location of Well	Unit: H	Section: 1	Township: 19S	Range: 30E

1. Has the New Mexico Oil Conservation Commission heretofore authorized the dual completion of a well in these same pools or in the same zones within one mile of the subject well? YES _____ NO X
2. If answer is yes, identify one such instance: Order No. _____ ; Operator, Lease, and Well No.:

3. The following facts are submitted:	Upper Zone	Lower Zone
a. Name of reservoir	Yates	Queen
b. Top and Bottom of Pay Section (Perforations)	Top - 2582' Bottom-2604' 2582-2604'	Top-3090' Bottom-3118' 3090-3118'
c. Type of production (Oil or Gas)	Oil	Oil
d. Method of Production (Flowing or Artificial Lift)	Flowing	Flowing Artificial Lift

4. The following are attached. (Please mark YES or NO)

Yes a. Diagrammatic Sketch of the Dual Completion, showing all casing strings, including size and setting, top of cement, perforated intervals, tubing strings, including diameters and setting depth, location and type of packers and side door chokes, and such other information as may be pertinent.

Yes b. Plat showing the location of all wells on applicant's lease, all offset wells on offset leases, and the names and addresses of operators of all leases offsetting applicant's lease.

Yes c. Waivers consenting to such dual completion from each offset operator, or in lieu thereof, evidence that said offset operators have been furnished copies of the application.*

_____ d. Electrical log of the well or other acceptable log with tops and bottoms of producing zones and intervals of perforation indicated thereon. (If such log is not available at the time application is filed, it shall be submitted as provided by Rule 112-A.)

5. List all offset operators to this lease and their correct mailing address.

Malco Refineries, Inc., Box 668, Roswell, N.M.

John H. Trigg Co., Box 5629, Roswell, N.M.

Featherstone Corp., 423 Hinkle Bldg, Roswell

W.G. Payne, 155 Allen Bldg., Midland, Texas

N.E. Muldrow, Box 935, Midland, Texas

Texas-Gulf Producing Co., Box 1764, Midland

M. E. Hale, 120 Requa Road, Piedmont, California

Grace Von Hook, Box 5629, Roswell, N.M.

6. Were all operators listed in item 5 above notified and furnished a copy of this application? YES 8-6-59 NO X. If answer is yes, give date of such notification _____.

CERTIFICATE: I, the undersigned, state that I am the Supt. of the Joseph I. O'Neill, Jr. (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

_____
Signature

* Should waivers from all offset operators not accompany an application for administrative approval, the New Mexico Oil Conservation Commission will hold the application for a period of twenty (20) days from date of receipt by the Commission's Santa Fe office. If, after said twenty-day period, no protest nor request for hearing is received by the Santa Fe office, the application will then be processed.

NOTE: If the proposed dual completion will result in an unorthodox well location and/or a non-standard proration unit in either or both of the producing zones, then separate application for approval of the same should be filed simultaneously with this application.