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NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

1000 UUL 1 1 M 8 53

WELL RECORD

Mail to District Office, Oil Conservation Commission, to which Form C-101 was sent not later than twenty days after completion of well. Follow instructions in Rules and Regulations of the Commission. Submit in QUINTUPLICATE. If State Land submit 6 Copies

AREA 640 ACRES LOCATE WELL CORRECTLY

| TEXACO | Inc, | (Company or Operat | | | State | of New Me | xico "0" | NCT-1 |) |
|-----------------------|-------------------------------|------------------------------------|-------------------|----------------------|-----------------|-----------------|------------------|-------------|------------------|
| | | in NW Vonian) Und gnated (Ab | | | | | | | |
| | | feet from | | | | | | | |
| of Section | 36 | If Sta | te Land the O | il and Gas Les | Be No. is | -155-1 | **** | | |
| Drilling (Name of | Commenced Drilling Contrac | Februar tor Braha 1695 - Mid | y 10 ney Drill | , 19.63 ing Compa | Drilling was Co | mpleted | April | 25 | , 19 63 |
| Elevation | above sea level a | t Top of Tubing | Head | | <u>}</u> | The information | on given is to l | be kept cor | ifidential until |
| | tached Shee | et .to . | | | OE ZONES | | to | | |

| • | | | |
|--|--|------------------------------------|----|
| | | | to |
| No. 3, from | to | No. 6, from | to |
| Drilled with rotary Include data on rate of water | tools. No water sands t inflow and elevation to which water row | WATER SANDS Sted. w in hole. | |
| No. 1, from | to | feet. | |
| No. 2, from | to | feet. | |
| No. 3, from | to | feet. | · |

| | · · · · · · · · · · · · · · · · · · · | | *************************************** |
|-------------|---------------------------------------|-------|---|
| No. 4, from | to | fcet. | |
| | CASING B | ECORD | |

| SIZE | WEIGHT PER FOOT | NEW OR USED | AMOUNT | KIND OF SHOE | CUT AND PULLED FROM | PERFORATIONS | PURPOSE | |
|---------|--------------------|----------------|---------|-----------------|------------------------|--------------|--------------|-----|
| 13-3/8" | 54.5 | New | 1570' | Ножсо | None | None | Surface | _ ~ |
| 9-5/8" | 36.0 | New | 4805 | Номсо | None | None | Intermediate | |
| 3-1/2" | 9.20 | New | 12,135' | Howco | None | See Attache | d | |
| 2-7/8" | 6.40 | New | 21,600' | Ножсо | None | See Attache | d | |

MUDDING AND CEMENTING RECORD

| SIZE OF HOLE | SIET OF CASING | WHERE Set | NO. BACKS OF CEMENT | METHOD USED | MUD GRAVITY | AMOUNT OF MUD USED |
|-----------------|-------------------|---------------|------------------------|---------------------------------|----------------------------|-----------------------|
| 20" | 13-3/8" | 1593' | 1200 | Halliburton | | |
| 12-1/4" | 9-5/8" | 4825 ' | 1700 | Halliburton | | |
| 8-3/4" | 3-1/2" | 12,152' | * | Halliburton | | |
| 8-3/4" | 2-7/8" | 10,799' | * | Halliburton | | |
| 8-3/4" | 2-7/8" | 10,801' | RECORD OF | Halliburton PRODUCTION AND S | Cement 3 str TIMULATION | rings with 1025 sacks |

(Record the Process used, No. of Qts. or Gals. used, interval treated or shot.)

See Attached Sheet

.....

Result of Production Stimulation See Attached Sheet

.

Depth Cleaned Out. 12,154'

_RECORD OF BEILL-STEM AND SPECIAL TTATS

ats or deviation surveys were made submit report If drill-stem or other specia separate sheet and attach hereto

| | | | | TOOL | S USED | | | | | |
|---------------------|---|----------------------|---------------------------------------|----------------------|--------------|----------------|---------------------|-----------------|--|--|
| Rotary to | ols were us | ed from | f | cet to <u>12,154</u> | feet, an | d from | | feet to | | feet. |
| Cable tool | ls were use | d from | f | eet to | feet, an | nd from | | feet to | | fcet. |
| | | | 4 | PROD | UCTION | | | | | |
| Put to Pr | oducing | Ju | une 16 | , 1963 | 3 | | | | | |
| | | | | | | | | | 100 | |
| OIL WE | LL: The | productio | n during the first 2 | 4 hours was43 | 8 | bar | rrels of liq | uid of which | 100 | |
| | was | oil; | % v | vas emulsion; | ~ - | .% water | ; and | | % was sedi | iment. A.P.I. |
| | Grav | ن ty | 40.3 | | | | | | | |
| GAS WE | LL: The | productio | on during the first 2 | 4 hours was | И | M.C.F. pl | lus | | | barrels of |
| | liqui | d Hydroc | arbon. Shut in Pres | surclb | s. | | . , | | | |
| Length o | f Time Shu | ut in | | | | | | | | |
| PLEA | ASE INDI | CATE B | ELOW FORMAT | ION TOPS (IN CO) | NFORMAN | CE WITI | H GEOGI | RAPHICAL SI | ECTION OF | STATE): |
| | | | Southeastern N | ew Mexico | | | | Northwest | ern New M | exico |
| T. Anhy | 1477 | ' t | | T. Devonian | | | т. | Ojo Alamo | | ····· |
| T. Salt | 1600 |) † | | T. Silurian | | | Т. | Kirtland-Fruit | land | |
| B. Salt | 2730 | | | T. Montoya | | | Т. | Farmington | | |
| T. Yates | 281 | 5 ' | | T. Simpson | | | Т. | Pictured Cliffs | | |
| T. 7 Riv | ers | | | T. McKee | | | Т. | Menefee | | |
| T. Quee | n. 3ô9 | 5' | | T. Ellenburger | | | Т. | Point Lookout | | |
| T. Gray | ourg | | | T. Gr. Wash | | | Т. | Mancos | | |
| T. San A | Andresl | +335' | | T. Granite | | | Т. | Dakota | | |
| T. Glori | eta | 5820' | | Т | | | Т. | Morrison | | ••••• |
| Blinebr T. Drink | ry Marke ard | er 65 | 001 | T. Lower Miss | <u>11,29</u> | <u>8'</u> | Т. | Penn | | ••••• |
| | | | | T. Woodford | | | | | | |
| T Abo | 788 | 36' | | T. Devonian | | | | | | |
| Wolfcan .T. Penn | 10^{10} | 84 : | | т | | | Т. | | | |
| Strawn T. Miss. | 10;73 | 90' | | т | | | Т. | | | |
| Atoka Morrow | 10,87 | 79 ' | | FORMATI | | | 8 | | | |
| From | | Thickness in Feet | For | mation | From | То | Thicknes in Feet | s | Formation | ······································ |
| | | <u>.</u> | | | | | - In Feet | - | | · · · · · · · · · · · · · · · · · · · |
| 0 125 | 125 876 | 125 751 | Caliche Redbed & Am | n hu | | | | | | |
| 876 | 1568 | 692 | | | | | | | | |
| 1568 | 2619 | 1051 | | t | | | | | | |
| 2619 | 2766 | 147 | • | | | | | | | |
| 2766 | 3323 | 557 | | | | | | | | |
| 3323 | 4306 | 983 | | | | | | | | |
| 4306 | 4437 | 131 | Lime & Anhy | у | | | | | | |
| 4437 5334 | 5334 5379 | 897 45 | | ami ta | 4 | • | | | , , | |
| 5379 | 6059 | 45 680 | | | : | | | | | |
| 6059 | 9582 | 3523 | | ~ | | | | | | |
| 9582 | 9614 | 32 | Lime & Cher | rt | | l | 1 | | | |
| 9614 | 9626 | 12 | Lime | | | | | | | |
| 9626 | 9776 | 150 | | rt | | | | | | |
| 9776 | 10,069 | 293 0115 | | | | | | | | |
| 0,069 1,014 | 11,014 11,027 | 945 13 | Lime & Sha Lime & Cher | | | | | • | - | |
| • | 11,725 | 698 | | | | | - | : | 1. A. A. A. A. | *** |
| - | 12,154 | 429 | - | | | - | | | · · · · <u>-</u> | , |
| 2,154 | , | | TD | | 1 - F | ile | | | an a | |
| 9,275 | | | PBTD | | 1 - F | ield | | | | |
|]] meac | ureman | ts from | n the rotary | table | | tate : MOCC | Land Of | fice | | |
| | | | and level. | | | | | | | |
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ATTACH SEPARATE SHEET IF ADDITIONAL SPACE IS NEEDED

I hereby swear or affirm that the information given herewith is a complete and correct record of the well and all work done on it so far as can be determined from available records.

July 23, 1963 (Date) TEXACO Inc. Address Drawer 728 - Hobbs, New Mexico

| 1100000 | 1101 | 102700 | |
|-------------|------|--------|--|
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| | | | |
| | | | |

J.G.Blevins, Jr. Position or Title. Assistant District Superintendent

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Company or Operator,

Name

Spudded 20" hole 1:30 A.M. 2-11-63.

Ran 1570' of 13-3/8" O.D. casing and cemented at 1593' with 850 sacks of Incor 4% Gel, and 350 sacks of Regular Neat. Cement circulated. Plug set at 1551'. Job complete 1:30 A.M. February 14, 1963. Tested 13-3/8" O.D. casing with 600 psi from 3:30 to 4:00 P.M., February 16, 1963. Tested OK. Drilled plug and retested with 600 psi from 5:00 to 5:30 P.M. Tested OK. Job complete 5:30 P.M. February 16, 1963.

Ran 4805' of 9-5/8" 0.D. casing and cemented at 4825' with 1500 sacks of Incor 8% Gel and 200 sacks of Neat. Plug set at 4792'. Job complete 9:45 P.M. February 23, 1963. Tested 9-5/8" O.D. casing with 1500 psi for 45 minutes. Tested OK. Job complete 11:00 P.M. February 24, 1963.

Undesignated (Devonian) Zone: Ran 12,135' of 3-1/2" O.D. casing and cemented at 12,152'. Undesignated (Wolfcamp) Zone: Ran 10,799' of 2-7/8" O.D. casing and cemented at 10,816'. Undesignated (Abo) Zone: Ran 10,801' of 2-7/8" O.D. casing. Cement down 3-1/2" O.D. casing with 400 sacks of Incor with 3/4 of 1% CFR-2 followed with 200 gallons of Acetic Acid. Cement down each string of 2-7/8" casing with 250 sacks 4% Gel with 3/4 of 1% CFR-2 plus 375 sacks of Incor cement with 4% Gel followed with 300 gallons of Acetic Acid. Plug down. Top of cement 4650'. Job completed 4:15 P.M. April 30, 1963. Ran cementing log. Tested above strings of casing with 1000 psi for six hours from 3 to 9 P.M., May 1, 1963. Tested OK. Job complete 9 P.M. May 1, 1963.

Ran Electric Logs April 26, 1963.

Drill Stem Test No. 1 from 6288' to 6346', Mis-run. Drill Stem Test No. 2 from 6286' to 6344', Mis-run.

String "Z" (Devonian) Ran 12,135' of 3-1/2" O.D. casing and cemented at 12,152'. Plug at 12,129'. Perforate 3-1/2" O.D. casing with 2 jet shots at 12,135'. Ran CI retainer and set at 12,129'. Spot acid on bottom at 12,129'. Acidize perforation at 12,135' and out shoe at 12,154'. Inject 166 gallons of 15% LSTNEA in 3 stages in 7-1/2 hours. Wash one barrel by after each stage. Perforate 3-1/2" O.D. casing with 2 jet shots per foot from 12,144-12,122'. Acidize perforations 12,114-12,122' with 300 gallons of Acetic Acid. Reacidize perforation at 12,114'-12,122' with 500 gallons of regular 15% Acid. Ran 1-1/2" tubing with perforation on bottom set at 12,122'. Spot 500 gallons of 15% acid on bottom. Unable to break formation. Pulled 1-1/2" tubing and re-perforated 3-1/2" O.D. casing from 12,114-12,122' with 2 jet shots per foot. Reacidize 12,114-12,122' with 500 gallons of 15% MCA. Squeeze perforations from 12,114-122' first stage with 50 sacks of Inferno cement. Well failed to squeeze. Cleared perforations with 5 barrels of water. Squeezed 2nd stage with 50 sacks of Inferno cement. Plug at 11,852'. Completed 7 P.M. June 27, 1963.

Set cement retainer at 11,929'. Squeezed perforations from 12,114-122' first stage with 50 sacks of Inferno cement. Well failed to squeeze. Cleared perforations with 5 barrels of water. Squeezed second stage with 50 sacks of Inferno cement. Plug at 11,852'. Completed 7 P.M. June 27, 1963. Perforate 3-1/2" O.D. casing with 2 jet shots per foot at 11,202-04', 11,213-15', 11,244-46', 11,250-52', 11,258-60', 11,268-70'. Acidize with 500 gallons of 15% LSTNEA. Ran Baker 3-1/2" cast iron bridge plug. Attempted to set at 11,795', pin sheared. Plug failed. Second plug set at 11,790'. Dumped 5 gallons of hydromite on top of plug. Shut in, held for Salt Water Disposal, July 22, 1963. State of New Mexico "O" NCT-1 No. 14

Page Two

String "X" (Wolfcamp) Ran 10,799' of 2-7/8" O.D. casing and cemented at 10,816'. Plug at 10,816'. Perforate 2-7/8" O.D. casing with 1 jet shot per foot from 9954-60', 9966-70', 9985-90', 10,030-36'. Drill out cement in 2-7/8" casing from 10,015-10,031'. Clean out to P.B.T.D. 10,462. Spot 500 gallons acetic acid over casing perforations from 9554-10,036'.

On 24 hour potential test ending 6 A.M. June 22, 1963, well flowed 438 BO + no water through 18/64" choke.

| Gravity | 40.3 |
|------------------|---------|
| GOR | 612 |
| Top Of Pay | 9954 |
| Bottom of Pay | 10,036 |
| TEXACO Inc. Date | 6-22-63 |
| NMOCC Date | 4-25-63 |

String "Y" (Abo) Ran 10,801' of 2-7/8" O.D. casing and cemented at 10,818'. Plugback 10,784'. Perforate 2-7/8" O.D. casing with 1 jet shot per foot from 9170-72', 9178-80', 9191-93', 9204-06', 9227-29', 9234-36', 9252-54'. Acidize perforations with 1000 gallons of 15% LSTNEA.

On 24 hour potential test ending 9:20 P.M. 7-20-63, well flowed 238 barrels of oil + no water through 21/64" choke.

| Gravity | 38.0 |
|------------------|---------|
| GOR | 937 |
| Top of Pay | 9170 |
| Bottom of Pay | 9254 |
| TEXACO Inc. Date | 7-20-63 |
| NMOCC Date | 4-25-63 |

August 28, 1963

APPLICATION FOR MULTIFLE COMPLETION TEXACO Inc. State of New Mexico "O" (NCT-1) Well No. 14, Vacuum North Abo and Vacuum Wolfcamp Pools Lea County, New Mexico

New Mexico Oil Conservation Commission P. O. Box 271 Santa Fe, New Mexico

Attention: Mr. A. L. Porter, Jr.

Gentlemen:

Attached are zone segregation tests, bottom hole pressure tests, diagrammatic sketch of completion installation and acoustilog for the subject well reflecting dual completion status of the well in the Vacuum Horth Abo and Vacuum Wolfcamp Pools.

The well was originally planned as a triple completion (combination tubingless and conventional) in the Devonian, Wolfcamp and Abo, with $4-1/2^{n}$ casing and 2-3/8" tubing to the Devonian and parallel strings of 2-7/8" casing to the Abo and Wolfcamp. Administrative Order No. MC-1292 dated April 15, 1963 was issued approving the installation. Subsequently a letter dated April 19, 1963 was submitted to the Commission requesting approval to substitute 3-1/2" casing and 1-1/2" tubing for the Devonian completion in lieu of the aforementioned 4-1/2" casing and 1-1/2" tubing.

The Devonian formation was encountered low on structure and proved non-productive. The Devonian was plugged off and an attempt at completing the Morrow zone was made in the $3-1/2^{"}$ casing. This zone was proven nonproductive and the $3-1/2^{"}$ casing $-1-1/2^{"}$ tubing string was shut in, held for possible recompletion in the Blinebry at a later date if results of development in the area indicates it to be advisable.

It is respectfully requested that approval of the dual completion be granted in accord with the facts outlined above. It is understood that since Devonian completions in the Vacuum are the only zones in which the Commission has approved $3-1/2^m$ casing $-1-1/2^m$ tubing strings, if the subject $\mathbf{r}_{i} = \mathbf{r}_{i} + \mathbf{r}_{i}$



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