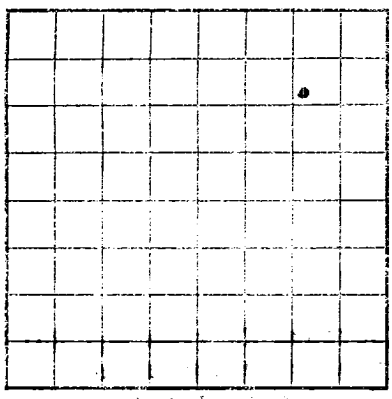
Budget Bureau No. 42-R355.4.
Approval expires 11-30-49.

Form 9-330

U. S. LAND OFFICE Santa Fe
SERIAL NUMBER N M 027
LEASE OR PERMIT TO PROSPECT



LOCATE WELL CORRECTLY

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

Company Kingwood Oil Company Address First National Bldg. Oklahoma City, Oklahoma

Lessor or Tract S. S. - Knauff Field Wildcat State New Mexico

Well No. 1 Sec. 13 T. 27N R. 10W Meridian N.M. P.M. County San Juan

Location 1190 ft. {N.} of N Line and 1190 ft. {W.} of E Line of Section 13 Elevation 6172'
(Derrick floor relative to sea level)

The information given herewith is a complete and correct record of the well and all work done thereon so far as can be determined from all available records.

Signed [signature]

Date April 9, 1959 Title Chief Clerk

The summary on this page is for the condition of the well at above date.

Commenced drilling February 12, 19 59 Finished drilling March 7, 19 59

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 6543 to 6670' (G) No. 4, from ____ to ____

No. 2, from ____ to ____ No. 5, from ____ to ____

No. 3, from ____ to ____ No. 6, from ____ to ____

IMPORTANT WATER SANDS

No. 1, from None to ____ No. 3, from ____ to ____

No. 2, from ____ to ____ No. 4, from ____ to ____

CASING RECORD

Size casing	Weight per foot	Threads per inch	Make	Amount	Kind of shoe	Cut and pulled from	Perforated From—	Perforated To—	Purpose
10-3/4	32.75	8	Lone Star	324½'	Baker				Surface
5½	15.5	8	Spang	6695'	Baker		6543'	6670'	Production String

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
10-3/4	340½'	300	Pump & Plug		
5½	6709'	232 sx. at shoe 100 sx at D.V. tool at 2215'	Pump & plug		

PLUGS AND ADAPTERS

Heaving plug—Material ____ Length ____ Depth set ____

Adapters—Material ____ Size ____

SHOOTING RECORD

Size	Shell used	Explosive used	Quantity	Date	Depth shot	Depth cleaned out
Perf. with 8-in-1 gun at 6670' & 6655'; 4 jets per foot, 6543-51', 6560-66', and 6624-28'.						

TOOLS USED

Rotary tools were used from 0 feet to 6710 feet, and from ____ feet to ____ feet

Cable tools were used from ____ feet to ____ feet, and from ____ feet to ____ feet

DATES

March 31, 19 59 Put to producing ____, 19 ____

*The production for the first 24 hours was 103 barrels of fluid of which 76.7% was condensate; 23.3% water; and ____ % sediment. Gravity, °Bé. 57°

If gas well, cu. ft. per 24 hours 2,276 MCF Gallons gasoline per 1,000 cu. ft. of gas 1.46

Rock pressure, lbs. per sq. in. 1985# S.I. surface press.

*Well test. Well is not connected to sales line as of this date.

EMPLOYEES

Drilled by Contractor, Driller ____, Driller

____, Driller ____, Driller

Don Johnston Drilling Co.

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	348	348	Surface sand & shales.
348	968	620	Sand
968	1231	263	Sand & shale.
1231	1238	7	Sand
1238	3140	1902	Sand & shale.
3140	3156	16	Shale
3156	4035	879	Sand & shale.
4035	4101	66	Shale
4101	4232	131	Sandy shale.
4232	4390	158	Shale & shells
4390	4550	160	Shale & sand
4550	4644	94	Shale & shells
4644	4918	274	Sandy shale
4918	4995	77	Shale
4995	5140	145	Shale & shells
5140	6501	1361	Sand & shale
6501	6510	9	Lime & chert
6510	6528	18	Sand & shale
6528	6556	28	Sand
6556	6566	10	Sand & shale
6566	6616	50	Core #1, 6566-6616', recovered 50': 6566-72', sand, very quartzitic, hard and tight, vertical fractures, bleeding gas; 6572-6601', shale; 6601-6605', sand quartzitic, hard and tight, vertical fractures, no shows; 6605-16',shale.
6616	6710	94	Sand & shale.

FOLD

MARK

FORMATION RECORD—Continued

FROM—	TO—	TOTAL FEET	FORMATION

HISTORY OF OIL OR GAS WELL

It is of the greatest importance to have a complete history of the well. Please state in detail the dates of redrilling, together with the reasons for the work and its results. If there were any changes made in the casing, state fully, and if any casing was "sidetracked" or left in the well, give its size and location. If the well has been dynamited, give date, size, position, and number of shots. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or bailing.

Spudded 12:00 p.m., 2-11-59. Drilled 8-3/4" hole to 348'. Reamed to 341'. Set 10 joints, 324.54' of 10-3/4", 32.75# surface casing. 340.44' from D.F. Cemented with 300 sacks of regular, 2% c.c. P.D. 10:30 p.m., 2-12-59. W.O.C. 48 hrs. Drilled cement plug and drilled 8-3/4" hole, 348-5901'. D.S.T. #1, 5700-5901', open 1 hr., good blow for 15 min.; very weak blow for 45 min. Recovered 30' of mud. I.F.P., 115#; I.S.I.P., 135#; 30-min. S.I.B.H.P., 120#; H.P., 2828#. Drilled 8-3/4" hole, 5901'-6125'. D.S.T. #2, 5901-6125'. Open 2 hrs., 33 min. Good blow immediately and throughout test. Gas to surface in 1 hr., 30 min. Not enough to measure. Recovered 180' of drilling mud; 1000' of heavily oil and gas-cut mud. I.F.P., 675#; F.F.P., 975#; 30-min. S.I.B.H.P., 1895#; H.P., 2895#. Drilled 8-3/4" hole, 6125-6566'. Cut core #1, 6566-6616' (see description above). Drilled 8-3/4" hole, 6616-6710'. Drillers T.D., 6710'. Ran Schlumberger log. Sch. tops: Pictured Cliffs, 2025'; Cliff House, 3620'; Point Lookout, 4370'; Gallup, 5575'; Greenhorn, 6363';Dakota, 6448'; main bench of Dakota, 6540'; Morrison, 6682'. Sch. T.D., 6710'. Set 167 jts., 6695' of 5½", 15.5# csg.6709' from drive bushing. D.V. tool set at 2215'. Cemented bottom stage with 132 sacks of regular and 100 sacks of Diacel D, 5 sacks of calcium chloride. Plug down 11:40 a.m., 3-8-59. Cemented top stage with 100 sacks of regular. Plug down 12:35 p.m., 3-8-59. W.O.C. 72 hrs. Drilled D.V. tool and cement and cleaned out to 6681'. Perf. with 8-in-1 gun at 6670' and 6655'. Perf. 4 jets per ft., 6624-28'. Swabbed and bailed dry. Tested no gas or fluid. Ran tbg. with packer set at 6522'. Treated with 500 gals. of mud acid, 15,000 gals. of 3% gelled acid and 20,000# of sand. Max. treating press., 2800#. Tested 1,100 MCF gas. Perf. 4 shots per foot, 6543-51', immediate increase in gas; 4 shots per foot, 6560-66', gauged 2,420 MCF gas, 3/4" choke, F.C.P., 60#. Set bridge plug at 6582', pumped in 750 gals. of mud acid, formation broke down from 2300# to 1400#. Treated with 30,000 gals. of 3% acid, 30,000# of sand. Average treating press., 1500#. Cleaned out to 6680'. Ran tbg. open ended to 6533', Swabbed 5½ hrs. and started flowing. Flowed treatment water to pits. Shut in to connect surface equipment. 48-hr. S.I.P., 1985#. Initial Production: 2,274 MCF gas per day, 3.3 bbls. of 57° condensate and 1 bbl. of treatment water per hour, 24/64" choke; F.T.P., 730#; F.C.P., 900#; separator press., 226#. Note: This Initial Production is subject to correction after well is connected to gas line. We did not choose to finish cleaning the well by venting the gas. Completed 3-31-59.