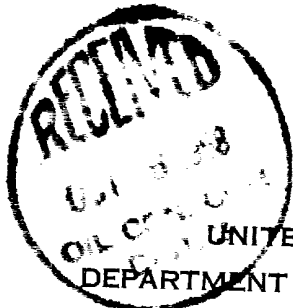


LOCATE WELL CORRECTLY

Farmington  
U. S. LAND OFFICE 077383-S.F.  
SERIAL NUMBER  
LEASE OR PERMIT TO PROSPECTUNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

RECEIVED

OCT 15 1958

U. S. GEOLOGICAL SURVEY  
FARMINGTON, NEW MEXICO

## LOG OF OIL OR GAS WELL

Company **Kingwood Oil Company** Address **First Nat'l. Bldg., Oklahoma City, Okla.**  
Lessor or Tract **U.S.-Kutz Canyon (Dakota)** Field **Pulcher-Kutz** State **New Mexico**  
Well No. **1** Sec. **22** T. **28N** R. **10W** Meridian **N.M.P.M.** County **San Juan**  
Location **790** ft. **N** of **S** Line and **790** ft. **E** of **W** Line of **Section** Elevation **6093'**  
(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.

Date **October 14, 1958**Signed *[Signature]*  
Title **Chief Clerk**

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

Commenced drilling **August 14,** 19**58** Finished drilling **September 7,** 19**58**

## OIL OR GAS SANDS OR ZONES

(Denote gas by G)  
No. 1, from **4436'** to **4507' (?)** No. 4, from \_\_\_\_\_ to \_\_\_\_\_  
No. 2, from **5610'** to **5962' (G?)** No. 5, from \_\_\_\_\_ to \_\_\_\_\_  
No. 3, from **6486'** to **6706' (G)** No. 6, from \_\_\_\_\_ to \_\_\_\_\_

## IMPORTANT WATER SANDS

No. 1, from **6706'** to **6790'** 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		Purpose
							From—	To—	
10-3/4	32.75	8	J & L	280'	Baker				Surface
5 1/2	14	8	CPAI	576'					Production
5 1/2	15.5	8	CPAI	1010'	Halliburton				Production

## MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
10-3/4	292'	245	Halliburton		
5 1/2	6787 1/2'		Halliburton		

DV tool set at 6106'. Cemented bottom stage with 50 sacks and 2500# of gilsonite; cemented top stage with 55 sacks and 3025# of gilsonite.

## 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 6647' & 6653'; treated with 1000 gals. of acid; treated with 20,000 gals. of gelled water & 20,000# of sand. Perf. with 8-in-1 gun at 6632', 6623' and 6613'. Perf. 4 swing jets per ft., 6570-6632' & 6504-16'. Treated all perfs. with 2420 bbls. of gelled acid, 79,000# of sand.						

## TOOLS USED

Rotary tools were used from **0** feet to **6790** feet, and from \_\_\_\_\_ feet to \_\_\_\_\_ feet  
Cable tools were used from \_\_\_\_\_ feet to \_\_\_\_\_ feet, and from \_\_\_\_\_ feet to \_\_\_\_\_ feet

## DATES

**October 14,** 19**58** Put to producing \_\_\_\_\_, 19\_\_\_\_

\* The production for the first 24 hours was **110** barrels of fluid of which **90** % was oil; **5** % emulsion; \_\_\_\_\_ % water; and **5** % sediment. Gravity, °Bé. **67°**

If gas well, cu. ft. per 24 hours **4,500,000** Gallons gasoline per 1,000 cu. ft. of gas **See above**

Rock pressure, lbs. per sq. in. **1950# S.I. surface press.** \* Well test. Well is not connected to sales line as of this date.

Drilled by contractor

Huron Drilling Co.

## EMPLOYEES

Driller

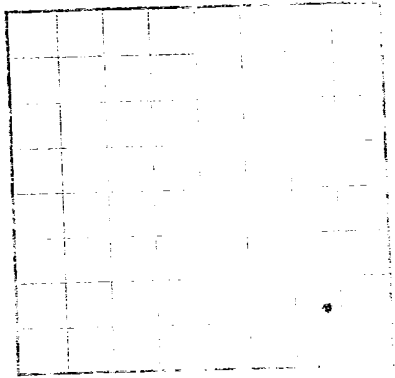
Driller

Driller

Driller

## FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	1190	1190	Surface sand and shales.
1190	1570	380	Shale with sand streaks.
1570	1885	315	Shale.
1885	2105	220	Shale with occasional sand streaks.
2105	2195	90	Water sand.
2195	2260	65	Sandy shale.
2260	3090	830	Shale.
3090	3688	598	Shale with occasional sand streaks.
3688	4438	750	Sand and shale streaks.
4438	4508	70	Top of Point Lookout, 4438'. Sand.
4508	4558	50	Sand and shale streaks.
4558	4738	180	Top of Mancos Shale, 4558'. Sand and shale streaks.
4738	5614	876	Shale.
5614	6150	536	Top of Gallup, 5614'. Shale with sand streaks.
6150	6380	230	Shale.
6380	6487	107	Sandy shale.
6487	6708	221	Top of Dakota, 6487'. Sand with occasional shale streaks.
6708	6790	82	Top of Morrison, 6708'. Shale, sand and sandy shale.



LOG OF OIL OR GAS WELL

DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

UNITED STATES

BRANCH OF RECORDS TO FIELD OFFICE  
Bureau of Land Management  
U.S. Department of the Interior

WELL NO. 1  
SECTION 10, T. 10 N., R. 10 E., S. 10 E.  
COUNTY OF [blank], STATE OF [blank]

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

WELL HISTORY ATTACHED.

DATE	DEPTH	REMARKS
1900	100	Drilled to 100 feet.
1901	200	Drilled to 200 feet.
1902	300	Drilled to 300 feet.
1903	400	Drilled to 400 feet.
1904	500	Drilled to 500 feet.
1905	600	Drilled to 600 feet.
1906	700	Drilled to 700 feet.
1907	800	Drilled to 800 feet.
1908	900	Drilled to 900 feet.
1909	1000	Drilled to 1000 feet.
1910	1100	Drilled to 1100 feet.
1911	1200	Drilled to 1200 feet.
1912	1300	Drilled to 1300 feet.
1913	1400	Drilled to 1400 feet.
1914	1500	Drilled to 1500 feet.
1915	1600	Drilled to 1600 feet.
1916	1700	Drilled to 1700 feet.
1917	1800	Drilled to 1800 feet.
1918	1900	Drilled to 1900 feet.
1919	2000	Drilled to 2000 feet.
1920	2100	Drilled to 2100 feet.
1921	2200	Drilled to 2200 feet.
1922	2300	Drilled to 2300 feet.
1923	2400	Drilled to 2400 feet.
1924	2500	Drilled to 2500 feet.
1925	2600	Drilled to 2600 feet.
1926	2700	Drilled to 2700 feet.
1927	2800	Drilled to 2800 feet.
1928	2900	Drilled to 2900 feet.
1929	3000	Drilled to 3000 feet.
1930	3100	Drilled to 3100 feet.
1931	3200	Drilled to 3200 feet.
1932	3300	Drilled to 3300 feet.
1933	3400	Drilled to 3400 feet.
1934	3500	Drilled to 3500 feet.
1935	3600	Drilled to 3600 feet.
1936	3700	Drilled to 3700 feet.
1937	3800	Drilled to 3800 feet.
1938	3900	Drilled to 3900 feet.
1939	4000	Drilled to 4000 feet.
1940	4100	Drilled to 4100 feet.
1941	4200	Drilled to 4200 feet.
1942	4300	Drilled to 4300 feet.
1943	4400	Drilled to 4400 feet.
1944	4500	Drilled to 4500 feet.
1945	4600	Drilled to 4600 feet.
1946	4700	Drilled to 4700 feet.
1947	4800	Drilled to 4800 feet.
1948	4900	Drilled to 4900 feet.
1949	5000	Drilled to 5000 feet.
1950	5100	Drilled to 5100 feet.
1951	5200	Drilled to 5200 feet.
1952	5300	Drilled to 5300 feet.
1953	5400	Drilled to 5400 feet.
1954	5500	Drilled to 5500 feet.
1955	5600	Drilled to 5600 feet.
1956	5700	Drilled to 5700 feet.
1957	5800	Drilled to 5800 feet.
1958	5900	Drilled to 5900 feet.
1959	6000	Drilled to 6000 feet.
1960	6100	Drilled to 6100 feet.
1961	6200	Drilled to 6200 feet.
1962	6300	Drilled to 6300 feet.
1963	6400	Drilled to 6400 feet.
1964	6500	Drilled to 6500 feet.
1965	6600	Drilled to 6600 feet.
1966	6700	Drilled to 6700 feet.
1967	6800	Drilled to 6800 feet.
1968	6900	Drilled to 6900 feet.
1969	7000	Drilled to 7000 feet.
1970	7100	Drilled to 7100 feet.
1971	7200	Drilled to 7200 feet.
1972	7300	Drilled to 7300 feet.
1973	7400	Drilled to 7400 feet.
1974	7500	Drilled to 7500 feet.
1975	7600	Drilled to 7600 feet.
1976	7700	Drilled to 7700 feet.
1977	7800	Drilled to 7800 feet.
1978	7900	Drilled to 7900 feet.
1979	8000	Drilled to 8000 feet.
1980	8100	Drilled to 8100 feet.
1981	8200	Drilled to 8200 feet.
1982	8300	Drilled to 8300 feet.
1983	8400	Drilled to 8400 feet.
1984	8500	Drilled to 8500 feet.
1985	8600	Drilled to 8600 feet.
1986	8700	Drilled to 8700 feet.
1987	8800	Drilled to 8800 feet.
1988	8900	Drilled to 8900 feet.
1989	9000	Drilled to 9000 feet.
1990	9100	Drilled to 9100 feet.
1991	9200	Drilled to 9200 feet.
1992	9300	Drilled to 9300 feet.
1993	9400	Drilled to 9400 feet.
1994	9500	Drilled to 9500 feet.
1995	9600	Drilled to 9600 feet.
1996	9700	Drilled to 9700 feet.
1997	9800	Drilled to 9800 feet.
1998	9900	Drilled to 9900 feet.
1999	10000	Drilled to 10000 feet.

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 depth of shot. If plugs or bridges were put in to test for water, state kind of material used, position, and results of pumping or falling of shots.

HISTORY OF OIL OR GAS WELL

DATE	DEPTH	REMARKS
1900	100	Drilled to 100 feet.
1901	200	Drilled to 200 feet.
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1949	5000	Drilled to 5000 feet.
1950	5100	Drilled to 5100 feet.
1951	5200	Drilled to 5200 feet.
1952	5300	Drilled to 5300 feet.
1953	5400	Drilled to 5400 feet.
1954	5500	Drilled to 5500 feet.
1955	5600	Drilled to 5600 feet.
1956	5700	Drilled to 5700 feet.
1957	5800	Drilled to 5800 feet.
1958	5900	Drilled to 5900 feet.
1959	6000	Drilled to 6000 feet.
1960	6100	Drilled to 6100 feet.
1961	6200	Drilled to 6200 feet.
1962	6300	Drilled to 6300 feet.
1963	6400	Drilled to 6400 feet.
1964	6500	Drilled to 6500 feet.
1965	6600	Drilled to 6600 feet.
1966	6700	Drilled to 6700 feet.
1967	6800	Drilled to 6800 feet.
1968	6900	Drilled to 6900 feet.
1969	7000	Drilled to 7000 feet.
1970	7100	Drilled to 7100 feet.
1971	7200	Drilled to 7200 feet.
1972	7300	Drilled to 7300 feet.
1973	7400	Drilled to 7400 feet.
1974	7500	Drilled to 7500 feet.
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1995	9600	Drilled to 9600 feet.
1996	9700	Drilled to 9700 feet.
1997	9800	Drilled to 9800 feet.
1998	9900	Drilled to 9900 feet.
1999	10000	Drilled to 10000 feet.

## WELL HISTORY

Location staked 8-7-58.

Spudded 8:00 p.m., 8-13-58.

Aug. 14th: Drlg. surface hole at 250'.

15th: T.D., 300'. Set 7 jts., 280' of 10-3/4" surface csg. 292' from D.B.; cemented with 240 sacks of regular cement, 2% c.c. P.D. 6:30 a.m. W.O.C.

16th: Drlg. plug at 9:30 a.m. Drlg. at 805' in sand and shale.

17th: Drlg. at 1740' in sand and shale.

18th: Drlg. at 2359' in shale.

19th: Drlg. at 2859' in sand and shale.

20th: Drlg. at 3186' in sand and shale.

21st: Drlg. at 3499' in sand and shale.

22nd: Drlg. at 3656' in sand and shale.

23rd: Drlg. at 3873' in sand and shale.

24th: Drlg. at 4165' in sand and shale.

25th: Drlg. at 4449' in sand and shale.

26th: Drlg. at 4608' in sand and shale.

27th: T.D., 4700'. Questionable top of Point Lookout, 4,500'. D.S.T. #1, 4515-4700', open 1½ hrs. Recovered 100' of drilling mud. I.F.P., 50#; F.F.P., 70#; H.P., 2340#; 30-min. S.I.P., 120#. Drlg. at 4740' in sand and shale.

28th: Drlg. at 5013' in sand and shale.

29th: Drlg. at 5228' in sand and shale.

30th: T.D., 5228', D.S.T., #2, 5188'-5228', open 1½ hrs. Fair blow throughout test. No gas to surface. Recovered 360' of oil-cut and gas-cut mud. I.F.P., 155#; F.F.P., 235#; H.P., 2690#; 15-min. S.I.P., 1445#. Drlg. at 5370' in sand and shale.

31st: Drlg. at 5493' in sand and shale.

Sept. 1st: Drlg. at 5859' in sand and shale.

2nd: Drlg. at 6004' in sand and shale.

3rd: Drlg. at 6288' in sand and shale.

4th: Drlg. at 6560' in sand and shale.

5th: Drlg. at 6640' in sand.

6th: Drlg. at 6762' in sand.

7th: Driller's T.D., 6790'. Made two attempts to run electric log. Hole bridged at 6390' and at 1548'. Conditioning hole.

8th: Finished conditioning hole and ran Schlumberger electric log. Sch. tops: Point Lookout, 4438'; Mancos Shale, 4558'; Gallup Zone, 5614'; Dakota, 6487'; main bench of Dakota, 6568-6636'; Morrison, 6706'.

9th: Set 212 jts., 6774' of 5½" csg. 6788' from D.B., with DV tool at 6106'. Cemented with 50 sacks of regular at shoe with 2500# of gilsonite. Cemented at DV tool with 55 sacks of regular with 3025# of gilsonite. Bottom plug down at 10:00 a.m.; top plug down at 2:45 p.m. W.O.C.

10th: W.O.C.

11th: Moving in cable tools

12th: Rigged up cable tools. Swabbed hole down to 6050'.

13th: Drilled DV tool and drove to hard bottom at 6743'. Perf. with 8-in-1 gun at 6647' & 6653'. Ran tbg., set frac tool at 6607'. Treated with 1,000 gals. of 7½% gelled acid, displaced with 25 bbls. of water. Max. press., 4,000#, finished on vacuum. Swabbed back water and started flowing. Tested with Pitot tube, 1,790 MCF gas.

14th: Killed well. Set frac tool at 6543'. Treated with 20,000 gals. of gelled water and 20,000# of sand. Max press., 3900#. Job completed 8:50 p.m.

15th: Swabbing back treatment water with small show of gas. Started flowing at 11:00 a.m. Tested 3,221 MCF gas with Pitot tube. Flowed 1½ bbls. distillate per hr., 7 hrs. Flowing.

- 16th: Ran Halliburton line to T.D., no sand in hole. 4-hr. S.I.P., 1500#. Testing.
- 17th: Killed with 30 bbls. of calcium chloride water. Pulled tbg. and re-ran with BP4 packer set at 6542'. Swabbed, kicked off and flowed calcium chloride water. Ran plug in BP4 packer.
- 18th: Pulled tbg. and perf. with 8-in-1 gun at 6613', 6623' and 6632'.
- 19th: Fishing for junk basket.
- 20th: Fishing for junk basket.
- 21st: Fishing for junk basket.
- 22nd: Recovered junk basket. Running tbg.
- 23rd: Finished running tbg., set packer at 6540'. Swabbed 2 hrs., started flowing at 4:00 a.m. Flowing calcium chloride water used to kill well.
- 24th: Tested 2750 MCF gas per day. Raised BP4 packer to 6468'.
- 25th: Swabbed in at 3:00 a.m. Flowing calcium chloride water used to kill well. Tested 2720 MCF gas per day through 2" line, no choke, T.P., 75#.
- 26th: Tested 3250 MCF gas per day, wide open, 75# T.P. Killed well, perf. 4 swing jets per foot, 6570-6632' and 6504-16'. Well flowed after each run. Flowing well to clean it up.
- 27th: Treated with 6 bbls. of m.c.a. followed by 40 bbls. of 7½% gelled acid, followed by 2380 bbls. of 3% gelled acid and 79,000# of sand. Max. press., 7500#. Avg. injection rate, 5 bpm. Job completed 1:30 a.m. Standing press., 1700#; 5½ hr. S.I.P., 250#. Opened well at 11:00 a.m. Started flowing back treatment water.
- 28th: Flowing treatment water. Tested 3320 MCF gas, wide open, T.P., 125#.
- 29th: Flowing treatment water. Tested 4450 MCF gas, wide open, T.P., 125#.
- 30th: Flowing and cleaning up well. Put gas through separator. Tested 2930 MCF gas, 200# separator press.
- Oct. 1st: Completed in Dakota Sand. Initial Production: F/110 bbls. of fluid, 67°, gravity, 90% distillate, 5% emulsion, 5% sediment, 4,500 MCF gas, 24 hrs. Shut in for gas connection.