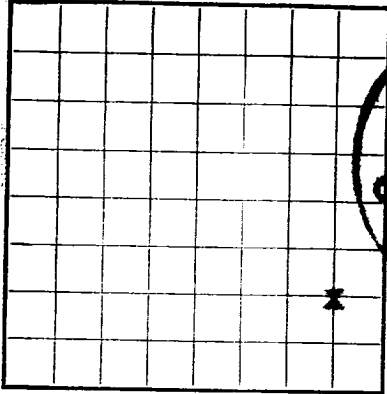


U. S. LAND OFFICE Santa Fe
SERIAL NUMBER 04444 A
LEASE OR PERMIT TO PROSPECT



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company J. R. Abraham Address 224-1st National Bank Bldg
Lessor or Tract _____ Field Horseshoe State New Mexico
Well No. 5 Sec. 9 T. 30N. R. 16W Meridian NMPN County San Juan
Location 2192 ft. ^(N.) of S Line and 534 ft. ^(E.) of E Line of Section-9 Elevation 5422
(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 Sept-16-1959 Signed J. R. Abraham Title _____

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

Commenced drilling Aug-7, 1959 Finished drilling Aug-23, 1959

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 1332 to 1359 No. 4, from 1446 to 1454
No. 2, from 1377 to 1389 No. 5, from 1461 to 1469
No. 3, from 1430 to 1436 No. 6, from _____ to _____

IMPORTANT WATER SANDS

No. 1, from _____ 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 shape	Cut and pulled from	Depth set	Purpose
<u>9-5/8</u>	<u>40</u>	<u>8 R.D.</u>	<u>J.N.L.</u>	<u>90</u>				<u>Surface</u>
<u>7</u>	<u>1512</u>	<u>8 R.D.</u>	<u>J-55</u>	<u>140</u>				<u>Prod Tby</u>

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
<u>9-5/8</u>	<u>90</u>	<u>60</u>	<u>Halliburton</u>		
<u>7</u>	<u>1512</u>	<u>140</u>	<u>B-J Service</u>		

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

TOOLS USED

Rotary tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

Sept-16-1959, 1959 Put to producing Sept-16-1959, 1959

The production for the first 24 hours was 648 barrels of fluid of which 100 % was oil; _____ % emulsion; _____ % water; and _____ % sediment. Gravity, °Bé. 40

If gas well, cu. ft. per 24 hours _____ Gallons gasoline per 1,000 cu. ft. of gas _____
Rock pressure, lbs. per sq. in. _____

EMPLOYEES

_____, Driller _____, Driller
Grossman Drilling Co, Driller _____, Driller

FORMATION RECORD

FROM-	TO-	TOTAL FEET	FORMATION
	<u>770</u>	<u>770</u>	<u>Shale - Water</u>
<u>770</u>	<u>905</u>	<u>35</u>	<u>Water Sand</u>
<u>905</u>	<u>1210</u>	<u>405</u>	<u>Shale</u>
<u>1210</u>	<u>1220</u>	<u>10</u>	<u>Oil Sand</u>
<u>1220</u>	<u>1290</u>	<u>70</u>	<u>Shale</u>
<u>1290</u>	<u>1332</u>	<u>42</u>	<u>Shale - Oil Sand</u>
<u>1332</u>	<u>1358</u>	<u>26</u>	<u>Oil Sand</u>
<u>1358</u>	<u>1377</u>	<u>19</u>	<u>Shale</u>
<u>1377</u>	<u>1339</u>	<u>12</u>	<u>Oil Sand</u>
<u>1339</u>	<u>1430</u>	<u>41</u>	<u>Shale</u>
<u>1430</u>	<u>1436</u>	<u>6</u>	<u>Oil Sand</u>
<u>1436</u>	<u>1446</u>	<u>10</u>	<u>Shale</u>
<u>1446</u>	<u>1454</u>	<u>8</u>	<u>Oil Sand</u>
<u>1454</u>	<u>1461</u>	<u>7</u>	<u>Shale</u>
<u>1461</u>	<u>1469</u>	<u>8</u>	<u>Oil Sand</u>
<u>1469</u>	<u>1512</u>	<u>43</u>	<u>Shale</u>

Top Gallup- 1290

U.S. LAND OFFICE
SERIAL NUMBER
LEASE OR PERMIT TO PROSPECT

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



LOCATE WELL CORRECTLY

LOG OF OIL OR GAS WELL

Company: Atlantic
Address: 524-1st National Bank Bldg
Field: Horcasitas State: New Mexico
Well No.: 2 Sec. 2 T. 30N R. 12W Meridian
Location: 1/2 of 2 line and 22 1/2 ft. W. of 1/2 line of Section 2
Elevation: 4222
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: James W. Workman
Date: Sept 10 - 1925
Title: _____
The summary on this page is for the condition of the well at above date.

Oil or Gas Sands or Zones
Commenced drilling: _____
Finished drilling: _____
No. 1 from _____
No. 2 from _____
No. 3 from _____
No. 1 from _____
No. 2 from _____
42000 gallons oil. Pressure 2350, then broke it down with 5000 gallons oil. Pressure 2350, then broke it down with 750, then we put in 100 balls, pressure went to 1100 then back to 900, then 25 more balls, pressure 1500 then back 1400 lb, then we put in 25 more balls, then pressure went to 2250 lb, then went back between 1800 to 1900 lb, pushed with 7500 gallons oil. Pressure 2 B.P.M. Swabbed back about 300 barrels oil then well began to flow. Recovered load oil. Well then flowed 108 B.O. in 4 hrs setting pump.

History of the well. Please state in detail the dates of redrilling, together with the reasons for the work and the results. If there were any changes made in the casing, state fully, and if any casing was sidetracked, or left in the well, give the size and location. If the well has been dynamited, give date, size, section, 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 pulling.

Date	Work	Results
9-10-25	C.O.T.D. 1512. Part. Gall. W/4 spot to the top of the lower 1322-1326. 1877-	
1322	1430-1436. 1446-1454. 1461-1469. Also with 40000 lb sand and	

MUDDING AND CEMENTING RECORD

Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
7-1512	150	B-1 service		
9-1436	50	Illustration		

Plugs and Adapters
Heaving plug—Material _____
Adapters—Material _____
Length _____
Depth set _____

SHOOTING RECORD

Shell used	Explosive used	Quantity	Date	Depth shot	Depth fanned out

TOOLS USED
Rotary tools were used from _____ feet to _____ feet and from _____ feet to _____ feet
Cable tools were used from _____ feet to _____ feet and from _____ feet to _____ feet

DATES
Put to producing _____
The production for the first 24 hours was _____ barrels of fluid of which _____% was oil; _____% emulsion; _____% water; and _____% sediment.
If gas well, cu. ft. per 24 hours _____
Rock pressure, lbs. per sq. in. _____

EMPLOYEES
Grossman Drilling Co. Driller _____
Driller _____

FORMATION RECORD

FROM	TO	TOTAL FEET	FORMATION
0	770	770	Shale - water
770	808	38	Water sand
808	1210	402	Shale
1210	1230	20	Oil sand
1230	1232	2	Shale
1232	1234	2	Shale - oil sand
1234	1236	2	Oil sand
1236	1238	2	Shale
1238	1240	2	Oil sand
1240	1242	2	Shale
1242	1244	2	Oil sand
1244	1246	2	Shale
1246	1248	2	Oil sand
1248	1250	2	Shale
1250	1252	2	Oil sand
1252	1254	2	Shale
1254	1256	2	Oil sand
1256	1258	2	Shale
1258	1260	2	Oil sand
1260	1262	2	Shale
1262	1264	2	Oil sand
1264	1266	2	Shale
1266	1268	2	Oil sand
1268	1270	2	Shale

LOG NO. 10

Serial No.

U.S. LAND OFFICE

Serial Number

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY

U.S. GEOLOGICAL SURVEY



Grid for well location coordinates

LOG OF OIL OR GAS WELL

Company Name, Address, Field, Well No., Location, Elevation

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

Date, Title, Signed, Commenced drilling, Finished drilling

OIL OR GAS SANDS OR ZONES

Log of well sections: No. 1, from 1885 to 1887; No. 2, from 1887 to 1891; No. 3, from 1891 to 1895; No. 4, from 1895 to 1900; No. 5, from 1900 to 1905.

9-10-1899, C.O.L.D. 1512 Part Cement; 1232-1238, 1277-1289, 1430-1436, 1440-1444, 1461-1463, 1464-1466, 1467-1469, 1470-1472, 1473-1475, 1476-1478, 1479-1481, 1482-1484, 1485-1487, 1488-1490, 1491-1493, 1494-1496, 1497-1499, 1500-1502, 1503-1505, 1506-1508, 1509-1511, 1512-1514, 1515-1517, 1518-1520, 1521-1523, 1524-1526, 1527-1529, 1530-1532, 1533-1535, 1536-1538, 1539-1541, 1542-1544, 1545-1547, 1548-1550, 1551-1553, 1554-1556, 1557-1559, 1560-1562, 1563-1565, 1566-1568, 1569-1571, 1572-1574, 1575-1577, 1578-1580, 1581-1583, 1584-1586, 1587-1589, 1590-1592, 1593-1595, 1596-1598, 1599-1601, 1602-1604, 1605-1607, 1608-1610, 1611-1613, 1614-1616, 1617-1619, 1620-1622, 1623-1625, 1626-1628, 1629-1631, 1632-1634, 1635-1637, 1638-1640, 1641-1643, 1644-1646, 1647-1649, 1650-1652, 1653-1655, 1656-1658, 1659-1661, 1662-1664, 1665-1667, 1668-1670, 1671-1673, 1674-1676, 1677-1679, 1680-1682, 1683-1685, 1686-1688, 1689-1691, 1692-1694, 1695-1697, 1698-1700, 1701-1703, 1704-1706, 1707-1709, 1710-1712, 1713-1715, 1716-1718, 1719-1721, 1722-1724, 1725-1727, 1728-1730, 1731-1733, 1734-1736, 1737-1739, 1740-1742, 1743-1745, 1746-1748, 1749-1751, 1752-1754, 1755-1757, 1758-1760, 1761-1763, 1764-1766, 1767-1769, 1770-1772, 1773-1775, 1776-1778, 1779-1781, 1782-1784, 1785-1787, 1788-1790, 1791-1793, 1794-1796, 1797-1799, 1800-1802, 1803-1805, 1806-1808, 1809-1811, 1812-1814, 1815-1817, 1818-1820, 1821-1823, 1824-1826, 1827-1829, 1830-1832, 1833-1835, 1836-1838, 1839-1841, 1842-1844, 1845-1847, 1848-1850, 1851-1853, 1854-1856, 1857-1859, 1860-1862, 1863-1865, 1866-1868, 1869-1871, 1872-1874, 1875-1877, 1878-1880, 1881-1883, 1884-1886, 1887-1889, 1890-1892, 1893-1895, 1896-1898, 1899-1901, 1902-1904, 1905-1907, 1908-1910, 1911-1913, 1914-1916, 1917-1919, 1920-1922, 1923-1925, 1926-1928, 1929-1931, 1932-1934, 1935-1937, 1938-1940, 1941-1943, 1944-1946, 1947-1949, 1950-1952, 1953-1955, 1956-1958, 1959-1961, 1962-1964, 1965-1967, 1968-1970, 1971-1973, 1974-1976, 1977-1979, 1980-1982, 1983-1985, 1986-1988, 1989-1991, 1992-1994, 1995-1997, 1998-2000.

HISTORY OF OIL OR GAS WELL

Table with columns: Size casing, Weight per foot, Threads per inch, Make, Amount, Kind of shoe, Cut and pulled from, Perforated, Purpose.

MUDDING AND CEMENTING RECORD

Table with columns: Size casing, Weight per foot, Threads per inch, Where set, Number sacks of cement, Method used, Mud gravity, Amount of mud used.

PLUGS AND ADAPTERS

Table with columns: Adapter-Material, Heaving plug-Material, Depth, Size, Depth set.

SHOOTING RECORD

Table with columns: Size, Shell used, Explosive used, Quantity, Date, Depth shot, Depth cleaned out.

TOOLS USED

Table with columns: Rotary tools used from, Cable tools used from, Dates.

EMPLOYEES

Table with columns: Driller, Driller, Driller.

FORMATION RECORD

Table with columns: FROM, TO, TOTAL FEET, FORMATION.

FORMATION RECORD-Continued

Table with columns: FROM, TO, TOTAL FEET, FORMATION.

GRAM LOG