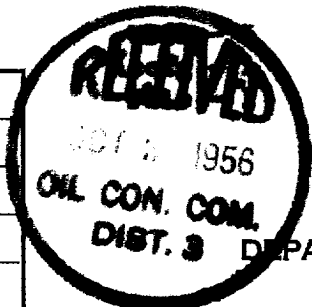


U. S. LAND OFFICE _____
SERIAL NUMBER Jicarilla
LEASE OR PERMIT TO PROSPECT _____
Contract #117



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

LOG OF OIL OR GAS WELL

LOCATE WELL CORRECTLY

Company Northwest Production Corporation Address 520 Simms Bldg., Albuquerque, N. M.
Lessor or Tract "E" Field Wildcat (NY) State New Mexico
Well No. 2-33 Sec. 33 T. 26N R. 3W Meridian NMPS County Rio Arriba
Location 1619 ft. S. of Sec Line and 974 ft. W. of Sec Line of Sec. 33 Elevation 7470.5 Grnd.
(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 RAY PHILLIPS
Date September 27, 1954 Title Asst Mgr., Production Operations

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

Commenced drilling 8-23-54, 19 54 Finished drilling 8-23-54, 19 54

OIL OR GAS SANDS OR ZONES
(Denote gas by G)

No. 1, from 4052 to 4102 G No. 4, from 5200 to 5204 G
No. 2, from 5740 to 5772 G No. 5, from 5208 to 5212 G
No. 3, from 5724 to 5736 G No. 6, from 5232 to 5248 G
(Cont'd on back)

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		Purpose
							From—	To—	
9-5/8	32.30	8-20	Spang	120.22	Baker guide				
7	24.10	8-20	Tanner	400.22	Reamer				
5	11.40	8-20	Tanner	233.22	Reamer				
2-3/8	4.77	8-20	Con	231.22	Tubing				

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
9-5/8	132.23	100 w/3% CaCl	Howco		
7	4301.20	50 of 8% & 100 reg	Howco		
5	6432.0	125 of 12% & 175 reg	Howco		

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 4460 feet, and from _____ feet to _____ feet
Cable tools were used from _____ feet to _____ feet, and from _____ feet to _____ feet

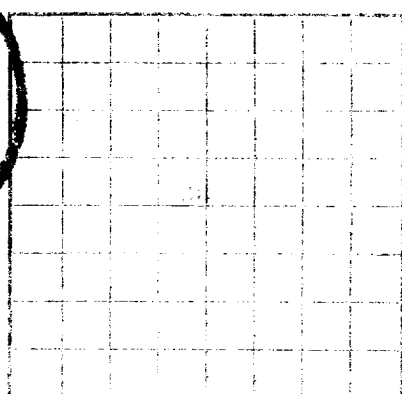
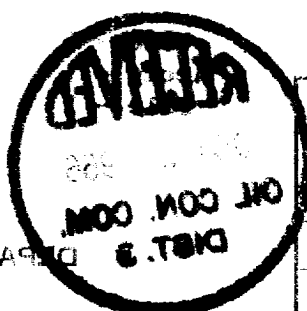
DATES

~~Pictured Cliffs test 9-13-54~~ Put to producing _____, 19____
The production for the first 24 hours was _____ barrels of fluid of which _____% was oil; _____%
emulsion; _____% water; and _____% sediment. Gravity, °Bé. _____
If gas well, None per 24 hours 502 CAOF Gallons gasoline per 1,000 cu. ft. of gas _____
Rock pressure, lbs. per sq. in. 51 CP 1023# 51 TP 1024# 51 12 days.
(See opposite side for HV test) EMPLOYEES
_____, Driller _____, Driller
_____, Driller _____, Driller

FORMATION RECORD

FROM—	TO—	TOTAL FEET	FORMATION
0	3602	3602	Surface
3602	3808	206	Ojo Alamo - Sand
3808	3886	58	Kirtland - Shale
3886	4052	186	Fruitland - Interbedded sand, shale & coal
4052	4112	60	Pictured Cliffs - Sand
4112	5716	1604	Lewis - Shale
5716	5824	108	Cliff House - Sand
5824	6122	368	Mancos - Interbedded sand, shale & coal.
6122	6358	166	Point Lookout - Sand
6358	6408 TD	102	Mancos - Shale

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY



LOG OF OIL OR GAS WELL

DO NOT WRITE IN THESE SPACES

1. The vehicle was a 1967 Ford Mustang coupe, black, with a white racing stripe down the side. It was a two-door model with a hardtop. The engine was a 289 cubic inch V8. The transmission was a four-speed manual. The car was in excellent condition, with no rust or damage. It was a very fast car, capable of reaching 100 miles per hour in less than 10 seconds. The car was a very popular model, and it was a very desirable car. It was a very nice car, and it was a very good car. It was a very fast car, and it was a very good car. It was a very nice car, and it was a very good car.

IN 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621,

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.

HISTORY OF OIL OR GAS WELL

U. S. GOVERNMENT PRINTING OFFICE

FROM-	TO-	TOTAL FEET	FORMATION
9	6172	6180	CLAY
10	6200	6210	CLAY
11	6228	6240	CLAY
12	6252	6266	CLAY
13	6272	6280	CLAY
14	6300	6306	CLAY
15	6316	6326	CLAY
16	6330	6334	CLAY
17	6338	6342	CLAY
18	6368	6388	CLAY
19	6400	6410	CLAY
20	6420	6430	CLAY
21	6440	6450	CLAY
22	6460	6470	CLAY
23	6480	6490	CLAY
24	6500	6510	CLAY
25	6520	6530	CLAY
26	6540	6550	CLAY
27	6560	6570	CLAY
28	6580	6590	CLAY
29	6600	6610	CLAY
30	6620	6630	CLAY
31	6640	6650	CLAY
32	6660	6670	CLAY
33	6680	6690	CLAY
34	6700	6710	CLAY
35	6720	6730	CLAY
36	6740	6750	CLAY
37	6760	6770	CLAY
38	6780	6790	CLAY
39	6800	6810	CLAY
40	6820	6830	CLAY
41	6840	6850	CLAY
42	6860	6870	CLAY
43	6880	6890	CLAY
44	6900	6910	CLAY
45	6920	6930	CLAY
46	6940	6950	CLAY
47	6960	6970	CLAY
48	6980	6990	CLAY
49	7000	7010	CLAY
50	7020	7030	CLAY
51	7040	7050	CLAY
52	7060	7070	CLAY
53	7080	7090	CLAY
54	7100	7110	CLAY
55	7120	7130	CLAY
56	7140	7150	CLAY
57	7160	7170	CLAY
58	7180	7190	CLAY
59	7200	7210	CLAY
60	7220	7230	CLAY
61	7240	7250	CLAY
62	7260	7270	CLAY
63	7280	7290	CLAY
64	7300	7310	CLAY
65	7320	7330	CLAY
66	7340	7350	CLAY
67	7360	7370	CLAY
68	7380	7390	CLAY
69	7400	7410	CLAY
70	7420	7430	CLAY
71	7440	7450	CLAY
72	7460	7470	CLAY
73	7480	7490	CLAY
74	7500	7510	CLAY
75	7520	7530	CLAY
76	7540	7550	CLAY
77	7560	7570	CLAY
78	7580	7590	CLAY
79	7600	7610	CLAY
80	7620	7630	CLAY
81	7640	7650	CLAY
82	7660	7670	CLAY
83	7680	7690	CLAY
84	7700	7710	CLAY
85	7720	7730	CLAY
86	7740	7750	CLAY
87	7760	7770	CLAY
88	7780	7790	CLAY
89	7800	7810	CLAY
90	7820	7830	CLAY
91	7840	7850	CLAY
92	7860	7870	CLAY
93	7880	7890	CLAY
94	7900	7910	CLAY
95	7920	7930	CLAY
96	7940	7950	CLAY
97	7960	7970	CLAY
98	7980	7990	CLAY
99	8000	8010	CLAY
100	8020	8030	CLAY

(CLASS) SENSITIVE TO SENSITIVE SVS TO TIO

FORMATION RECORD—Continued