

U. S. LAND OFFICE Santa FeSERIAL NUMBER SF-077383LEASE OR PERMIT TO PROSPECT
USA Kutz Deep Test "D"UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEYRECEIVED
OCT 26 1959LOG OF OIL OR GAS WELL
GEOLOGICAL SURVEY
FARMINGTON, NEW MEXICO

LOCATE WELL CORRECTLY

Company Pan American Petroleum Corporation Address Box 487, Farmington, New Mexico
Lessor or Tract USA Kutz Deep Test "D" Field Angels Peak Dakota State New Mexico
Well No. 1 Sec. 27 T. 28 R. 10 Meridian N. P. M. County San Juan
Location 790 ft. N of 1 Line and 790 ft. E of 1 Line of section 27 Elevation 5942 (FDB)
(Derive 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

ORIGINAL SIGNED BY
R. M. Bauer, Jr.Date October 22, 1959Title area engineer

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

Commenced drilling September 4, 1959 Finished drilling September 17, 1959

OIL OR GAS SANDS OR ZONES

(Denote gas by G)

No. 1, from 6415 to 6468 (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 _____ 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"	32.3	BRT	National	359	Guide				Surface
4-1/2"	9.5	BRT	National	6328	Guide				Oil String)
4-1/2"	11.6	BRT	National	271	Guide				Oil String)

MUDDING AND CEMENTING RECORD

Size casing	Where set	Number sacks of cement	Method used	Mud gravity	Amount of mud used
9-5/8"	367	200 sacks of cement	Rocky Mountain 1 plug		
4-1/2"	6575	750 sacks of cement	Haker 2 stage		

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 0 feet to 6575 feet, and from _____ feet to _____ feet

DATES

Completed as shut in gas well Angels Peak Dakota Field Put to producing Shut in for pipeline connection:
The production for the first 24 hours was _____ barrels of fluid of which _____% was oil; _____%
emulsion; _____% water; and _____% sediment. Gravity, °Bé. _____

If gas well, cu. ft. per 24 hours _____ Gallons gasoline per 1,000 cu. ft. of gas _____
Preliminary test Rock pressure, lbs. per sq. in. 4942

2000 EMPLOYEES
Shut in casing pressure 13 days.

_____, Driller _____, Driller
J. D. Roe, Driller R. G. Cary, Driller

Charles LockhartFORMATION RECORD J. C. Hinkley

FROM—	TO—	TOTAL FEET	FORMATION
0	950	950	Surface & Animas sands & shales.
950	1070	120	Ojo Alamo sandstone.
1070	1727	657	Kirtland sands & shales, including Farmington sands.
1727	1980	253	Fruitland sands, shales & coals.
1980	2057	77	Pictured Cliffs sandstone.
2057	3542	1485	Lewis shales & sands.
3542	3656	114	Cliffhouse sands & shales.
3656	4230	574	Henslee shales, sands & coals.
4230	4368	138	Point Lookout sands & shales.
4368	5465	1097	Mancos shale.
5465	6241	776	Gallup sands & shales.
6241	6303	62	Greenhorn shale.
6303	6358	55	Graneros shale.
6358	6416	58	Dakota sands & shales.
6416	6575	159	Dakota pay sands & shales.
			Tops from electric logs.
			Potential test 10-21-59 flowed 4856 MCFPD through 3/4" choke after 3 hours. Absolute open flow potential 6374 MCFPD.

FROM—	TO—	TOTAL FEE	FORMATION
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DATE	DESCRIPTION	AMOUNT	CHECK NO.	BANK
1/1/19	Initial deposit	100.00		Bank of America
1/15/19	Payment for rent	50.00	101	Bank of America
2/1/19	Payment for utilities	25.00	102	Bank of America
2/15/19	Payment for groceries	15.00	103	Bank of America
3/1/19	Payment for car insurance	30.00	104	Bank of America
3/15/19	Payment for medical bills	40.00	105	Bank of America
4/1/19	Payment for property taxes	60.00	106	Bank of America
4/15/19	Payment for car maintenance	20.00	107	Bank of America
5/1/19	Payment for groceries	15.00	108	Bank of America
5/15/19	Payment for utilities	25.00	109	Bank of America
6/1/19	Payment for rent	50.00	110	Bank of America
6/15/19	Payment for medical bills	40.00	111	Bank of America
7/1/19	Payment for property taxes	60.00	112	Bank of America
7/15/19	Payment for car insurance	30.00	113	Bank of America
8/1/19	Payment for groceries	15.00	114	Bank of America
8/15/19	Payment for utilities	25.00	115	Bank of America
9/1/19	Payment for rent	50.00	116	Bank of America
9/15/19	Payment for medical bills	40.00	117	Bank of America
10/1/19	Payment for property taxes	60.00	118	Bank of America
10/15/19	Payment for car insurance	30.00	119	Bank of America
11/1/19	Payment for groceries	15.00	120	Bank of America
11/15/19	Payment for utilities	25.00	121	Bank of America
12/1/19	Payment for rent	50.00	122	Bank of America
12/15/19	Payment for medical bills	40.00	123	Bank of America
1/1/20	Payment for property taxes	60.00	124	Bank of America
1/15/20	Payment for car insurance	30.00	125	Bank of America
2/1/20	Payment for groceries	15.00	126	Bank of America
2/15/20	Payment for utilities	25.00	127	Bank of America
3/1/20	Payment for rent	50.00	128	Bank of America
3/15/20	Payment for medical bills	40.00	129	Bank of America
4/1/20	Payment for property taxes	60.00	130	Bank of America
4/15/20	Payment for car insurance	30.00	131	Bank of America
5/1/20	Payment for groceries	15.00	132	Bank of America
5/15/20	Payment for utilities	25.00	133	Bank of America
6/1/20	Payment for rent	50.00	134	Bank of America
6/15/20	Payment for medical bills	40.00	135	Bank of America
7/1/20	Payment for property taxes	60.00	136	Bank of America
7/15/20	Payment for car insurance	30.00	137	Bank of America
8/1/20	Payment for groceries	15.00	138	Bank of America
8/15/20	Payment for utilities	25.00	139	Bank of America
9/1/20	Payment for rent	50.00	140	Bank of America
9/15/20	Payment for medical bills	40.00	141	Bank of America
10/1/20	Payment for property taxes	60.00	142	Bank of America
10/15/20	Payment for car insurance	30.00	143	Bank of America
11/1/20	Payment for groceries	15.00	144	Bank of America
11/15/20	Payment for utilities	25.00	145	Bank of America
12/1/20	Payment for rent	50.00	146	Bank of America
12/15/20	Payment for medical bills	40.00	147	Bank of America
1/1/21	Payment for property taxes	60.00	148	Bank of America
1/15/21	Payment for car insurance	30.00	149	Bank of America
2/1/21	Payment for groceries	15.00	150	Bank of America
2/15/21	Payment for utilities	25.00	151	Bank of America
3/1/21	Payment for rent	50.00	152	Bank of America
3/15/21	Payment for medical bills	40.00	153	Bank of America
4/1/21	Payment for property taxes	60.00	154	Bank of America
4/15/21	Payment for car insurance	30.00	155	Bank of America
5/1/21	Payment for groceries	15.00	156	Bank of America
5/15/21	Payment for utilities	25.00	157	Bank of America
6/1/21	Payment for rent	50.00	158	Bank of America
6/15/21	Payment for medical bills	40.00	159	Bank of America
7/1/21	Payment for property taxes	60.00	160	Bank of America
7/15/21	Payment for car insurance	30.00	161	Bank of America
8/1/21	Payment for groceries	15.00	162	Bank of America
8/15/21	Payment for utilities	25.00	163	Bank of America
9/1/21	Payment for rent	50.00	164	Bank of America
9/15/21	Payment for medical bills	40.00	165	Bank of America
10/1/21	Payment for property taxes	60.00	166	Bank of America
10/15/21	Payment for car insurance	30.00	167	Bank of America
11/1/21	Payment for groceries	15.00	168	Bank of America
11/15/21	Payment for utilities			

U. S. GOVERNMENT PRINTING OFFICE 16-43094-2

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 "staked" 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.

USA Tests Deep Test "B" #1. Spudded 12-1/4" hole on September 4, 1959 and drilled to 3671. 9-5/8" casing was set at 3642 with 200 sacks of cement. Circulated 20 sacks of cement. Tested casing and water shut off with 500 psi for thirty minutes, which held with no indication of pressure drop. Reduced hole to 7-7/8" at 3671 and resumed drilling operations.

resumed drilling operations.

4-1/2" casing was set at 6575'. With 2-stage tool at 2236'. Cemented first stage with 700 sacks 6% gel cement with 1-1/2 pounds medium TUL-FING per sack, followed by 300 sacks neat cement. Good returns. Tested 4-1/2" casing with 3000 psi, cemented second stage with 250

which held with no indication of pressure drops. Tested 4-1/2" casing with 3000 psi, which sacks 4 1/2 gal cement. Good returns. Tested 4-1/2" casing with 3000 psi, which held with no indication of pressure drops. Billed DV tool at 2236'. Tagged float collar at 6541'. CR-1 listed hole and logged ending at 6406'. Released

rolled in completion unit. The casing at 6498' with homal abrasjet tool.
The formation at 2300 feet with 8-5 barrels per minute.

Spotted 100 gallons breakdown acid. Pulled tubing and tool. Fracked thru casing with 60,000 gallons cold water and 56,000 pounds sand. Maximum treating pressure 2300 psi, minimum treating pressure 1800 psi, 1 1/2 to 10 minute injection rate 5/8 barrels per minute. Average injection rate for entire treatment 15 barrels per minute. New tubing and down hole stream. Loaded at tubing at 6477.5. Grubbed well in.

Completed as part of the Point Barlowe Gun Hill Project, October 8, 1958. EXHIBIT

last October 8, 1958, 7962 NORDP.

1959, 1962, 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, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 26