

APPROVED

COM

HOBBS

Budget Bureau No. 42-R358.4.
Form Approved.Form 9-581a
(Feb. 1951)

AUG 23 1962

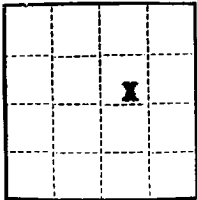
(SUBMIT IN TRIPLICATE)

Land Office Las CrucesLease No. LC 062269-AUnit GE. W. STANDLEY
DISTRICT ENGINEERUNITED STATES
DEPARTMENT OF THE INTERIOR

GEOLOGICAL SURVEY

1962 AUG 23 AM 9 53

AUG 23 1962



SUNDRY NOTICES AND REPORTS ON WELLS

NOTICE OF INTENTION TO DRILL	<input checked="" type="checkbox"/>	SUBSEQUENT REPORT OF WATER SHUT-OFF	
NOTICE OF INTENTION TO CHANGE PLANS		SUBSEQUENT REPORT OF SHOOTING OR ACIDIZING	
NOTICE OF INTENTION TO TEST WATER SHUT-OFF		SUBSEQUENT REPORT OF ALTERING CASING	
NOTICE OF INTENTION TO RE-DRILL OR REPAIR WELL		SUBSEQUENT REPORT OF RE-DRILLING OR REPAIR	
NOTICE OF INTENTION TO SHOOT OR ACIDIZE		SUBSEQUENT REPORT OF ABANDONMENT	
NOTICE OF INTENTION TO PULL OR ALTER CASING		SUPPLEMENTARY WELL HISTORY	
NOTICE OF INTENTION TO ABANDON WELL			

(INDICATE ABOVE BY CHECK MARK NATURE OF REPORT, NOTICE, OR OTHER DATA)

August 22, 1962

U. S. Smelting-USA

Well No. 4 is located 2310 ft. from N line and 1670 ft. from E line of sec. 22SW 1/4 NE 1/4 Sec. 22
(1/4 Sec. and Sec. No.)24-S
(Twp.)32-E
(Range)RMPM
(Meridian)Undesignated
(Field)Lee
(County or Subdivision)New Mexico
(State or Territory)

Ground Level

The elevation of the ~~bottom of hole~~ above sea level is 3600 ft. est.

DETAILS OF WORK

(State names of and expected depths to objective sands; show sizes, weights, and lengths of proposed casings; indicate mudding jobs, cementing points, and all other important proposed work)

See prognosis and plats attached.

I understand that this plan of work must receive approval in writing by the Geological Survey before operations may be commenced.

Company TECHNICO CORPORATION BY ITS MANAGING AGENT TECHNICO OIL COMPANYAddress P. O. Box 307Hobbs, New MexicoBy R. G. JonesTitle District Office Supervisor

NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

FORM C-128
 Revised 5/1/57

SEE INSTRUCTIONS FOR COMPLETING THIS FORM ON THE REVERSE SIDE

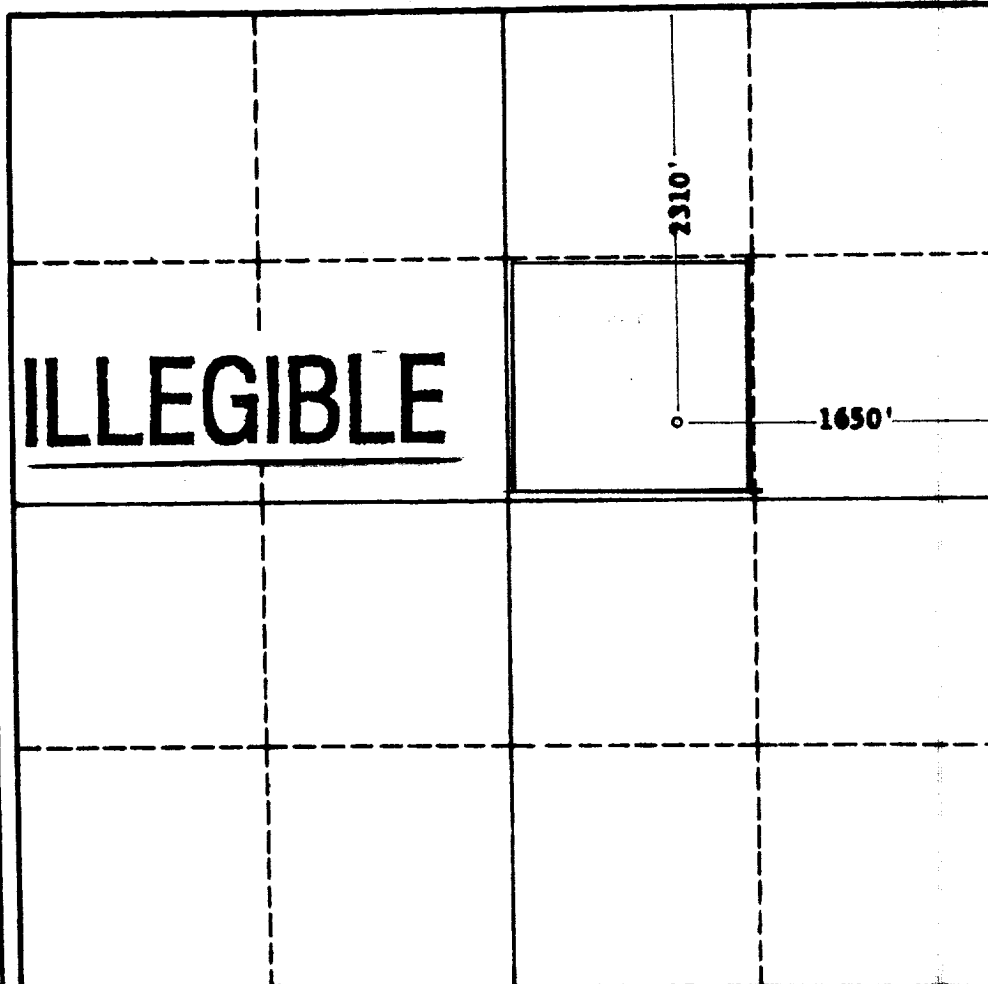
SECTION A

Operator TENNECO OIL COMPANY				1962 APR 23 AM 9:53 US SMELTING USA		Well No. 4
Unit Letter G	Section 22	Township 24 SOUTH	Range 32 EAST	County LEA		
Actual Footage Location of Well: 2310 feet from the NORTH line and 1650 feet from the EAST line						
Ground Level Elev. 3600 ft.	Producing Formation Delaware Sand		Pool Undesignated		Dedicated Acreage: 40 Acres	

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below? YES _____ NO _____. ("Owner" means the person who has the right to drill into and to produce from any pool and to appropriate the production either for himself or for himself and another. (65-3-29 (e) NMSA 1935 Comp.)
2. If the answer to question one is "no," have the interests of all the owners been consolidated by communitization agreement or otherwise? YES _____ NO _____. If answer is "yes," Type of Consolidation _____
3. If the answer to question two is "no," list all the owners and their respective interests below:

Owner	Land Description

SECTION B



CERTIFICATION

I hereby certify that the information in SECTION A above is true and complete to the best of my knowledge and belief.

Name _____
 Position **Field Office Supervisor**

TENNECO OIL COMPANY

TENNECO OIL COMPANY

August 22, 1962

I hereby certify that the well location shown on the plat in SECTION B was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

REGISTERED ENGINEER & LAND SURVEYOR

Date Surveyed **7-24-62**

Registered Professional Engineer and/or Land Surveyor, **JOHN H. WEST**

John H. West

Certificate No. **MEX 676**

N. M. C. E. & L. S. NO. 676

0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

TENNeco OIL COMPANY
PROGNOSIS TO DRILL AND COMPLETE
1082 AUG 23 AM 9 53

Lease: U. S. Smelting-USA

Well No.: 4

District: Hobbs

Field: Double X Delaware

Location: 2310' FWL & 1670' FWL of Sec. 22, T-24-S, R-32-E, Lea County, New Mexico

Projected Horizon: Delaware Sand

Estimated TD: 5030'

Estimated Elevation: 3600' GL

Drilling, Casing & Cement:

1. Drill 12-1/4" hole to approx. 350'.
2. Cement 8-5/8", 24#, J-55 csg w/insert float collar at approx. 350' w/sufficient volume to circulate. Use Incor High Early Portland cmt containing 2% HA-5. Slurry wt will be 14.85#/gal. Pumping time is 1 hr 12 min.

Record the following data:

- A. Volume of cmt slurry (cubic feet).
 - B. Brand name of cmt and additives, percent additives used, and sequence of placement if more than one type cmt slurry is used.
 - C. Approx. temperature of cmt slurry when mixed.
 - D. Actual time cmt in place prior to starting csg test.
3. If float valve holds, release pressure after WOC 4 hrs and nipple up.
 4. WOC a total of 8 hrs, pressure test csg w/1000 psi for 30 min and drill out cmt.

NOTE: When drilling out cement the weight on the bit should not exceed 20,000# and the rotary speed should not exceed 60 RPM until the top of the D.C. are below the base of the casing.

5. Drill 7-7/8" hole to Delaware Sand core point. Approximate core depth ~~4880'~~ 4880'. Exact core depth will be determined by company exploitation engineer.
6. Core from top of Delaware Sand to TD (approx 150') with a 7-13/16 X 4-3/8 diamond core head. Run junk basket on last two trips prior to coring point.
7. Set 4-1/2", 9.5#, J-55 at TD w/150 sx of 50-50 pozmix "S" w/2% gel (Slurry weight should be 15#/gal) and 50 sx reg cmt containing latex. (Slurry wt should be 14.5#/gal).

NOTE:

- A. Prior to running csg, treat mud system w/2 sx of Sodium Bichromate.
- B. Precede cmt w/20 bbls of lime wtr.

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NOBBE OFF 12-1-62

8. If float valve holds, ~~release rig when top plug is down.~~
9. WOC 8 hrs and run temperature survey.
10. RUDDU, run tbg, displace wtr w/oil and pressure test csg w/1500 psi for 30 min after WOC a minimum of 18 hrs.
11. Completion program to be determined at TD.

Drilling Mud:

1. Drill w/fresh wtr and native mud to approximate coring depth. Prior to coring, the mud should have the following properties:
 - A. Type: Salt Gel.
 - B. Viscosity: 35-40 sec/qt.
 - C. Water Loss: 10 cc or less
 - D. Filter Cake: 2/32 or less.

NOTE: Do not suspend drilling operations to mix mid.

Drilling Time:

1. Record 1' drilling time from surface to TD w/a geograph or equivalent recorder.
2. Driller will record 5' drilling time from 4750 to coring point or as specified by company exploitation engineer.

Drill Pipe Measurement:

1. Tally drill pipe on last trip prior to reaching coring point.
2. Tally drill pipe under company supervision at all casing points, coring points, and at TD.

Samples:

1. Catch one set of 10' samples from 4750 to TD unless otherwise specified by company exploitation engineer.
2. Catch circulating samples as specified by company exploitation engineer.
3. All samples will be washed, sacked, labeled, and tied in bundles of 100'.

Hole Deviation:

1. Run slope test every 100' on surface hole.
2. Run slope test on each trip for bit or every 500', whichever occurs sooner.
3. If hole deviation changes more than 1-1/2 degrees in any 100' interval, a string reamer will be run to wipe out dog leg.
4. If hole deviation changes more than 2 degrees in any 100' interval, the hole shall be plugged back and straightened out.
5. Maximum allowable hole deviation is shown on the following page.

1. *Journal of the American Medical Association*, 1997; 277: 1033-1038.

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, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 26

1. The first step in the process is to identify the problem. This involves gathering information about the situation and understanding the needs of the stakeholders involved.

2. *Chlorophyll a* and *Chlorophyll b* were determined by the method of Arar and Collins (1971).

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, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 26

[illegible]

PROGNOSIS TO DRILL

<u>Depth</u>	<u>Deviation</u>
0 - 1000	1 degree
1000 - 2000	2 degrees
2000 - 3000	3 degrees
3000 - 4000	4 degrees
4000 - TD	5 degrees

Surveys:

1. Run GR-Sonic Log from base of surface csg to TD w/detailed section as required.
2. Run Laterolog through detailed section.
3. Run temperature survey in production csg after WOC 8 hrs.
4. Run Gamma-Ray log w/collar locator through pay section for perforating control.

Completion:

To be determined at TD.

APPROVED: C. W. Nance
C. W. Nance

APPROVED: A. W. Lang
A. W. Lang

1. The first part of the report
describes the general situation
of the country and the
main problems which
are facing it.

2. The second part

describes the main
features of the
economy and the
social structure of the
country.

3. The third part

describes the main
features of the
politics and the
administration of the
country.

4. The fourth part

describes the main
features of the
culture and the
education of the
country.

5. The fifth part