LOG OF COAST OIL COMPANY'S WELL
Located in the
SE¼, NE¼, SE¼ Sec. 10, Twp. 28 S., R. 13 W., W.M.

0 — 39	Clay and Sand
105	Sandy Shale
146	Quick Sand Water
150	Blue Shale
183	Brown Shale
191	Lime
208	Hard Brown Shale
245	Blue Shale
260	Sandy Lime
270	Shale
295	Sand
312	Sand
314	Grahamite
322	Blue Shale
365	Lime
368	Pink Lime
374	Oil Sand
380	Lime
392	Sand and Lime
422	Shale
580	Gray Limey Sand
585	Gray Limey Sand
600	Sandy Clay
620	Lignite and Clay
630	Sandy Clay
645	Sand, Clay and Lignite
670	Limey Sand
790	Brown Sandy Clay
815	Gray Limey Sand
850	Gray Limey Sand - Gas
855	Dark Gray Sandy Shale
865	Gray Limey Sand
900	Dark Gray Pebble Shale
905	Gray Limey Sand
915	Gray Sand
980	Dark Gray Shale
1069	Dark Gray Limey Shale
1073	Gray Limey Shale
1175	Gray Limey Shale - Gas
1200	Gray Limey Shale - Gas and Oil Show
1300	Gray Limey Shale - Gas and Oil Show
-1476	Gray Limey Shale - Gas
1630	Blue Shale - Gas
1675	Gray Lime
1690	Blue Shale - Some Sand - Some Free Oil - Gas burns 20' high.
1728	Blue Shale - Oil Show - Gas
1760	Blue Shale - Gas and Oil
1765	Dark Gray to Black Lime
1790	Blue Limey Shale - Gas
1805	Hard Lime - Water

LOG OF COAST OIL COMPANY'S WELL (Cont.)

1817	Shale
1832	Lime
1895	Sand - Good Gas Show
2006	Lime
2026	Chocolate Shale - Good Gas Show
2075	Chocolate Shale - Streaks of Sand - Good Gas Show
2100	Alternating bed of Lime and Shale - Good Gas Show
2255	Sandy Lime with thin streaks of Shale - Continued Gas Show.

PULASKI ARCH

This Arch occupies the center of Township 28 South of Range 13 West, W.M., Coos County, Oregon. It is between three and four miles in length, and two miles wide at its widest point, wide at the South end, coming to a point at its north enclosure, forming an oblong appearance, trending 25 degrees East of North. It is well defined, as to formations, time, relations, and dips and strikes. The rocks, originally horizontal, have been compressed laterally, and thrown into folds, the Sinclines of the area consist of Newport, Beaver Slough, Coquille and South Slough. These are separated by the Pulaski and Westport Arches or anticlines. The Sandstones and Shales associate with such a great amount of Marine Fossils and Marine Organic Matter brings to light a very interesting and valuable state of facts.

HISTORY OF DEVELOPMENTS

In 1929 a group of men, inexperienced in the drilling for Oil, organized a company called the Fat Elk Oil and Gas Company. They assembled a very substantial standard drilling equipment, and in December, 1929 commenced the drilling of a well for Oil, in the Southeast corner of the Northeast Quarter of the Southeast Quarter of Section Eleven, Township Twenty-eight South Range Thirteen West of W.M., Coos County, Oregon, two miles South of Coquille. The well was drilled to the depth of 1476 feet.

LOG OF WELL

39 feet	CLAY AND SAND
39 to 105-71 feet	SANDY SHALE
105 to 146 --- 41 feet	QUICK SAND - Water 130 Ft.
146 to 150 --- 4 feet	BLUE SHALE
150 to 183 --- 33 feet	BROWN SHALE
183 to 191 --- 8 feet	LIME
191 to 208 --- 17 feet	HARD BROWN SHALE
208 to 245 --- 37 feet	BLUE SHALE
245 to 260 --- 15 feet	SANDY LIME
260 to 270 --- 10 feet	SHALE
270 to 295 --- 25 feet	SAND
295 to 312 --- 17 feet	SAND
312 to 314 --- 2 feet	GRAHAMITE
314 to 322 --- 8 feet	BLUE SHALE
322 to 365 --- 43 feet	LIME
365 to 368 --- 3 feet	PINK LIME

(Continuation of LOG OF WELL)

368 to 374 --- 6 feet	OIL SAND
374 to 380 --- 6 feet	LIME
380 to 392 --- 12 feet	SAND AND LIME
392 to 422 --- 30 feet	SHALE
422 to 580 --- 58 feet	CALCAREOUS SAND GRAY Very fine grained Silica Quartz Sand Shale with lime black and brown particles of diabase possible Volcanic erosion traces of iron.
580 to 585 --- 5 feet	CALCAREOUS GRAY SAND This sample shows more lime than the previous sample, also shows considerable amount of a low grade of Grahamite and magnetic Iron.
585 to 600 --- 15 feet	ARENACEOUS CLAY Brown Shale and Clay Silica Sand small particles of Grahamite. This may be sluffing off from above. It would indicate that it is not present in the Shale, there is a considerable trace of Aluminum Oxide.
600 to 620 --- 20 feet	LIGNITE MATERIAL Very low Lignite content possible inter-bedded with thin strata of Silica Clay, indicating Fresh Water Deposit.
620 to 630 --- 10 feet	ARENACEOUS CLAY Sandy Clay some Lime, trade of Titanium indicating fresh water deposit.
630 to 645 --- 15 feet	ORGANIC LIGNITE A mixture of Clay, Silica Sand and Lignite matter, showing of Lime, is quite evident that these elements would be stratified, gray muddy appearance, fresh water deposit.

(Continuation of LOG OF WELL)

645 to 670 --- 25 feet	CALCAREOUS SAND Gray Silica Sand Shale with Lime, Lime about ½ percent, there appears under the glass a trace of Petroleum content, it is possible for this sand to have carried some gas.
670 to 790 --- 120 feet	BROWN ARGILLACEOUS SAND Light brown clay, fine Silica Sand, small particles of Lignite Material may have been put in by drillers, or may have sluffed off from beds previously passed through, very plastic, great deal of Organic Material.
790 to 815 --- 25 feet	GRAY CALCAREOUS SAND Gray Sandstone very sharp approximately 1% Lime, greater part Silica, small amount of Quartz forming Porous, hard sandstone, showing a considerable amount of Organic matter not absolutely certain from what source it comes.
815 to 840 --- 25 feet	GRAY CALCAREOUS SAND Gray Sandstone Sealed with Lime approximately 1% Lime, sand consists of Silica Quartz, Short and Amphibole Schist, Sharp, Coarse, some small pebbles, indicating a hard porous Sandstone.
840 to 850 --- 10 feet	GRAY CALCAREOUS SAND Gray Sandstone Sealed with Lime at least 1% Lime, same as sample 815 to 840 except coarser, and a greater amount of Lime, making 35 feet same formation Gray Sand, gas.
850 to 855 --- 5 feet	DARK GRAY ARENACEOUS SHALE Shale dark gray to black, consisting of Feldspar, Hornblende, and Silica; Silica Quartz Gray Sand, it is evident that the sand lay interbedded in the Shale, indicating Marine Deposit.

855 to 865 --- 10 feet	GRAY CALCAREOUS SAND Gray Sandstone sealed with approximately 1% Lime Sand fine and sharp, Silica, Quartz. Some dark gray shale in cutting possibly came from small inlaid strata, same as in previous samples. Gas.
865 to 900 --- 35 feet	DARK GRAY PEBBLE SHALE Called Pebble Shale from the fact that the Shale is formed in Pebble-like formations and resembles small pebbles, or concretionary formations in the mass; consisting of Feldspar, Hornblende and Silica.
900 to 905 --- 5 feet	GRAY CALCAREOUS SAND Gray Sand sealed with approximately 2% Lime Sand very fine Silica, Quartz, some particles of Shale, possibly came from formations above, there is a noticeable increase in Lime content.
905 to 915 --- 10 feet	GRAY SAND Very fine Gray Silica, Quartz Sand interstratified with thin stratas of Gray Shale. The fineness of the Sand would indicate it had been deposited in still water.
915 to 980 --- 65 feet	DARK GRAY SHALE Dark Gray Silica, Feldspar Shale, showing a slight petroliferous condition, indicating marine deposit, the first of any of the samples that have shown a true Shale. Sample from 915 to 943, from 943 to 948, from 948 to 958, to 980 are all the same formation and character. Marine.
980 to 1069 --- 89 feet	DARK GRAY CALCAREOUS SHALE This Shale when wet has the appearance of being black, small amount of Silica Quartz Sand, Shale consists of Lime, Silica and Feldspar. Marine

1069 to 1073 --- 4 feet	GRAY CALCAREOUS SHALE Gray Shale carries between 3% and 4% Lime when wet, has a dark brown appearance with white specks which constitutes Lime forming a limey shale. Marine origin. Gas.
1073 to 1125 --- 52 feet	GRAY CALCAREOUS SHALE Gray Shale Silica, Feldspar and Lime Shale, carrying between 2% and 3% Lime, a continuation of previous sample with White Particles in the Samples are Lime. Gas.
1125 to 1200 --- 75 feet	GRAY CALCAREOUS SHALE A continuation same gray to dark brown Shale consisting of Silica, Feldspar and between two and three percent Lime, traces of Petroliferous conditions; there is indication that these shales carried considerable in hardness showing Oil.
1200 to 1300 --- 100 feet	GRAY CALCAREOUS SHALE This Shale when wet, has the appearance of being black. Breaks in slabs and blocks, consists of Silica, Feldspar, Hornblende and about 1% lime much the same as previous samples.
1300 to 1476 --- 176 feet	GRAY CALCAREOUS SHALE Same as from twelve to thirteen hundred excepting at a point near fourteen hundred and forty feet, it would appear from samples that there was strata of Lime. Bottom of well 1476. Well was capped at this point. A valve in the cap when closed for a short time and opened, gas would burn for several minutes.

SIZE AND AMOUNT OF CASING IN WELL

146 feet	24 inch
347 "	15 "
1115 "	12¼ "
1393 "	10¾ "
1460 "	8¼ "

The samples of cuttings from the well were well kept, and indicate and disclose a very interesting and favorable condition. The top 915 feet showed a fresh water, and marine sediment, consisting of Sandstone, Shale, Lime and Clay Stratified, there were three pronounced showings of Gas to this point. From 915 feet to the bottom, 1476 feet, a depth of 565 feet with no breaks consisted of a blue and gray Diatomaceous Shale carrying abundance of Marine Fossil of Organic life. These shales disclose a petroliferous content of petroleum. Within this distance of 565 feet, there was one pronounced showing of Gas and two definite showings of Oil and Gas.

The examinations and study of the Pulaski Arch have disclosed the following facts:

First: That the Pulaski Arch is of a known character in which Oil and Gas may accumulate.

Second: That it is associated with Petroliferous Shales, showing a sufficient Oil content to form accumulations.

Third: That there are Sandstones of sufficient thickness and porosity to act and form reservoirs for the accumulation of both Oil and Gas.

Fourth: There are no visible faults or intrusion that may have altered or destroyed any of the conditions, since having been set up. With the foregoing conditions, which have disclosed a very favorable condition for the accumulation of both Oil and Gas at a depth not to exceed 3000 feet, I fully advise and recommend that this well be drilled to a point of definite determination.

(Signed) J. ELLIS LOHEMAN
Consulting Geologist and
Oil Operating Engineer.