

18S-47E-?

Malheur County

LOG OF WELL NO. 1 OF ONTARIO COOPERATIVE GAS & OIL COMPANY
AT ONTARIO, OREGON

<u>Character of rock</u>	<u>Thickness (feet)</u>	<u>Depth^a (feet)</u>
Soil, black, sandy	8	0
Sand and coarse gravel with water	16	8
Clay, blue, soft	67	24
Sand with much water	10	91
Shale, sandy	53½	101
Hard "shell"	½	154½
Shale, blue	481	155
Gas		636
Shale, blue	70	636
Shale with some gas	5	706
Shale, blue	125	711
Hard "shell"	1	836
Shale with trace of oil	9	837
Shale, blue	32	846
Hard "shell"	2	878
Shale	88	880
Sand with gas under high pressure	14	968
Shale	4	982
Sand	7	986
Shale	65	993
Sand with gas under very high pressure	8	1,058
Shale	132	1,066
Hard "shell"	1	1,198
Shale	20	1,199

<u>Character of rock</u>	<u>Thickness (feet)</u>	<u>Depth^a (feet)</u>
Hard "shell"	1	1,219
Shale	3	1,220
Hard "shell"	3	1,223
Shale	78	1,226
Hard "shell"	1	1,304
Shale and sand	291	1,305
Shale, brown	80	1,596
Shale, sandy	20	1,676
Shale, blue	85	1,696
Hard "shell"	5	1,781
Shale, brown	110	1,786
Shale with a little gas	100	1,896
Shale, blue	150	1,996
Shale, blue, with gravel	10	2,146
Shale, sandy	43	2,156
Sand with trace of oil and much gas under high pressure. .	1	2,199
Shale, soft	276	2,200
Shale, hard	30	2,476
Shale, blue	165	2,506
Shale, blue, mixed with small pebbles of black chert . . .	165	2,671
Shale, hard, brittle	50	2,836
Shale, soft, blue	120	2,886
Shale, hard	20	3,006
Shale, dark	80	3,026
Shale, blue	225	3,106
Shale, dark, hard	70	3,331

<u>Character of rock</u>	<u>Thickness (feet)</u>	<u>Depth^a (feet)</u>
Shale, blue	65	3,401
Shale, dark, hard	41	3,466
Shale, dark, blue	60	3,507
Shale, dark, hard	29	3,567
Shale, blue	54	<u>3,596</u>
Total depth of well ^b		3,650

^aIn the logs in this paper the depths given refer to the top of each stratum measured in feet from the surface of the ground.

^bIn September 1910, the depth of the Ontario well is reported to be 4,000 feet. Samples submitted from this depth are identical in character with the light-blue shale found at higher horizons, and there can be no doubt that the well has not yet passed entirely through the Payette formation.