COMPOSITE LOG OF UNITED CO. REED & POTEET # 1

Section 9, Township 23 south Range 31 East

HARNEY COUNTY OREGON. 10/25/49

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DEPTH & THICKNESS

0--480-- Tuffaceous clay, sand & gravel.

480--610--130'--soft white tuffaceous clay; some gravel embedded in clay. tan & coffee colored tuffaceous clays. few pieces of green shale.

610--650--40'--Grayish tan to grayish black lava; green mineral in lava.

650--660--10'--altered sediments.

660--690--30'-- grayish tan to grayish black lava.

690--708--18'--red to brick colored altered material; red sandy shale

708--750--42'-- grayish tan lava.

750--790--40'--vari-colored altered material; clear quartz? in altered material.

790--1000--210'-- vari-colored volcanic agglomerate;gray & green bentonitic clays; white clay.

1000--1100--100'--hard grayish black lava with high iron Pyrite.

1100--1140--40'-- streaks of grayish black lava & gray tuffaceous clays and shales.

1140--1290--150'-- gray ,green & white tuffaceous shale & clay with some sandy streaks; Some vari-colored tuffaceous shale with large quartz crystals; some cream colored clays.

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DEPTH & THICKNESS

1290--1430--140'--cream colored limey clay vari-colored tuffaceous clays.

1430--1585--155'--tuffaceous material & some sandy streaks grayish green to grayish tan clay which has been partly altered to quartz? by hydrothermal action vari-colored sand.

1585--1860--275'--very hard grayish white hydrothermally altered sediments; the original material was probably volcanic ash.

1860--3730--1870'vari-colored bentonitic clays; tuffaceous shales grayish black altered sediments; green shales and streaks of limey ash; some hydrocarbons? in tan & brown shales.

3730--3850--120'-- hard ,fine grained,grayish tan to grayish black lava.

3850--3950--100' grayish black altered sediments.

3950--4010--60'-- grayish tan to grayish black lava

4010--4065--55'-- grayish to grayish green altered sediments

4065--4092--27'-- grayish black lava

4092--4100--8'-- altered material

4100--4118--18'--grayish black lava

4118--4121--3'--altered material

4121--4143--22'--grayish black lava

4143--4310--167'--vari-colored altered sediments with sandy streaks.

4310--4350--40'--grayish black ,fine grained lava.

4350--5140--790'--gray,green & tan bentonitic clays and some

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continued.

altered sediments .

DEPTH & THICKNESS

5140--5155--15'-- top of Columbia basalts of lower Miocene age. grayish tan to grayish black lava.

5155--5228--73'-- bentonitic clays; tuffaceous shales.

5228--5260--32'-- grayish tan lava

5260--5290--30'-- tan & green clay & altered material.

5290--5300-10'-- grayish tan lava

5300--5320--20'-- vari-colored altered material.

5320--5390--70'--grayish tan to grayish black lava

5390--5410--20'--vari-colored altered sediments.

5410--5470--60'--very hard grayish tan to grayish black lava

5470--5560--90'--soft bentonitic clays & vari colored altered sediments.

5560--5680--120'--grayish tan lava with black mineral specks.

5680--5800--120'--grayish tan & green bentonitic clay ;brick red altered material & altered material in streaks.

5800-5830--30'-- grayish tan lava

5830--5955--125'--vari-colored altered sediments & thin streaks of lava.

5955--6000--45'--grayish tan lava;

6000--6060--60'-- gray,tan & green altered sediments

6060--6103--43'-- grayish tan to grayish black lava

6103--6330--227'--soft gray, tan & green bentonitic clays & streaks of altered material.

6330--6380--50'--grayish black& grayish green lava.

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DEPTh & THICKNESS

6380--6420--40' tan & green bentonitic clays

6420--6480--60'-- TOTAL DEPTH--grayish black & grayish green lava and grayish tan lava.

All samples were checked with a fluorescope and there were no worth while shows of oil and gas. There is a very close correlation between sample log, drilling time and Schlumberger log. The high resistivity values on the Schlumberger log correlate with the lava beds. The high drilling time also correlates with the lava beds.

There were some streaks of dry hydrocarbon in the brown and tan shales. It appears that this has been burned by high temperatures.

Burns, Oregon October 26,1949