

Supplee Oil

NAME	OLD NAMES	PRINCIPAL ORE	MINOR MINERALS
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17 S	25 E	23
T	R	S

PUBLISHED REFERENCES

McKittrick, Wm. Mastees Thesis, OSC/934

Crook ..... COUNTY

Dayville Quad. .... AREA

5000 ..... ELEVATION

..... ROAD OR HIGHWAY

..... DISTANCE TO SHIPPING POINT

MISCELLANEOUS RECORDS

PRESENT LEGAL OWNER (S) .....

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Address .....

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OPERATOR .....

Name of claims	Area	Pat.	Unpat.
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Name of claims	Area	Pat.	Unpat.
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EQUIPMENT ON PROPERTY

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# State Department of Geology and Mineral Industries

702 Woodlark Building  
Portland, Oregon

## SUPLEE OIL

## DAYVILLE QUADRANGLE CROOK COUNTY

Owner: George and Annie Q. Senecal

Location: SW $\frac{1}{4}$  NW $\frac{1}{4}$  sec. 23, T. 17 S., R. 25 E., Crook County, Oregon.

Geology of Suplee area: The Suplee area is composed of Carboniferous limestones, cherts, sandstones and conglomerates, Jurassic, Triassic and Cretaceous sediments.

The structure of the Paleozoic rocks is that of an anticline whose axis trends approximately north and south with limbs dipping to the east and west. The Carboniferous rocks strike N. 45° E. to N. 50° E. with a dip of approximately 80 degrees, but the beds have been deformed to such an extent that their strike varies in some places from a north-south to a northeast-southwest direction. The Mesozoic material is well exposed on the outer limbs of the anticline, being overlain to the south and west by younger lavas closely resembling the Columbia River basalts. The coarse pyroclastics of the Harney formation cap the Mesozoics on the north and probably cap the basalts on the northwest. East-west streams have cut across the strike at right angles, revealing excellent sections of the limestones and associated sediments.

The material examined and tested for oil content was from the Upper Cretaceous formation (the old Chico formation of Gabb's, now the Antome formation of Packard) which outcrops in a roadcut on the new Suplee-Paulina road just above Soda Springs (sec. 23, T. 17 S., R. 25 E.) where well stratified fossiliferous limestones may be seen grading into conglomerates composed of well rounded chert and quartzite pebbles and boulders, some of which measure as much as twelve inches in diameter. During deposition of these sediments, channels of a cut and fill nature were cut through these beds and are now exposed in the roadcuts. Such channels seem to trend in a north-south direction, seemingly at right angles to the strike of the strata of the older beds. Good cross-bedding is exhibited in these channel fills.

Just east of the Andrew Bernard ranch house on Beaver Creek, the Cretaceous formation also outcrops along a northwest-southeast trending ridge. The rocks are limey conglomerates composed of rounded to subrounded pebbles of quartzites and cherts in a matrix of fine to arenaceous limestone with interbeds of fossil-bearing limestone occurring throughout.

The Cretaceous, then, here consists of fine to coarse-grained fossiliferous limestones grading into an arenaceous phase which are unconformably overlain by conglomerates with pebbles ranging in size from a fraction of an inch to more than twelve inches in diameter.

Unconformably capping these old conglomerates at an elevation of about 5000 feet are some ten feet more or less of coarse gray pyroclastics which resemble and probably are identical with the pyroclastics of the Harney formation. This capping

appears to be widespread over much of the area to the north and northwest, with direction and amount of dip being variable. These dips probably represent initial dips which somewhat reveal the older erosion surface upon which the ash fell.

Paleontology: The fossils found at the Bernard ranch include species of *Trigonia*, *Natica*, and an unidentified pelecypod. Those found at the Soda Springs locality include *Natica*, *Solen* and an unidentified pelecypod, which is not the same as that undetermined species found at the Bernard Ranch locality. The *Solen* were not found at the Bernard ranch and the *Trigonia* were not found at Soda Springs. The *Natica* species seem to be quite similar. More work will need to be done on determinations of these fossils before accurate correlations may be completed.

McKittrick reported that some of his fossils found in the area contained globules of oil. In the fossils collected by the writer previous to the date of the present field examination, no oil was detected. These fossils were taken from the Bernard ranch and Soda Springs localities, the latter locality lying stratigraphically below those sediments from which the samples tested for oil (described below) were taken.

Economic: The basal gravels lying upon the Cretaceous limestones were panned for gold but no color was noted.

Workmen constructing the road through the area reported getting oil stains on hands and clothing when digging out the present road cuts on the new Suplee-Paulina road. At a site just above and slightly east of Soda Springs, samples were taken from a road cut to be tested for oil. The material thus exposed in the cut was colored yellowish-brown due to the presence of limonitic iron. Such color was also noted on incrustations at Soda Springs where the water also had a slight rusty taste noticeable above the soda taste of the water. Material similar to that tested has been used to surface the road and has been found to pack down and produce a hard and durable surface.

The following test was applied to the sands lying just below the coarse gravels:

The sample was crushed and placed in a test tube with acetone and shaken vigorously. After allowing the sediment to settle, the liquid was filtered to remove the yellow coloration of the liquid, and then the liquid was replaced in the tube. This was then held before a strong light and water dropped a drop at a time into the test tube. The presence of oil was indicated by a milky opalescence surrounding the water droplets, the reason for this phenomenon being the precipitation of oil momentarily by the water. This test is used to indicate the presence or absence of clear and higher test petroleum.

This test has been run to test its indicative ability for minute amounts of oil present, and was found reliable for 0.01% oil content. The reaction found in the sample tested was much stronger than that obtained for 0.01% content, indicating a stronger concentration of oil.

Development: Most of the area surrounding Suplee has been leased at one time or another to various oil development groups. Past lessees of the area are W. H. Dills and R. E. Combs, who took the last oil leases that are of record on the property in January, 1937. It is probable that these leases have expired by this date, although more recent leases may now be in effect but not of record.

Drilling was begun on a well on the Weberg Ranch several miles to the south, but only went down about 80 feet when a flow of hot water was hit and drilling was discontinued. "The driller said they would not pay him and the lessees said that the driller was no good, so there." The driller was George E. Scott, Prineville, Oregon. It is possible Scott has a log "for he told me he always kept one".

Other work on the area: The Geology of the Suplee Paleozoic Series of Central Oregon - William Ernest McKittrick, Masters Thesis, Oregon State College, 1934.

Report by: Jean Bowman, August 8, 1942

Informant: A. R. Bowman, Prineville, Oregon.

Visited: July 27, 1942