

Confidential

This is situated on a meandering but shallow stream from 30 to 50 feet wide. During the writer's visit the water was low, being on an average 8 or 10 inches deep. There is much more drop in the river than is usual in such streams, being 8 to 10 feet per mile from the railway crossing North. From the railway crossing south the grade is slightly more.

The river meanders back and forth between two scarp hills. The scarp faces would be about 25 feet high at the north part of the territory examined and increase in height to about forty feet as the river is ascended. The scarp faces are perpendicular and fairly regular in strike. The distance between the scarp faces are quite regular, being from 1000 to 1500 feet apart. It is apparent the scarps are due to a fault movement.

As noted above, the river crosses back and forth from one face to the other, but only occasionally encounters either of them. Where the stream has washed away the overburden which fell in following the fault movement it has exposed oil bearing shale. These shale exposures may be observed along the river bank, at intervals for at least twenty miles.

The shale is exposed for a depth of from 6 to 20 feet, but the bottom was not visible at any point, for a depth of from five to eight feet, immediately overlying the shale is a bluish grey soil containing some limestone pebbles. Over this is a yellow soil containing water worn pebbles, mainly of small size for a depth of five to eight feet. Above this is a black muck for a depth of two feet forming the surface soil.

Oil - The Pas - Oil shale report & Pasquia Hills Report

THE PAS

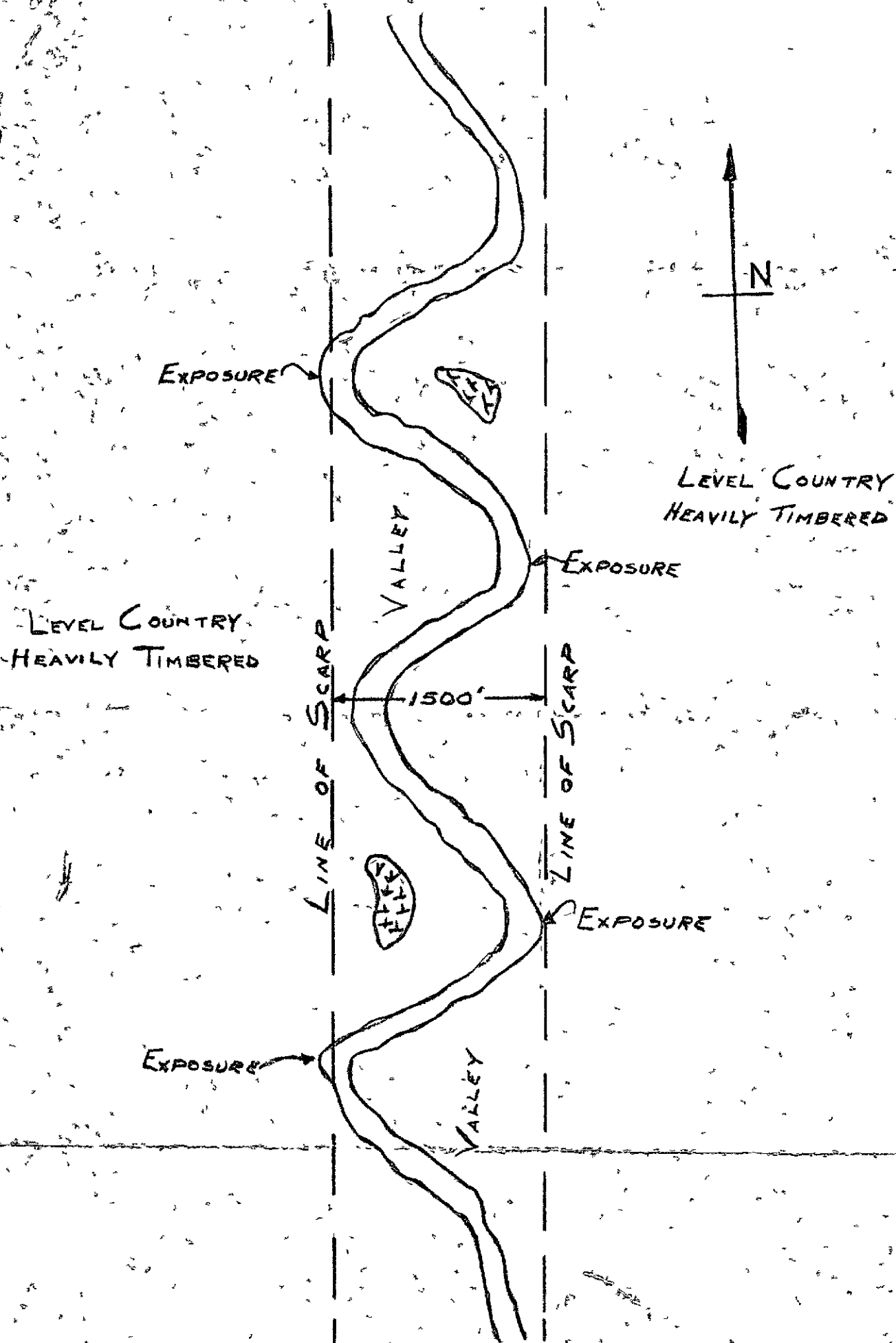
This examination did not reveal any limestone overlying the shale, but at some points there were quite large pebbles of limestone in the blueish grey soil above the shale. It is possible that this is an impure limestone which is much weathered on exposure. In the river bed there are very large slabs of pure white, fossiliferous limestone, but none was seen in place. At one point, among the decomposed material covering an exposure of twenty feet thick of the shale, there are limestone boulders which I believe formed a bed of limestone in the shale.

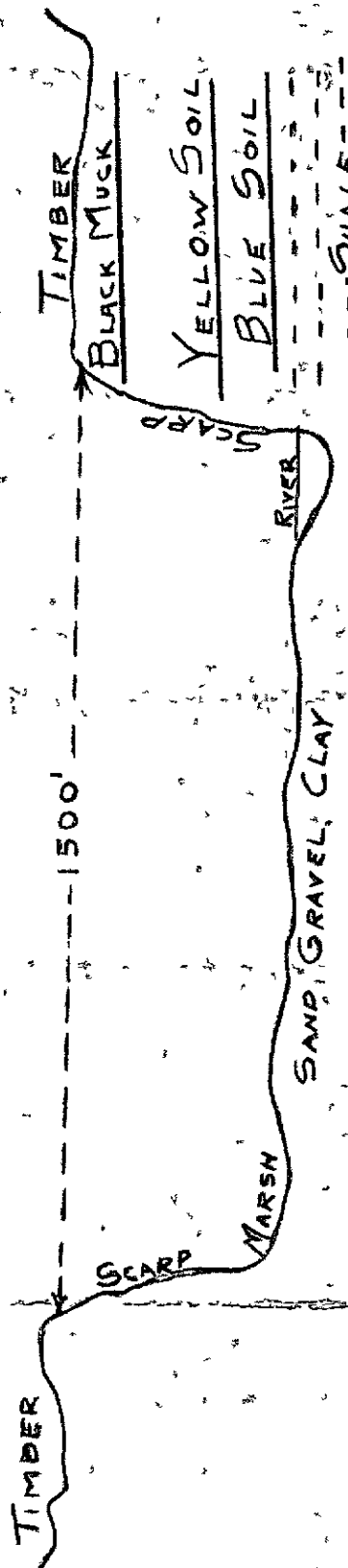
Naturally, where the shale is exposed at these faces it is much decomposed. Nevertheless it all contains oil.

The country inland from the river is fairly level, only small depressions of a few feet being observed. A traverse of five miles was made up into the other River. This is a small stream emptying into the river above referred to. No shale exposures were seen, but there was much shale float in the stream bed. There are no lakes or ponds in the area, the country being heavily timbered with poplar and spruce.

There is at least twenty miles along and twenty feet thick of oil bearing shales. How wide the deposit is could not be determined. Wherever there was water not in motion along the river there was a thin coating of oil in the water.

Probably considerable further information could be obtained regarding the extent of the deposit if a further investigation. The best time to make this would be when the river is frozen over as the underbrush is very dense along the river. It is not likely that any exposures occur other than along the river.





SKETCH SHOWING POSITION
OF RIVER AND SCARP FACES
IN REFERENCE TO OIL BEARING SHALE

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