

ABSTRACT

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Feasibility study of waterflooding the G sands in Point Fortin

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The G sand occurs at an average depth of 2,880 ft. subsea. It contains three (3) secondary faults and its dip is 20° towards the north. The total area under study is 284 acres.

The field was initially produced in 1939, flowing at an average of 360 b.o.p.d. and a GOR of 600 cu ft./bbl. Eight million six hundred and ninety five thousand barrels (8.695×10^6 bbl) of oil have been produced from primary production. Calculations show that ten million six hundred and eighty thousand barrels of oil (10.68×10^6 bbl) can be recovered from the reservoir by waterflooding. The gravity of the crude varies between 19° API and 25° API and the viscosity of the oil under reservoir conditions is 10cp.

The reservoir rock characteristics and fluid properties of the G sand formation are favourable to waterflooding. New wells may have to be drilled and gravel packed in the area.

An inverted five spot pattern is recommended for the area because of the high mobility ratio of the reservoir fluids.