

DEEP CRESCENT PROSPECT Logan County, Oklahoma Section 34 -T18N - R4W

The Deep Crescent Prospect is located along the Nemaha fault zone in Logan County, Oklahoma. The Nemaha Fault zone runs N-NW to S-SE throughout central and northern Oklahoma. During continuous uplift along the Nemaha, multiple faults developed along the anticline. This series of faults along the Nemaha have allowed the deeper Ordovician zones to trap oil and gas. A structural high was identified in the S2 of Section 33 and the SW of Section 34-18N-4W. The structure is bound by 3 faults and shows 4 way closure.

An analog field exists to the south across a southern bounding fault and down-dip from the proposed location on a structure in Section 3-17N-4W. The field consists of 6 wells that produced 564,454 BO and 2.2 BCF from the 1st Wilcox. The producing Wilcox sands in this field have on average 10' of net sand, 50 to over 100 ohms resistivity and 6-14% cross plot porosity.

The Wilcox has been tested in a few key wells in the Western portion of the structure we have identified in Sections 33 and 34-18N-4W. The Laray 9-33, drilled by Baron Exploration in 2001 tested an upper part of the Wilcox from 6037-6042' and produced 422 BO and 294,000 MCF from the same zone that produced in the analog field. The sand was only 5' thick. It appears that the Wilcox sand thickens from West to East in this area. The J F Manning 1 in the NW/4 NW/4 of Section 3-17N-4W produced from the Layton formation, but had 13' of Wilcox sand that had oil staining on core samples. The Moore 1 well in the NE/4 NE/4 of Section 33-18N-4W was down-dip and had 15' of Wilcox Sand. In the SW/4 of Section 34-18N-4W, we are hoping to encounter a thicker Wilcox sand while staying on the structure.

The Viola (dolomite zone), Layton, and Carmichael are secondary objectives in this prospect. Several wells were drilled in Section 33-18N-4W, in the mid-1950's that produced from the Viola (dolomite zone) and the Layton. The completion reports indicate the wells were dually completed with the dolomite zone flowing through tubing and the Layton was produced up casing. There are individual cums on these wells prior to 1973 that total greater than 280,000 BO. In 1973, Cotton Petroleum Corporation unitized 8 wells to form the NW Crescent unit for the Viola dolomite and Layton sands. The unit made 137,544 BO and 1,044,900 MCF from 1973 to July of 2020. The Carmichael has been tested in the NE4 SE4 33-18N-4W from the Laray 8-33. The Laray had an IP of 321 MCF from 3584-98' in 1999. It produced 295,772 MCF.

Gulf is scheduled to drill a vertical well to target the Ordovician zones on the structure with uphole potential in the Layton and Carmichael. The proposed location for the Ausbie #1-34 is in the NW4 SW4 of Section 34 with 2 potential 40-acre offsets in the 160-acre spacing unit where the Ordovician zones have not been tested. The Ausbie #1-34 is targeting the Viola (dolomite zone), Simpson Dolomite and 1st Wilcox. Gulf has contracted a local drilling contractor to drill the well on a footage basis.

At present, Gulf has acquired 160 acres in the prospect in the SW/4 of section 34-18N-4W. The AMI includes the E2 of Section 33 and Section 34-18N-4W. The acreage cost will be \$325 per acre. Gulf will be delivering a 78% NRI with a dry hole cost of \$517,000 and completion cost of \$367,000 for a completed well cost of \$884,000. There will be a 25% Management Fee on the drilling cost for the initial well calculated as follows; (\$517,000 DHC *1.25 or \$517,000 DHC/0.80) which will result in an initial well's DHC to participate to be \$646,250. Completion costs and all subsequent well costs will be heads-up. For a 1% interest, the upfront cost to participate in the prospect is \$6,982.50 and the cost to complete the initial well is an additional \$3,670.00. Should drilling expenses exceed the AFE estimate there will be no additional Management Fee charged to participating owners.

Please contact Jordan Williams via email at <u>jwilliams@gulfexploration.com</u> or by phone at 405-840-3381 with any questions.





MAIN TARGETS: SIMPSON

- Simpson Avg. Thickness 10' net sand
- Resistivity 50+ ohms
- Porosity 6-14%
- Other potential targets in Viola & Layton



DEEP CRESCENT PROSPECT

Logan County, Oklahoma T18N-R4W

Conventional, Vertical, TD 6500'

PRODUCTION

- Oil & Gas
- Estimate new well to make 100,000+ BO
- Estimated payout < 1 year
- Analog Field (7 wells) Cum Oil 564,454 BO Cum Gas 2,266,471 MCF









Simpson: 1st Wilcox Isopach



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