GEOLOGIC REPORT

Walnut Draw Unit
Chaves and Eddy Counties, New Mexico

The proposed Walnut Draw Unit covers 9,780.99 ~~9,797.48~~ acres and is located fourteen miles northwest of Artesia in Eddy and Chaves Counties, New Mexico. This unit is situated in a very sparsely drilled area. A 6,500 foot wildcat located in Section 7, Township 16 South, Range 24 East is proposed to evaluate the primary objective, the Siluro-Devonian dolomite. Other secondary objectives include pays in Permian and Pennsylvanian formations that have had showings of hydrocarbons in the area.

Cambrian, Ordovician, Silurian, Devonian and Mississippian rocks were deposited in this area in seas entering from the south. Post Chester uplift in the north resulted in southward tilting and erosion of these pre Pennsylvanian beds. Pennsylvanian strata were deposited on Mississippian rocks to the south and on these progressively older rocks northward. Stratigraphic oil traps are anticipated due to the pinchouts of these older beds as is shown on the attached cross section.

Contours on the top of the Silurian-Devonian show a pronounced south southeast plunging nose. This structured feature is situated just south of the pinchout or limits of the Siluro-Devonian dolomite as is shown on the accompanying structure map.

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Anticipated depths of geologic markers are as follows:

GEOLOGIC MARKERS

FORMATION	DEPTH (Sulsea)	LITHOLOGY
San Andres	300 (+3450)	dolomite
Glorieta	1425 (+2325)	sandstone
Abo	3600 (+150)	shale & dolomite
Wolfcamp	4350 (-600)	limestone
Upper Pennsylvanian	5600 (-1850)	limestone, shale and sand
Siluro-Devonian	6150 (-2400)	dolomite
Ordovician	6450 (-2700)	dolomite
Basement	7100 (-3350)	granite

The unit outline includes all full sections which meet available geologic criteria. The unit is defined on the north by the pinchout of the Siluro-Devonian and on the west by a down to the west fault (based on a gravity survey). The south and east boundaries of the unit are defined by the -2500 deliniating down dip structural contour as shown on the attached Suluro-Devonian structure map.