STINGRAY STATE UNIT CHAVES COUNTY, NEW MEXICO

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The Stingray State Unit is proposed in 10S-26E & 27E. It consist of the east half of 12-10S-27E, south half of 6-10S-27E, all of 7-10S-27E except for the southwest of the southwest, and all of 18-10S-27E except for the west half of the west half. The proposed location is in 18-10S-27E and it is 660 FNL & 1980 FEL.

The main objective of the Stingray State Unit is the Wolfcamp Spear Zone. The Wolfcamp Spear Zone, which is a limestone, is productive to the north and northwest and to the south of the Stingray State Unit. Nine wells produce from this interval. These wells are shown on the Wolfcamp Spear Zone Net Porosity Isopach Map and the Gross Wolfcamp Isopach Map. The wells are: Loretta #1(594 MMCF cum.prod.) 19-10S-27E, Loretta #2 (44 MMCF cum. prod) 19-10S-27E, Canner #2 (333 MMCF cum. prod.) 30-10S-27E, Overeasy #1 (178 MMCF cum. prod.) 6-10S-27E, Energy #3 (7 MMCF cum. prod.) 36-9S-26E, Houston #1 (63 MMCF cum. prod.) 31-9S-27E, Sunny Side #2 (744 MMCF cum.prod) 1-10S-26E, Dallas #1(which is combined with other intervals,) 35-9S-26E, and Z-28 #1 (tested for 1 MMCF per day and is shut in waiting on a pipeline connection.) 11-10S-26E.

The proposed location in 18-10S-27E is projected to encounter thirty-five gross feet of the Wolfcamp Spear Zone with eight feet of net porosity greater than or equal to 4%. This is shown by the Gross Isopach Map and the Net Porosity Isopach. The Seismic Time Structure Map on the Spear Zone shows the proposed location situated on the flank of a southeast trending nose. Most wells that produce from the Spear Zone are located on the flanks or slopes of structures. The Spear Zone Time Structure Map shows this concept. A west to east A-A' Cross-section depicts the Spear Zone highlighted in blue with the neutron-density cross-over highlighted in red as shown in the Sunny Side State Unit UN #2 and the Overeasy State #1. The Sunny Side has produced 744 MMCF from 5/99-3/04 and the Z-28 State #1 tested for 1 MMCF and is shut in waiting on a pipeline connection. The north to south B-B' Cross-section shows the Spear zone highlighted in the same way. All the wells on this cross-section are producing from the spear zone with their cumulative production at the bottom of each log. Both cross-sections show productive Spear intervals on a gradual slope or flank of a structure. The Spear Seismic Time Structure Map displays this idea as a plunging nose towards the southeast. This map shows a smaller area than the Wolfcamp Spear Zone Maps because of proprietary seismic data in this larger area.

The secondary objective in the Stingray State Unit is the Siluro-Devonian Dolomite. The Siluro-Devonian Time Structure Map shows the proposed location toward the crest of a closed structure bounded on the north by a fault. The B-B' Cross-section which is the north to south one shows our location to be up dip to the north of the Loretta #2 and Canner #2 which tested gas and water from the Siluro-Devonian interval. Our proposed location is three miles southeast of the Foor Ranch Siluro-Devonian Field where some wells have produced over 10 BCF and the Diablo Siluro-Devonian Field 2 ½ miles to the southeast which has some wells that have produced 2 BCF and 150,000 BO.

The Stingray State Unit has the capability of production from two formations. The main producing formation is the Wolfcamp Spear Zone with production to the north and south of the Unit with corresponding wells on the two cross-sections and the Wolfcamp

BEFORE THE OIL CONSERVATION DIVISION Santa Fe, New Mexico Case No. <u>13296</u> Exhibit No. 11 Submitted by: <u>YATES PETROLEUM CORPORATION</u> Hearing Date: <u>July 8, 2004</u> Spear Gross Isopach and Net Porosity Maps. The secondary objective is the Siluro-Devonian Dolomite which is depicted on the Seismic Time Structure as a closed structure. The B-B' Cross-section shows the location to be up dip from the Loretta #2 and Canner #2 that have tested gas and water from this formation. Yates Petroleum Corporation proposes the Stingray State unit to adequately test two productive formations in the enclosed sections. The proposed TD of 6,765' will adequately test both prospective horizons to the Precambrian/Basement.