# Tuscaloosa Marine Shale / Austin Chalk Oil Trend St. Helena Parish, Louisiana 175,000 acres





### **Suggested Deal Terms:**

Lease terms:

- Current Market Rates
- 22.5% royalty
- 3 years paid-up

#### Technical Presentation Available Upon Request

This information is not intended to be and should not be interpreted to be an exclusive offer to your company. Unless and until an Option/Lease Agreement or binding letter of intent has been executed between your company and Weyerhaeuser, neither your company nor Weyerhaeuser will be under any legal obligation whatsoever to conclude a transaction. Weyerhaeuser reserves the right, at its sole discretion, to reject any and all offers and to terminate discussions concerning a potential transaction at any time without liability or obligation of any nature whatsoever.

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## **Executive Summary: Tuscaloosa Marine Shale/Austin Chalk, SE Louisiana**

Play Concept: Tuscaloosa Marine Shale (TMS), Austin Chalk

**Drill Depth:** 10,000' – 15,000' MD

**Reservoir:** Thick, over-pressured, organic-rich shale & carbonate

**Pay Thickness:** Potential productive interval ranges from 100' – 300' thick

#### Geologic Overview:

Horizontal drilling in the Tuscaloosa Marine Shale (TMS) has substantiated the significant oil potential of this reservoir in SW Mississippi and SE Louisiana. While oil prices have limited new drilling activity, historical operators in the play include Goodrich, EnCana, Halcon, Sanchez, Comstock and EOG. Operators have had success drilling long laterals (up to 8,575 feet), performing large, multi-stage fracs (30+ stages), and completing high-IP wells (up to 1540 BOEPD). There have been 50 completions in the play to date. The best TMS completion has been the GDP #12H-1 Crosby Minerals which has produced over 253 MBOE with 170 MBOE recovered in the 1<sup>st</sup> 14 months. Estimated oil-in-place volumes are 15 - 22 MMBO/section and EUR ranges between 450-850 MBOE with 1<sup>st</sup> year decline rates of 78-83%. Prior to the drop in oil prices and the curtailment of new drill activity, TMS drilling time had progressively decreased from an average of 42 days to 27 days with completed well costs of < \$9MM.

The most favorable reservoir characteristics and core areas of the TMS play have been generally established and de-risked with new completions. Initially, operators avoided areas where the TMS has high clay content focusing their drilling programs in areas where the shale is more brittle. However, the GDP #12H-1 Crosby Minerals was drilled in an area where TMS cores contain the highest clay content indicating that lithology alone is not necessarily the main driver of productive capability in the TMS. Industry best practices include drilling longer laterals > 4400', targeting "Passey" pay >100', using higher proppant concentrations of 400,000 – 650,000 lbs per stage, using hybrid fluid systems and landing laterals in the lower TMS.

Geologic Overview, continued:

Weyerhaeuser has 175,00 mineral acres available for lease in the trend including 17,298 acres in the St. Helena Parish which is comparable to the acreage containing the Goodrich #12H-1 Crosby Minerals TMS well and the Austin Chalk acreage is comparable in terms of Passey thickness and oil-in-place to areas in Karnes County, Texas and Avoyelles Parish where new horizontal drilling activity has resulted in significant IP rates and EURS including the EOG Eagles Ranch 14H #1 which had a reported IP of 2546 BOEPD.

