



# Oil Refinery/Pipeline Offering: Expansion Options Overview

Scalability Options (Expanding Current Product Mix Production / Leveraging Pipeline / Upgrading Product Mix)

Current Product Mix	Pipeline Options	Upgrading Product Mix
<p><b>Permitted Production Limit: 15,000 BPD</b></p> <ul style="list-style-type: none"> <li>• <b>Refinery permitted to 15,000 BPD</b> Can expand operations to 15K bpd</li> <li>• <b>Would require additional/expanded equipment</b> Current equipment can only support 4,600 bpd</li> <li>• <b>Capitalization required</b> Ball park estimate (not validated) is \$10M</li> </ul>	<p><b>Leverage Pipeline – Transport Other Organizations Product: Tariff Based System</b></p> <ul style="list-style-type: none"> <li>• <b>Concept is to generate revenue by enabling other organizations to use the pipeline to move their own product</b> Does not have to go to/through Garco refinery</li> <li>• <b>These types of connections/operations would require capitalization</b> This is basically leveraging the pipeline asset to generate new revenue streams</li> </ul>	<p><b>Hydrocracking/Hydrotreating Upgrading Production Equipment to Permitted Limit (15,000 bpd)</b></p> <ul style="list-style-type: none"> <li>• <b>Can dramatically improve ratio/type of higher priced products produced</b> Can significantly reduce total ratio of bottom products produced</li> <li>• <b>Significant capitalization required</b> Ball park estimate (not validated) is \$50M for 15,000 bpd facility (plus estimated \$10M for expanding from 5,000 to 15,000 bpd capability)</li> </ul>
<p><b><u>Existing Operations: Production Limit 4,600 BPD</u></b></p> <ul style="list-style-type: none"> <li>• <b>Produce 4,000 bpd, with target profit of \$1.1M – \$1.8M</b> Based on current operating/financial models</li> <li>• <b>No additional equipment or capitalization required</b> Other than the \$8M - \$10M funding for cost of goods (crude purchase) each month</li> </ul>	<p><b>Connect Suppliers to Pipeline: Multiple Suppliers</b></p> <ul style="list-style-type: none"> <li>• <b>Concept is to invest in the pipeline to provide significant capacity to bring in large volumes of product to the refinery</b> Expand the number of wells connected to the pipeline</li> <li>• <b>Multiple connections would require sizable capitalization</b> With larger investment, target larger ROI with large volumes of product moved/processed</li> </ul>	<p><b>Hydrocracking/Hydrotreating Upgrading Existing Production Equipment (4,600 bpd)</b></p> <ul style="list-style-type: none"> <li>• <b>Can dramatically improve ratio/type of higher priced products produced</b> Can significantly reduce total ratio of bottom products produced</li> <li>• <b>Significant capitalization required</b> Ball park estimate (not validated) is \$20M for 5,000 bpd facility</li> </ul>
<p><b>Connect Suppliers to Pipeline: One At a Time</b></p> <ul style="list-style-type: none"> <li>• <b>Concept is to connect individual suppliers to the pipeline, on a case by case basis</b> For example two separate new wells in the local area, projected to produce 400-500 bpd, one with a pipeline arm near the well, and the other about .25 miles from the pipeline gathering system.</li> <li>• <b>Each connection would require some minimal level of capitalization</b></li> </ul>		