





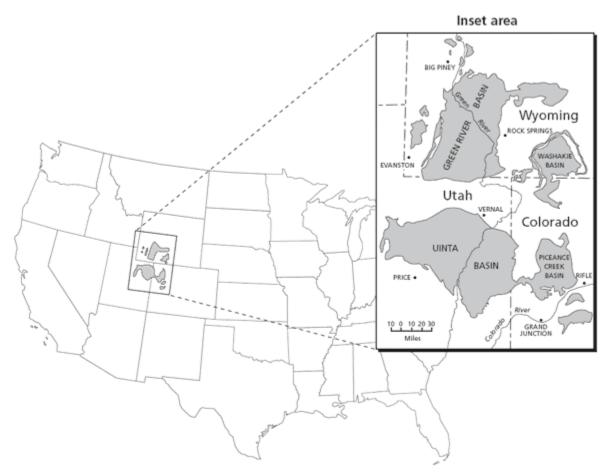
### **Presented By:**

**Dr. James Patten CEO – Red Leaf Resources, Inc.** 

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# USA: Enormous Alternative Fuels Source American Oil Shale

Location of the Green River Formation Oil Shale and Its Main Basins



SOURCE: Adapted from Smith, 1980.

RAND MG414-2.1



**Red Leaf** controls oil shale property containing approximately **1.5 billion barrels of oil** in Utah — about 25,000 acres.

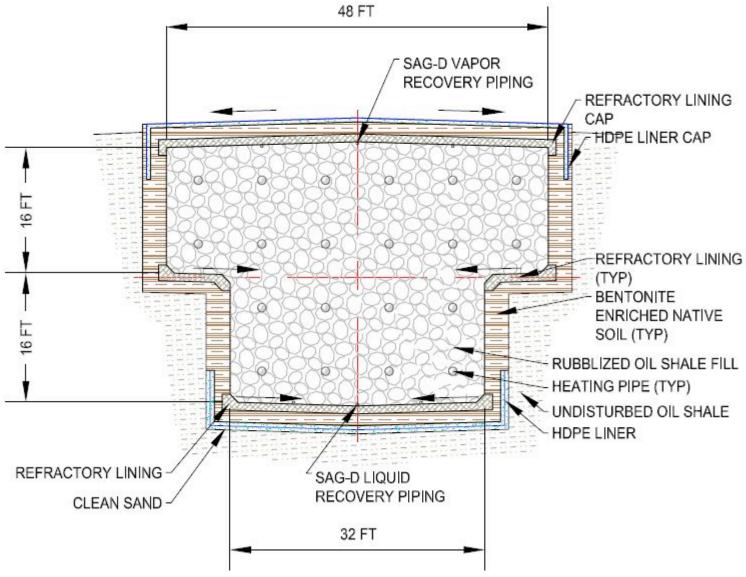






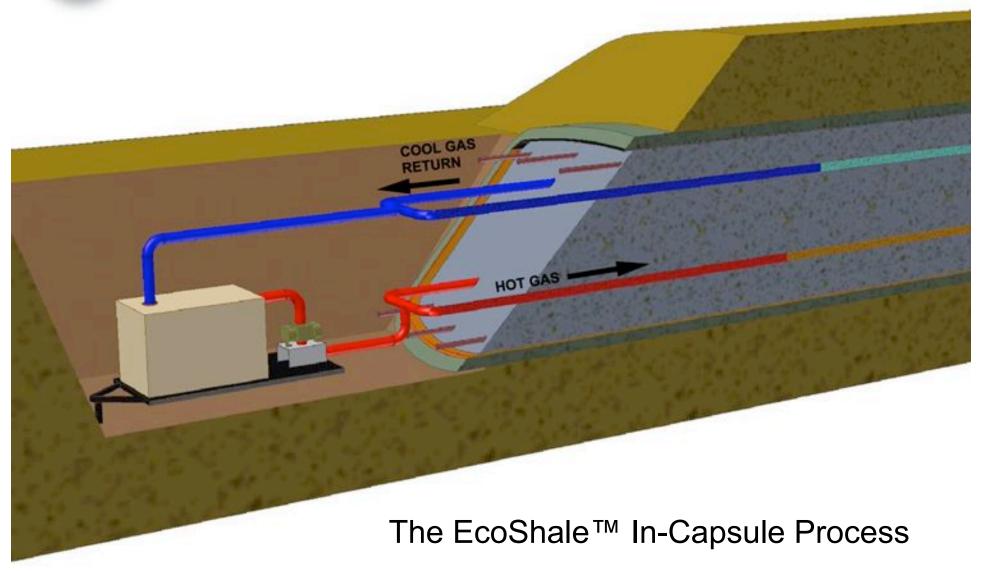






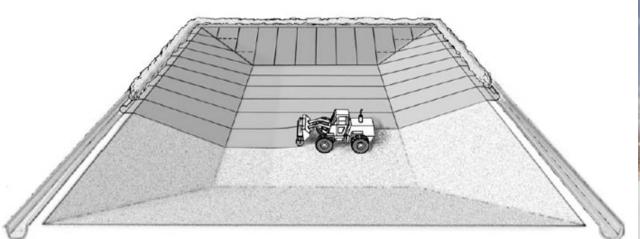
EcoShale™ In-Capsule Process







**Step 1.** Prepare the Capsule in quarry and add Bentonite permeability barrier



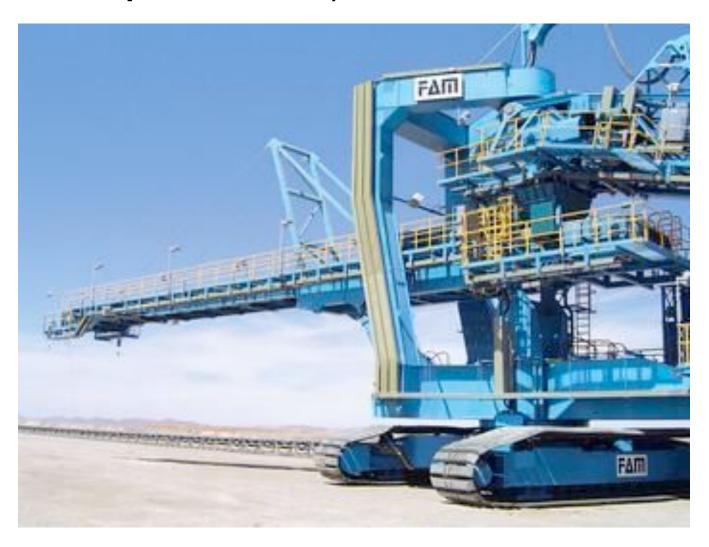


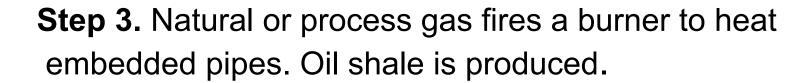


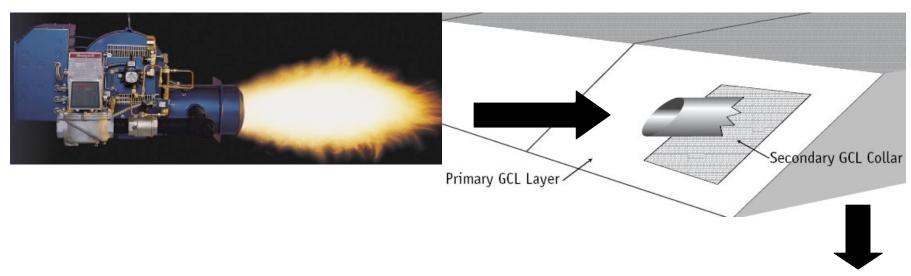




Step 2. Mine and place the ore















## **High Quality Oil**

- Lower Sulfur
- 35 40 API
- Bottomless
- Jet Fuel
- Naphtha
- Low Emission
   Diesel (ULSD)





## Green River, Utah Refinery

- Rail Loading Facility for market access
- Future Upgrader Site





#### **SOME FINAL THOUGHTS**

- ETHANOL WILL DISTURB 40 TIMES MORE LAND THAN OIL SHALE
- COSTS <u>UNDER \$25 PER BARREL</u>
- REDUCE C02 EMISSIONS BY OVER 2/3RDS OVER OLD RETORTS

#### **Todd Dana**

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