Wolverine’s exports have among the highest energy content of Pacific seaborne coal

The energy content of global seaborne coal has been declining due to depletion and limited capital investment.

- Wolverine sells 6,000 Kcal/kg nar coal (Newcastle index).
- Pacific seaborne coal is dominated by Australia (5,500-6,000 nar) and Indonesia (3,800-4,700 nar).
- The majority of Pacific growth has been low-CV Indonesian coal.
- Higher CV coal increases boiler efficiency and reduces CO₂ emissions.
Well-Positioned in the Export Market with Strong Demand for Wolverine’s Premium Quality Coal

Wolverine’s Premium Export Product Compares Favorably to Benchmark

| Coal Energy Content (Kcal / kg NAR) | | |
|---|---|---|---|---|---|
| Wolverine | Newcastle | High-Ash | Indo Sub-Bit | Indo Low Grade |
| 6,000 | 6,000 | 5,500 | 4,700 | 3,800 |

International Thermal Coal Prices (US$ per metric ton)

- Newcastle (High Calorific Value – 6,000 Kcal/Kg NAR – to Asia)
- ARA (High Calorific Value – 6,000 Kcal/Kg NAR – to Europe)
- Indo Sub-Bit (PRB Quality – 4,700 Kcal/Kg NAR – to Asia)

Sulfur Content

<table>
<thead>
<tr>
<th></th>
<th>Wolverine</th>
<th>Newcastle</th>
<th>High-Ash</th>
<th>Indo Sub-Bit</th>
<th>Indo Low Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.43%</td>
<td>0.75%</td>
<td>1.00%</td>
<td>0.80%</td>
<td>0.50%</td>
<td></td>
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</tbody>
</table>

Larger Quality Premium for High CV Coal Driven by Shrinking Supply


Note: CV denotes calorific value. NAR denotes net as received. ARA denotes Amsterdam-Rotterdam-Antwerp; ARA basis denotes coal originating from any of these ports.
Wolverine’s exports are among the highest quality of Pacific seaborne coal

Wolverine has higher quality than other major Pacific imports

- Wolverine coal has low sulfur, moisture, and ash content - making it cleaner burning and more efficient for power generation
- Wolverine also has low quantities of other undesirable elements (mercury, chlorine, boron, etc.)
- Wolverine coal works well for clean-burning Japanese utilities that are designed to use high CV, high quality coal
Thermal Coal Exports to Asia Continue to Remain Robust

Seaborne Market Demand Projects to Remain Stable...

Coal Demand (Million metric tons)

- **2017A Total:** 3,799mt
- **2023E Total:** 3,924mt
- **Increase:** 125mt

...With Significant Southeast Asian Coal-Fueled Power Generation Growth...

Southeast Asia Coal Powered Electricity Generation (TWh)

- **2018 – 2023 CAGR**
  - Coal: 6.2%
  - Renewables: 4.7%
  - Others: 2.4%

...Contributing to a Market that Continues to Improve

Historic and Forward Newcastle Prices (US$ per metric ton)

- Price Increase: +85%

We are a Major Exporter of Utah Coal

Wolverine is the only major coal producer with exclusive US West Coast export capacity

- In 2018, Wolverine exported ~3 million tons of Utah coal!
- WF coal is branded internationally as a premium, lower sulfur, high btu product
- Our coal has been shipped to Central America, South America and Asia
- Vessels are primarily loaded at the Port of Stockton and topped off at the Port of Richmond
- WF exports are estimated to bring ~$230M into Utah’s economy in 2019 and employ ~1,000 people.

2019 Vessel Schedule

FD Angelica berthing at the Port of Stockton

Wolverine (Utah) Coal bound for Japan
Barriers to Exports

- Local and State Political Opposition to Shipping Coal Through Ports
- Questionable Use of National Environmental Policy Act (NEPA), Clean Water Act, Clean Air Act, etc. to Stop Port Expansions and New Constructions
- Lack of Competition in the Rail Market Result in Monopolistic Shipping Costs
- Affordable Access to Deep Water Ports
  - Rail costs to Mexican Ports are excessive
  - Railroad is not complete to Ensenada requiring multiple product transfers
  - Civil unrest south of the border has resulted in loss of products and rail cars