

## **Western States Coal Strategies Forum**

Tribal Opportunities, Western Port Access, Military and Tribal Ports

November 20, 2019



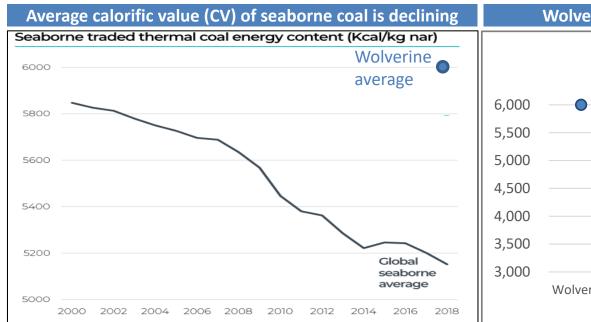


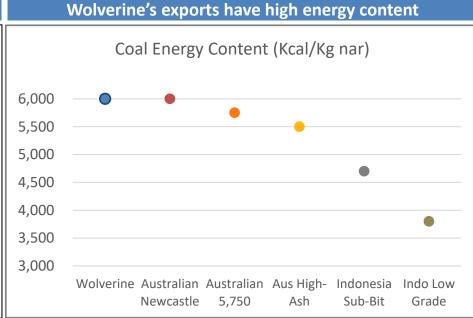






## Wolverine's exports have among the highest energy content of Pacific seaborne coal

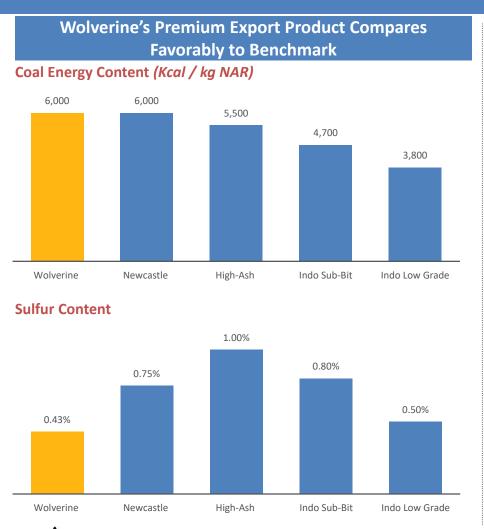




- The energy content of global seaborne coal has been declining due to depletion and limited capital investment
- Wolverine sells 6,000 Kcal/kg nar coal (Newcastle index)
- Pacific seaborne coal is dominated by Australia (5,500-6,000 nar) and Indonesia (3,800-4,700 nar).
- The majority of Pacific growth has been low-CV Indonesian coal
- Higher CV coal increases boiler efficiency and reduces CO<sub>2</sub> emissions



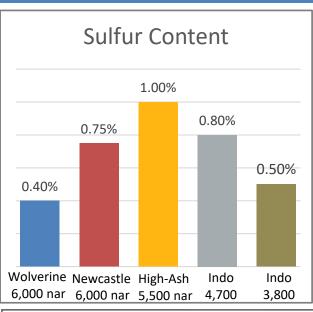
# Well-Positioned in the Export Market with Strong Demand for Wolverine's Premium Quality Coal

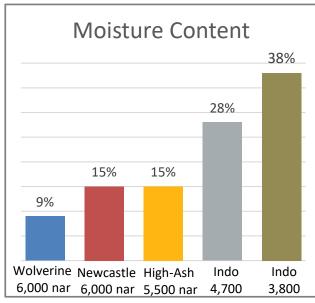


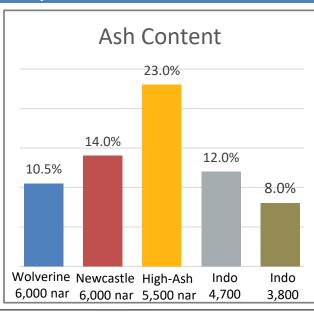


## Wolverine's exports are among the highest quality of Pacific seaborne coal

#### Wolverine has higher quality than other major Pacific imports



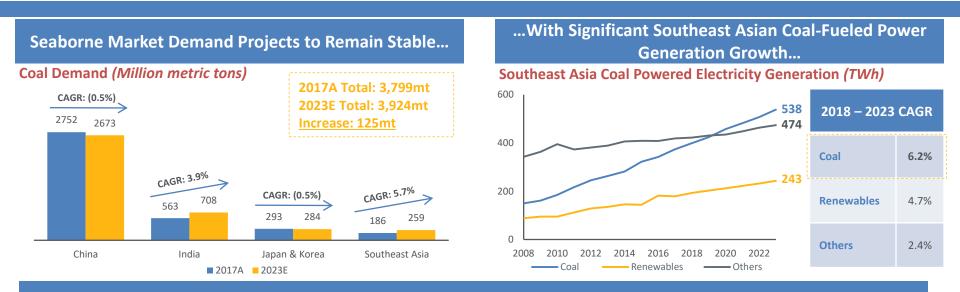




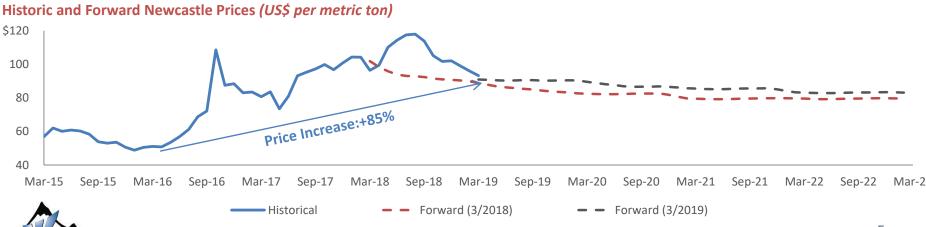
- Wolverine coal has low sulfur, moisture, and ash content making it cleaner burning and more efficient for power generation
- Wolverine also has low quantities of other undesirable elements (mercury, chlorine, boron, etc.)
- Wolverine coal works well for clean-burning Japanese utilities that are designed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



### Thermal Coal Exports to Asia Continue to Remain Robust



#### ...Contributing to a Market that Continues to Improve



### 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.

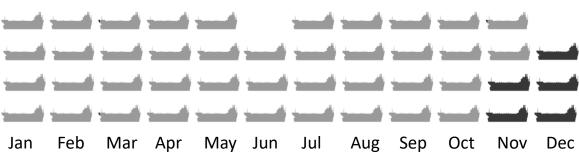


Wolverine (Utah) Coal bound for Japan



FD Angelica berthing at the Port of Stockton

### 2019 Vessel Schedule





## **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

