

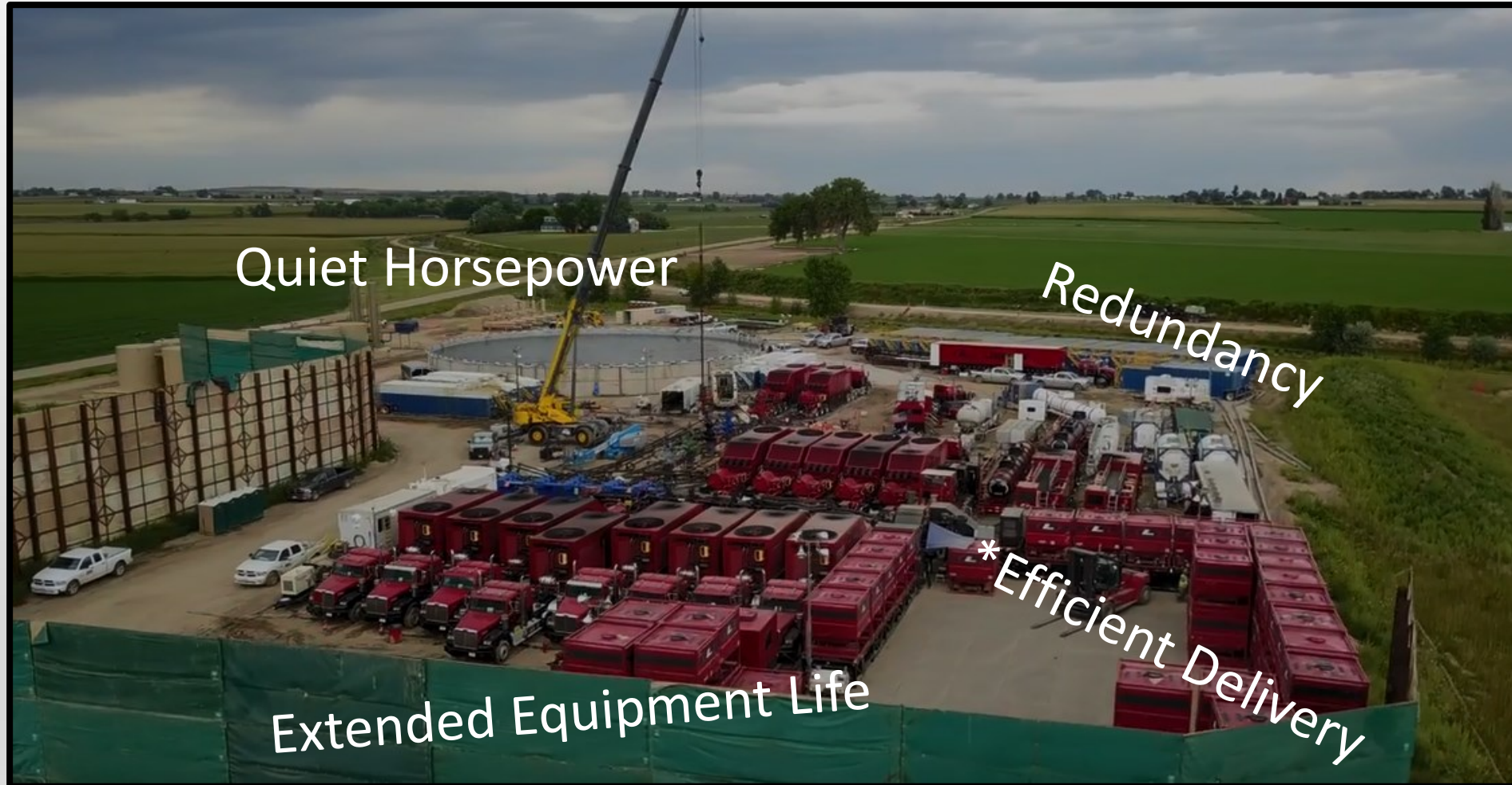
- What is PropX?
- Last Mile Sand Logistics, Silica Exposure Prevention & Sourcing Trends 2016-2020
- What does the future look like on the supply chain front to support increased frac efficiency
- Wet Sand – Value proposition
- How PropX utilizes wet sand technology today
- Considerations & Questions





Modern & Efficient Frac Operations

- Environmental, Social and Governance Progress – Mostly Driven by Competition



- Started operations in October 2016
- ~8,500 Containers on the US market designed specifically for the hydraulic fracturing market
- 150 Billion lbs. and counting thru PropX systems
 - ~2 billion lbs of wet sand in the last 12 months
- One day record throughput – 13.4MM lbs. in 24 Hours
- Equipment working in West Texas, South Texas, Colorado, Wyoming, Louisiana, North Dakota, Oklahoma, Pennsylvania, West Virginia and Argentina
- We provide equipment to Operators, Frac Providers, Logistics Providers and Sand Miners



Frac Sand TRENDS → Employee Protection from Silica Dust Exposure



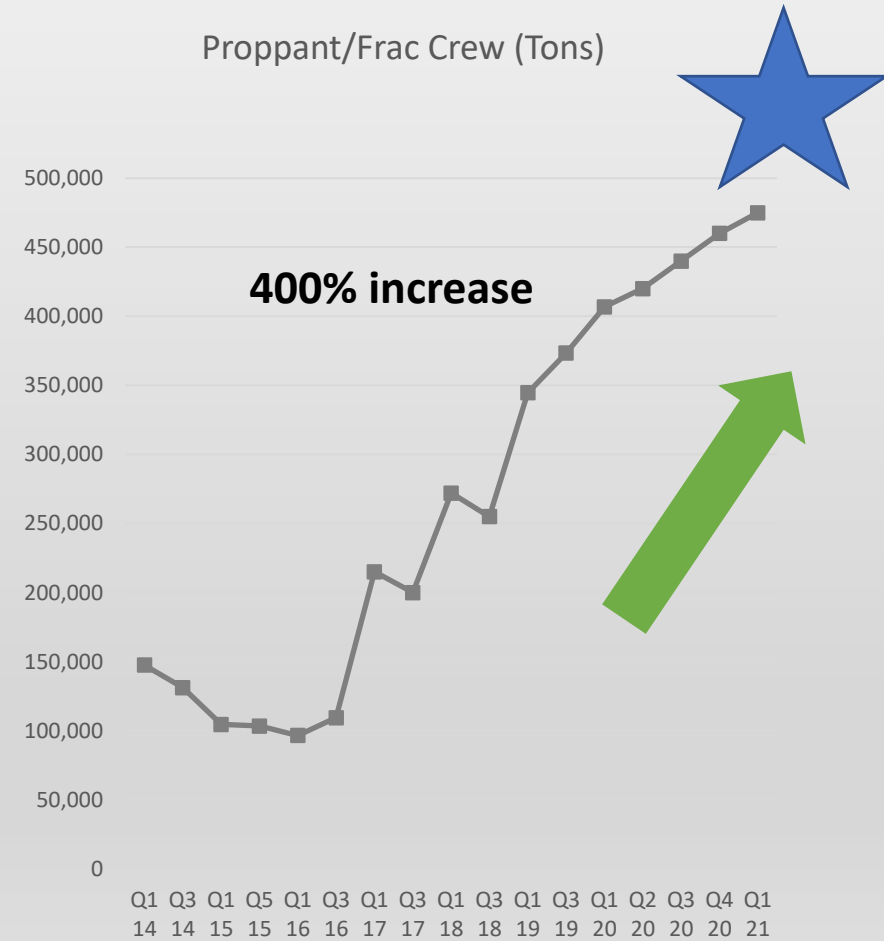
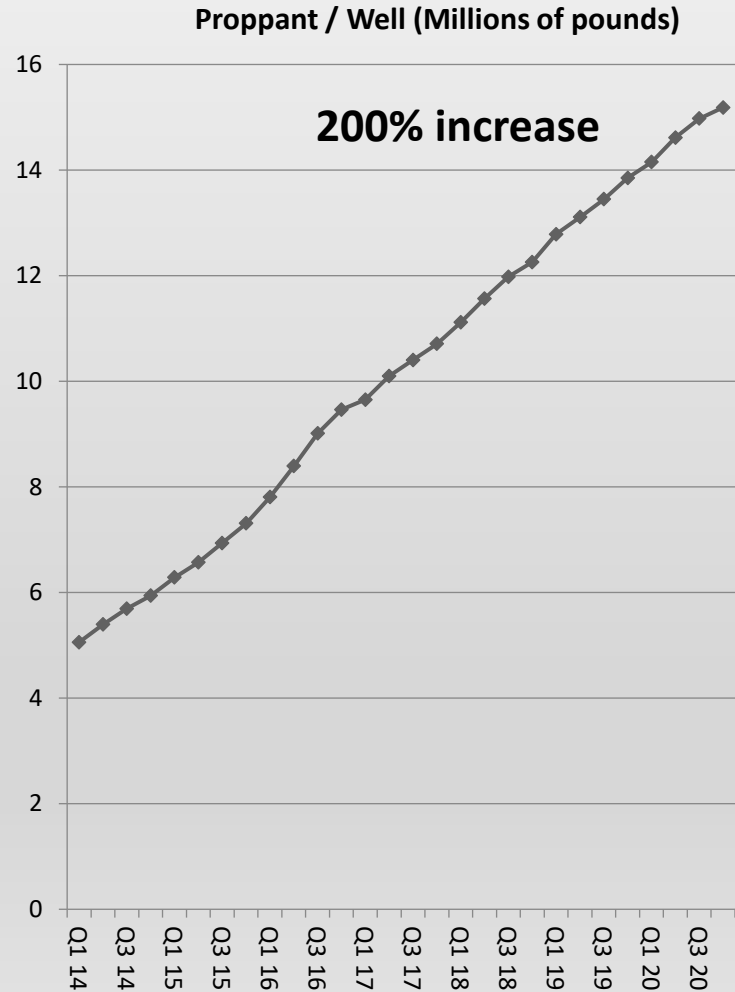
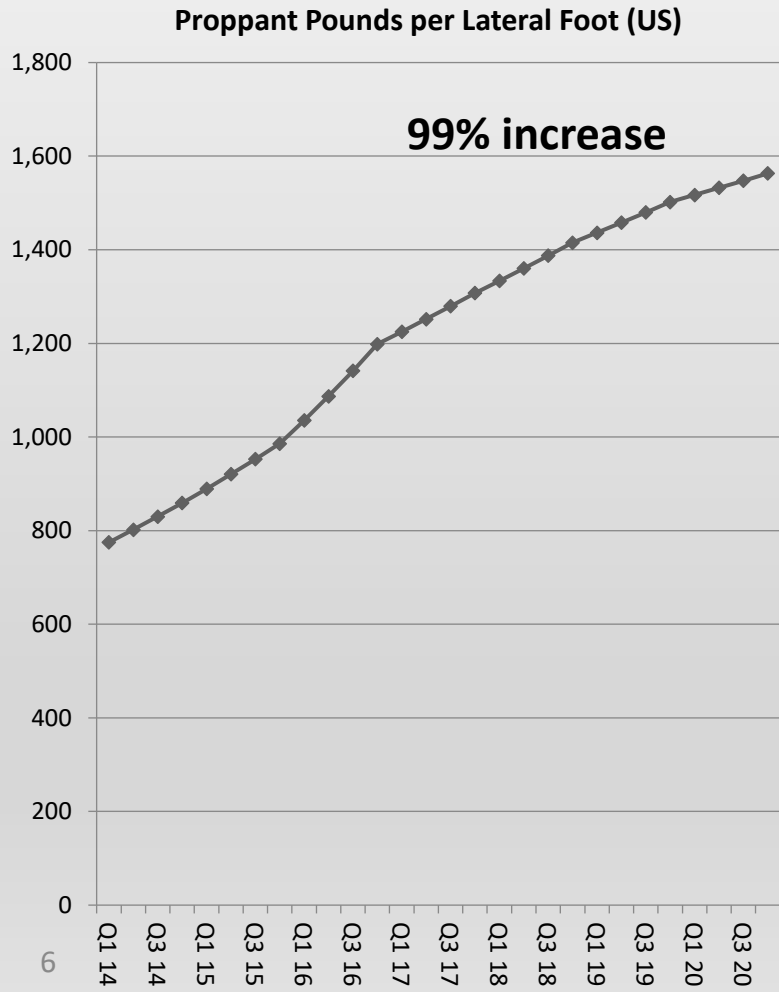
Along the way:

- Ceramic Proppants
- Resin Coated Proppants
- Filtration
- Ventilation
- Modular Delivery
- Controlled Climate Cabins
- Misting
- Silo/Box – Gravity feed discharge
- WET SAND



Frac Sand TRENDS → Wellsite Proppant Demand

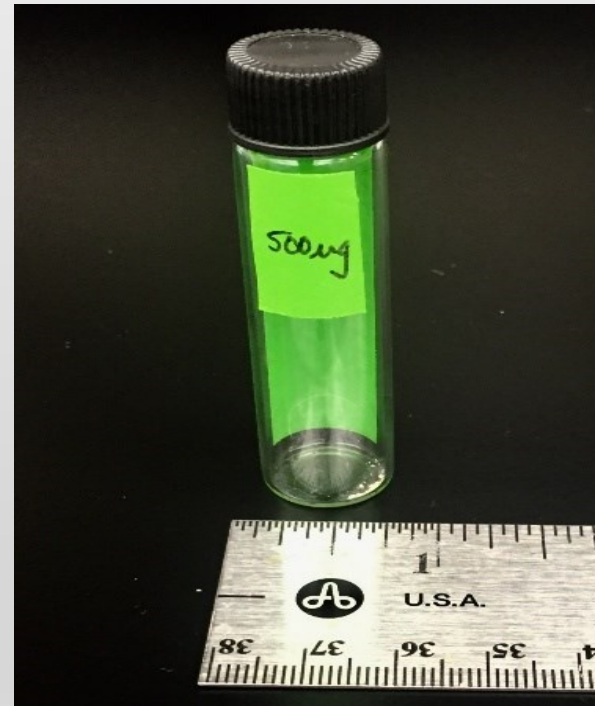
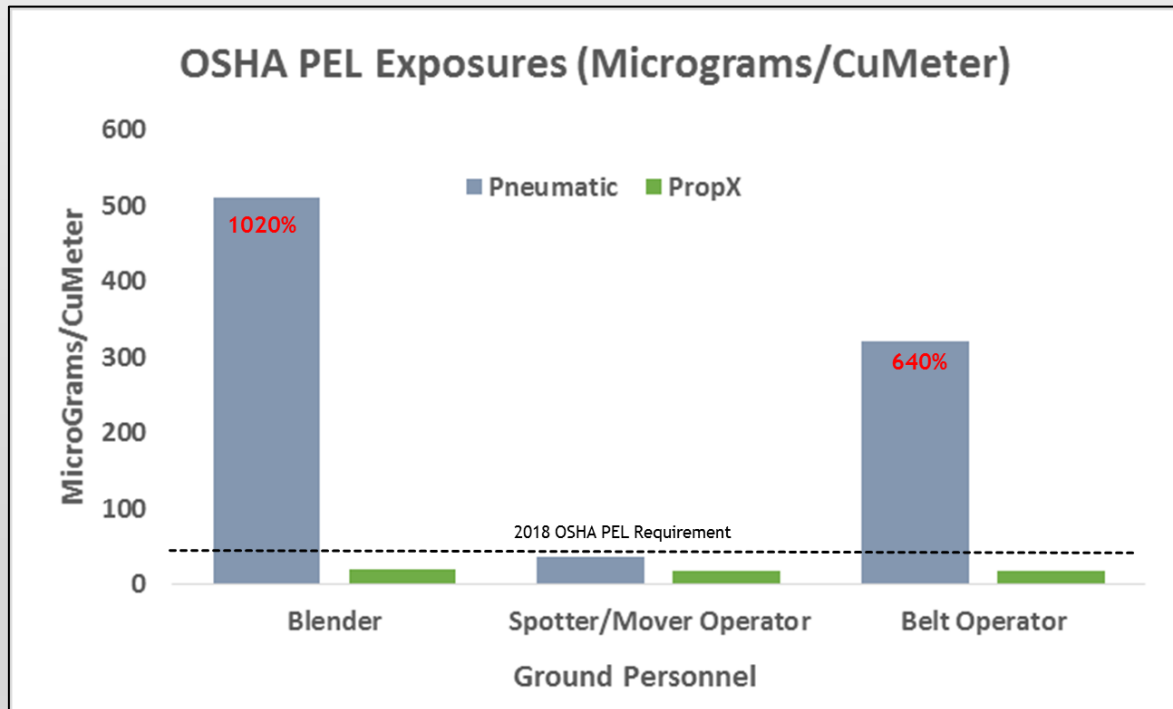
- Frac surface efficiency continues to increase.
- More sand pumped per day, per month, per year – per crew



June 2018 standard for hydraulic fracturing is 50 ug/cu m (actionable at >25ug/cu m)

Additional steps taken since initial testing in 2016

- Remote Control PLC Panel
- Telescoping discharge
- Blender specific shrouding
- Consolidated discharge
 - Misting systems
 - Systems automation
 - Control Cabins
 - WET SAND



Modern Fracturing Sand Throughput Amplifies the New Regulations

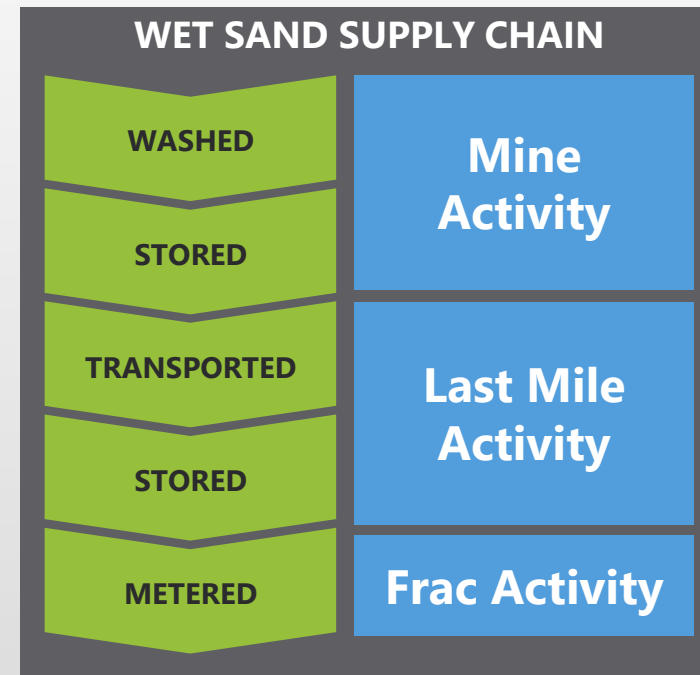
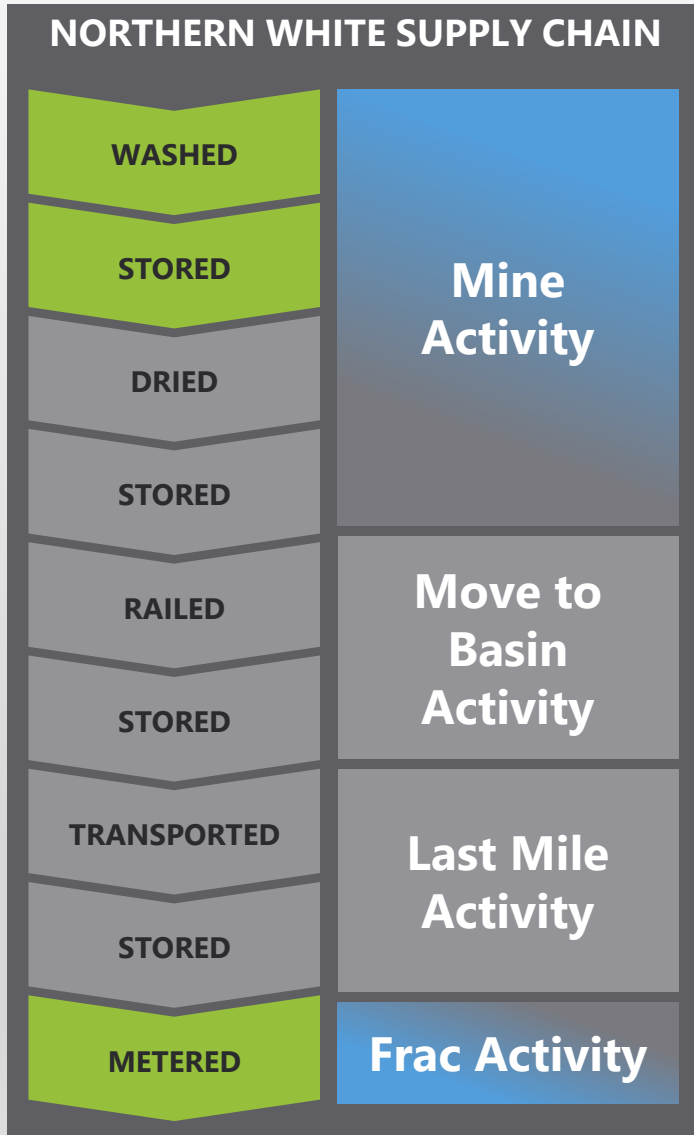


		• Total Tons Delivered	• Total Truck Loads	• Total Truck Miles
• Sunday	• 4-Apr	• 5,206.90	• 232	• 19,708
• Monday	• 5-Apr	• 5,213.84	• 232	• 19,699
• Tuesday	• 6-Apr	• 5,259.92	• 233	• 20,154
• Wednesday	• 7-Apr	• 4,906.36	• 218	• 19,542
• Thursday	• 8-Apr	• 5,713.06	• 254	• 23,446
	• Totals	• 26,300.08	• 1,169	• 102,549

PropX's Wet Sand Development Project



Compressing the Supply Chain Enables Wet Sand





- Reduced fugitive silica dust in the air

- Could be a definitive solution to the employee silica exposure problem!
- Safer for wellsite & mine site employees
- Cleaner air

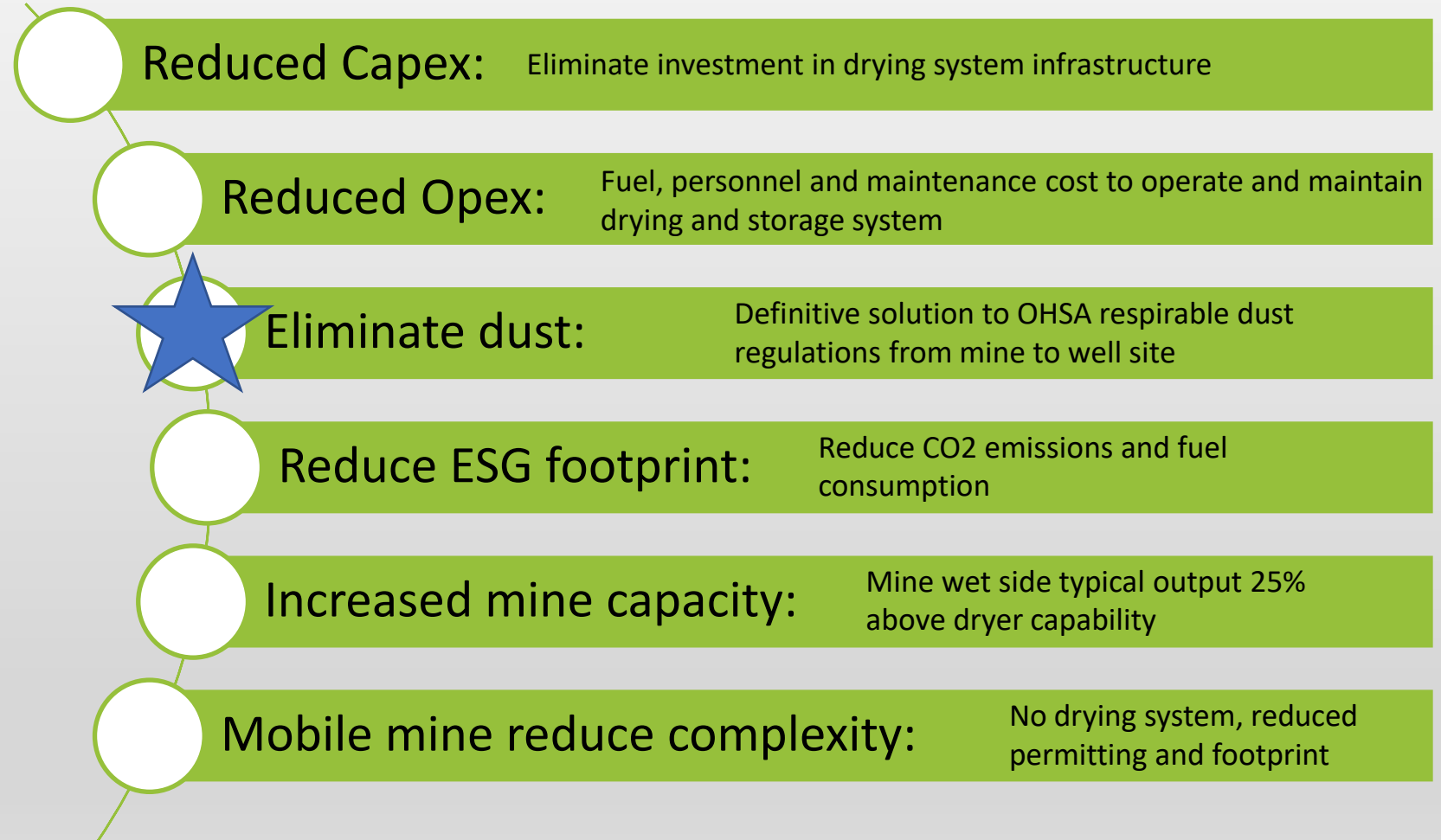
Day	Sample Type	Position/Area	Sample ID	Analytical Results - Respirable Crystalline Silica (µg/m3)	OSHA PEL (µg/m3)	OSHA Action Limit (µg/m3)	Total Time (Mins)
1	Personal	Hopper Operator	26	Below Detectable Limit	50	25	210
1	Personal	Blender Operator	51	Below Detectable Limit	50	25	450
2	Personal	Hopper Operator	55	Below Detectable Limit	50	25	435
2	Personal	Blender Operator	52	Below Detectable Limit	50	25	480
3	Personal	Hopper Operator	53	Below Detectable Limit	50	25	480
3	Personal	Blender Operator	4	Below Detectable Limit	50	25	480



- Lower operational costs
 - ~300,000 – 400,000 BTU needed to dry 1 ton of product.
 - Reduced headcount
 - Reduced maintenance costs

- Simplified Process
 - Increased plant uptime
 - Elimination of operational bottlenecks
 - Flexible capacity

DRYING COST (Permian Basin - 43 million tons per year in 2018)	
Output (Tons per Hour)	5,000
Total Hours/Year	8,736
Yearly Output (Tons of dried sand)	43,680,000
Utility Cost per MCF of Natural Gas	\$2.50
BTU needed to dry 1 ton of sand	350,000
BTU per gallon of gasoline	114,000
Gasoline Equivalent to Dry 1 Ton of Sand (Gallons)	3.1
Price per Gallon of gasoline	\$2.5
BTU per hour	1,750,000,000
	15,288,000,000,00
BTU per year	0
Total Gallons Equivalent Consumed per hour	15,351
Total Gallons Equivalent Consumed per year	134,105,263
Total cost (gasoline)	\$335,263,158
Total Cost (Natural Gas)	\$38,220,000
Miles per car per year (US average)	13,500
Average Miles per Gallon	25
Gallons per car per year	540
Cars taken off the road equivalent	248,343





Thank you for your time!

