



smartsand®

December 2020 Investor Presentation

Forward-Looking Statements

This presentation contains forward-looking statements within the meaning of the federal securities laws. Statements that are predictive in nature, that depend upon or refer to future events or conditions or that include the words “believe,” “expect,” “anticipate,” “intend,” “estimate” and other expressions that are predictions of or indicate future events and trends and that do not relate to historical matters identify forward-looking statements. Our forward-looking statements include statements about our business strategy, our industry, our future profitability, our expected capital expenditures and the impact of such expenditures on our performance, the costs of being a publicly traded corporation and our capital programs.

A forward-looking statement may include a statement of the assumptions or bases underlying the forward-looking statement. We believe that we have chosen these assumptions or bases in good faith and that they are reasonable. Factors that could cause our actual results to differ materially from the results contemplated by such forward-looking statements include, but are not limited to (i) large or multiple customer defaults, including defaults resulting from actual or potential insolvencies, (ii) the level of production of crude oil, natural gas and other hydrocarbons and the resultant market prices of crude oil, natural gas, natural gas liquids and other hydrocarbons, (iii) changes in general economic and geopolitical conditions; (iv) competitive conditions in our industry (including the adoption of regional sand), (v) changes in the long-term supply of and demand for oil and natural gas, (vi) actions taken by our customers, competitors and third-party operators, (vii) changes in the availability and cost of capital, (viii) our ability to successfully implement our business plan, (ix) our ability to complete growth projects on time and on budget, (x) the price and availability of debt and equity financing (including changes in interest rates), (xi) changes in our tax status, (xii) technological changes, (xiii) operating hazards, natural disasters, pandemics, weather-related delays, casualty losses and other matters beyond our control, (xiv) the effects of existing and future laws and governmental regulations (or the interpretation thereof), (xv) failure to secure or maintain contracts with our largest customers or non-performance of any of those customers under the applicable contract, (xvi) our ability to collect our accounts receivable, (xvii) the effects of current and future litigation, and such other factors discussed or referenced in the “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” sections of the Form 10-K and the Form 10-Q filed by the Company with U.S. Securities and Exchange Commission (the “SEC”) on February 26, 2020 and November 9, 2020, respectively.

You should not place undue reliance on our forward-looking statements. Although forward-looking statements reflect our good faith beliefs at the time they are made, forward-looking statements involve known and unknown risks, uncertainties and other factors, including the factors described in the preceding paragraph, which may cause our actual results, performance or achievements to differ materially from anticipated future results, performance or achievements expressed or implied by such forward-looking statements. You should also carefully consider the statements under the heading “Note About Forward-Looking Statements” in the Annual Report on Form 10-K for the year ended December 31, 2019. Any forward-looking statement speaks only as of the date on which such statement is made, and we undertake no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events, changed circumstances or otherwise, unless required by law.

In this presentation, assumptions were made with respect to industry performance, general business and economic conditions and other matters. Any estimates contained in these analyses, whether expressed or implied, are based on estimates and are not necessarily indicative of actual values or predictive of future results or values, which may be significantly more or less favorable than as set forth herein. The Company reserves the right to change any or all of the estimates included herein whether as a result of any changes in the above referenced information, market factors or otherwise.

Industry and Market Data

This presentation has been prepared by the Company and includes market data and other statistical information from third-party sources, including independent industry publications, or other published independent sources. Although the Company believes these third-party sources are reliable as of their respective dates, the Company has not independently verified the accuracy or completeness of this information.

Reserves

Mineral resources and reserves are typically classified by confidence (reliability) levels based on the level of exploration, consistency and assurance of geologic knowledge of the deposit. This classification system considers different levels of geoscientific knowledge and varying degrees of technical and economic evaluation. Mineral reserves are derived from in situ resources through application of modifying factors, such as mining, analytical, economic, marketing, legal, environmental, social and governmental factors, relative to mining methods, processing techniques, economics and markets. In estimating our reserves, our independent reserve engineer does not classify a resource as a reserve unless that resource can be demonstrated to have reasonable certainty to be recovered economically in accordance with the modifying factors listed above. "Reserves" are defined by SEC Industry Guide 7 as that part of a mineral deposit that could be economically and legally extracted or produced at the time of the reserve determination. Industry Guide 7 defines "proven (measured) reserves" as reserves for which (a) quantity is computed from dimensions revealed in outcrops, trenches, workings or drill holes; grade and/or quality are computed from the results of detailed sampling and (b) the sites for inspection, sampling and measurement are spaced so closely and the geologic character is so well defined that size, shape, depth and mineral content of reserves are well-established. Industry Guide 7 defines "probable (indicated) reserves" as reserves for which quantity and grade and/or quality are computed from information similar to that used for proven (measured) reserves, but the sites for inspection, sampling, and measurement are farther apart or are otherwise less adequately spaced. The degree of assurance, although lower than that for proven (measured) reserves, is high enough to assume continuity between points of observation.

Non-GAAP Information

This presentation also contains information about the Company's EBITDA, Adjusted EBITDA, and contribution margin, which are not measures derived in accordance with U.S. generally accepted accounting principles ("GAAP") and which exclude components that are important to understanding the Company's financial performance. We define EBITDA as our net income, plus (i) depreciation, depletion, and amortization expense; (ii) income tax expense (benefit); (iii) interest expense and (iv) franchise taxes. We define Adjusted EBITDA as EBITDA, plus (i) gain or loss on sale of fixed assets or discontinued operations, (ii) integration and transition costs associated with specified transactions, (iii) equity compensation, (iv) acquisition and development costs, (v) non-recurring cash charges related to restructuring, retention and other similar actions, (vi) earn-out, contingent consideration obligations and other acquisition and development costs, (vii) non-cash charges and unusual or non-recurring charges. We believe that our presentation of EBITDA and Adjusted EBITDA will provide useful information to investors in assessing our financial condition and results of operations. Net income is the GAAP measure most directly comparable to EBITDA and Adjusted EBITDA. EBITDA and Adjusted EBITDA should not be considered alternatives to net income presented in accordance with GAAP. Because EBITDA and Adjusted EBITDA may be defined differently by other companies in our industry, our definition of EBITDA and Adjusted EBITDA may not be comparable to similarly titled measures of other companies, thereby diminishing its utility.

We also use contribution margin, which we define as total revenues less costs of goods sold excluding depreciation, depletion and accretion of asset retirement obligations, to measure our financial and operating performance. Contribution margin excludes other operating expenses and income, including costs not directly associated with the operations of our business such as accounting, human resources, information technology, legal, sales and other administrative activities. We believe contribution margin is a meaningful measure because it provides an operating and financial measure of our ability to generate margin in excess of our operating cost base.

The Right Operating Model

- Oakdale is one of the largest single operating Northern White raw frac mines in United States
 - 300+ million tons of high quality fine mesh reserves with 5.5 million tons current operating capacity
 - 14+ miles of rail track servicing Oakdale from two Class I rail lines
 - Multi-unit train capable with access to all operating basins
- Low operating cost structure
 - Mining, processing, and shipping all done at one location
 - Large single mine sites on rail dominate other bulk commodity business models
- Sustainable long-term supply and logistics advantage
 - Combination of large, high quality reserve base, low cost operations, and ability to ship large quantities of sand efficiently and sustainably to all operating basins
- Mine to Wellsite Solutions Capabilities
 - Through our Van Hook Terminal, our network of third party terminal partners, and our SmartSystems™ wellsite storage solutions, we can offer sustainable, efficient sand supply chain support for our customers

The Right Sand

- ~80% of Oakdale's reserves are fine mesh (40/70 and 100 Mesh)
 - Fine mesh raw frac sand represents over 80% of the current demand for raw frac sand
- Quality Matters
 - Northern White sand vs regional sand is a higher quality product that we believe can lead to better long-term well results for oil and gas producers
 - Higher crush strength
 - Better conductivity
 - Cleaner / less turbidity

The Right Capital Structure

- Prudent capital structure with lowest leverage levels in the proppant industry (0.4x Net Debt / EBITDA)
- High insider ownership that aligns management with investors (~15% owned by CEO, ~49% owned by insiders)

- E&P spending dropped 50-75% in the second quarter of 2020 and has continued at low levels
- However, we saw improvement in market activity in the third quarter as our sales volumes increased by ~49% to 308k tons and this improved activity level has continued into the fourth quarter (we guided Q4 volumes up +15-20% q/q)
- In response to the abrupt slowdown in completion activity from our customers, we have taken the following steps to manage through this period:
 - Reduced Capital Expenditures to an estimate of less than \$10 million for 2020, down from \$25 million spent in 2019
 - Reduced Executive Compensation by 35-40%
 - Reduced headcount at Oakdale and Saskatoon, Canada operating facilities
 - Implemented salary reductions for part of the year for all employees
 - To preserve liquidity, we have worked with numerous vendors to manage timing and amount of payments to line up with expected cash inflows

- Sand market in North America under stress
 - Increased regional capacity financed primarily with debt has led to oversupplied market
 - Lower current demand due to pandemic created financial stress for many over-levered sand companies leading to several bankruptcies/restructurings
- Sand Industry needs consolidation
 - Customers are consolidating and may be looking to consolidate their suppliers into fewer strategic partners
 - Sand consolidation provides opportunity to rationalize inefficient supply and a more disciplined approach to supply/demand dynamics in the future
- Strategic opportunities available to acquire attractive assets at reasonable valuations
- Smart Sand well positioned to participate in consolidation opportunities
 - Low leverage
 - Sufficient liquidity to support operations
 - Ownership and management aligned
 - Proven disciplined approach to growing the business
- Key objectives of any strategic investment
 - Access to new operating basins
 - Increased logistics capabilities
 - Expanded product offerings to enhance mine to wellsite solutions
 - Opportunities to broaden customer base

Purchase Price & Liquidity Support

- \$2M purchase price, consideration paid in 1.5M shares of SND stock (share count based on 20 day VWAP for SND prior to close)
- Up to \$5M in liquidity support for Eagle operations for 12 months
 - 6% interest during first 12 months
 - 8% interest after first 12 months
 - Loan will amortize ratably over three years after first 12 months
 - Can be paid in combination of cash or stock, and pre-payable at any time

Primary Assets Acquired

- Utica Plant and Mine
 - 1.6M ton plant with 138M tons estimated minimum reserves⁽¹⁾ in Utica, IL
 - Reserve base is ~70% finer mesh sands
 - Unit train capable terminal in Peru, IL with direct access to the BNSF rail line. Facility is capable of managing up to 550 railcars
 - During the 12 months ending March 2020, 831k tons were sold through Utica
- New Auburn
 - 1.9M ton plant with 36M tons estimated minimum reserves⁽¹⁾
 - Facility is capable of supporting 400 railcars
 - During the 12 months ending March 2020, 417k tons were sold through New Auburn
- We are currently operating the Utica mine while New Auburn remains idle

(1): Reserve information disclosed in Eagle Materials 10-K for fiscal year ending March 2020

Opportunity to generate better returns under the SND umbrella and be accretive to shareholders

- Expect the acquisition to be accretive to cash flow from operations and we currently anticipate only needing to spend minimal maintenance capital to support operations once they ramp back up
- These facilities sold 1.25M tons for the 12 months ending March 30, 2020. Once operations have resumed, we anticipate sales volumes of this level would generate Contribution Margin⁽²⁾ between \$5M and \$10M.

Utica – Quality plant and incremental NWS reserves with access to additional Class 1 rail carrier at attractive valuation

- Access to BNSF for the Utica mine via the Peru terminal provides enhanced access into the Bakken and other basins in Colorado and Wyoming as well as additional direct access into the Texas and Oklahoma markets
- Provides us with greater flexibility to provide multiple supply and logistics options to broaden our ability to provide sustainable supply and services to our key customers
- Opportunity to leverage additional NWS capabilities to develop new customer relationships

New Auburn – Currently idle from a mining / plant operation perspective

- Railyard provides additional railcar storage space for SND
- Offices at location can be used for administrative functions
- Provides optionality for low cost incremental NWS supply should market demand increase in the future

(2): Contribution Margin is defined as total revenues less costs of goods sold excluding depreciation, depletion and accretion of asset retirement obligations

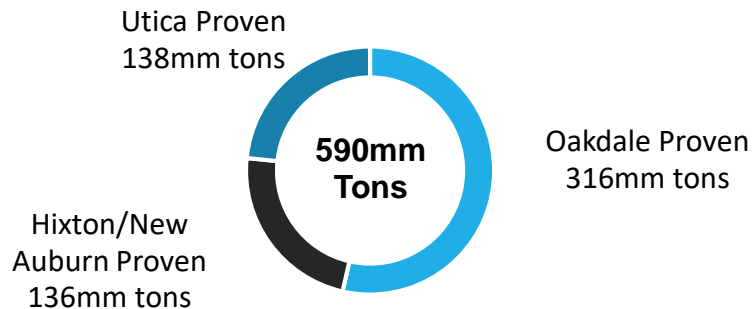


Company Overview

Overview

- Fully integrated provider of high quality Northern White frac sand
- Large fine mesh (40/70 and 100 Mesh) Northern White reserve base
- Low cost and efficient operations
- Cost-efficient provider of mine to wellsite solutions to simplify our customers' frac sand supply chain needs

Sand Reserve Overview ⁽¹⁾

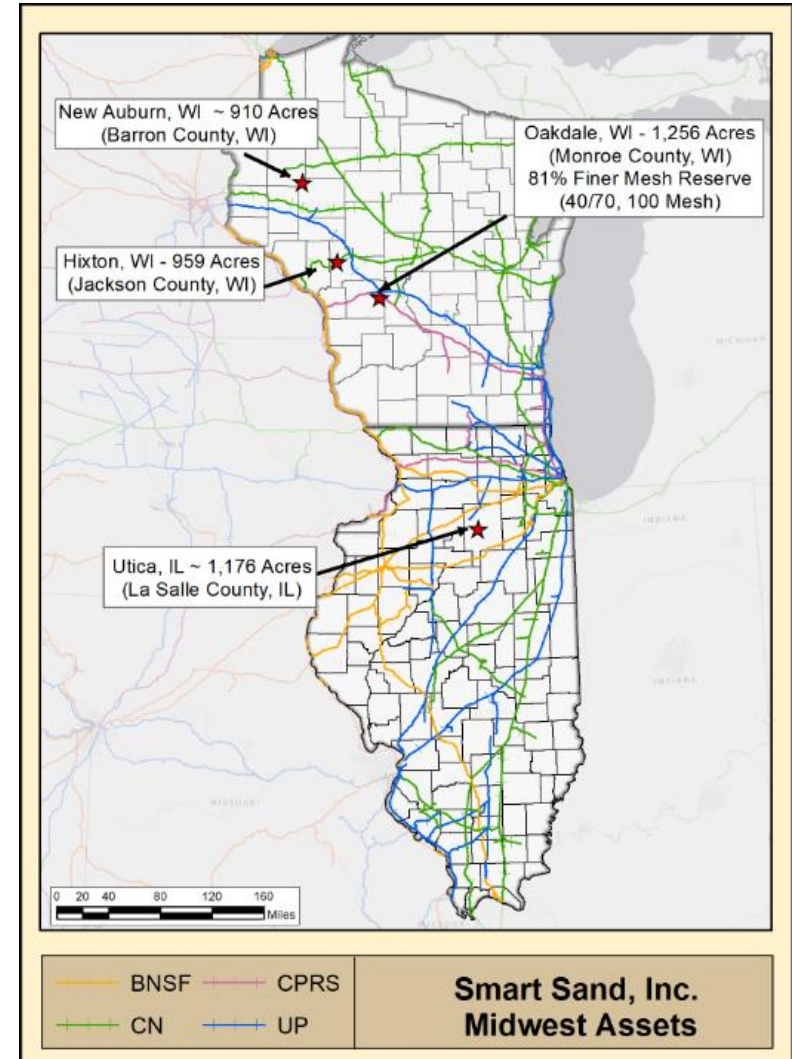


Source: Smart Sand Management, Company disclosures.

(1) Reserves data as of December 31, 2019 for Oakdale/Hixton and March 31, 2020 for Utica/New Auburn

(2) Further development and permitting at the Oakdale facility could ultimately allow for production of up to 9 million tons of raw frac sand per year.

Wisconsin/Illinois Reserve Locations



Vertical Integration – A Key Differentiator



Smart Sand's Business Offerings

Premium Northern White Reserve



Gigantic Rail Capacity



Terminal & Forward Staging Management



Last Mile Logistics



Wellsite Storage Solutions



Large Finer Mesh Northern White Reserve

Class 1 rail (CP, UP, BNSF)

Planning ahead reduces risks

Safe and reliable

Wellsite storage

Consistent high-quality proppant

Over 14 miles of track at Oakdale

Redundancy in the supply chain

Helps eliminate demurrage

Direct to the blender delivery

9mm tons annual production capability

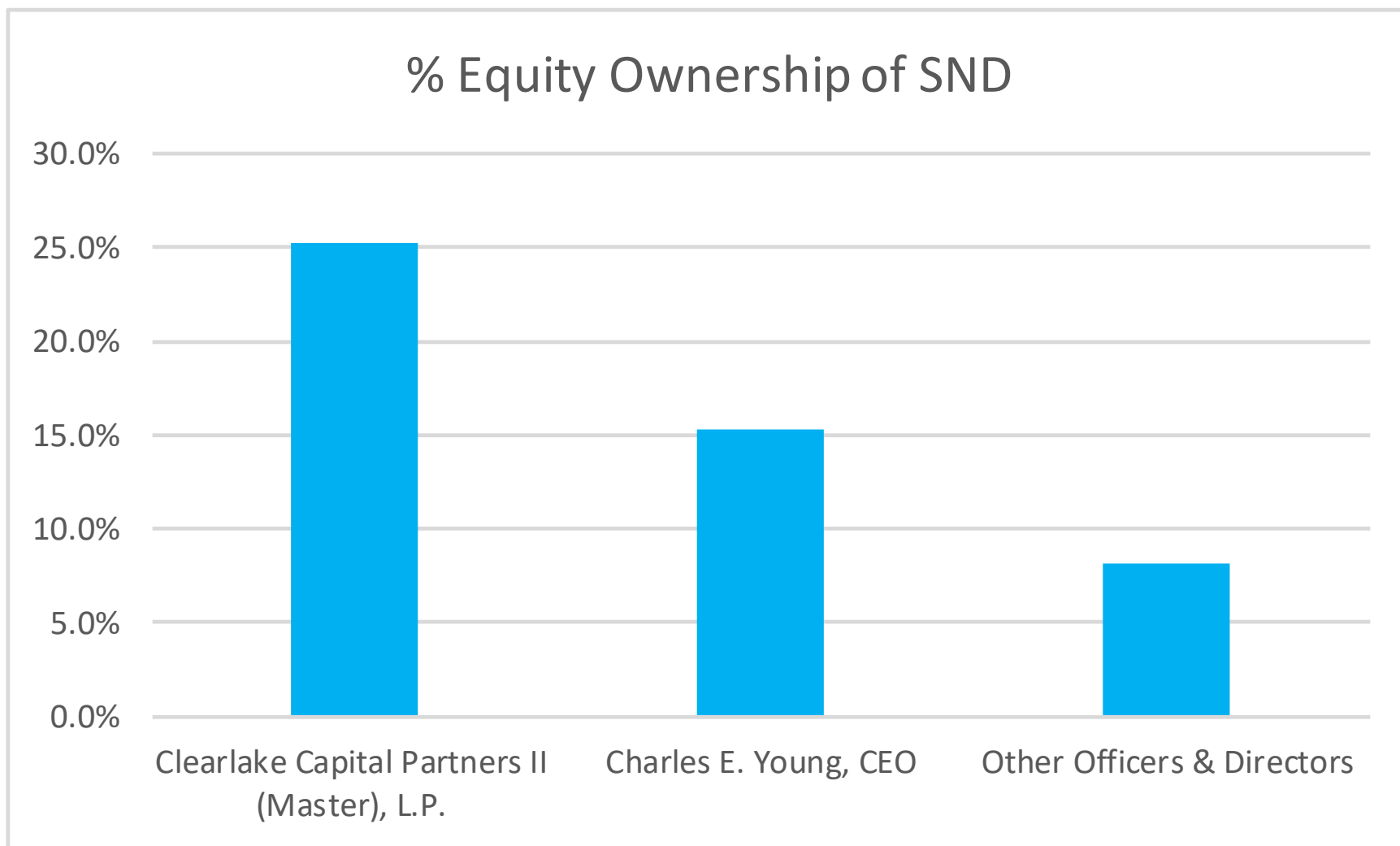
Unit train capable

Avoid trucking congestion

Smaller fleet and more turns per day

Realtime inventory control

Insiders own ~50% of Smart Sand Equity



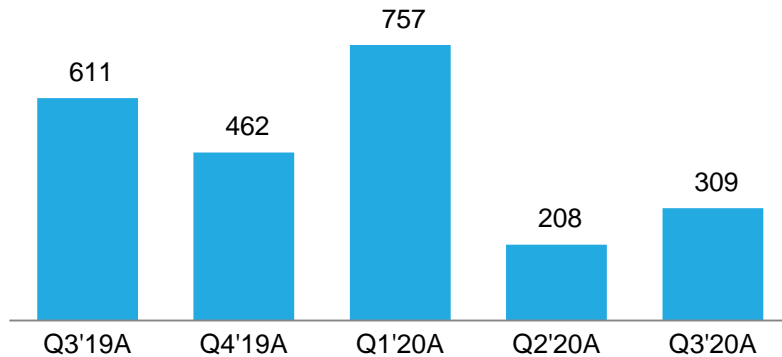
Source: Smart Sand proxy statement

Summary Financials



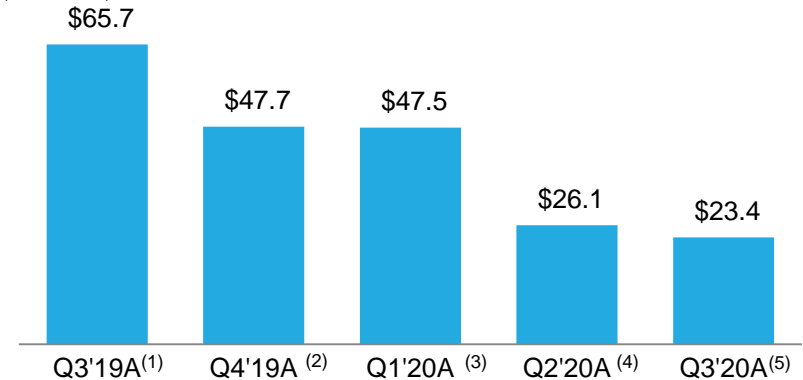
Quarterly Sales Volumes

(thousands of tons)

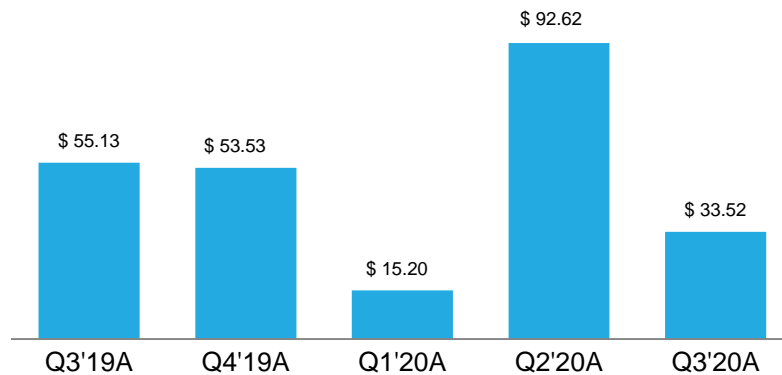


Quarterly Revenue

(\$ in millions)

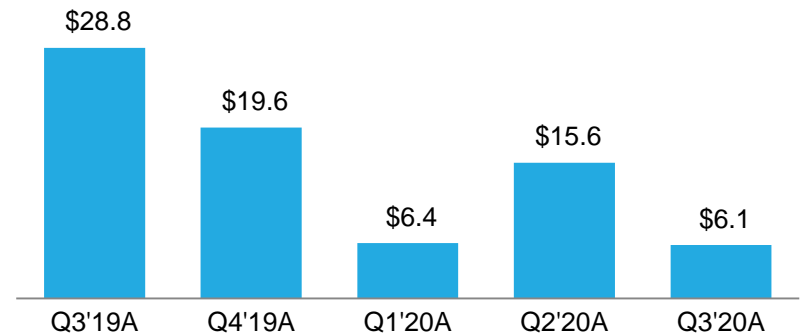


Contribution Margin/Ton



Quarterly Adjusted EBITDA

(\$ in millions)

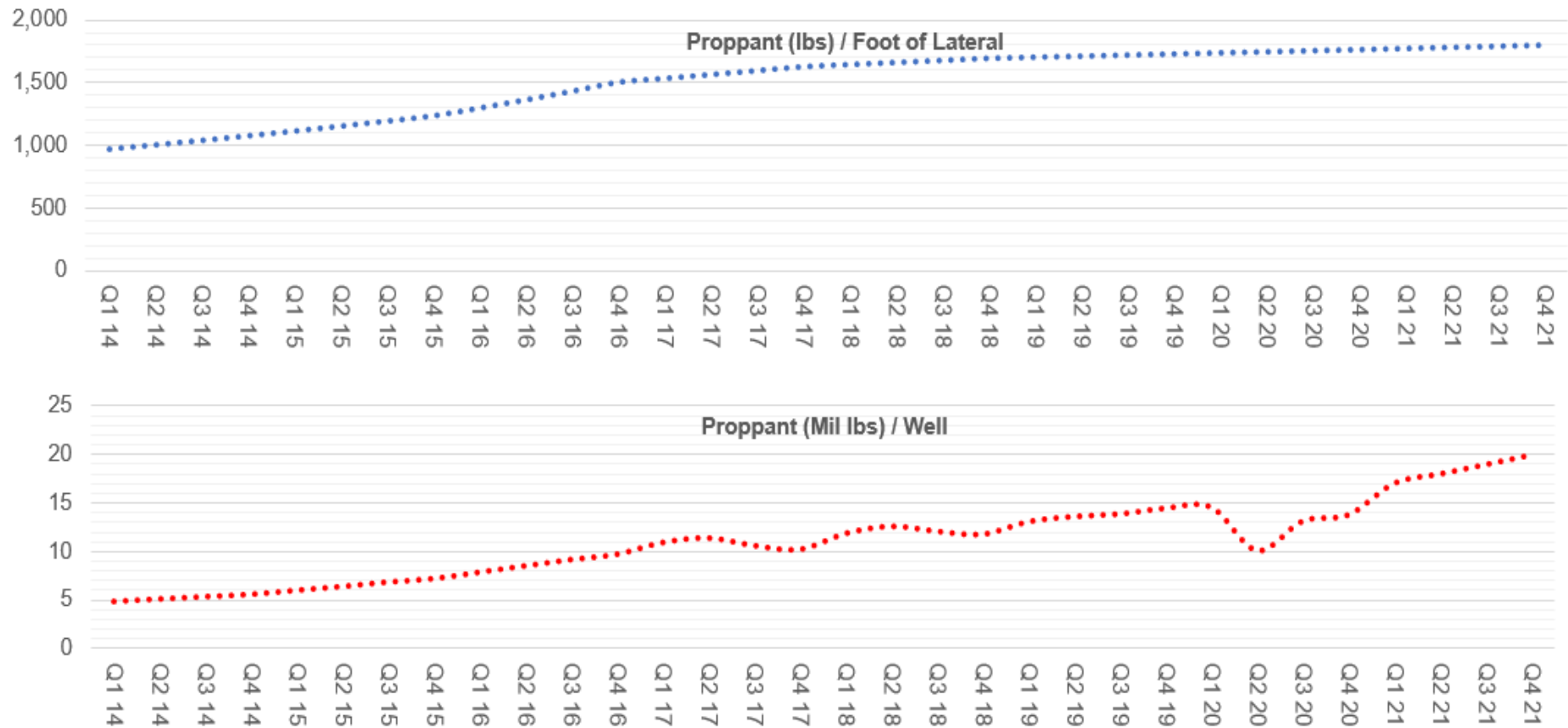


- (1) Includes monthly minimum / shortfall payments of \$15.6 million for 3Q'19
- (2) Includes monthly minimum / shortfall payments of \$11.6 million for 4Q'19
- (3) Includes monthly minimum / shortfall payments of \$1.3 million for 1Q'20
- (4) Includes monthly minimum / shortfall payments of \$14.0 million for 2Q '20
- (5) Includes monthly minimum / shortfall payments of \$6.8 million for 3Q '20



Industry Overview

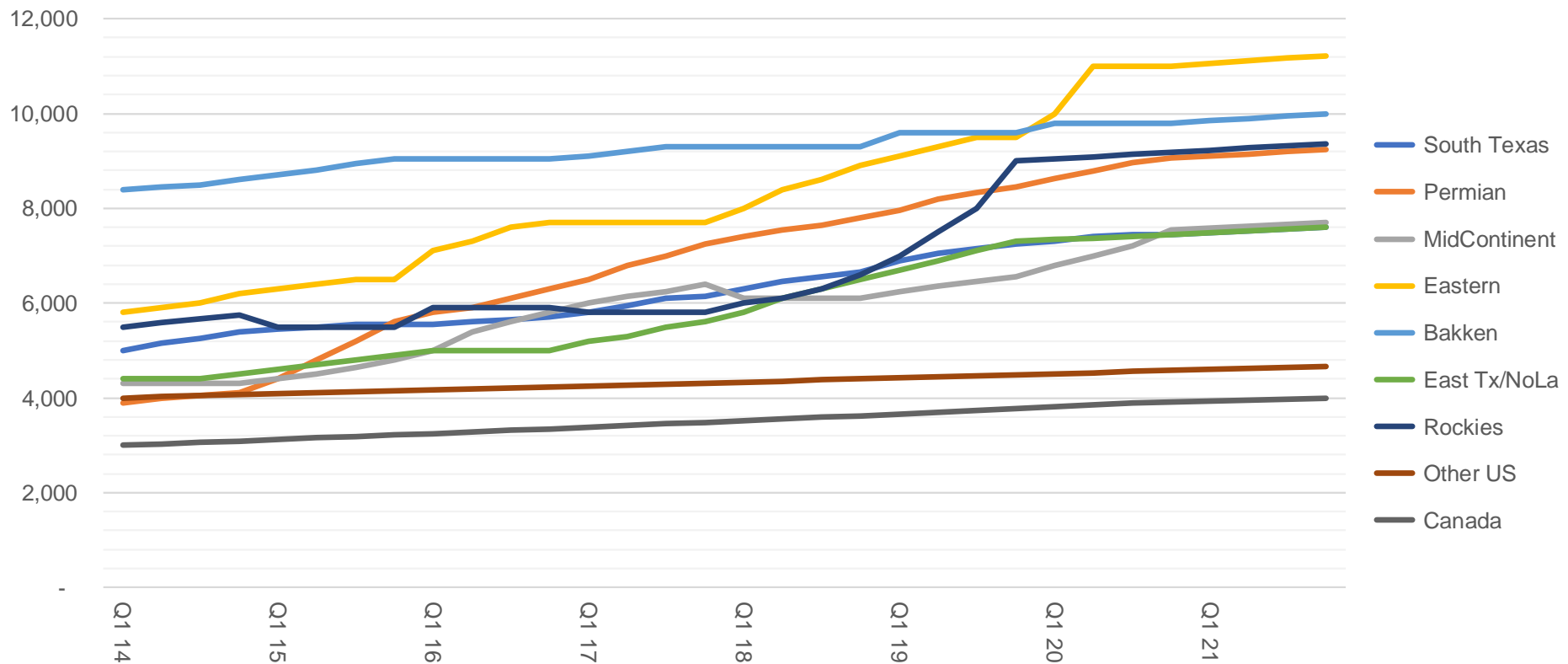
Industry Trends Continue to Support Increasing Use of Frac Sand per Well



Industry Trends Continue to Support Increasing Use of Frac Sand per Well









Lateral lengths continue to get longer



- A 2020 study by Rystad Energy has linked proppant type to decreased production and profitability – while local sand has been cheaper to deliver to the wellsite than northern white sand, the loss in cash flow from lower production as a result of using the inferior product is exceeding the cost savings
- The study examined 800 wells across 7 operators in the Permian basin
- 50% of operators have seen a negative economic impact as compared to wells completed with northern white sand and up to 85% are on the verge of seeing a negative economic impact on wells with less than one year of production
- The impact has been seen in both the Midland and Delaware basins from using lower cost and lower quality in-basin sand rather than northern white sand on cash flows assuming oil prices remain at \$40/bbl

The Value of Northern White Sand (continued)

All Permian Basin case studies except one show either an impact or light impact in well productivity after switching to in-basin sand

Basin	Case	Well Count (NWS)	Time Frame Assessed (NWS)	IP270 (NWS)	Well Count (In-Basin)	Time Frame Assessed (In-Basin)	IP270 (In-Basin)	Observed Change in IP270	Allowable Degradation (Year 1)	Impact Assessment
Midland	Midland Operator A	46	4Q17 – 2Q18	15,892	133	3Q18 – 2Q19	15,075	-5.1%	-6.8%	 Light Impact
	Midland Operator B	30	3Q17 – 2Q18	18,296	117	2Q18 – 2Q19	16,731	-8.6%	-6.0%	 Impact
	Midland Operator C	32	3Q18 – 4Q18	17,848	43	4Q18 – 2Q19	16,320	-8.6%	-7.1%	 Impact
	Midland Operator D	16	1Q18 – 2Q18	13,239	33	3Q18 – 2Q19	12,304	-7.1%	-8.8%	 Light Impact
Delaware	Delaware Operator A	61	2Q17 – 3Q18	19,420	81	3Q18 – 2Q19	18,180	-6.4%**	-6.1%	 Light Impact
	Delaware Operator B*	31	3Q18 – 4Q18	31,806	31	1Q19 – 2Q19	27,980	-12.0%	-4.3%	 Impact
	Delaware Operator C	62	1Q18 – 4Q18	29,482	60	4Q18 – 2Q19	31,516	+6.9%	-5.6%	No Impact

*Delaware Operator B has both in-basin and NWS wells in NWS well count bucket for timeframes between 3Q18 and 4Q18; sand type is unknown for wells in 3Q18 and 4Q18

**Change in production per lateral foot is slightly greater than allowable degradation, but production per ton is increasing, hence light impact (see also next page for more commentary)

Source: Rystad Energy research and analysis



Mining and Production

Cost-Effective, Differentiated Process

On-site Mining / Excavation



Conveyer Belt to On-site Wet Plant



Wet Plant Cleans and Sorts Product



Dry Plant Dries and Sorts Product



Unit Trains Deliver Dry Sand to Basins



- Low Cost Structure Due to Several Key Attributes:
 - Low royalty rates (\$0.50 per ton sold on 20/70 sand at Oakdale / no royalties at Utica)
 - Higher mining yields due to balance of coarse and fine mineral reserve deposits
 - Minimal trucking required; reserves, processing plants, and rail facilities are centralized
- Evaluating Other Initiatives to Reduce Mining and Operating Costs

Oakdale Facility: High Quality Northern White Raw Frac Sand in an Efficient Configuration





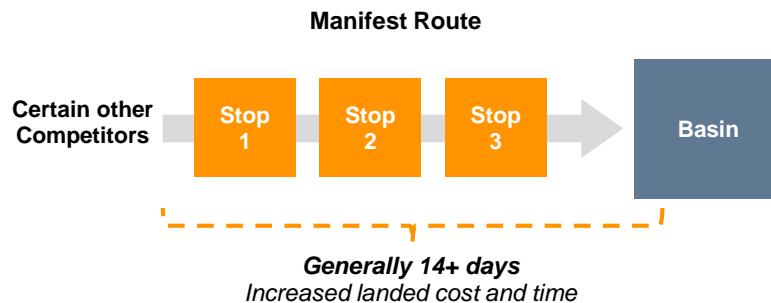
Logistics and Wellsite Solutions

Expansive Logistics Capabilities

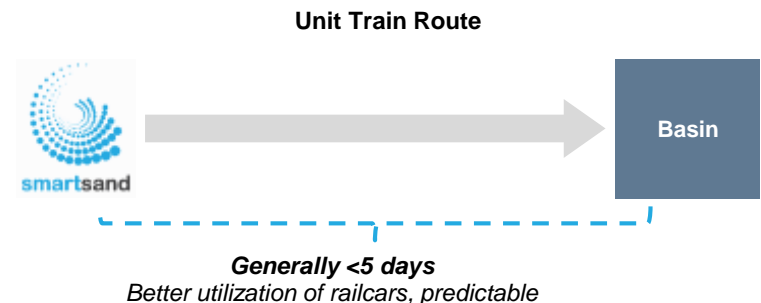
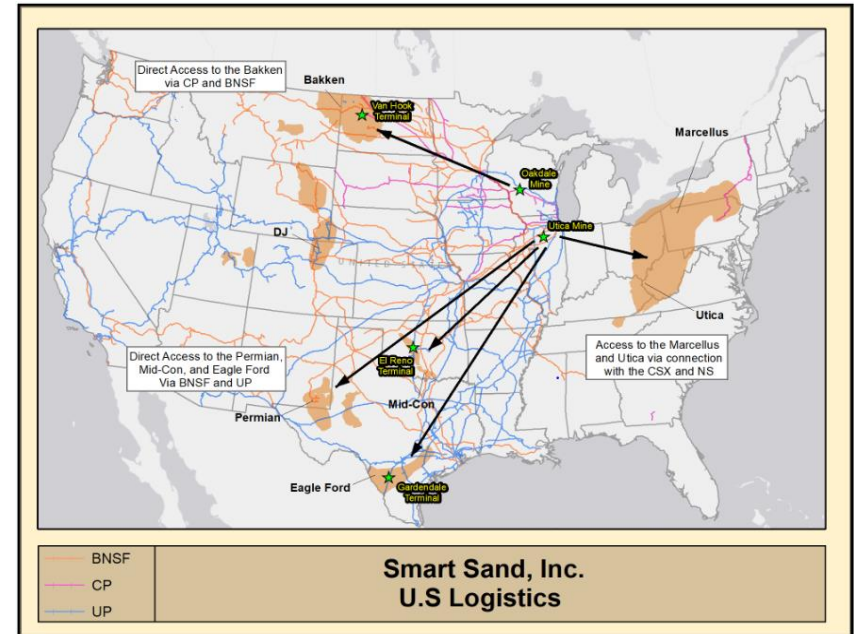
Key Logistical Advantages

- **Dual Served Class I Rail Access** – onsite service on Canadian Pacific rail line coupled with nearby terminal on Union Pacific rail line allows access to multiple oil and gas plays, avoids interchange fees on local short-hauls and allows opportunity to reduce freight costs through competition
- **Unit Train Capability** – Reduces customer product delivery time and costs (see below)
- **In Basin Terminal** – Van Hook terminal in North Dakota provides competitive advantage for delivery of frac sand into the Bakken
- **Wellsite Storage Solutions** - Portable wellsite storage solutions provide customers with a proppant management system designed to help control demurrage, drive down costs and improve safety

Manifest Route vs. Unit Train Route Benefits



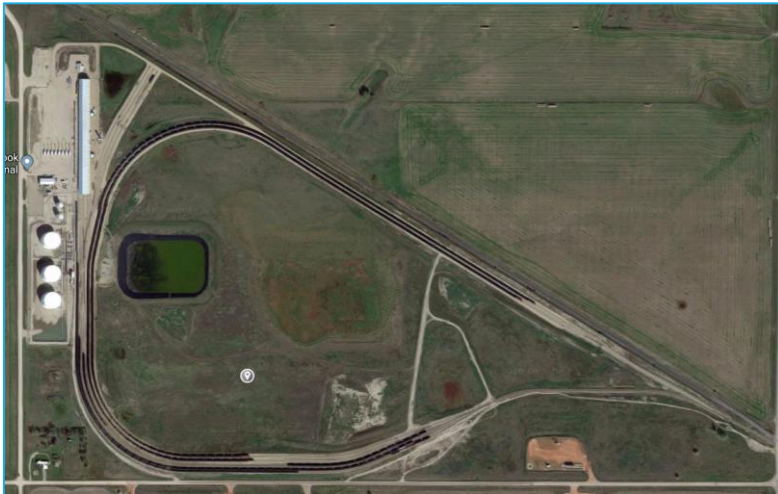
Highly Competitive Delivery Capabilities



Unit Trains Require Approximately One-third of the Time of Manifest Trains and Significantly Improve Reliability

- Location: Van Hook, ND
- Commenced operations in April 2018
- We shipped 47% of our volumes year to date in 2020 through this terminal as customers recognized the value of Van Hook's strategic location and efficient logistics solutions

Van Hook Terminal



SmartSystems™ Wellsite Storage Solutions Features



- Transported using specialized trailer for unassisted setup in five minutes.
- Tri-axle trailer design with reinforced steel frame and remote control operation.
- Direct to blender delivery, controls dust, stops and starts proppant flow.
- Passive & Active onboard positive dust collection.
- Five chute positions offering unparalleled site layout options.
- Up to five SmartDepot™ silos delivering ~1,000 tons direct to the blender hopper.
- Service platforms for safe access to service areas.
- Six external pneumatic fill pipes for simultaneous loading.
- The system is self-powered and requires no generator.
- Hydraulic stabilizers to maintain stability.



Focus on
Safety and
Environmental
Stewardship

Providing
Logistics
and Last Mile
Advantages

A Proven &
Tested Product

Our SmartSystems™ Storage vs. the Competition



Competitive Options



Silos:

- Belts Required, No Direct To Blender Offload
- Dust Can Be a Concern
- Large Footprint
- Not Fully Integrated



Box Design:

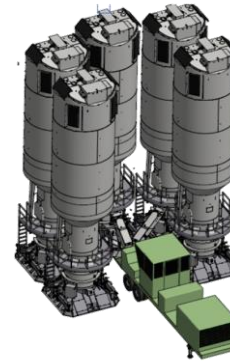
- Limited Tonnage Per Truck Resulting In Poor Optimization
- Moving Equipment Causing Safety Concerns
- Forklifts and Safe Spaces Required
- Extremely Large Footprint



Hybrid:

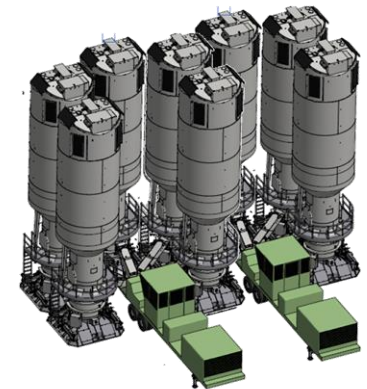
- Completion Conveyor Design With Inefficient Delivery System To The Blender
- Dust Can Be a Concern
- Large Footprint
- Not Fully Integrated

SmartSystems™ Storage Equipment



Smart Sand:

- Multiple Size Options With Custom Configurations
- Engineered and Designed Specifically For Sand Storage on the Well Site
- Smallest Footprint in the Industry
- Fast Mobilization and Demobilization Times
- Direct to Blender Offload
- Dust Control
- Single & Dual Blender Designs
- No Moving Parts



SmartPath™ Proppant Handling System



- SmartPath™ is a patent-pending mobile transloading system, designed to work with bottom dump trailers, featuring a drive over conveyor, surge bin, dust collection system, on-board generator, and redundant conveyance circuits for transferring proppant into SmartDepot™ silos
- The SmartPath coupled with our Smart Depot portable silos will provide pressure pumpers and E&Ps a very efficient and flexible proppant delivery and storage system at the wellsite
- Key Features:
 - Self-contained - requires no external equipment in order to deploy or operate
 - Drive over conveyor is capable to unloading at a rate of up to 5 tons per minute, pneumatic to the silos at a rate of up to 2 tons per minute
 - Double tank discharge system for longer life than traditional rotary airlocks
 - Generator meets EPA Tier 4 emissions standard
 - OSHA/OHS ladders and platforms for service and maintenance
 - Controls and wiring rated for all weather operation, -40°F to 100°F temperatures
 - DOT/TC approved axles, abs brakes, running lights, and rear bumper



Sustainable Operating Model

- Large, high quality reserve base
- Low cost operations
- Efficient and sustainable logistics capabilities with access to all operating basins

Prudent Capital Structure

- Low leverage levels (0.4x Net Debt / TTM EBITDA) allow Company the ability to manage through all operating cycles
- Well positioned to participate in consolidation opportunities should they present themselves

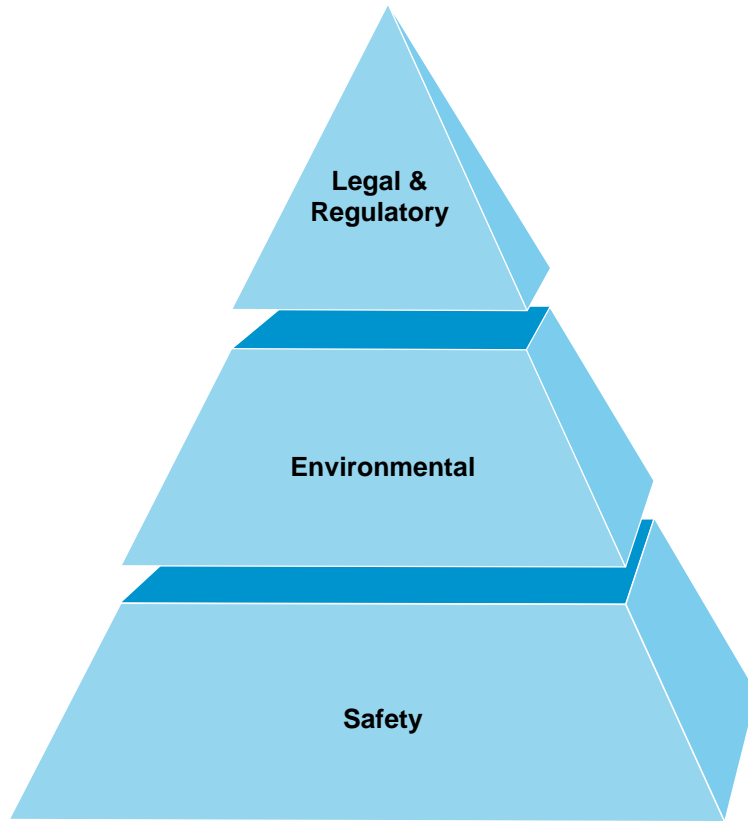
Committed Management / Ownership

- High insider ownership that aligns management with investors (~15% owned by CEO, ~49% owned by insiders) to focus on long-term value creation



Appendix

Committed to Highest Corporate Standards



- Management maintains close dialogue with customers regarding the oil and gas industry's rigorous regulatory environment
- ISO registered Quality System and Environmental Management System in place
- Minimal environmental and community impact: on-site rail, careful mine design, moderated trucking and extensive use of conveyors
- A member of the Wisconsin Industrial Sand Association (WISA), a selective industry group promoting high standards for safety, sustainability and environmental performance
- Participant in Wisconsin's Green Tier program, demonstrating voluntary commitment to high environmental performance through projects that improve the environment and promote good community relations
- Our first priority is a safe work environment. Dedicated safety staff, continual training and daily inspections are part of our MSHA approved safety plan



Smart Sand is committed to providing a safe working environment and upholding the highest levels of environmental stewardship

EBITDA Reconciliation



(\$ in thousands)	Year ended December 31,				
	2015	2016	2017	2018	2019
Net income (loss)	\$4,990	\$10,379	\$21,526	\$18,688	\$31,623
Depreciation, depletion, accretion and amortization	5,318	6,445	7,300	18,165	27,135
Income tax (benefit) expense	4,129	9,394	(2,809)	5,122	7,809
Interest expense	7,826	8,436	700	2,320	3,626
Franchise taxes	35	21	339	442	285
EBITDA	\$22,298	\$34,675	\$27,056	\$44,737	\$70,478
(Gain) Loss on sale of fixed assets	39	(59)	253	321	(42)
Integration and transition costs	—	—	16	—	—
Initial public offering related costs ⁽¹⁾	221	725	—	—	—
Equity compensation ⁽²⁾	792	1,426	1,652	2,670	2,755
Acquisition and development costs ⁽³⁾	76	—	845	(218)	(3,047)
Non-cash impairment of goodwill and other intangible asset ⁽⁴⁾	—	—	—	17,835	15,542
Cash charges related to restructuring and retention	—	—	279	674	137
Non-cash charges ⁽⁵⁾	469	21	514	(26)	687
Loss on extinguishment of debt	—	1,051	—	—	561
Adjusted EBITDA	\$23,881	\$37,839	\$30,615	\$65,993	\$87,071

⁽¹⁾ For the year ended December 31, 2016, represents IPO-related bonuses. For the year ended December 31, 2015, represents expenses related to previous IPO activities.

⁽²⁾ Represents the non-cash expenses for stock-based awards issued to our employees and employee stock purchase plan compensation expense.

⁽³⁾ Represents costs incurred related to the business combinations and current development project activities. The year ended December 31, 2019 includes \$3,272 decrease in the estimated fair value of our contingent consideration related to the acquisition of Quickthree and \$225 related to development project activities. The year ended December 31, 2018 includes \$1,858 decrease in the estimated fair value of our contingent consideration related to the acquisition of Quickthree, partially offset by \$1,146 of costs related to the acquisition of Quickthree and \$494 related to development project activities.

⁽⁴⁾ The \$17.8mm charge in 2018 relates primarily to the decline in our stock price in 2018 and the relationship between the resulting market capitalization and the equity recorded on our balance sheet. During the year ended December 31, 2019, we recorded impairment loss of \$15.5 million, of which \$7.6 million relates to our finite-lived developed technology intangible assets and \$7.9 million relates to our Hixton, Wisconsin property. The impairment of the finite-lived intangible assets is from our developed technology allocated to the Quickload acquired in connection with the acquisition of Quickthree in 2018. We are developing and testing a new transload technology and no longer plan to actively market the Quickload and as such, all developed technology intangible assets related to the Quickload were fully impaired during the third quarter of 2019. In the fourth quarter of 2019, we determined that the full amount recorded on the balance sheet which relate to the Hixton, Wisconsin property may not be recoverable as we have no current plans to further develop the site.

⁽⁵⁾ Represents accretion of asset retirement obligations and loss on derivatives.

EBITDA Reconciliation

(\$ in thousands)	Quarter ended				
	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020
Net income (loss)	\$10,887	\$2,388	(\$84)	\$4,640	\$36,282
Depreciation, depletion, accretion and amortization	6,992	7,250	5,487	5,450	5,529
Income tax expense (benefit)	2,608	294	165	3,470	1,941
Interest expense	969	679	480	619	506
Franchise taxes	56	51	56	94	63
EBITDA	\$21,512	\$10,662	\$6,104	\$14,273	\$44,321
Gain (loss) on sale of fixed assets	(15)	(1)	—	275	(27)
Equity compensation ⁽¹⁾	663	708	926	842	832
Acquisition and development costs ⁽²⁾	(1,208)	(315)	(822)	144	823
Non-cash impairment of goodwill and other intangible asset ⁽³⁾	7,628	7,914	—	—	—
Cash charges related to restructuring and retention	—	55	82	—	—
Gain on bargain purchase	—	—	—	—	(39,889)
Accretion of asset retirement obligations	178	64	75	76	88
Loss on extinguishment of debt	—	561	—	—	—
Adjusted EBITDA	\$28,758	\$19,648	\$6,365	\$15,610	\$6,148

(1) Represents the non-cash expenses for stock-based awards issued to our employees and employee stock purchase plan compensation expense.

(2) Represents costs incurred related to the business combinations and current development project activities, offset by contingent consideration as applicable.

(3) The charge in the quarter ending 9/30/19 related to specific developed technology allocated to the Quickload - The Company is developing and testing a new SmartPath™ transload technology and no longer plans to actively market the Quickload system and as such, all developed technology intangible assets related to the Quickload have been impaired. In the fourth quarter of 2019, we determined that the full amount recorded on the balance sheet relating to the Hixton, Wisconsin property may not be recoverable as we have no current plans to further develop the site.

Contribution Margin Reconciliation



(\$ in thousands)	Quarter ended				
	9/30/2019	12/31/2019	3/31/2020	6/30/2020	9/30/2020
Revenue	\$65,690	\$47,667	\$47,488	\$26,106	\$23,409
Cost of goods sold	38,555	29,793	41,089	11,906	18,227
Gross profit	27,135	17,874	6,399	14,200	5,182
Depreciation, depletion, and accretion of asset retirement obligations	6,547	6,858	5,109	5,065	5,177
Contribution margin	\$33,682	\$24,732	\$11,508	\$19,265	\$10,359
Contribution margin per ton	\$55.13	\$53.53	\$15.20	\$92.62	\$33.52

Note: Figures may not tie due to rounding.