

## Energy | Oilfield Services, Equipment & Drilling

**James West**  
212-653-9047  
james.west@evercoreisi.com

**Jason Bandel**  
212-653-9044  
Jason.Bandel@evercoreISI.com

**Andres Menocal**  
212-653-9041  
andres.menocal@evercoreisi.com

### Energy Technology Showcase; A Tech Revolution Unfolding?

**Technology revolution coming?** Last week, we hosted a well-attended showcase with CSL Capital Management's ("CSL") venture arm – CSL Ventures (<http://www.cslenergy.com/csl-ventures.html>). The attendees included a wide range of investors, entrepreneurs, energy management executives and industry strategists. It was an engaging two-hour session with active participation from the audience and an exciting discussion around key emerging themes and technologies in the energy industry.

CSL launched the technology initiative in August of this year with the objective of addressing the rapidly evolving technical needs of the energy industry at a time when not only production growth, cost control and efficiency, but also sustainable energy resource development, are of paramount importance. The industry is also changing the way technology innovation is being driven. Today, for the US land, innovation is being driven by the demands of the manufacturing mode of unconventional development and being pushed forward by entrepreneurs. CSL Ventures' objective is to complement and extend CSL's global network of sourcing unique opportunities, proven track record of successfully incubating and building greenfield businesses, and creatively structuring transactions through the energy cycle for the benefit of early stage and technology-focused companies and entrepreneurs.

**Three high-tech energy companies at the second showcase.** Our second technology showcase focused on three high-tech energy companies affiliated with CSL Ventures: Shale Value, Revo Testing Technologies, and REDLIST. Shale Value provides formation fluid information and production forecasts to vastly improve modeling and subsurface understanding of unconventional reservoir. Revo is a next generation flowback and well testing service. REDLIST wants to revolutionize how heavy industry gets work done using cloud-based field management software. **More details within.**

#### Key Themes

Technology is moving to the forefront as energy companies are increasingly asked to do more with less. Today's E&P operators must deal with conflicting priorities of being asked to generate FCF while also continuing to grow. The industry has also reached the bottom of the cost curve by industrializing processes and squeezing suppliers. Technology will need to continually be developed to drive further efficiency gains, improve production and grow reserves. Over the past decade, innovation has migrated towards entrepreneurs and new startup ventures as employees leave large organizations and create or join technology-driven startups. The other key change was that historically large cap diversifieds (SLB, HAL, BHGE, WFT) used to buy three to five companies a year but that pace has slowed since the energy downturn started in 2014.

## Company 1 – Shale Value

### Background:

Shale Value's software provides pressure, volume, and temperature (PVT) fluid information and production forecasts for unconventional reservoirs. The firm has two software products called FIRM (Forecasting through Inferred Reservoir Modeling) and FACET (Fluid Analysis and Composition Estimation Tool). The software solutions combine deep domain reservoir engineering with machine learning based on public and private data. This data is then interpreted to provide substantially improved understanding of the subsurface and to enhance value across the entire shale development lifecycle. This software can be used to make better operational decisions, assist in estimating reserves, better plan infill drilling programs, optimize surface facilities, and design enhanced oil recovery processes.

### Management:

**Phani Gadde, CEO & Co-Founder:** Mr. Gadde has over 20 years' experience in the energy industry. Prior to starting Shale Value in 2017, he was a Principal Analyst in the Upstream Lower 48 team at Wood Mackenzie where he led North America supply data analysis and developed production forecasts for tight oil and shale gas plays. Mr. Gadde also spent six years as a research engineer at the University of Texas.

**Pavana Gadde, VP Business Development & Operations:** Ms. Gadde has over 16 years of experience in the technology arena, with positions at HP, HPE Aruba and Dell. Her focus has been in product management and she was an Alliance Director with several industry-first launches. Ms. Gadde has her Masters in Computer Science from Texas A&M, and an MBA from MIT Sloan.

### Our Key Takes:

With all the work currently being done on forecasting and analysis, the company estimates that market for asset valuation and production supply forecasts is roughly \$800 million.

Shale Value's solution leverages foresight through physics using FIRM (Forecasting through Inferred Reservoir Modeling) which is supported by FACET (Fluid Analysis and Composition Estimate Tool). FIRM uses deep domain reservoir engineering to infer rock, frac and fluid properties. The software is easy to use and it builds reliable forecasts based on inferred parameters and does not do curve fitting. FIRM has trained functions and machine learning to build detailed well level forecasts, benchmarking of inferred rock and frac properties, what-if-analysis, diagnostics from public domain data, proprietary PVT models, analytical models and diagnostic plots, and compositional reservoir stimulations. Operators can compare results within minutes. FACET is a fluid analysis model that can improve oil recovery. It offers the industry's only play-wide fluid analysis.

## Company 2 – Revo Testing Technologies (Revo)

### Background:

Revo Testing Technologies (Revo) has developed reservoir analysis, software, and hardware technology to create the next generation flowback and well testing service. This new service can help operators maximize production and minimize completion and reservoir damage. Revo utilizes a proprietary process to continuously assess well performance during flowback through analytical models to optimize choke management. The company has also developed new hardware to automate and digitize flowback. The hardware will provide higher quality data to improve analysis, enhance fluid separation to reduce oil lost to disposal, minimize safety risks through automation, and lower emissions.

### Management:

**Adam Swartley, CEO:** Mr. Swartley has over 10 years of experience in the oil and gas industry working for various financial institutions and oilfield service companies like Halliburton, prior to becoming the CEO of Revo. He has a Bachelor of Science in Electrical and Computer Engineering from the University of Colorado and holds a MBA degree from Rice University.

**Our Key Takes:** The team at Revo wanted to bring new technology and data science to flowback as current practices can damage wells and ultimately impact EURs. For those who maybe unfamiliar, flowback is used to control initial production post fracturing, clean up the well before transfer to production facilities, measure initial production rates, and protect production facilities from sand. The market size is roughly \$1.2-1.3 billion in North America but is highly fragmented with basin specific competition. Revo was founded in 2018 to create a cloud-based platform with real-time analytics in order to set a new standard for the flowback industry. The company has built a software application with hardware that automates the flowback and well test package. The goal is to set a new standard for the industry through integration of equipment automation and analytics, reduction of personnel needs and HSE risks, and limit environmental impacts.

Revo Performance Management (RPM) is a cloud-based application that allows for engineered

choke management to improve well performance and EURs. The application also protects the completion and minimizes sand production in order to protect the production facilities. An operator can remotely access real-time well test data via a mobile app and web interface that provides real-time analysis and automated reporting tools. Revo quickly realized that a hardware application would help drive adoption. Its automated flowback and well test package has automated controls and measurements that minimizes crew sizes and reduces safety exposure. The equipment also has near 100% separation efficiency to eliminate oil lost to water disposal and lower flaring emissions by reducing oil in the gas stream. The package can accelerate the flowback and improve completion optimization.

## Company 3 – REDLIST

### Background:

REDLIST was built with a mission to revolutionize how heavy industry gets work done. The company was founded in 2014 to provide field service management software through a cloud-based mobile ready application to streamline workflows and optimize the performance of heavy equipment and crews. The features include real-time communication and reporting, location mapping, planning and dispatch, work order management, preventive maintenance scheduling, digital inspections, and route optimization. It also helps digital enablement of small to medium sized enterprises operating in the energy, industrial, and construction verticals.

### Management:

**John Keller, Co-Founder and President:** Mr. Keller is a successful entrepreneur in retail and software who launched REDLIST as the President and Co-Founder in August of 2014. Prior to that, he was a Managing Director of Red Orchard, an investment and holding company for technology-related companies. Mr. Keller received his BA in International Business from Brigham Young University.

**Our Key Takes:** As per IBISWorld report, the field service management software industry is approximately \$1.4 billion in the US and is expected to grow at a 14% CAGR over the next five years. Integrated production, safety, and maintenance is the opportunity in the market. The current competitive offerings have large and cumbersome platforms and are approaching the challenge from an ERP standpoint. However, REDLIST is attacking the industrial challenge from an operational, field and shop floor perspective.

The REDLIST solution consolidates the silos to give customers a fully integrated platform of production, safety, and maintenance. All the information and data across these departments can be shared real-time while also helping companies achieve faster employee onboarding. Imagine when information gleaned from a safety inspection is not just stored in a corporate office, but quickly and seamlessly shared with counterparts in maintenance and production. REDLIST Production is a self-service customer portal that allows for quick changes to scheduling, fully integrated quote to close, and updates to pricing. The platform also allows field workers to quickly communicate with field managers and corporate office managers. REDLIST Safety digitalizes inspections and safety documents in order to promote collaboration, root cause analysis, and improve incident documentation and reporting. Lastly, REDLIST Maintenance automates work order communication, real-time field work order management, and eliminates unnecessary waste.

**TIMESTAMP****(Article 3(1)e and Article 7 of MAR)**

Time of dissemination:

**ANALYST CERTIFICATION**

The analysts, James West, Andres Menocal, Jason Bandel, primarily responsible for the preparation of this research report attest to the following: (1) that the views and opinions rendered in this research report reflect his or her personal views about the subject companies or issuers; and (2) that no part of the research analyst's compensation was, is, or will be directly related to the specific recommendations or views in this research report.

**DISCLOSURES**

This report is approved and/or distributed by Evercore Group L.L.C. ("Evercore Group"), a U.S. licensed broker-dealer regulated by the Financial Industry Regulatory Authority ("FINRA"), and Evercore ISI International Limited ("ISI UK"), which is authorised and regulated in the United Kingdom by the Financial Conduct Authority. The institutional sales, trading and research businesses of Evercore Group and ISI UK collectively operate under the global marketing brand name Evercore ISI ("Evercore ISI"). Both Evercore Group and ISI UK are subsidiaries of Evercore Inc. ("Evercore"). The trademarks, logos and service marks shown on this report are registered trademarks of Evercore.

The analysts and associates responsible for preparing this report receive compensation based on various factors, including Evercore's Partners' total revenues, a portion of which is generated by affiliated investment banking transactions. Evercore ISI seeks to update its research as appropriate, but various regulations may prevent this from happening in certain instances. Aside from certain industry reports published on a periodic basis, the large majority of reports are published at irregular intervals as appropriate in the analyst's judgment.

Evercore ISI generally prohibits analysts, associates and members of their households from maintaining a financial interest in the securities of any company in the analyst's area of coverage. Any exception to this policy requires specific approval by a member of our Compliance Department. Such ownership is subject to compliance with applicable regulations and disclosure. Evercore ISI also prohibits analysts, associates and members of their households from serving as an officer, director, advisory board member or employee of any company that the analyst covers.

This report may include a Tactical Call, which describes a near-term event or catalyst affecting the subject company or the market overall and which is expected to have a short-term price impact on the equity shares of the subject company. This Tactical Call is separate from the analyst's long-term recommendation (Outperform, In Line or Underperform) that reflects a stock's forward 12-month expected return, is not a formal rating and may differ from the target prices and recommendations reflected in the analyst's long-term view.

**Applicable current disclosures regarding the subject companies covered in this report are available at the offices of Evercore ISI, and can be obtained by writing to Evercore Group L.L.C., Attn. Compliance, 666 Fifth Avenue, 11th Floor, New York, NY 10103.**

Evercore and its affiliates, and I or their respective directors, officers, members and employees, may have, or have had, interests or qualified holdings on issuers mentioned in this report. Evercore and its affiliates may have, or have had, business relationships with the companies mentioned in this report.

Additional information on securities or financial instruments mentioned in this report is available upon request.

**Ratings Definitions****Current Ratings Definition**

Evercore ISI's recommendations are based on a stock's total forecasted return over the next 12 months. Total forecasted return is equal to the expected percentage price return plus gross dividend yield. We divide our stocks under coverage into three primary ratings categories, with the following return guidelines:

**Outperform**- the total forecasted return is expected to be greater than the expected total return of the analyst's coverage universe

**In Line**- the total forecasted return is expected to be in line with the expected total return of the analyst's universe

**Underperform**- the total forecasted return is expected to be less than the expected total return of the analyst's universe

**Coverage Suspended**- the rating and target price have been removed pursuant to Evercore ISI policy when Evercore is acting in an advisory capacity in a merger or strategic transaction involving this company and in certain other circumstances.\*

**Rating Suspended**- Evercore ISI has suspended the rating and target price for this stock because there is not sufficient fundamental basis for determining, or there are legal, regulatory or policy constraints around publishing, a rating or target price. The previous rating and target price, if any, are no longer in effect for this company and should not be relied upon.\*

\*Prior to October 10, 2015, the "Coverage Suspended" and "Rating Suspended" categories were included in the category "Suspended."

**FINRA requires that members who use a ratings system with terms other than "Buy," "Hold/Neutral" and "Sell" to equate their own ratings to these categories. For this purpose, and in the Evercore ISI ratings distribution below, our Outperform, In Line, and Underperform ratings can be equated to Buy, Hold and Sell, respectively.**

**Historical Ratings Definitions**

Prior to March 2, 2017, Evercore ISI's recommendations were based on a stock's total forecasted return over the next 12 months:

**Buy**- the total forecasted return is expected to be greater than 10%

**Hold**- the total forecasted return is expected to be greater than or equal to 0% and less than or equal to 10%

**Sell** -the total forecasted return is expected to be less than 0%

On October 31, 2014, Evercore acquired International Strategy & Investment Group LLC ("ISI Group") and ISI UK (the "Acquisition") and transferred Evercore Group's research, sales and trading businesses to ISI Group. On December 31, 2015, the combined research, sales and trading businesses were transferred back to Evercore Group in an internal reorganization. Since the Acquisition, the combined research, sales and trading businesses have operated under the global marketing brand name Evercore ISI.

#### ISI Group and ISI UK:

Prior to October 10, 2014, the ratings system of ISI Group and ISI UK which was based on a 12-month risk adjusted total return:

Strong Buy- Return > 20%  
Buy- Return 10% to 20%  
Neutral - Return 0% to 10%  
Cautious- Return -10% to 0%  
Sell- Return < -10%

For disclosure purposes, ISI Group and ISI UK ratings were viewed as follows: Strong Buy and Buy equate to Buy, Neutral equates to Hold, and Cautious and Sell equate to Sell.

#### Evercore Group:

Prior to October 10, 2014, the rating system of Evercore Group was based on a stock's expected total return relative to the analyst's coverage universe over the following 12 months. Stocks under coverage were divided into three categories:

Overweight- the stock is expected to outperform the average total return of the analyst's coverage universe over the next 12 months.  
Equal-Weight- the stock is expected to perform in line with the average total return of the analyst's coverage universe over the next 12 months.  
Underweight- the stock is expected to underperform the average total return of the analyst's coverage universe over the next 12 months.  
Suspended- the company rating, target price and earnings estimates have been temporarily suspended.

For disclosure purposes, Evercore Group's prior "Overweight," "Equal-Weight" and "Underweight" ratings were viewed as "Buy," "Hold" and "Sell," respectively.

#### Ratings Definitions for Portfolio-Based Coverage

Evercore ISI utilizes an alternate rating system for companies covered by analysts who use a model portfolio-based approach to determine a company's investment recommendation. Covered companies are included or not included as holdings in the analyst's Model Portfolio, and have the following ratings:

**Long**- the stock is a positive holding in the model portfolio; the total forecasted return is expected to be greater than 0%.

**Short**- the stock is a negative holding in the model portfolio; the total forecasted return is expected to be less than 0%.

**No Position**- the stock is not included in the model portfolio.

**Coverage Suspended**- the rating and target price have been removed pursuant to Evercore ISI policy when Evercore is acting in an advisory capacity in a merger or strategic transaction involving this company, and in certain other circumstances; a stock in the model portfolio is removed.

**Rating Suspended** - Evercore ISI has suspended the rating and/or target price for this stock because there is not sufficient fundamental basis for determining, or there are legal, regulatory or policy constraints around publishing, a rating or target price. The previous rating and target price, if any, are no longer in effect for this company and should not be relied upon; a stock in the model portfolio is removed.

Stocks included in the model portfolio will be weighted from 0 to 100% for Long and 0 to -100% for Short. A stock's weight in the portfolio reflects the analyst's degree of conviction in the stock's rating relative to other stocks in the portfolio. The model portfolio may also include a cash component. At any given time the aggregate weight of the stocks included in the portfolio and the cash component must equal 100%.

Stocks assigned ratings under the alternative model portfolio-based coverage system cannot also be rated by Evercore ISI's Current Ratings definitions of Outperform, In Line and Underperform.

**FINRA requires that members who use a ratings system with terms other than "Buy," "Hold/Neutral" and "Sell," to equate their own ratings to these categories. For this purpose, and in the Evercore ISI ratings distribution below, our Long, No Position and Short ratings can be equated to Buy, Hold and Sell respectively.**

#### Evercore ISI rating (as of 11/11/2019)

Coverage Universe			Investment Banking Services I Past 12 Months		
Ratings	Count	Pct.	Ratings	Count	Pct.
Buy	420	52	Buy	96	23
Hold	315	39	Hold	35	11
Sell	39	5	Sell	3	8
Coverage Suspended	14	2	Coverage Suspended	6	43
Rating Suspended	13	2	Rating Suspended	5	38

#### Issuer-Specific Disclosures (as of November 11, 2019)

#### Price Charts

## GENERAL DISCLOSURES

This report is approved and/or distributed by Evercore Group L.L.C. ("Evercore Group"), a U.S. licensed broker-dealer regulated by the Financial Industry Regulatory Authority ("FINRA") and by Evercore ISI International Limited ("ISI UK"), which is authorised and regulated in the United Kingdom by the Financial Conduct Authority. The institutional sales, trading and research businesses of Evercore Group and ISI UK collectively operate under the global marketing brand name Evercore ISI ("Evercore ISI"). Both Evercore Group and ISI UK are subsidiaries of Evercore Inc. ("Evercore"). The trademarks, logos and service marks shown on this report are registered trademarks of Evercore Inc.

This report is provided for informational purposes only. It is not to be construed as an offer to buy or sell or a solicitation of an offer to buy or sell any financial instruments or to participate in any particular trading strategy in any jurisdiction. The information and opinions in this report were prepared by registered employees of Evercore ISI. The information herein is believed by Evercore ISI to be reliable and has been obtained from public sources believed to be reliable, but Evercore ISI makes no representation as to the accuracy or completeness of such information. Opinions, estimates and projections in this report constitute the current judgment of the author as of the date of this report. They do not necessarily reflect the opinions of Evercore and are subject to change without notice. In addition, opinions, estimates and projections in this report may differ from or be contrary to those expressed by other business areas or groups of Evercore and its affiliates. Evercore ISI has no obligation to update, modify or amend this report or to otherwise notify a reader thereof in the event that any matter stated herein, or any opinion, projection, forecast or estimate set forth herein, changes or subsequently becomes inaccurate. Facts and views in Evercore ISI research reports and notes have not been reviewed by, and may not reflect information known to, professionals in other Evercore affiliates or business areas, including investment banking personnel.

Evercore ISI does not provide individually tailored investment advice in research reports. This report has been prepared without regard to the particular investments and circumstances of the recipient. The financial instruments discussed in this report may not be suitable for all investors and investors must make their own investment decisions using their own independent advisors as they believe necessary and based upon their specific financial situations and investment objectives. Securities and other financial instruments discussed in this report, or recommended or offered by Evercore ISI, are not insured by the Federal Deposit Insurance Corporation and are not deposits of or other obligations of any insured depository institution. If a financial instrument is denominated in a currency other than an investor's currency, a change in exchange rates may adversely affect the price or value of, or the income derived from the financial instrument, and such investor effectively assumes such currency risk. In addition, income from an investment may fluctuate and the price or value of financial instruments described in this report, either directly or indirectly, may rise or fall. Estimates of future performance are based on assumptions that may not be realized. Furthermore, past performance is not necessarily indicative of future performance.

Evercore ISI salespeople, traders and other professionals may provide oral or written market commentary or trading strategies to our clients that reflect opinions that are contrary to the opinions expressed in this research. Our asset management affiliates and investing businesses may make investment decisions that are inconsistent with the recommendations or views expressed in this research.

Electronic research is simultaneously available to all clients. This report is provided to Evercore ISI clients and may not be redistributed, retransmitted or disclosed, in whole or in part, or in any form or manner, without the express written consent of Evercore ISI. Receipt and review of this research report constitutes your agreement not to redistribute, retransmit, or disclose to others the contents, opinions, conclusion or information contained in this report (including any investment recommendations, estimates or target prices) without first obtaining express permission from Evercore ISI.

This report is not intended for distribution to, or use by any person or entity in any jurisdiction or country where such distribution or use would be contrary to local law or regulation.

For investors in the UK: In making this report available, Evercore makes no recommendation to buy, sell or otherwise deal in any securities or investments whatsoever and you should neither rely or act upon, directly or indirectly, any of the information contained in this report in respect of any such investment activity. This report is being directed at or distributed to, (a) persons who fall within the definition of Investment Professionals (set out in Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the "Order")); (b) persons falling within the definition of high net worth companies, unincorporated associations, etc. (set out in Article 49(2) of the Order); (c) other persons to whom it may otherwise lawfully be communicated (all such persons together being referred to as "relevant persons"). This report must not be acted on or relied on by persons who are not relevant persons.

Applicable current disclosures regarding the subject companies covered in this report are available at the offices of Evercore ISI, and can be obtained by writing to Evercore Group L.L.C., Attn. Compliance, 666 Fifth Avenue, 11th Floor, New York, NY 10103.

In compliance with the European Securities and Markets Authority's Market Abuse Regulation, a list of all Evercore ISI recommendations disseminated in the preceding 12 months for the subject companies herein, may be found at the following site: <https://evercoreisi.mediasterling.com/disclosure>.

© 2019. Evercore Group L.L.C. All rights reserved.