



NOBLE CAPITAL MARKETS NEWSLETTER

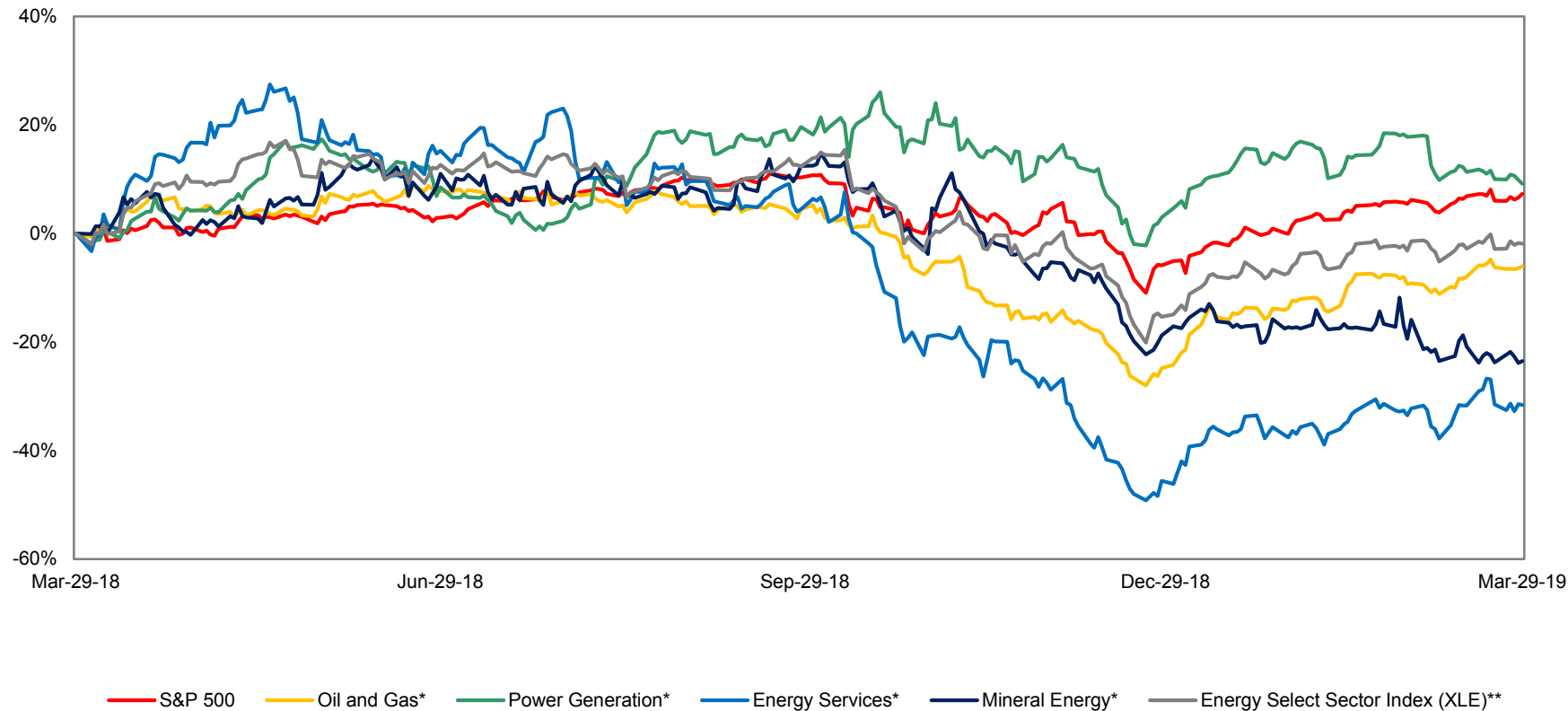
ENERGY

QUARTERLY REVIEW Q1 2019



ENERGY SECTOR NEWSLETTER

ENERGY SECTOR LTM EQUITY PERFORMANCE



INSIDE THIS ISSUE

Energy Industry Data	3
Outlook: Energy Industry	4
Oil & Gas Comp Tables	5
Oil & Gas Market Performance	7
Oil & Gas M&A	8
Power Generation Comp Tables	9
Power Generation Market Performance	10
Power Generation M&A	11
Energy Services Comp Tables	12
Energy Services Market Performance	13
Energy Services M&A	14
Mineral Energy Comp Tables	15
Mineral Energy Market Performance	16
Mineral Energy M&A	17
Energy Industry M&A Overview	18
Noble Quarterly Highlights	19
Noble Overview	20

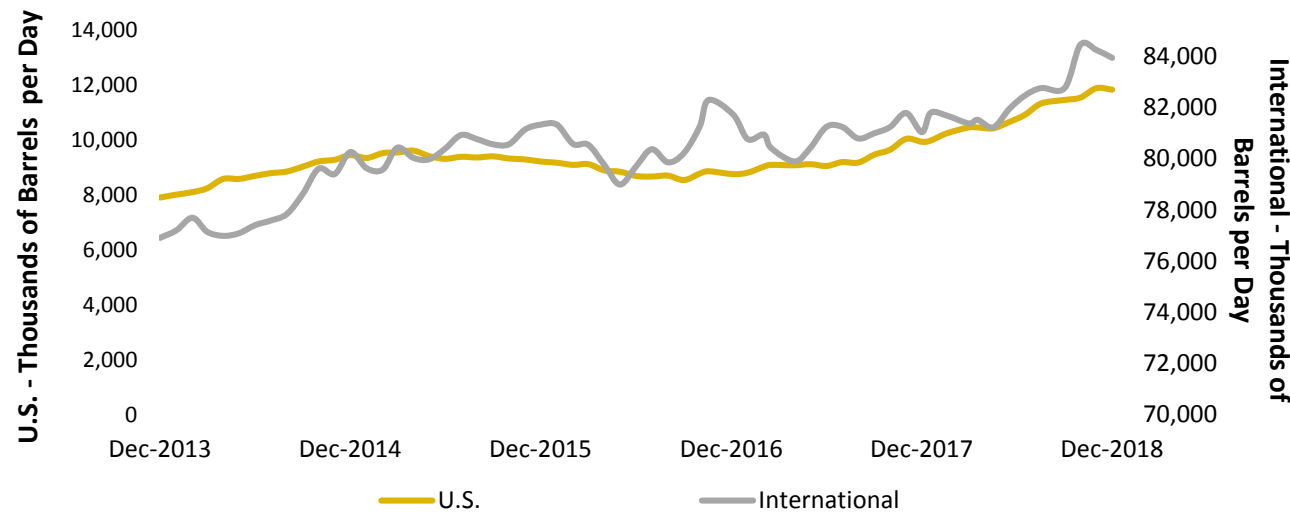
* Noble Proprietary Sector (index composed of companies in the comparable table)
 ** Energy Select Sector SPDR ETF (refer to disclosure section for more information)

Source: Capital IQ as of 03/29/2019

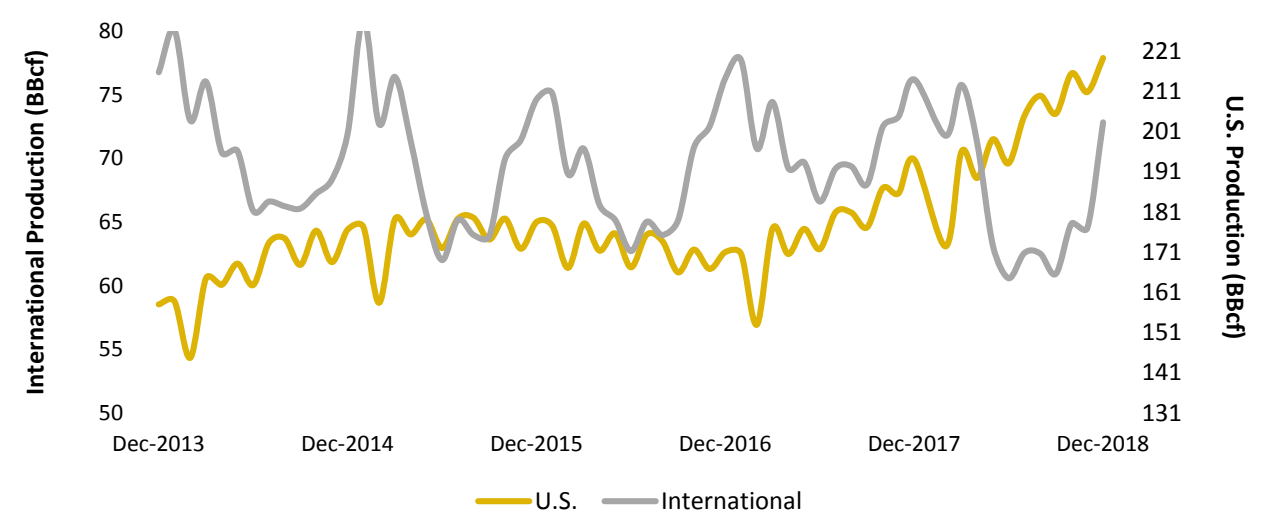


ENERGY FUNDAMENTAL DATA

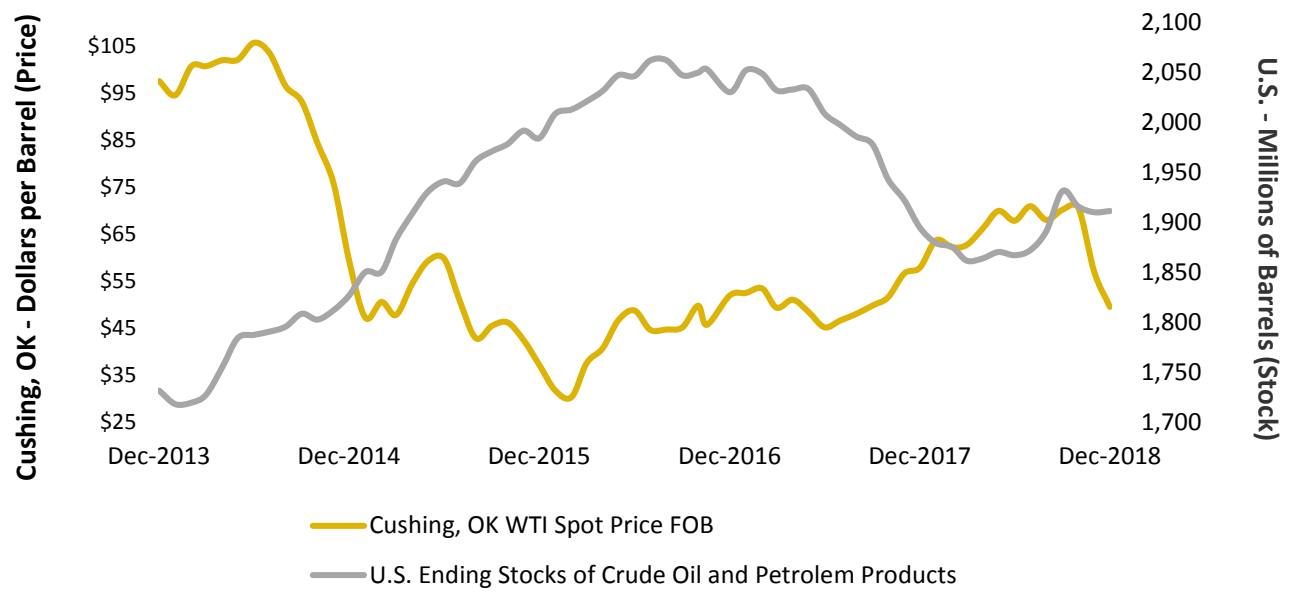
CRUDE OIL PRODUCTION



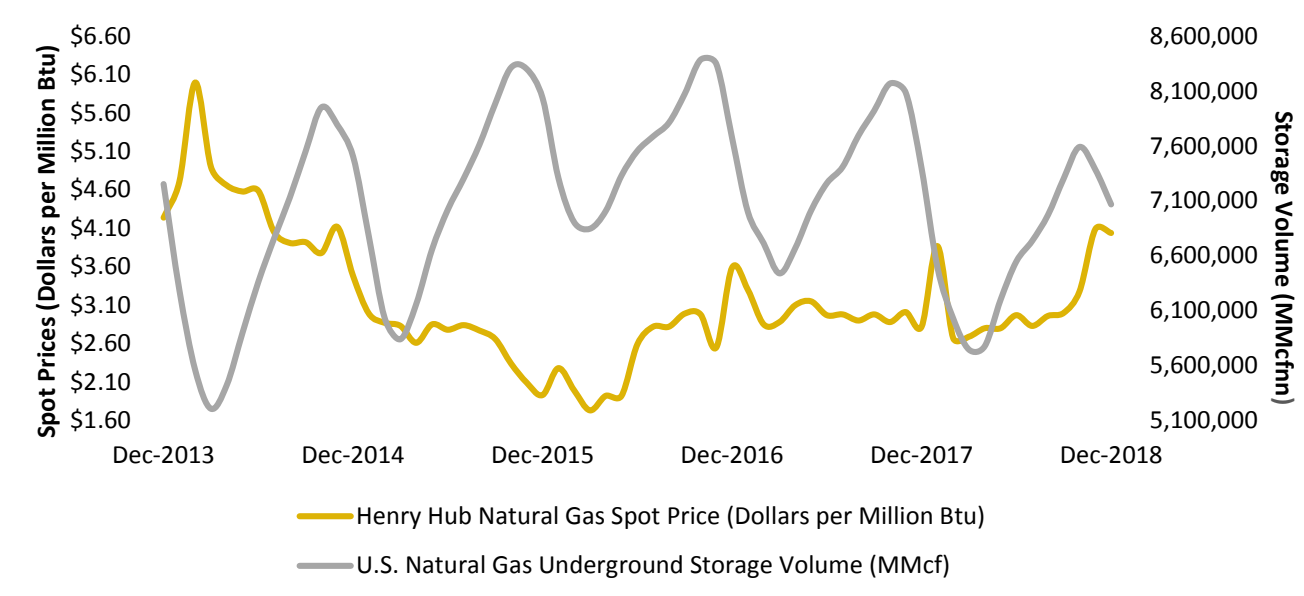
NATURAL GAS PRODUCTION



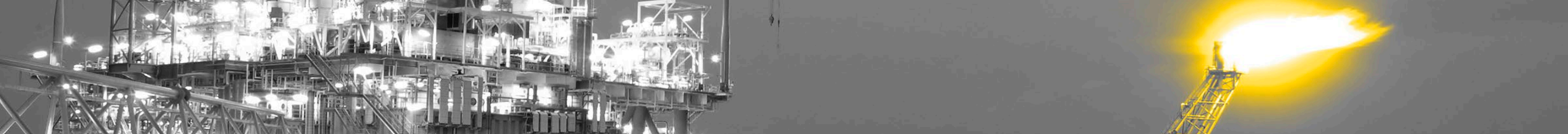
STOCK VS. PRICE



STORAGE VS. PRICE



Source: Energy Information Administration as of 03/29/2019



ENERGY INDUSTRY OUTLOOK

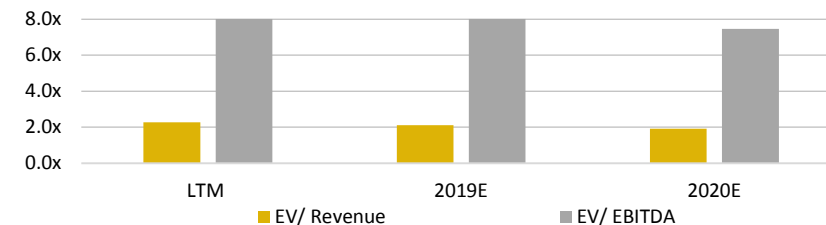
INDEPENDENT EXPLORATION AND PRODUCTION

Exploration and production stocks (as measured by the XLE Index) rose 16.8% in the March quarter surpassing a 14.4% increase in the S&P 500 Composite Index. The outperformance comes after a 33% increase in WTI spot oil prices during the quarter. The rise from \$45 per barrel to over \$60 per barrel came in response to violence in Libya and renewed hope for trade war détente. At current prices, well economics have turned more favorable and we would expect energy companies to begin increasing capital expenditures and the pace of drilling. We have long spoke of an oil trading range of \$45-\$70 per barrel and believe the market will correct itself as we approach the upper end of this range.

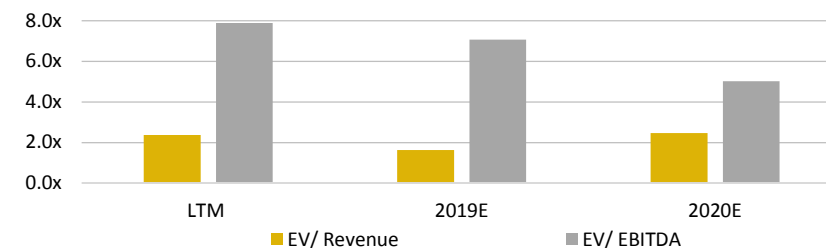
Meanwhile, company profitability is improving. Look for energy companies to take advantage of higher prices to add to hedge positions. While the oil price increase may be too late to help March-quarter earnings, the outlook for 2019 results and beyond has definitely improved. We favor energy companies with a large portfolio of drilling prospects and a strong balance sheet to fund future drilling. We believe energy companies will begin to consider share repurchases later in the year if energy prices remain strong and stock prices have not responded.

Source: Capital IQ as of 03/29/2019; Michael Heim

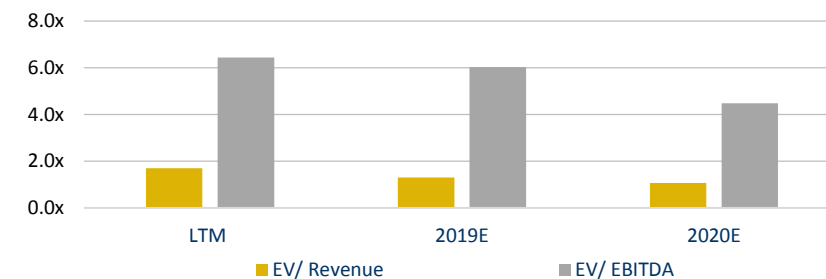
OIL AND GAS MULTIPLES



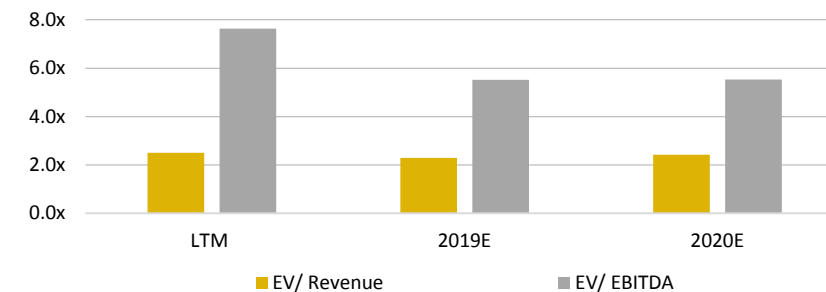
POWER GENERATION MULTIPLES



ENERGY SERVICES MULTIPLES



MINERAL ENERGY MULTIPLES



Source: Capital IQ as of 03/29/2019

OIL & GAS

COMPARABLE TABLES

Exploration and Production Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2019E	2020E	LTM	2019E	2020E	
Torchlight Energy Resources, Inc.	NasdaqCM:TRCH	183%	26%	\$1.64	83%	118	18	135	1	(4)	NM	NM	NM	NM	NM	NM	NM
Lilis Energy, Inc.	AMEX:LLEX	(3%)	(71%)	\$1.17	19%	105	158	414	67	16	6.2x	4.4x	2.6x	NM	8.5x	5.0x	24%
Journey Energy Inc.	TSX:JOY	(3%)	NM	\$1.61	63%	70	92	164	76	20	2.2x	1.1x	NM	8.2x	3.5x	3.9x	27%
BNK Petroleum Inc.	TSX:BKX	2%	(55%)	\$0.21	30%	49	30	77	24	15	3.2x	NM	NM	5.0x	NM	NM	NM
Jericho Oil Corporation	TSXV:JCO	4%	(56%)	\$0.32	32%	41	NM	38	NM	(2)	NM	NM	NM	NM	NM	NM	NM
Approach Resources, Inc.	NasdaqGS:AREX	(62%)	(86%)	\$0.35	11%	32	385	417	114	62	3.7x	4.6x	4.1x	6.7x	9.3x	7.5x	NM

Mean	3.8x	3.4x	3.4x	6.6x	7.1x	5.5x	25%
Median	3.4x	4.4x	3.4x	6.7x	8.5x	5.0x	25%

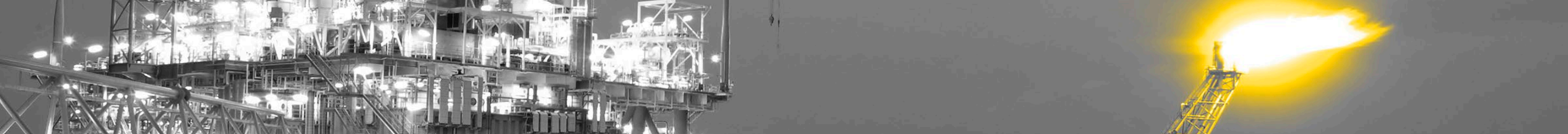
Midstream Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2019E	2020E	LTM	2019E	2020E	
PBF Logistics LP	NYSE:PBFX	7%	14%	\$21.02	89%	1,163	673	1,986	283	177	7.0x	6.1x	6.0x	NM	NM	10.1x	NM
Dorian LPG Ltd.	NYSE:LPG	10%	(14%)	\$6.42	73%	354	711	1,031	41	61	NM	5.9x	4.9x	NM	NM	8.5x	NM
USD Partners LP	NYSE:USDP	3%	5%	\$10.82	92%	292	206	494	114	51	4.3x	3.7x	3.4x	9.8x	8.1x	7.4x	NM
American Midstream Partners, LP	NYSE:AMID	19%	(52%)	\$5.17	44%	279	1,024	1,620	803	36	2.0x	2.1x	2.0x	NM	9.1x	8.7x	4%
Sanchez Midstream Partners LP	AMEX:SNMP	28%	(79%)	\$2.15	16%	38	179	564	83	37	6.8x	NM	NM	NM	7.3x	7.9x	NM
Southcross Energy Partners, L.P.	OTCPK: SXEE.Q	(3%)	(85%)	\$0.25	14%	20	523	550	618	48	0.9x	NM	NM	NM	NM	NM	8%

Mean	4.2x	4.4x	4.1x	9.8x	8.2x	8.5x	6%
Median	4.3x	4.8x	4.2x	9.8x	8.1x	8.5x	6%

Last twelve months (LTM) are as of Q4 2019

Source: Capital IQ as of 03/29/2019



OIL & GAS

COMPARABLE TABLES

Refining and Marketing Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2019E	2020E	LTM	2019E	2020E	
Par Pacific Holdings, Inc.	NYSE:PARR	27%	4%	\$17.81	83%	878	399	1,201	3,411	145	0.4x	0.3x	0.2x	8.3x	5.4x	4.3x	4%
Clean Energy Fuels Corp.	NasdaqGS:CLNE	78%	87%	\$3.09	76%	632	84	638	346	53	1.8x	1.9x	1.6x	12.1x	12.7x	NM	15%
Sprague Resources LP	NYSE:SRLP	26%	(23%)	\$18.48	66%	420	661	1,074	3,771	158	0.3x	0.3x	0.3x	6.8x	9.3x	8.6x	4%
Calumet Specialty Products	NasdaqGS:CLMT	66%	(50%)	\$3.56	41%	276	1,710	1,843	3,498	293	0.5x	0.7x	0.7x	6.3x	7.2x	6.1x	8%
Trecora Resources	NYSE:TREC	19%	(33%)	\$9.09	58%	224	102	320	288	19	1.1x	1.1x	1.0x	NM	12.0x	9.1x	7%

Mean	0.8x	0.8x	0.8x	8.4x	9.3x	7.0x	8%
Median	0.5x	0.7x	0.7x	7.5x	9.3x	7.4x	7%

Retail and Commerce

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2019E	2020E	LTM	2019E	2020E	
NGL Energy Partners LP	NYSE:NGL	49%	28%	\$14.03	98%	1,747	2,218	4,294	24,196	483	0.2x	0.2x	0.2x	8.9x	8.8x	8.3x	2%
Superior Plus Corp.	TSX:SPB	20%	(10%)	\$8.57	63%	1,498	1,359	2,840	1,998	270	1.4x	0.9x	0.9x	10.5x	6.0x	5.8x	14%
Global Partners LP	NYSE:GLP	22%	28%	\$19.66	93%	664	1,288	2,010	12,673	258	0.2x	0.2x	0.2x	7.8x	9.3x	9.0x	2%
CrossAmerica Partners LP	NYSE:CAPL	30%	(11%)	\$18.26	82%	629	597	1,223	2,348	92	0.5x	0.5x	0.5x	NM	10.3x	9.4x	4%
Star Group, L.P.	NYSE:SGU	4%	3%	\$9.60	95%	499	192	666	1,776	68	0.4x	NM	NM	9.8x	NM	NM	4%

Mean	0.5x	0.4x	0.4x	9.2x	8.6x	8.1x	5%
Median	0.4x	0.3x	0.3x	9.3x	9.1x	8.6x	4%

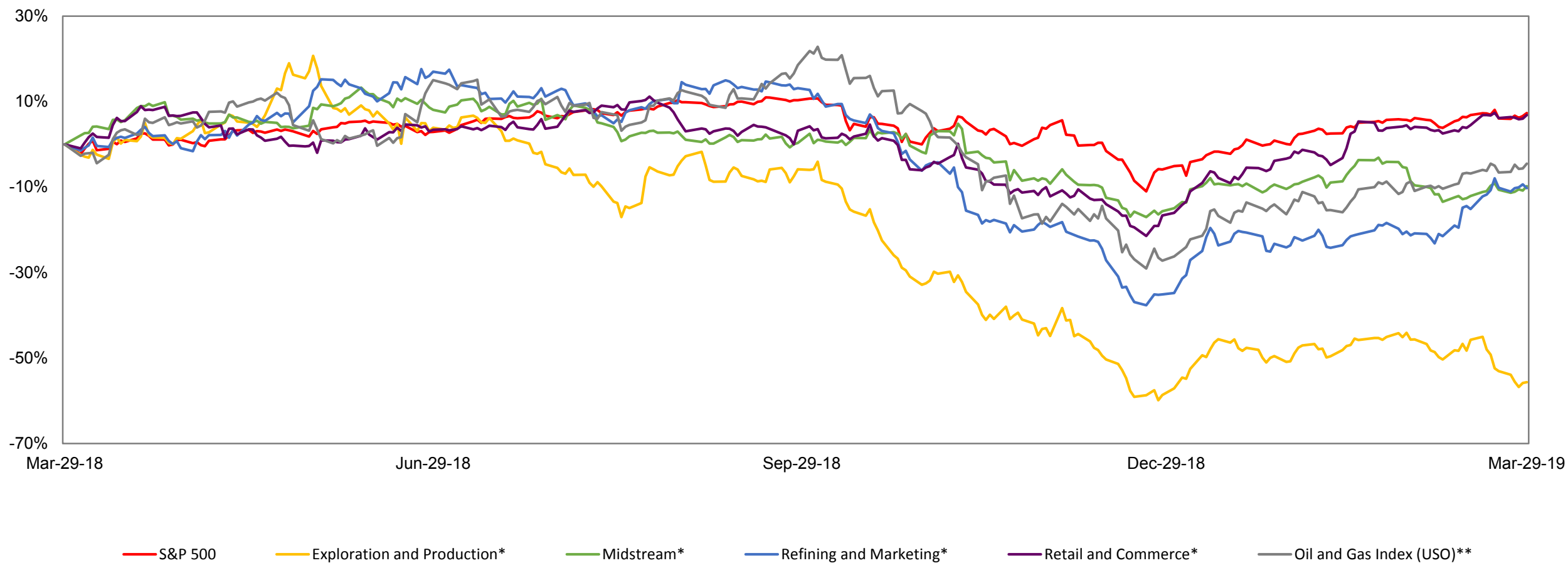
Last twelve months (LTM) are as of Q4 2019

Source: Capital IQ as of 03/29/2019



OIL & GAS LTM EQUITY PERFORMANCE

(NOBLE INDEX SELECTION)



* Noble Proprietary Sector (index composed of companies in the comparable table)
 ** SPDR S&P Oil & Gas Exploration & Production ETF (refer to disclosure section for more information)

Source: Capital IQ as of 03/29/2019



OIL & GAS YTD GLOBAL M&A ACTIVITY

Date	Buyer	Seller	Transaction Value (\$M)	EV/Revenue	EV/EBITDA
02/19/2019	GSO Capital Partners LP; Blackstone Tactical Opportunities Advisor	Targa Badlands	1,600.0	-	-
01/31/2019	The Blackstone Group L.P. (NYSE:BX); GIC Pte. Ltd.; Enagás, S.A	Tallgrass Energy GP, LLC	3,200.0	-	-
11/19/2018	Cimarex Energy Co. (NYSE:XEC)	Resolute Energy Corporation	1,582.78	4.59	14.29
11/08/2018	Western Midstream Partners, LP (NYSE:WES)	Western Midstream Operating, LP	12,547.92	7.84	14.43
11/02/2018	IFM Investors Pty Ltd; Vitol Investment Partnership II Limited	Vitol Tank Terminals International B.V.	975.0	-	-
11/01/2018	Encana Oil & Gas (USA) Inc.	Newfield Exploration Company	8,059.3	3.14	6.69
11/01/2018	Equital Ltd. (TASE:EQTL)	J.O.E.L. Jerusalem Oil Exploration Ltd.	4,373.03	-	-
11/01/2018	First Reserve Corporation	Blue Racer Midstream, LLC	1,500.0	-	-
10/30/2018	Chesapeake Energy Corporation (NYSE:CHK)	Brazos Valley Longhorn, L.L.C.	4,103.27	4.64	7.16
10/25/2018	Dommo Energia S.A. (OTCPK:DMMO.Y)	Óleo e Gás Participações S.A.	1,212.01	-	-
10/22/2018	EnLink Midstream, LLC (NYSE:ENLC)	EnLink Midstream Partners, LP	11,355.67	1.74	12.12
10/18/2018	Valero Energy Corporation (NYSE:VLO)	Valero Energy Partners LP	950.85	7.63	10.48
10/10/2018	Parkland Fuel Corporation (TSX:PKI)	SOL Investments Limited	1,603.44	-	-
10/09/2018	Antero Midstream Corporation (NYSE:AM)	Antero Midstream Partners LP	7,359.7	7.69	11.55
09/24/2018	Gold Cheers Corporation Limited	Kuwait Energy plc	1,208.5	5.39	7.56
09/23/2018	Evergrande Group Limited	Xinjiang Guanghui Industry Investment (Group) Co., Ltd.	974.22	0.86	9.96
09/04/2018	Flywheel Energy, LLC	DeSoto Gathering Company, L.L.C./SWN Production (Arkansas), LLC	2,303.0	-	-
08/22/2018	Santos Limited (ASX:STO)	Quadrant Energy Australia Limited	1,980.0	2.41	-
08/21/2018	Mapleleaf Midstream, LLC	BridgeTex Pipeline Company LLC	1,438.0	-	-
08/14/2018	Diamondback Energy, Inc. (NasdaqGS:FANG)	Energen Corporation	9,239.41	7.35	11.92
08/06/2018	Kosmos Energy Ltd. (NYSE:KOS)	Deep Gulf Energy LP/Deep Gulf Energy II, LLC/Deep Gulf Energy III, LLC	1,220.35	-	-
08/01/2018	Energy Transfer LP (NYSE:ET)	Energy Transfer Operating, L.P.	69,264.24	2.09	10.85
07/30/2018	KKR & Co. Inc. (NYSE:KKR); The Williams Companies, Inc. (NYSE:WMB)	Discovery Midstream Partners LLC	1,173.0	-	-
07/26/2018	BP American Production Company	Petrohawk Energy Corporation	10,500.0	-	-
07/10/2018	TLP Acquisition Holdings LLC	TransMontaigne Partners LLC	1,276.91	6.1	11.12
06/29/2018	Boardwalk GP LP	Boardwalk Pipeline Partners, LP	5,299.14	5.26	8.32
06/18/2018	Baytex Energy Corp. (TSX:BTE)	Raging River Exploration Inc. (TSX:RRX)	1,413.62	4.33	6.31
06/06/2018	Global Infrastructure Partners	EnLink Midstream Partners, LP/EnLink Midstream, LLC/Enlink Midstream Manager,	3,125.0	-	-
05/29/2018		Trans Mountain Pipeline ULC/Trans Mountain Pipeline L.P./Kinder Morgan Canada	3,457.1	-	-
05/17/2018	Enbridge (U.S.) Inc.	Enbridge Energy Partners, L.P.	15,262.76	7.52	11.16
05/17/2018	The Williams Companies, Inc. (NYSE:WMB)	Williams Partners L.P.	10,469.71	7.04	14.08
05/17/2018	Enbridge Inc. (TSX:ENB)	Enbridge Income Fund Holdings Inc. (TSX:ENF)	3,621.78	15.02	-
05/17/2018	Enbridge Inc. (TSX:ENB)	Spectra Energy Partners, LP	3,289.02	13.53	19.62
05/17/2018	Enbridge Inc. (TSX:ENB)	Enbridge Energy Management, L.L.C.	988.1	-	-
05/10/2018	Shell Midstream Partners, L.P. (NYSE:SHLX)	Amberjack Pipeline Company LLC	1,220.0	8.23	9.41
05/09/2018	ArcLight Capital Partners, LLC	Midcoast Operating, L.P.	1,120.0	-	-
04/30/2018	Marathon Petroleum Corporation (NYSE:MPC)	Andeavor	35,536.0	0.924	12.71
04/26/2018	EQM Midstream Partners, LP (NYSE:EQM)	Rice Midstream Partners LP	2,786.8	8.66	11.14
04/16/2018	Vermilion Energy Inc. (TSX:VET)	Spartan Energy Corp.	1,111.22	3.73	6.36
04/09/2018	Morgan Stanley Infrastructure Inc.	Brazos Midstream Holdings, LLC	1,750.0	-	-
		Mean		5.9x	10.8x
		Median		5.4x	11.1x

Source: Capital IQ as of 03/29/2019

POWER GENERATION

COMPARABLE TABLES

Renewable and Cleantech Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2019E	2020E	LTM	2019E	2020E	
Renewable Energy Group, Inc.	NasdaqGS:REGI	0%	(3%)	\$21.96	68%	820	198	842	2,013	351	0.4x	0.4x	0.3x	2.4x	8.3x	5.3x	17%
Green Plains Inc.	NasdaqGS:GPPE	0%	(5%)	\$16.68	76%	691	891	1,447	3,843	73	0.4x	0.4x	0.4x	NM	9.3x	7.8x	2%
Polaris Infrastructure Inc.	TSX:PIF	0%	(1%)	\$8.47	41%	133	187	285	69	57	4.1x	3.8x	3.3x	5.0x	4.6x	4.0x	NM
Pacific Ethanol, Inc.	NasdaqCM:PEIX	0%	(15%)	\$0.98	25%	48	241	282	1,515	(11)	0.2x	0.2x	0.2x	NM	NM	3.9x	NM
Synthesis Energy Systems, Inc.	NasdaqCM:SES	0%	3%	\$0.54	16%	6	6	8	1	(7)	6.9x	NM	NM	NM	NM	NM	NM

Mean	2.4x	1.2x	1.1x	3.7x	7.4x	5.3x	10%
Median	0.4x	0.4x	0.4x	3.7x	8.3x	4.7x	10%

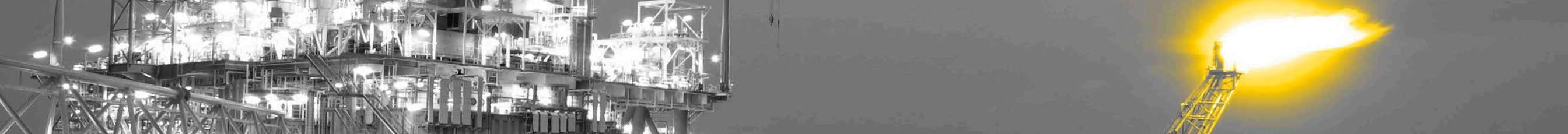
Utilities and Independent Power Producers Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2019E	2020E	LTM	2019E	2020E	
Atlantic Power Corporation	TSX:ATP	17%	19%	\$2.51	63%	275	704	1,123	282	104	4.0x	3.5x	3.5x	10.9x	6.1x	6.3x	NM
Genie Energy Ltd.	NYSE:GNE	39%	70%	\$8.50	81%	230	3	201	274	15	0.7x	0.7x	0.7x	13.3x	NM	NM	5%
RGC Resources, Inc.	NasdaqGM:RGCO	(12%)	4%	\$26.51	85%	213	89	302	67	18	4.5x	4.3x	4.2x	NM	NM	NM	28%
Spark Energy, Inc.	NasdaqGS:SPKE	22%	(25%)	\$8.91	70%	126	147	357	1,001	22	0.4x	0.0x	0.0x	NM	NM	3.5x	2%
Maxim Power Corp.	TSX:MXG	(3%)	(45%)	\$1.50	54%	79	-	31	14	(4)	2.1x	1.3x	1.2x	NM	NM	4.3x	NM
Etrion Corporation	TSX:ETX	27%	NM	\$0.21	68%	60	187	242	20	8	NM	NM	10.9x	NM	NM	NM	NM

Mean	2.3x	2.0x	3.4x	12.1x	6.1x	4.7x	12%
Median	2.1x	1.3x	2.4x	12.1x	6.1x	4.3x	5%

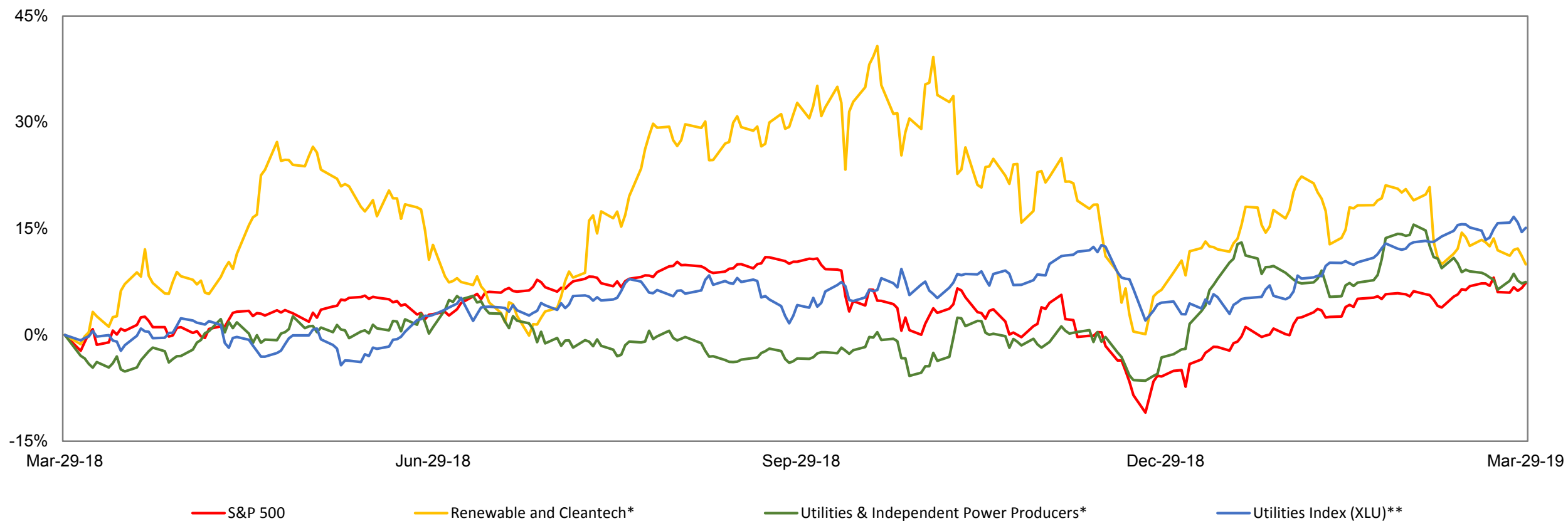
Last twelve months (LTM) are as of Q4 2019

Source: Capital IQ as of 03/29/2019



POWER GENERATION LTM Equity Performance

(NOBLE INDEX SELECTION)



* Noble Proprietary Sector (index composed of companies in the comparable table)
 ** SPDR S&P Utilities ETF (refer to disclosure section for more information)

Source: Capital IQ as of 03/29/2019

POWER GENERATION YTD GLOBAL M&A ACTIVITY

Date	Buyer	Seller	Transaction Value (\$M)	EV/Revenue	EV/EBITDA
01/28/2019	Bridgepoint Advisers Limited	Miya S.a.r.l.	260.0	-	-
01/04/2019	SJ Energy Co., Ltd.	Yeosu Green Energy Co., Ltd.	407.77	-	-
12/31/2018	Ence Energia Solar S.L.	Ence Energia Termollano S.A.	207.58	-	-
12/28/2018	Equatorial Energia S.A. (BOVESPA:EQL3)	Companhia Energética de Alagoas	464.43	-	-
12/21/2018	Fondi Italiani per le Infrastrutture SGR SpA	EF Solare Italia	244.24	-	-
11/28/2018	Colonial First State Asset Management (Australia) Limited	OÜ Utilitas	361.05	-	-
11/14/2018	Gen Plus B.V	Paju Energy Service Co., Ltd.	798.27	-	-
11/08/2018	Glenwood Private Equity	Hae Yang City Gas Co., Ltd.	406.26	-	-
10/30/2018	Huadian Yunnan Power Generation Corporation Limited	Yunnan Huadian Jinsha River Hydropower Development Co.,Ltd.	878.05	-	-
10/16/2018	Drax Smart Generation Holdco Limited	ScottishPower Generation Limited	928.07	20.22	-
10/08/2018	Ørsted A/S (CPSE:ORSTED)	Deepwater Wind, LLC	510.0	-	-
10/02/2018	General Electric Company (NYSE:GE)	Interests in Energy Joint Ventures Renewables, Grid and Nuclear	2,999.54	-	-
09/20/2018	Consolidated Edison Development, Inc.	Sempra Solar Holdings, LLC	2,116.0	-	-
09/11/2018	Repsol, S.A. (BME:REP)	Valdesolar Hive SL	243.37	-	-
09/03/2018	FS Gas Transport AB	Swedegas AB	225.25	-	-
08/09/2018	Ontario Power Generation Inc.	Eagle Creek Renewable Energy, LLC	298.0	-	-
08/08/2018	KDDI Corporation (TSE:9433); Electric Power Development Co., Ltd. (TSE:9513)	ENERES Co.,Ltd.	271.87	31.01	0.625
07/27/2018	Agritrade Resources Limited (SEHK:1131)	SKS Power Generation (Chhattisgarh) Limited	316.2	-	10.16
07/26/2018	Fondi Italiani per le Infrastrutture SGR SpA	RTR	1,516.21	10.0	-
07/26/2018	PGGM	SUEZ Water Resources Inc.	601.0	-	-
07/19/2018	Doosan Heavy Industries & Construction Co., Ltd. (KOSE:A034020); POSCO	POSPOWER Co., Ltd.	291.4	-	-
07/06/2018	Equinor ASA (OB:EQNR)	Danske Commodities A/S	470.26	-	0.073
07/03/2018	CJSC INTER RAO Capital	Public Joint Stock Company Inter RAO UES (MISX:IRAO)	271.51	2.12	0.226
07/03/2018	Chilquinta Energia SA	Compañía Transmisora del Norte Chico S.A.	226.0	-	-
06/29/2018	Samsung Asset Management Co.,	Dunkerque LNG SAS	763.62	-	-
06/29/2018	CJSC INTER RAO Capital; OAO Praktika	Public Joint Stock Company Inter RAO UES (MISX:IRAO)	389.97	2.35	0.24
06/25/2018	ENN Energy Holdings Limited (SEHK:2688)	ENN Ubiquitous Energy Network Technology Co., Ltd.	412.12	-	-
06/20/2018	Global Power Synergy Public Company Limited (SET:GPSC)	Glow Energy Public Company Limited (SET:GLOW)	4,386.63	10.3	3.2
05/31/2018	Sembcorp Industries Ltd (SGX:U96)	UK Power Reserve Limited	451.85	-	4.25
05/21/2018	700 Universe, LLC	Gulf Power Company	5,696.0	11.54	3.74
05/21/2018	700 Universe, LLC	Southern Company - Oleander LLC/Southern Company - Florida LLC	195.0	-	-
04/26/2018	Tessenderlo Group NV (ENXTBR:TESB)	T-Power NV/SA	378.89	-	5.01
04/23/2018	CenterPoint Energy, Inc. (NYSE:CNP)	Vectren Corporation	8,148.89	12.51	3.02
04/20/2018	Kazanci Holding AS	Aksa Enerji Üretim A.S. (IBSE:AKSEN)	300.0	15.75	2.64
04/18/2018	TOTAL S.A. (ENXTPA:FP)	Direct Energie Société Anonyme	2,893.37	17.98	1.3
04/18/2018	TOTAL S.A. (ENXTPA:FP)	Direct Energie Société Anonyme	633.9	18.13	1.31
04/17/2018	Enel Brasil Investimentos Sudeste, S.A.	Eletropaulo Metropolitana Eletricidade de São Paulo S.A. (BOVESPA:ELPL3)	2,982.5	10.29	0.748
04/17/2018	Fluxys Belgium SA (ENXTBR:FLUX); Snam S.p.A. (BIT:SRG)	DESFA S.A.	660.41	4.58	-
04/17/2018	Algonquin Power & Utilities Corp. (TSX:AQN)	Atlantica Yield plc (NasdaqGS:AY)	345.0	9.49	6.58
04/04/2018	-	Mytrah Energy Limited	1,265.0	7.69	2.31
		Mean		12.3x	2.8x
		Median		10.3x	2.5x

Source: Capital IQ as of 03/29/2019

ENERGY SERVICES

COMPARABLE TABLES

Oilfield Services Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2019E	2020E	LTM	2019E	2020E	
Tidewater Inc.	NYSE:TDW	19%	(19%)	\$23.19	64%	865	439	932	397	13	2.3x	1.8x	1.3x	NM	NM	3.9x	3%
Newpark Resources, Inc.	NYSE:NR	33%	13%	\$9.16	79%	827	162	933	947	110	1.0x	1.0x	0.9x	8.5x	7.8x	6.2x	12%
Hi-Crush Partners LP	NYSE:HCLP	22%	(58%)	\$4.45	27%	450	445	781	843	219	0.9x	1.0x	0.9x	3.6x	7.6x	6.2x	26%
ION Geophysical Corporation	NYSE:IO	160%	(47%)	\$14.44	47%	202	122	292	180	43	1.6x	1.6x	1.3x	6.8x	4.5x	3.6x	24%
Key Energy Services, Inc.	NYSE:KEG	133%	(65%)	\$4.06	22%	83	244	276	522	24	0.5x	0.5x	0.4x	NM	9.4x	5.1x	5%
Emerge Energy Services LP	NYSE:EMES	17%	(68%)	\$1.94	21%	60	200	257	375	63	0.7x	0.9x	0.8x	4.1x	6.0x	4.9x	17%
Hornbeck Offshore Services, Inc.	NYSE:HOS	(18%)	(57%)	\$1.24	20%	47	1,220	1,042	212	21	4.9x	4.2x	3.1x	NM	NM	NM	10%

Mean	1.7x	1.6x	1.2x	5.7x	7.1x	5.0x	14%
Median	1.0x	1.0x	0.9x	5.5x	7.6x	5.0x	12%

Drillers Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2019E	2020E	LTM	2019E	2020E	
Precision Drilling Corporation	NYSE:PDS	37%	(14%)	\$2.39	58%	697	1,250	1,901	1,129	261	1.7x	1.2x	1.1x	7.3x	4.8x	4.0x	23%
Ensign Energy Services Inc.	TSX:ESI	16%	(14%)	\$4.00	56%	629	1,265	1,916	847	187	2.3x	1.1x	1.0x	NM	4.6x	4.1x	22%
Independence Contract Drilling, Inc.	NYSE:ICD	(18%)	(27%)	\$2.77	52%	214	131	332	143	31	2.3x	1.3x	1.2x	NM	4.5x	3.5x	22%
Pioneer Energy Services Corp.	NYSE:PES	36%	(34%)	\$1.77	28%	137	465	548	590	86	0.9x	0.9x	0.8x	6.4x	6.4x	4.9x	15%
AKITA Drilling Ltd.	TSX:AKT.A	(17%)	(58%)	\$2.43	32%	97	61	158	87	8	1.8x	0.7x	0.6x	NM	3.9x	3.0x	10%
Western Energy Services Corp.	TSX:WRG	(26%)	(71%)	\$0.24	20%	22	164	188	173	22	1.1x	0.8x	0.7x	8.4x	6.2x	4.2x	13%

Mean	1.7x	1.0x	0.9x	7.4x	5.1x	4.0x	17%
Median	1.8x	1.0x	0.9x	7.3x	4.7x	4.1x	18%

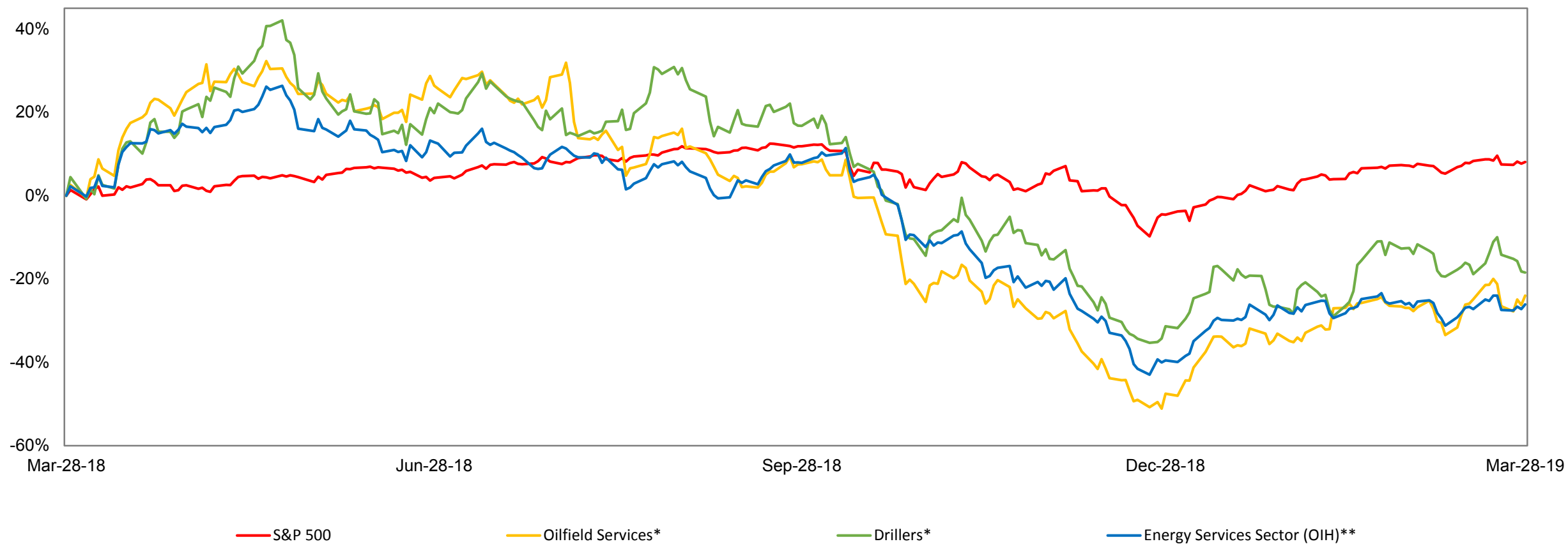
Last twelve months (LTM) are as of Q4 2019

Source: Capital IQ as of 03/29/2019



ENERGY SERVICES LTM EQUITY PERFORMANCE

(NOBLE INDEX SELECTION)



* Noble Proprietary Sector (index composed of companies in the comparable table)
** SPDR S&P Oil & Gas Equipment & Services ETF (refer to disclosure section for more information)

Source: Capital IQ as of 03/29/2019

ENERGY SERVICES YTD GLOBAL M&A ACTIVITY

Date	Buyer	Seller	Transaction Value (\$M)	EV/Revenue	EV/EBITDA
03/20/2019	KLX Energy Services Holdings, Inc. (NasdaqGS:KLXE)	Red Bone Services LLC/Tecton Energy Services Ltd.	82.59	-	4.8
02/26/2019	Quorum Business Solutions, Inc.	Coastal Flow Measurement, Inc.	100.0	-	-
01/29/2019	Uzma Berhad (KLSE:UZMA)	Setegap Ventures Petroleum Sdn. Bhd.	8.77	-	-
01/20/2019	Shawcor Ltd. (TSX:SCL)	ZCL Composites Inc. (TSX:ZCL)	243.07	1.73	13.94
01/15/2019	Pulse Seismic Inc. (TSX:PSD)	Seitel Canada Ltd.	44.15	-	-
01/11/2019	Beijing Xingkai Investment Co., Ltd.	Chengdu Huaqi Houpu Holding Co.,Ltd. (SZSE:300471)	17.37	6.22	-
12/13/2018	Mistras Group, Inc. (NYSE:MG)	Onstream Pipeline Inspection Services Inc.	142.12	5.32	-
11/20/2018	SINOMACH Capital Management Corporation	Machinery Industry Shanghai Lanya Petrochemical Equipment Testing Co.	36.0	2.38	-
11/16/2018	Forbes Energy Services, LLC	Cretic Energy Services, LLC	67.5	1.5	-
11/12/2018	Tallgrass Energy, LP (NYSE:TGE)	NGL Water Solutions Bakken, LLC	91.0	-	-
11/07/2018	Nabors Industries Ltd. (NYSE:NBR)	PetroMar Technologies, Inc.	25.0	-	-
11/02/2018	Petrobras Argentina S.A.	Bolland y Cia. S.A.	126.08	-	-
10/31/2018	Solix Group AB	Wärtsilä Pumps Pte Ltd	73.57	1.3	-
10/30/2018	Magseis Fairfield ASA (OB:MSEIS)	WGP Group Ltd/Seismic Technologies Business of Fairfield Geotechnologies	298.09	-	-
10/29/2018	Enservco Corporation (AMEX:ENSV)	Adler Hot Oil Service, LLC.	13.0	0.703	4.48
10/24/2018	Core Laboratories N.V. (NYSE:CLB)	Guardian Global Technologies Limited	49.1	-	-
10/22/2018	KLX Energy Services LLC	Motley Services LLC	148.2	1.5	5.55
10/15/2018	Nine Energy Service, Inc. (NYSE:NINE); Nine Energy Canada Inc.	Magnum Oil Tools International, LTD	536.94	5.97	23.35
10/15/2018	The Carlyle Group L.P. (NasdaqGS:CG)	EnerMech Limited	591.58	1.68	13.95
10/08/2018	Baker Hughes, a GE company (NYSE:BHGE)	ADNOC Drilling	500.0	-	-
10/05/2018	Nuverra Environmental Solutions, Inc. (AMEX:NES)	Clearwater Three, LLC/Clearwater Five, LLC/Clearwater Solutions, LLC	41.9	-	-
09/04/2018	Altamont Capital Partners	100% of The Bayou Companies, LLC/51% of Bayou Wasco Insulation, LLC	50.0	-	-
09/04/2018	Transocean Ltd. (NYSE:RIG)	Ocean Rig UDW Inc.	3,323.79	3.66	7.4
08/21/2018	Tekmar Group plc (AIM:TGP)	Subsea Innovation Limited	5.14	2.0	-
08/20/2018	High Arctic Energy Services Inc (TSX:HWO)	Powerstroke Well Control Ltd	7.19	-	-
08/13/2018	Ensign Drilling Inc.	Trinidad Drilling Ltd. (TSX:TDG)	685.93	1.7	8.51
08/06/2018	Mammoth Energy Services, Inc. (NasdaqGS:TUSK)	RTS Energy Services LLC	8.1	-	-
07/26/2018	BT Investment Pte. Ltd.	CH Offshore Ltd (SGX:C13)	14.67	7.28	-
07/23/2018	Hi-Crush Partners LP (NYSE:HCLP)	FB Industries Inc.	58.88	-	-
07/19/2018	Independence Contract Drilling, Inc. (NYSE:ICD)	Sidewinder Drilling, LLC	303.16	2.63	45.09
07/17/2018	Centerbridge Partners, L.P.	Seitel, Inc.	292.02	3.05	4.12
07/16/2018	Forum Energy Technologies, Inc. (NYSE:FET)	ESP Completion Technologies L.L.C.	8.0	-	-
07/16/2018	Tidewater Inc. (NYSE:TDW)	Gulfmark Offshore, Inc.	433.34	3.75	-
07/13/2018	Vertex Resource Group Ltd. (TSXV:VTX)	Three Star Trucking Ltd.	13.8	-	-
07/10/2018	-	Magnora ASA (OB:MGN)	28.0	3.22	-
06/21/2018	TWMA Group Ltd.	Dynamic Oilfield Services, Inc	13.25	-	-
06/05/2018	AKITA Drilling Ltd. (TSX:AKT.A)	Xtreme Drilling Corp.	160.94	2.84	162.39
05/02/2018	Weatherford International plc (NYSE:WFT)	Al-Shaheen Weatherford Co.	87.0	-	-
04/16/2018	Daseke Companies, Inc.	Aveda Transportation and Energy Services Inc. (TSXV:AVE)	117.68	0.675	8.66
03/29/2018	Public Joint Stock Company "Chelyabinsk Pipe-Rolling Plant"	OOO RIMERA-Service	93.31	-	-
		Mean		3.0x	25.2x
		Median		2.5x	8.6x

Source: Capital IQ as of 03/29/2019

MINERAL ENERGY

COMPARABLE TABLES

Mineral Energy Index

	TICKER	CHANGE IN STOCK PRICE		SHARE PRICE	% OF 52 WEEK HIGH	MARKET CAP (\$M)	TOTAL DEBT (\$M)	ENT. VALUE (\$M)	LTM		EV / REVENUE			EV / EBITDA			EBITDA MARGIN
		3-MONTH	12-MONTH						REVENUES (\$M)	EBITDA (\$M)	LTM	2019E	2020E	LTM	2019E	2020E	
Foresight Energy LP	NYSE:FELP	(24%)	(26%)	\$2.61	64%	381	1,445	1,825	1,097	374	1.7x	1.8x	1.8x	4.9x	5.8x	5.9x	34%
Energy Fuels Inc.	AMEX:UUUU	22%	92%	\$3.33	81%	303	16	281	32	(16)	8.9x	3.8x	1.8x	NM	NM	6.2x	NM
Fission Uranium Corp.	TSX:FCU	(4%)	(22%)	\$0.38	48%	185	0	170	0	(4)	NM	NM	NM	NM	NM	NM	NM
Ur-Energy Inc.	TSX:URE	38%	38%	\$0.82	69%	131	15	140	23	7	6.0x	5.5x	3.0x	NM	NM	8.7x	30%
Corsa Coal Corp.	TSXV:CSO	17%	(54%)	\$0.64	36%	60	35	137	266	33	0.5x	0.4x	0.4x	4.1x	3.1x	2.2x	13%
Cloud Peak Energy Inc.	OTCPK:CLDP	(72%)	(96%)	\$0.11	3%	8	401	317	810	59	0.4x	0.5x	0.4x	5.4x	6.7x	6.8x	7%

Mean	3.5x	2.4x	1.5x	4.8x	5.2x	6.0x	21%
Median	1.7x	1.8x	1.8x	4.9x	5.8x	6.2x	22%

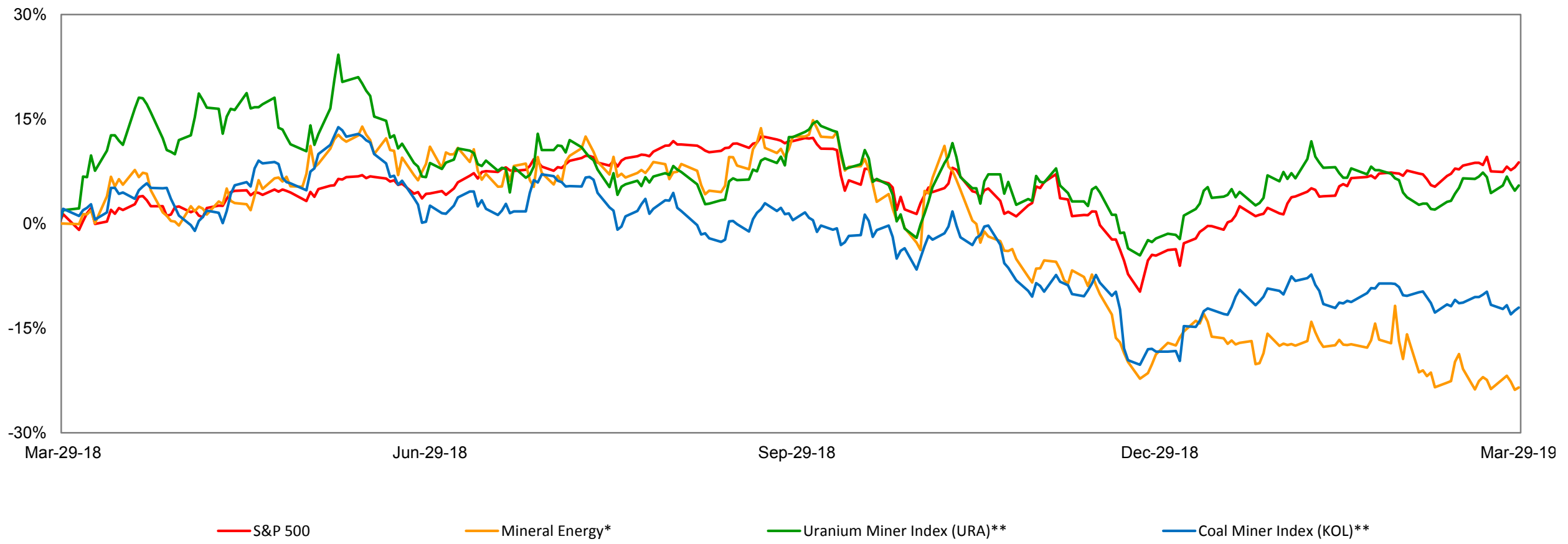
Last twelve months (LTM) are as of Q4 2018

Source: Capital IQ as of 03/29/2019



MINERAL ENERGY LTM EQUITY PERFORMANCE

(NOBLE INDEX SELECTION)



* Noble Proprietary Sector (index composed of companies in the comparable table)
 ** VanEck Vectors Coal ETF (refer to disclosure section for more information)

Source: Capital IQ as of 03/29/2019



MINERAL ENERGY YTD GLOBAL M&A ACTIVITY

Date	Buyer	Seller	Transaction Value (\$M)	EV/Revenue	EV/EBITDA
02/13/2019	Westmoreland Coal Company (OTCPK:WLBA.Q)	Westmoreland Resource Partners, LP (OTCPK:WMPL.Q)	-	-	-
12/25/2018	Beijing Energy Group Co., Ltd.	Beijing Haohua Energy Resource Co., Ltd. (SHSE:601101)	-	-	-
10/03/2018	-	URU Metals Limited (AIM:URU)	-	-	-
08/01/2018	Paladin Energy Limited (ASX:PDN)	Summit Resources Limited	5.78	-	-
06/27/2018	Canyon Coal (Pty) Ltd	Kangra Coal Proprietary Limited	40.0	-	-
06/13/2018	-	Vimy Resources Limited (ASX:VMY)	-	-	-
05/07/2018	Azarga Uranium Corp. (TSX:AZZ)	URZ Energy Corp.	13.38	-	-
04/23/2018	Green Thumb Industries Inc. (CNSX:GTII)	Bayswater Uranium Corporation	-	-	-
		Mean		NA	NA
		Median		NA	NA

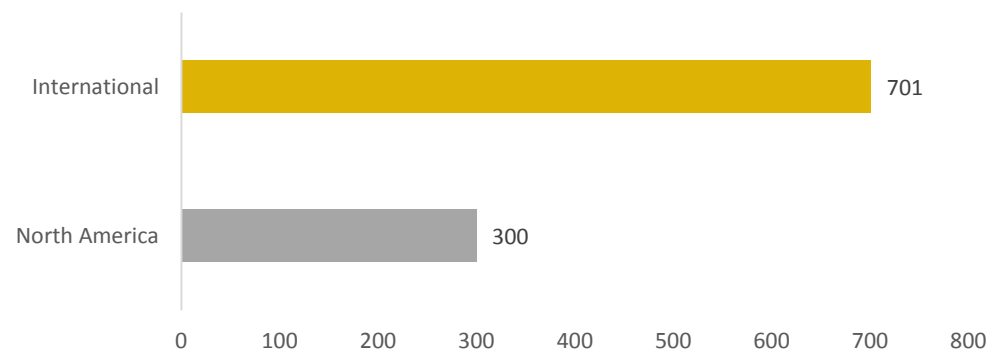
Source: Capital IQ as of 03/29/2019



LTM ENERGY INDUSTRY M&A SUMMARY *Update*

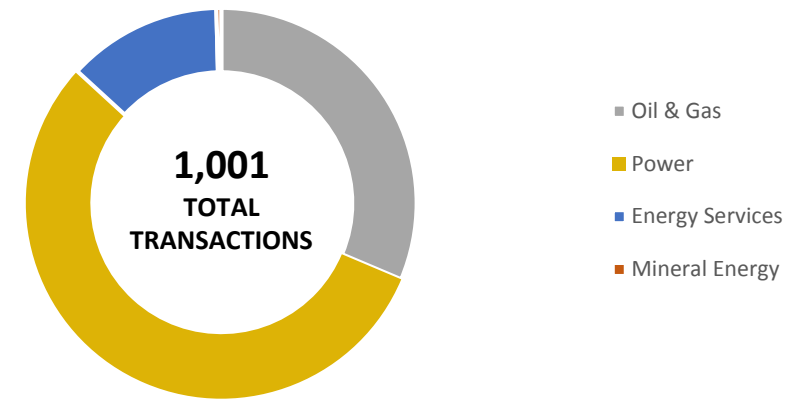
NORTH AMERICA VS INTERNATIONAL

TOTAL TRANSACTIONS (Number of transactions)



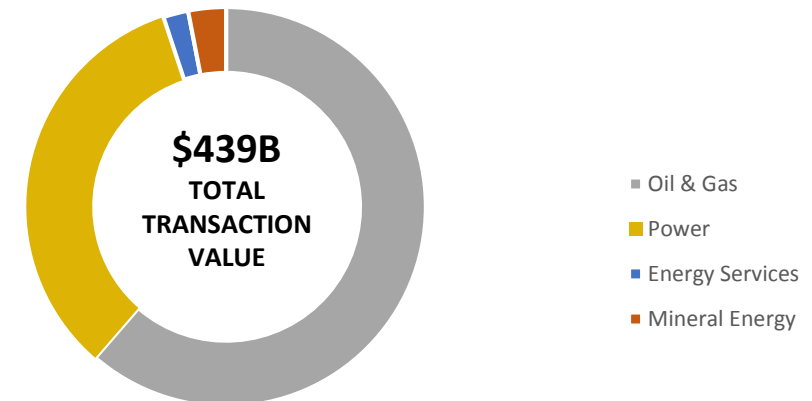
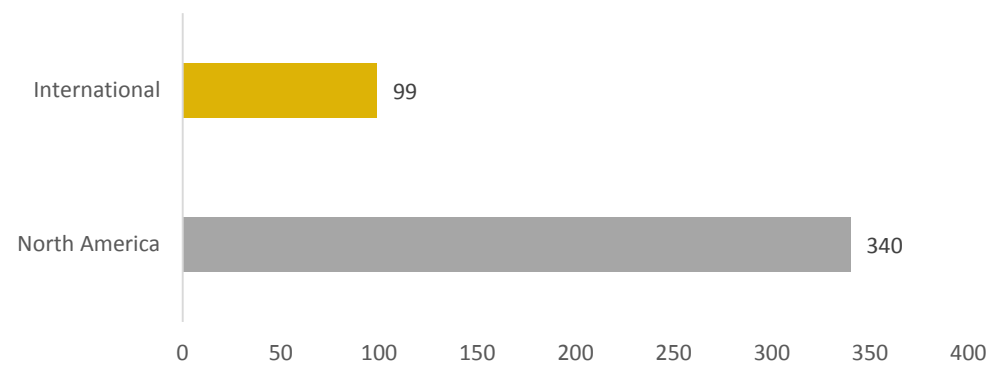
DEAL VALUE PER SECTOR

(Number of transactions)



NORTH AMERICA VS INTERNATIONAL

TOTAL TRANSACTIONS (Values in \$B)



Source: Capital IQ as of 03/29/2019



NOBLE QUARTERLY HIGHLIGHTS

Torchlight Energy Resources Inc. (NASDAQCM:TRCH)

Industry: Energy – Exploration and Production

Torchlight Energy is an oil and gas exploration and production company based in Plano, Texas. The Company’s primary focus is in the exploration, production, and acquisition of highly profitable domestic oil fields. Torchlight has a 100% working interest in ~9,600 net acres in the Midland Basin, a 72.5% working interest in ~133,000 net acres in the Orogrande Basin, and a 10.72% working interest on 67.2 net acres in the Delaware Basin.

1st Quarter News Highlights:

- **03/23/2019** – Orogrande Update Call: The Company estimated that Orogrande could have as much as 3.7 billion barrels of reserves. The Company drilled five wells (one horizontal) in the 134,000 acres. Given the findings, Torchlight increased its estimated price per acre from \$2,500 to \$7,500.
- **02/21/2019** – Orogrande Update: Torchlight, along with its operating partner Maverick Operating, have completed the drilling phase of all three wells in the drilling plans set out in Q4. The Company has confirmed several new pay zones at Wolfcamp, in addition to the existing Penn Silt formation.



Jericho Oil Corporation (TSXV:JCO)

Industry: Energy – Exploration and Production

Jericho Oil is focused on domestic, liquids-rich unconventional resource plays, located primarily in the Anadarko basin STACK play of Oklahoma. Jericho’s primary business objective is driving long-term shareholder value through the growth of oil and gas production, cash flow and reserves. Jericho has assembled a 55,000 net acre position across Oklahoma, including an interest in 16,000 net acres in the STACK play.

1st Quarter News Highlights:

- **02/28/2019** – Production Growth: Jericho announced that preliminary 2018 full-year partnership production totaled ~297,000 BOE, up 33% from 2017.
- **12/17/2018** – Reaffirmation of Borrowing Base and Restructuring of Hedging Program: The Company’s borrowing base was reaffirmed at \$7.5mm. The Company also restructured its commodity hedge positions to eliminate upside caps on its realized price for crude oil and raised the floor.



Approach Resources Inc. (NASDAQ:ROSE)

Industry: Energy – Exploration and Production

Approach is an oil and gas exploration and production company based in Fort Worth, Texas. The company is focused on four specific initiatives. First, they want to develop their Wolfcamp shale oil resource play. Secondly, they’ll stay focused to remain a low cost producer with a concentrated acreage position in the Midland Basin. Thirdly, they will continually review opportunities to acquire producing properties, undeveloped acreage and drilling prospects in their existing core area in the Permian Basin. Lastly, they want to strengthen their balance sheet.

1st Quarter News Highlights:

- **03/18/2019** – 2018 Highlights: Full year production of 4,082 Mboe and year-end 2018 proved reserves increased 5% to 180.1 MMBoe. Approach drilled six and completed nine horizontal Wolfcamp wells during the year with an inventory of seven drilled and uncompleted wells at year-end. EBITDAX (non-GAAP) of \$59 million, a 7% increase over the prior year.
- **11/08/2018** – Reaffirmation of Borrowing Base: The borrowing base was reaffirmed by the bank group at \$325 million.



Source: Company Press Releases



$$R + (e^2 + p^2) = \text{NF}$$

NOBLE CAPITAL MARKETS

NOBLE CAPITAL MARKETS

Noble Capital Markets is a research-driven investment and merchant bank focused on small cap, emerging growth companies in the healthcare, technology, ENERGY and natural resources sectors. That's what we are. Who we are is what makes us different.

Our people are talented, dedicated, experienced professionals who come together with a common cause; advising on long-term client solutions by employing innovative, collaborative and responsive strategies. We're passionate and personable. We approach things from our clients' perspective.

We know that developing lasting relationships is reliant upon putting our clients' interests before ours. We understand the impact of our services. Insightful advisory and effective capital procurement can change lives. Empowering our clients to create employment, engineer technological and medical breakthroughs, producing products and services that lay the foundation for the future. For more than 30 years these have been our guiding principles. While much has changed over the three decades since we began, these core values and our reputation have not. Our clients must know what to expect from us. Then we can strive to exceed expectations.

A SIMPLE FORMULA OUR VALUE PROPOSITION.

It starts with research With a fundamental belief that information guides the management process, Noble understands that there is no short-path to success. With this as a solid foundation, apply experience and execution delivered by people with passion. This is our formula to add value to your creation.

Research + Experience & Execution + People with Passion = Value

FULL-SERVICE INVESTMENT BANK

- Established 1984.
- Private firm, employee owned.
- Built on commitment to provide value and support for our clients.

FOCUSED INSTITUTIONAL SALES AND TRADING

- Seasoned sales and sales trading team.
- Long standing relationships with premier growth- focused investors.

INVESTMENT BANKING COMMITMENT

- Proven track record.
- Senior level attention to every client and transaction.
- Ability to deliver complete "mind share" of Noble on all transactions.

RESEARCH DRIVEN CAPITAL MARKETS PLATFORM

- Experience team of Research Analysts covering approximately 100 companies.
- Focus on Technology, Media, Healthcare and Natural Resources.
- Strong Institutional Sponsorship.

$$R + (e^2 + p^2) = \text{TF}$$

INVESTMENT BANKING

Our investment banking team, together with our well-recognized equity research analysts and the equity capital markets group, provide our clients with fundamental capital markets advisory and support - prior, during and most importantly, after a transaction. Noble's investment banking team works closely with the management and Board of our corporate clients in order to fully understand operational and financial objectives. With this knowledge our banking team will develop an efficient and effective advisory program which offers a variety of services including:

EQUITY CAPITAL MARKETS

- Secondary and Follow-on Offerings
- Registered Direct Offerings
- Initial Public Offerings
- At the market Offerings (ATM's)
- PIPEs/Private Sale Offerings


DEBT CAPITAL MARKETS

- Senior Debt
- Mezzanine
- Convertible Debt
- Bridge Financings

ADVISORY SERVICES

- Merger & Acquisitions
- Fairness Opinions
- Valuation Services

SELECT NATURAL RESOURCES TRANSACTIONS

Gravitas
Resources Corporation
(PRIVATE)
\$4,200,000
Private Placement
Placement Agent

February 2019

SAILFISH
ROYALTY CORP.
(TSX-V: FISH)
Restructuring Advisory
Fairness Opinion

August 2018

ORCHLIGHT
ENERGY
(TRCH)
Advisory
Corporate Advisory


March 2018

SIERRA
METALS
\$55,000,000
At-The-Market
Offering (ATM)
Agent

October 2017

MARLIN
GOLD MINING LTD.
(MLN)
Advisory
Corporate Advisory

February 2017

SES
SYNTHESIS ENERGY SYSTEMS
(SYMX)
Advisory
Corporate Advisory

January 2017

AVINO SILVER & GOLD MINES LTD.
(ASM)
\$800,000
Private Placement of
Registered Securities
Sole Placement Agent

March 2016

$$R + (e^2 + p^2) = \pi$$

VALUATION SERVICES

Noble's Valuation and Advisory Services team specializes in providing business and intangible asset valuations, fairness opinions, financial and strategic analysis, and transaction support services covering a broad spectrum of industries and situations from early stage, middle market and Fortune 500 companies and capital market constituents. Noble's team is made up of professionals with numerous accreditations and bring excellence in accounting, taxation, and financial due diligence to provide companies with valuation advice for a multitude of purposes.

Valuation – Noble's professionals have significant experience in the valuation of privately owned and public businesses across a wide range of industries. We perform an extensive analysis of the business as well as evaluate industry trends and various other factors in order to inform our clients as to the likely range of value they can expect. Our services are characterized by intellectual and analytical rigor and our conclusions are backed by thorough documentation.

Chief Accounting Officers, Corporate Controllers, CFOs, and Corporate Boards rely on Noble's experienced valuation professionals to produce sophisticated, supportable, and timely valuations to assist in complying with financial reporting requirements, including:

- Purchase price allocation and fresh start accounting
- Goodwill and long-lived asset impairment testing
- Tangible asset valuation
- Fair Value measurement of financial assets & liabilities

Opinions - Whether our clients are looking to fulfill their fiduciary duties, mitigate risk or determine corporate value, we are there throughout the transaction process to offer objective advice based on rigorous analysis. We work on behalf of boards of directors, investors, trustees and other corporate leaders to advise and provide opinions on a wide range of transactions.

We have advised Corporate Boards, special transaction committees, independent trustees, management and other fiduciaries of middle market public and private companies on the financial aspects of a transaction. Our independent advice withstands scrutiny from shareholders, bondholders, the SEC, IRS, or counterparties to a transaction

MERCHANT BANKING

Our Principal Investment focus is primarily on private and small-cap public (\$10mill to \$50mill market caps) companies in industries within Noble's research verticals. Investments are made directly by Noble and its affiliates and may also involve syndicate participants. We work to identify those companies with game-changing or superior products and technologies that have management teams with proven track-records of success. Noble structures investments to meet a company's capital needs whether its growth capital, liquidity or debt repayment. Capital commitment ranges from \$200k to \$2million principal and \$2million above with syndicate.

The scope of our Merchant Banking activities includes:

- Targeting domestic companies within our areas of focus and expertise
- Analyzing a company's opportunities and assessing its risks within their respective industry
- Structuring, negotiating and executing the transaction
- Work in assessing the appropriate time and manner in which to harvest the investment

Noble's Merchant Banking Team works continuously with our portfolio companies to assist the management team and Board of Directors to create value and grow their businesses to facilitate long-term shareholder value. Through our extensive sector research coverage, institutional investor non-deal road shows, equity conferences and market making, we blend a powerful mix of capital markets acumen to procure success.

$$R + (e^2 + p^2) = \pi$$

INVESTMENT BANKING TEAM

Richard Giles, Managing Director

rgiles@noblecapitalmarkets.com – 617.692.9346

- Joined Noble in 2010 as Head of the Technology, Media & Telecommunications Investment Banking Group
- 25 years of investment banking experience.
- Executed more than 100 M&A and capital raising transactions totaling \$10+ billion
- Former head of Stifel Nicolaus' Technology Group.
- Former head of A.G. Edwards' Emerging Growth Group and member of Investment Committee for A.G. Edwards Capital
- A.B. Harvard College; M.B.A., Harvard Business School

Francisco Penafiel, Managing Director

fpenafiel@noblecapitalmarkets.com – 561.994.5740

- Executed M&A and capital raising transactions totaling over \$1 billion dollars in value
- 7 years of sell side equity research experience, covering enterprise & infrastructure software, business services, media, communications, and banks
- 6 years of portfolio managing experience
- Manage the business development efforts in LATAM for Noble
- Engineering, IT & Statistics, Escuela Superior Politecnica (Guayaquil, Ecuador); M.S. Economics, Florida Atlantic University

Juan Arvelo, Director

jarvelo@noblecapitalmarkets.com – 561.994.5731

- More than 18 years of corporate finance and capital markets experience, with a special focus on M&A, restructuring and capital raising transactions.
- Previous Director at Enkeros Investments and Activa Capital Markets
- Former CFO of LS Energia
- Main focus in the QSR, financial institutions and energy sectors
- Managed corporate finance and recoveries division at PricewaterhouseCoopers (PwC)
- B.S. Economics UCAB; M.S. Finance IESA; MBA Babson College

Joseph Hain - Director

jhain@noblecapitalmarkets.com – 561.999.2265

- Prior experience holding senior positions at Robotti & Company, Wynston Hill Capital, SternAegis Ventures, WestPark Capital, and Tejas Securities
- Experience working with institutional, retail and HNW clients
- B.S. SUNY Albany with concentration in Biology, Chemistry, and Physics
- Holds various FINRA licenses

Brittnee Fatigate, Analyst

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- Joined Noble Capital Markets in January 2017
- Has completed multiple M&A and capital raising assignments, accounting for nearly \$150 million+ of transaction value
- Held previous position as an accounting assistant at a privately held manufacturing company
- B.S. Finance, Florida Atlantic University

Adam Carey, Analyst

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- Joined Noble Capital Markets in October 2018
- Previously worked as a private equity analyst at Northern Capital Partners
- B.S. Finance and Applied Economics, University of Minnesota, Twin Cities

$$R + (e^2 + p^2) = \text{TR}$$

SALES & TRADING

Dan Pollitt

Head of Institutional Equity Trading

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Vincent Gioeni

Director of Institutional Sales

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