# J.P.Morgan CAZENOVE

### Global Oil & Gas Daily

Woodside LNG agreement, Wood Group secures contract from Tullow, PMO asset disposal and more...

#### In the News Today

#### WTI continues down ward trend

• Oil (WTI) was down 0.4% yesterday. However, in early trade this morning oil was up 0.3%.

#### Woodside signs LNG agreement with Corpus Christi

• Woodside in a press release this morning announced that it had signed a binding LNG sale and purchase agreement with Corpus Christi Liquefaction. As per the agreement, Woodside will purchase ~0.85m tonnes of LNG per annum from Corpus Christi on start up of the second train (expected to start in 2019) at the LNG export facility at Corpus Christi, Texas. Woodside will pay a price of 115% of the monthly Henry Hub price plus \$3.50 per MMBtu. The agreement is for a period of 20 years and includes an extension option of up to 10 years. The agreement also provides for Woodside to forgo deliveries with sufficient notice through payment of \$3.50/MMBtu for cancelled quantities.

#### Premier Oil disposes asset in Indonesia

 Premier Oil announced that it had disposed its wholly owned subsidiary Premier Oil Sumatra North BV to KrisEnergy Asia Holdings. Premier Oil will receive an after tax-consideration of \$40m plus working capital adjustments for the subsidiary. The subsidiary holds a non-operated 41.67% interest in Block A Aceh, onshore North Sumatra in Indonesia.

#### **Wood Group secures contract from Tullow**

 Wood Group Kenny in a press release this morning announced that it had been awarded an engineering services contract by Tullow in Ghana. The contract is related to the Tweneboa, Enyenra and Ntomme (TEN) project, situated in the Deepwater Tano area offshore Ghana. As per the contract, company will provide Tullow with project engineering resources, specialist technical support and technical assurance services across the SURF implementation work scope through to first oil (expected in mid-2016).

#### Polarcus receives LoI for West Africa project

Polarcus in a press release this morning announced that it had received a
Letter of Intent (LoI) for a 3D marine seismic acquisition project from an
undisclosed client for offshore West Africa. The project is expected to run
for approximately 1 month.

#### BG to get LNG supply for Egypt from Leviathan field

• Noble Energy in a press release yesterday announced that Leviathan field partners had executed a non-binding Letter of Intent (LoI) with BG for supply of natural gas from Leviathan field, offshore Israel. As per the LoI, Leviathan field will supply BG LNG facilities in Egypt with up to 3.75 trn cubic feet of natural gas over 15-years (~700m cubic feet/day).

Source for above: Bloomberg, Upstreamonline, Reuters.

#### Global Oil & Gas

Fred Lucas AC

(44-20) 7134-5943 fred.lucas@jpmorgan.com **Bloomberg** JPMA LUCAS <GO>

J.P. Morgan Securities plc

#### Nitin Sharma

(44-20) 7134-5947 nitin.sharma@jpmorgan.com Bloomberg JPMA SHARMA1 <GO> J.P. Morgan Securities plc

#### **James Thompson**

(44-20) 7134-5942 james.a.thompson1@jpmorgan.com **Bloomberg** JPMA THOMPSON <GO> J.P. Morgan Securities plc

#### Joseph Allman, CFA

(1-212) 622-4864 joseph.d.allman@jpmorgan.com **Bloomberg** JPMA ALLMAN <GO> J.P. Morgan Securities LLC

#### J. David Anderson, PE, CFA

(1-212) 622-6684 jdavid.anderson@jpmorgan.com Bloomberg JPMA ANDERSON <GO> J.P. Morgan Securities LLC

#### Benjamin Wilson

(61-2) 9003-8612 benjamin.x.wilson@jpmorgan.com **Bloomberg** JPMA WILSON <GO> J.P. Morgan Securities Australia Limited

#### Caio M Carvalhal

(55-11) 4950-3946 caio.m.carvalhal@jpmorgan.com **Bloomberg** JPMA CARVALHAL <GO> Banco J.P. Morgan S.A.

#### **Scott L Darling**

(852) 2800 8578
scott.darling@jpmorgan.com
Bloomberg JPMA DARLING <GO>
J.P. Morgan Securities (Asia Pacific) Limited

#### Andrey Gromadin, CFA

(7-495) 967-1037 andrey.gromadin@jpmorgan.com J.P. Morgan Bank International LLC

### For Specialist Sales advice, please contact:

Ian Mitchell

See page 23 for analyst certification and important disclosures, including non-US analyst certification and important disclosures.

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Figure 1: Global coverage - upside/downside heat map

SQZ.L	OPHR.L	0196.HK	GAZPq.L	TATN_p.MM	QGEP3.SA	CNE.L	GTE	096770.KS	COG
111%	50%	48%	47%	44%	44%	40%	36%	33%	32%
LUPE.ST	ENQ.L	TATN.MM	SM	LKOHq.L	2883.HK	SNGS.MM	PDCE	ROSNq.L	3337.HK
32%	31%	31%	30%	29%	29%	29%	28%	27%	27%
1251.HK	5020.T	CIE	AFR.L	TLW.L	LPI	RRC	SNGS_p.MM	NBL	ECO.CN
26%	25%	25%	24%	23%	23%	22%	21%	21%	20%
O2C.F	CIU.L	APC	WLL	EC	0857.HK	EDCLq.L	GENL.L	DNR	SIBN.MM
19%	18%	18%	17%	17%	15%	14%	14%	14%	13%
xco	9532.T	5012.T	RDSa.L	0883.HK	AWE.AX	STL.OL	010950.KS	XEC	RELI.BO
10%	10%	10%	10%	10%	9%	9%	9%	9%	8%
0386.HK	AR	PXD	NVTKq.L	PTTE.BK	cxo	BP.L	EQT	LAM.L	PRE.TO
8%	8%	8%	8%	7%	7%	7%	7%	6%	6%
CAIL.BO	BG.L	5019.T	5002.T	TOTF.PA	TUPRS.IS	STO.AX	TS	SXY.AX	DLS.AX
5%	5%	4%	4%	3%	3%	3%	2%	1%	1%
REP.MC	ROC.AX	SOLJ.J	SIA.L	TOP.BK	GDP	PTT.BK	CLR	SWN	CHK
1%	0%	-1%	-1%	-2%	-2%	-3%	-3%	-3%	-3%
9531.T	WPL.AX	QEP	BANE.MM	DVN	AREX	5007.T	RDSb.L	BANE_p.MM	UPL
-4%	-4%	-4%	-5%	-6%	-8%	-8%	-9%	-9%	-9%
EOG	NFX	GALP.LS	JONE	OMVV.VI	ENI.MI	WPX	TRNFP.MM	DNO.OL	OSH.AX
-9%	-10%	-10%	-12%	-15%	-15%	-16%	-17%	-21%	-23%
BPT.AX	BPCL.BO	ONGC.BO	HK	IOC.BO	HPCL.BO				
-24%	-25%	-29%	-31%	-45%	-50%				

Source: J.P. Morgan. Prices at c.o.b 30-Jun-2014

Figure 2: Global coverage – YTD Total Return (in US\$)

89% 8 EOG 40% 3 BANE.MM 05 27% 2	PCL.BO NFX 81% 79% APC UPL 39% 37% SH.AX BPT.AX 26% 26% EQT PDCE 19% 19% AIL.BO PTT.BK	BPCL.BO 78% XEC 37% BANE_p.MM 26% RDSa.L 18%	IOC.BO 66% CXO 34% PXD 25% RELI.BO	GDP 62% STL.OL 32% SOLJ.J 23% AREX	ONGC.BO 53% WLL 30% TUPRS.IS 21%	AWE.AX 42% LAM.L 29% TOTF.PA 21%	JONE 42% ROC.AX 29% PRE.TO 20%	CLR 40% DVN 29% 0386.HK 20%
EOG 40% 3 BANE.MM OS 27% 2 9531.T	APC UPL 39% 37% SH.AX BPT.AX 26% 26% EQT PDCE 19% 19%	XEC 37% BANE_p.MM 26% RDSa.L	CXO 34% PXD 25% RELI.BO	STL.OL 32% SOLJ.J 23%	WLL 30% TUPRS.IS 21%	LAM.L 29% TOTF.PA	ROC.AX 29% PRE.TO	DVN 29% 0386.HK
40% 3 BANE.MM OS 27% 2 9531.T	39% 37% SH.AX BPT.AX 26% 26% EQT PDCE 19% 19%	37% BANE_p.MM 26% RDSa.L	34% PXD 25% RELI.BO	32% SOLJ.J 23%	30% TUPRS.IS 21%	29% TOTF.PA	29% PRE.TO	29% 0386.HK
BANE.MM OS 27% 2 9531.T	SH.AX BPT.AX 26% 26% EQT PDCE 19% 19%	BANE_p.MM 26% RDSa.L	PXD 25% RELI.BO	SOLJ.J 23%	TUPRS.IS 21%	TOTF.PA	PRE.TO	0386.HK
27% 2 9531.T	26% 26% EQT PDCE 19% 19%	26% RDSa.L	25% RELI.BO	23%	21%	-		
9531.T I	EQT PDCE 19% 19%	RDSa.L	RELI.BO			21%	20%	20%
	19% 19%			ARFX				20/0
20%		18%		, <u></u> /\	RDSb.L	0857.HK	WPX	ENI.MI
	AIL.BO PTT.BK		18%	18%	18%	18%	17%	17%
WPL.AX CA		CHK	PETR4.SA	NBL	DLS.AX	5002.T	3337.HK	5007.T
16%	16% 16%	15%	15%	14%	14%	14%	13%	13%
DNR )	XCO GALP.L	S QEP	REP.MC	PETR3.SA	LPI	BP.L	CIE	GTE
13%	13% 13%	13%	13%	12%	12%	12%	12%	11%
TS E	NQ.L 9532.T	SIA.L	5020.T	5012.T	SNGS_p.MM	STO.AX	TLW.L	PTTE.BK
9%	8% 8%	8%	6%	5%	5%	4%	4%	4%
TATN.MM LU	JPE.ST AR	RRC	SIBN.MM	ECO.CN	SM	EC	QGEP3.SA	BG.L
4%	3% 3%	3%	3%	1%	1%	1%	0%	-1%
SXY.AX 08	B83.HK OMVV.V	I GENL.L	5019.T	DNO.OL	TOP.BK	SFY	ROSNq.L	LKOHq.L
-1%	-1% -2%	-3%	-3%	-3%	-4%	-4%	-4%	-4%
O2C.F S	SQZ.L GAZPq.	_ NVTKq.L	SNGS.MM	1251.HK	AFR.L	COG	SWN	TRNFP.MM
-6%	-7% -8%	-8%	-9%	-10%	-12%	-12%	-14%	-16%
096770.KS 010	0950.KS 2883.HF	CNE.L	0196.HK	EDCLq.L	OPHR.L	BRU.AX		
-17% -	-20% -20%	-23%	-24%	-30%	-31%	-33%		

Source: Bloomberg. Prices at c.o.b 30-Jun-2014

Table 1: J.P. Morgan – Global Oil & Gas Stock Recommendations:

Sector/Region	OVERWEIGHT		NEUTRAL		UNDERWEIGHT	NOT RATED
Integrateds/ Refiners						
Europe	Statoil BP	Tupras TOTAL	BG Group	GALP RD Shell	OMV ENI Repsol	Essar Energy
Rest of World	Tatneft com. Rosneft Lukoil Sinopec Gazprom Reliance Ind. TonenGeneral Sekiyu	Sasol SK Innovation Surgutneftegaz pref.  Tatneft pref. BPCL PetroChina JX Holdings	HPCL TNK-BP Holding Cosmo Oil  Gazprom neft Thai Oil Public Co. Idemitsu Kosan S-Oil	Surgutneftegaz com. Ecopetrol Bashneft  TNK-BP Holding pref. Essar Oil Showa Shell Sekiyu	Transneft Indian Oil Bashneft pref. Sinopec Shanghai Petrochemical	
E&P						
North America	Denbury Resources Anadarko Cabot Oil & Gas Cimarex Goodrich Petroleum Whiting Petroleum Jones Energy EOG Resources EQT Corp RSP Permian	Newfield Exploration Laredo Petroleum Noble Energy PDC Energy Southwestern Energy Continental Res. Cobalt Intl. Pioneer Natural Range Resources EP Energy Corp.	Chesapeake EXCO Resources WPX Energy PetroQuest Energy Concho Resources Devon Energy	QEP Resources Halcón Resources SM Energy Ultra Petroleum	Approach Resources Sandridge Energy  Afren	Apache Swift Energy
•	Enquest Ophir Energy	Lundin Petroleum	Genel Energy		Serica	
Rest of World	AWE Gran Tierra PTTEP Santos	Woodside ROC Oil GeoPark	PTT Public Co. HRT ONGC Novatek Aurora Oil & Gas Pacific Rubiales	CNOOC Senex Energy QGEP Cairn India	Beach Energy Oil Search Drillsearch Energy	Buru Energy
Oilfield Services						
North America	Diamond Weatherford Ensco Forum Energy Tech Halliburton Rowan	National Oilwell Bristow Schlumberger Hornbeck Offshore Superior Energy CHC Group	Baker Hughes Dril-Quip Exterran C&J Energy Services Noble Corp Cameron	Dresser-Rand Transocean		
Europe	Lamprell C.A.T. Oil	Eurasia Drilling Co.	Gulf Marine Services	Tenaris		
Rest of World	China Oilfield Ser. Hilong Holdings	Anton Oilfield Ser. SPT Energy Grp.	Honghua Grp.			

Source: J.P. Morgan.

#### J.P. Morgan Global Energy Research

- Noble Energy: LOI for Leviathan Gas Positive; First Significant Leviathan Sales Agreement – ALERT
- Oil Services & Equipment Sector: Marketing Update on Valuation, Performance and Forecasts

Table 2: Global oil & gas: Macro data points and indices

c.o.b.	WTI	OSX	XLE	SXEP	S&P500
30-Jun-14	105.37	311.02	100.10	371.94	1960.23
27-Jun-14	105.74	308.86	100.02	371.58	1960.96
% Change	-0.3%	0.7%	0.1%	0.1%	0.0%

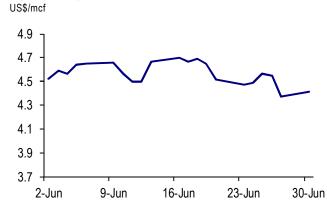
Source: Bloomberg

**Figure 3: Front Month Brent Crude Prices** 

119 113 107 101 95 2-Jun 9-Jun 16-Jun 23-Jun 30-Jun

Source: Bloomberg.

Figure 4: Henry Hub spot prices



Source: Bloomberg

## **Calendar of Upcoming Events**

Date*	Company	Event
July		
02	Tullow	Trading Statement
10	Premier Oil	Trading Update
14	Galp	Trading Update
17	Det Norkse	2Q14 results
	Aker Solutions	2Q14 results
23	OMV	Trading Update
24	Repsol	2Q14 results
25	Statoil	2Q14 results
28	Galp	2Q14 results
29	BP	2Q14 results
30	ENI	2Q14 results
	TOTAL	2Q14 results
31	BG	2Q14 results
	RD Shell	2Q14 results

Source: Company calendars, Bloomberg;\* denotes subject to change

### Latest Global Energy Research

This note includes excerpts from previously published research. For access to the full reports, including analyst certification and important disclosures, investment thesis, valuation methodology, and risks to rating and price targets, please contact your salesperson or the covering analyst's team or visit <a href="www.ipmorganmarkets.com">www.ipmorganmarkets.com</a>.

# Americas Equity Research

# Noble Energy: LOI for Leviathan Gas Positive; First Significant Leviathan Sales Agreement - ALERT

Analyst: Joseph Allman, CFA

(1-212) 622-4864, joseph.d.allman@jpmorgan.com, This report can be accessed by clicking here, or at www.morganmarkets.com

NBL announced an LOI with BG Group for Leviathan gas. This LOI is NBL's first significant sales agreement for Leviathan natural gas. We think the agreement is positive.

- 3.75 Tcf over a 15-year period. The LOI covers 3.75 Tcf (700 MMcfpd) of gross natural gas volumes over 15 years. We do not know the specific pricing but the company has indicated that it would price new agreements above what it current receives for natural gas. NBL's average realized sales price in Israel in 1Q14 was \$5.60/Mcfe. Further, its previously announced deal with Arab Potash and Jordan Bromine (for Tamar gas) was for at least \$6.50/Mcf with upside linked to Brent. Thus, we expect at least \$6/Mcf for this BG agreement. Apparently, the agreement is scalable with Brent oil (e.g., if Brent is one price or below, NBL and partners might receive \$6/Mcf; if Brent is higher, the partners receive \$6.50, an so forth).
- **Delivery at FPSO.** The agreement calls for gas delivery to happen at the outlet of the FPSO. Therefore, BG (or some third-party midstream company) would incur the pipeline and related costs to take the gas from the FPSO to the Egyptian LNG plant near Idku, Egypt. For gas sales from the FPSO to onshore Israel, NBL and partners likely would incur those pipeline costs or contract the work to a third party. In its December 2013 Analyst Day meeting, NBL estimated the gross cost of a 1.6 Bcf/d FPSO at \$4.6 Bn.

# Oil Services & Equipment Sector: Marketing Update on Valuation, Performance and Forecasts

Analyst: J. David Anderson, PE, CFA

(1-212) 622-6684, jdavid.anderson@jpmorgan.com, This report can be accessed by clicking <u>here</u>, or at www.morganmarkets.com

The OIH was up 130bp this past week, outperforming the S&P500 by 140bp. Among the major oil service categories, Large Caps was the top performing subsector (up 320bp), led by SLB (up 820bp). Over the past month, the Oil Services and Equipment sector has outperformed the broader market by 600bp, and year to date, the group has outperformed by 1420bp. Within our coverage universe, the top three performing stocks YTD have been WFT, CJES and HAL, while the three worst performers have been DO, NE and RIG. Company models begin on page 12.

- Valuation: Large cap service is trading at 7.5x our 2015E EBITDA with SLB and HAL having the most upside from accelerating FCF driving multiple expansion, in our view. Capital Equipment is trading at 9.7x our 2015E EBITDA, the low end being NOV at 7.2x, we believe the most undervalued name across the sector. Under conservative assumptions, we believe Offshore Drillers are fairly valued at 6.1x.
- Commodity prices: WTI oil prices ended the week at \$105.74/bbl, down \$1.52 since last week and up \$1.63 over the past month. US natural gas prices ended the week at \$4.41/MMbtu, down \$0.12 on the week and down \$0.10 over the past month. The JP Morgan Commodities team is forecasting WTI to end the year at \$91/bbl (Brent \$105/bbl) and average \$85/bbl (Brent \$100/bbl) in 2015. US natural gas prices are forecasted to average \$4.65/MMbtu during 2H14 and \$4.20 in 2015.
- North America rig count: The U.S. land rig count rose by 16 to 1,800 rigs last week and is up 124 rigs YTD. Since the beginning of the year, the Permian has led all basins, up 85 to 554 rigs currently drilling. Horizontal oil increased by 160 YTD, while the natural gas rig count is down 51 YTD. Canada was down 29 on the week to 236 rigs, which is 15% up versus last year. We are forecasting the US land rig count to end the year at 1,758 rigs, a 4% increase over the prior year.
- Offshore drilling dayrates: Oversupply in the deepwater offshore drilling market are sending dayrates lower. Looking towards year end, 12 ultra deepwater rigs (+10,000ft) will be available to go with eight newbuilds that have yet to be contracted. We are forecasting contract renewals on 6th generation floaters to bottom at \$400k/day and for newbuilds (mid '15 delivery) to bottom at \$500k/day.
- **Upstream spending:** We are forecasting global upstream spending to increase 8% this year, with North America up 7% and International markets up 11%. Assuming WTI oil prices continue to hold up well above internal forecasts, E&Ps will likely increase spending on US onshore unconventional oil to push North America spending above 10% in 2015.

### Refining marker margins

Figure 5: US North West (\$/bbl)

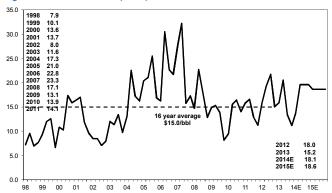


Figure 7: NW Europe (\$/bbl)

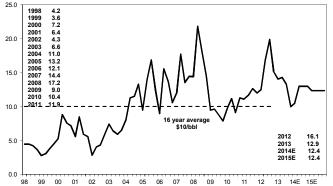


Figure 9: Australia (\$/bbl)

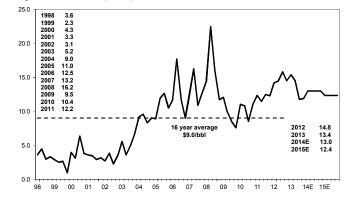


Figure 6: US Mid West (\$/bbl)

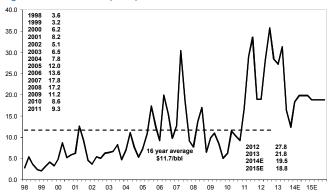
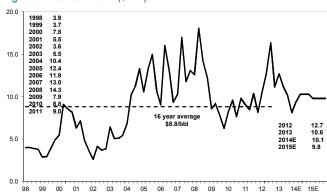
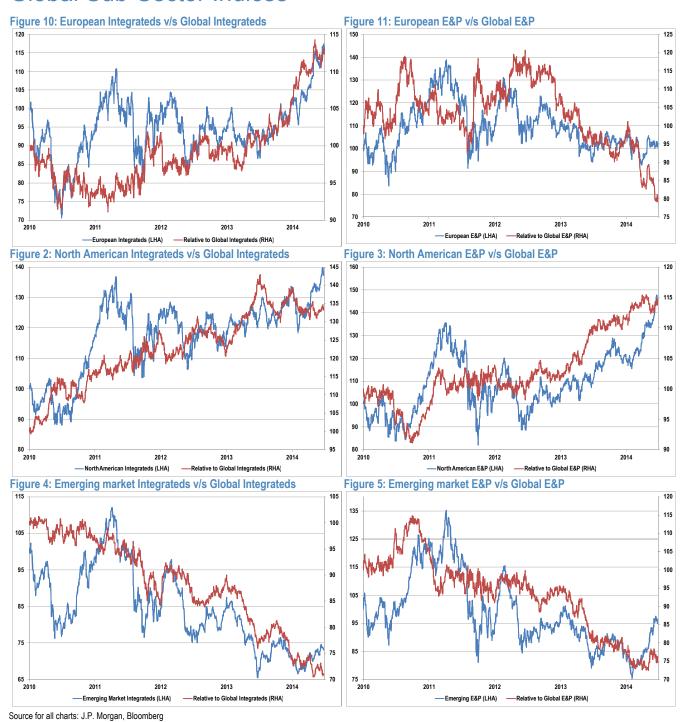


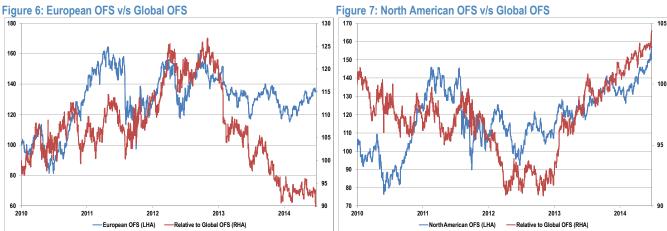
Figure 8: Mediterranean (\$/bbl)

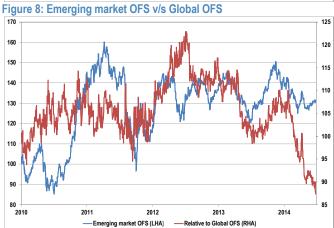


### Global Sub-Sector Indices



### Global Sub-Sector Indices





Source for all charts: J.P. Morgan, Bloomberg

### Oil & gas prices

Figure 9: UK natural gas (pence/therm)

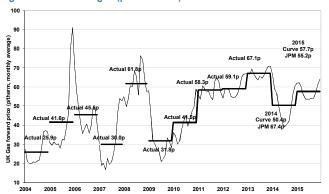


Figure 10: US natural gas (\$/mmbtu)

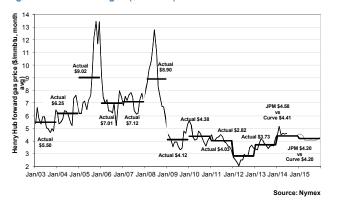


Figure 12: CFTC net non-commercial positions & WTI oil price

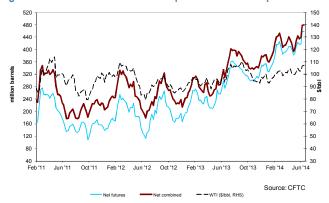


Figure 20: Brent oil (\$/bbl)



Figure 11: CFTC non commercial long/short oil positions & WTI oil price

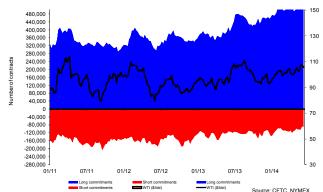
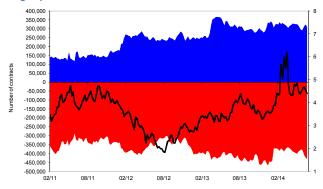
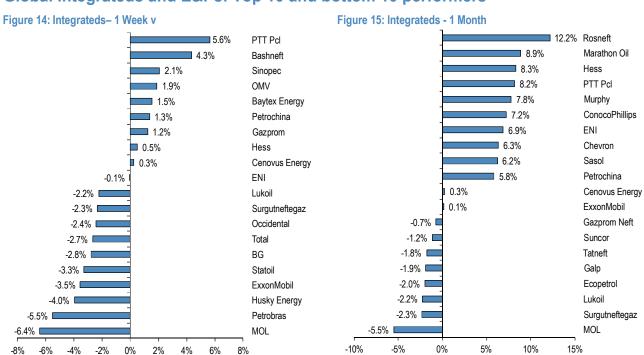


Figure 13: CFTC non-commercial long/short US gas positions & Henry Hub gas price



### Share price charts

#### Global Integrateds and E&Ps: Top 10 and bottom 10 performers





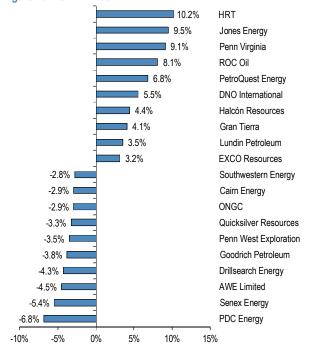
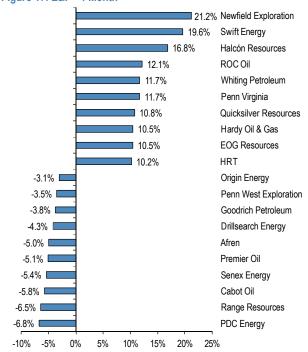
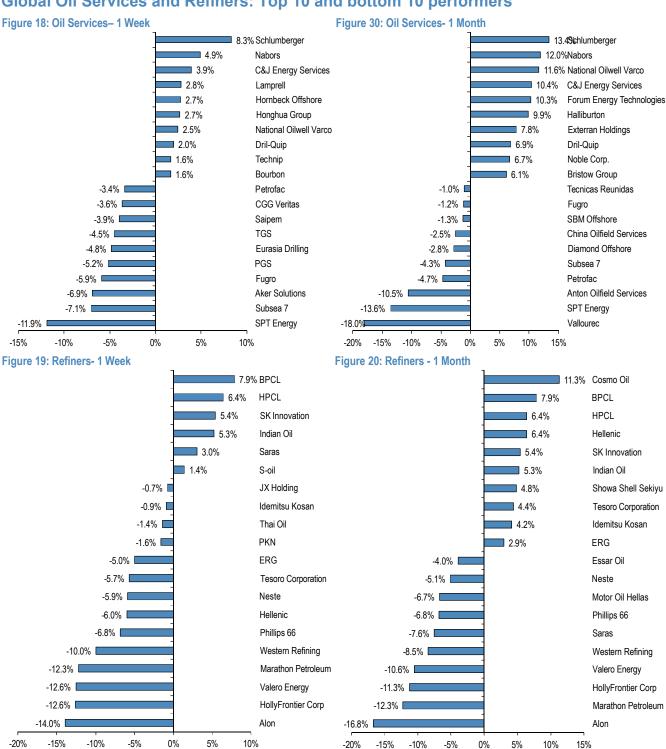


Figure 17: E&P - 1 Month

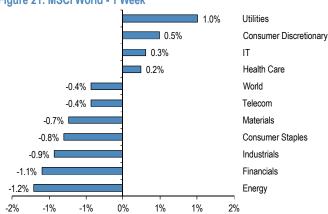


#### Global Oil Services and Refiners: Top 10 and bottom 10 performers



#### **Sector Performance**

Figure 21: MSCI World - 1 Week



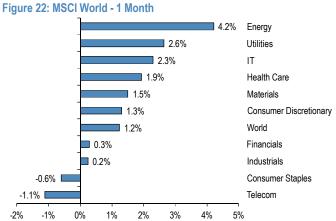


Figure 23: MSCI Euro - 1 Week

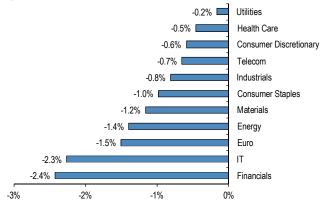


Figure 24: MSCI Euro - 1 Month 2.9% Energy 1.7% Utilities 1.5% Health Care Materials 0.0% Euro -0.7% -1.2% [ Consumer Staples -1.5% Consumer Discretionary -2.1% Telecom -2.2% I Industrials IT -2.2% Financials -3.9% ■ -5% -4% -3% -2% -1% 0% 3% 4%

#### Coverage stocks - % Upside/ (Downside) to Target Price

#### Figure 25: Global Integrateds

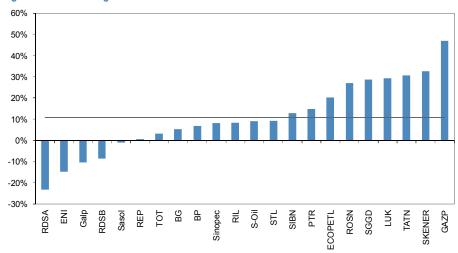


Figure 26: Global Oil Services & Equipment

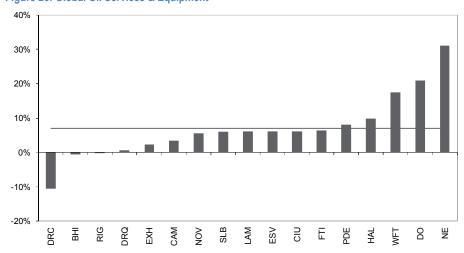
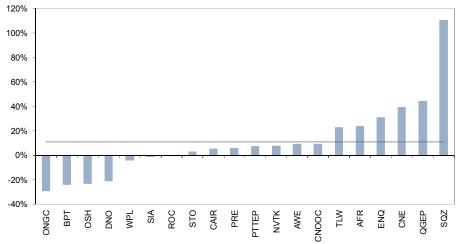


Figure 27: Global E&P's



Source for all charts: Bloomberg, JP Morgan estimates

#### **Global Integrateds valuations**

#### **Table 3: Summary valuation multiples**

Global Integrated Oils - Analyst Team

UK Integrateds European Integrateds Fred Lucas (AC) (44-20) 7134 5943 Nitin Sharma (44-20) 7134 5947 fred.lucas@jpmorgan.com nitin.sharma@jpmorgan.com Emerging Oils - Asia Scott Darling (852) 2800 8578 scott.darling@jpmorgan.com

Emerging Oils - LatAm Caio Carvalhal (55-11) 3048 3946 caio.m.carvalhal@jpmchase.com Emerging Oils -South Africa Alex Comer (44-20) 7325 1964 alex.r.comer@jpmorgan.com

For specialist sales advice please contact:

Emerging Oils - Russia Andrey Gromadin, CFA (7-495) 967-1037 Ian Mitchell (44-20) 7134 1356 andrey.gromadin@jpmorgan.com ian.e.mitchell@jpmorgan.com

Prices as of c.o.b. 30-Jun-14

Company	Reporting	Trading	Share	Rec	Shares in	MV	MV	EV		EPS			DPS		Po	st tax CFP	S
	Currency	Currency	price		issue (m)	(\$ m)	(m)	(m)	13E	14E	15E	13E	14E	15E	13E	14E	15E
OECD											1						
BP	\$	£	514.9	OW	18,611	168,402	98,448	113,177	0.72	0.90	0.88	0.4	0.4	0.5	1.1	1.8	1.8
RD Shell B	\$	£	2,542.5	N	6,295	273,796	160,061	180,444	3.10	3.24	3.04	1.8	1.9	1.9	6.4	6.3	6.6
BG Group	\$	£	1,235.0	N	3,402	71,742	41,941	82,352	1.3	1.0	1.2	0.29	0.32	0.35	2.2	1.7	2.4
ENI	€	€	20.0	UW	3,562	98,939	72,275	87,703	1.22	1.20	1.38	1.10	1.12	1.12	3.1	3.6	3.9
GALP	€	€	13.4	N	829	15,184	11,092	13,266	0.37	0.38	0.45	0.29	0.32	0.36	1.3	1.5	1.5
OMV	€	€	32.8	UW	326	14,662	10,711	14,897	3.41	3.66	3.85	1.22	1.25	1.27	8.6	7.5	8.2
Repsol***	€	€	19.3	UW	1,313	31,972	23,355	35,507	1.41	1.28	1.33	0.98	1.98	0.98	3.7	3.1	3.1
Statoil	Nkr	Nkr	188.4	OW	3,182	97,700	599,206	663,106	14.76	15.22	14.66	7.00	7.35	7.72	31.9	37.6	41.8
TOTAL	€	€	52.8	OW	2,378	170,943	124,874	194,555	6.29	6.70	6.98	3.16	3.38	3.57	12.3	12.8	13.9
Emerging Market					į						ı						
Sinopec	CNY	HK\$	7.4	OW	116,565	111,145	861,415	1,229,180	0.53	0.67	0.70	0.24	0.28	0.30	1.3	1.2	1.3
PetroChina	CNY	HK\$	9.8	OW	183,021	231,185	1,791,776	2,346,672	0.71	0.71	0.73	0.32	0.32	0.33	1.5	1.6	1.7
S-Oil	KRW	KRW	56,900	N	113	6,332	6,406,940	9,124,344	2494	4388	5055	1330	2194	2528	2948.5	16492.0	13685.6
SK Innovation	KRW	KRW	113,000	OW	92	10,326	10,448,660	15,658,257	8360	13009	14847	3200	3200	3200	27294.2	25532.4	0.0
Gazprom	Rb	\$	8.7	OW	11,475	100,007	100,007	133,104	3.05	2.88	2.71	0.38	0.41	0.51	0.0	0.0	0.0
Gazprom Neft	\$	Rb	150.5	N	4,741	20,998	713,566	954,861	1.23	1.12	0.99	0.30	0.28	0.25	1.9	1.6	1.6
Lukoil	\$	\$	59.7	OW	755	45,099	45,099	52,829	14.82	15.48	18.59	3.25	3.64	4.04	22.2	25.2	29.0
Rosneft	\$	\$	7.3	OW	9,237	77,524	77,524	148,425	1.27	1.39	1.30	0.35	0.31	0.30	2.6	3.2	3.2
Surgutneftegaz	Rb	Rb	26.4	N	43,428	33,507	1,138,636	669,034	0.16	0.16	0.15	0.02	0.02	0.03	0.2	0.2	0.1
Tatneft	Rb	Rb	221.9	OW	2,326	14,225	483,408	493,774	0.97	1.09	1.11	0.24	0.28	0.29	1.3	1.4	1.5
Sasol*	ZAR	ZAR	63,236	OW	605	35,745	380,238	371,026	6093	8816	6431	1900.0	2100.0	2200.0	58.8	64.9	65.6
Ecopetrol	COP	COP	3,410	N	40,473	73,510	138,011,300	152,950,090	345.3	345.2	441.3	252.1	186.9	238.9	439.7	518.8	594.3
Reliance Industries**	INR	INR	1,015.4	N	3,235	54,578	3,284,819	3,852,449	64.6	69.7	78.4	10.0	10.0	11.0	110.0	83.3	104.4

NB: The reported Market Value (MV) and Enterprise Value (EV) are in trading currencies.

<sup>-</sup> Fiscal year end June, \*\* - Fiscal year end March.

2014 dividend for			iiviueriu														
Company		Premium		PER (x)			//DACF(x)			nd Yield (%)	•	6	debt / (cas	, , ,	P	ot / Equity (%	6)
	per share	(Discount)	13E	14E	15E	13E	14E	15E	13E	14E	15E	13E	14E	15E	13E	14E	15E
OECD																	
BP	700	(26)%	12.3	9.8	10.0	9.3	5.9	6.0	4.2	4.7	5.1	25,195	29,040	30,481	19	21	21
RD Shell B	2,849	(11)%	14.0	13.4	14.3	7.7	7.8	7.8	4.1	4.3	4.3	34,866	37,945	46,399	19	20	23
Average		(16)%	13.2	12.0	12.7	8.1	7.1	7.1	4.2	4.5	4.7				19	20	22
BG Group	1,483	(17)%	16.5	21.9	18.0	11.1	15.3	11.3	1.4	1.5	1.6	10,610	16,778	18,952	33	49	51
ENI	24.6	(19)%	16.3	16.6	14.5	8.0	7.0	6.8	5.5	5.6	5.6	15,428	17,364	21,940		30	38
GALP	16.1	(17)%	35.7	34.9	29.4	12.0	11.4	11.4	2.2	2.4	2.7	2,174	2,731	3,525	42	52	66
OMV	37.6	(13)%	9.6	9.0	8.5	5.3	6.3	6.1	3.7	3.8	3.9	4,186	4,673	5,493	36	38	43
Repsol***	24.2	(20)%	13.6	15.0	14.5	7.4	7.5	7.9	5.1	10.3	5.1	12,152	7,443	8,927	45	26	31
Statoil	205.6	(8)%	12.8	12.4	12.9	6.5	5.7	5.1	3.7	3.9	4.1	63,900	87,389	102,169	18	24	26
TOTAL	58.4	(10)%	11.5	10.8	10.4	6.7	6.3	5.8	4.4	4.7	4.9	23,612	21,898	21,523	24	20	19
Average		(25)%	16.6	17.2	15.4	8.1	8.5	7.8	3.7	4.6	4.0				32	34	39
Emerging Market																	
Sinopec			11.2	8.8	8.5	6.7	7.2	6.4	4.1	4.8	5.0	294,414	352,393	380,350	52	56	56
PetroChina			11.1	11.0	10.7	6.8	6.4	6.1	4.1	4.1	4.2	444,222	538,674	591,230	39	43	44
S-Oil			22.8	13.0	11.3	27.5	4.9	5.9	2.3	3.9	4.4	2,717,404	3,096,736	2,721,786	51	53	45
SK Innovation			13.5	8.7	7.6	6.2	6.6	NM	2.8	2.8	2.8	5,209,597	5,725,995	5,505,262	33	34	31
Gazprom			2.9	3.0	3.2	NA	NA	NA	4.3	4.7	5.9	33,097	20,670	9,391	12	7	3
Gazprom Neft			3.6	3.9	4.5	3.1	3.6	3.7	6.9	6.3	5.6	241,295	309,244	339,297	28	32	32
Lukoil			4.0	3.9	3.2	3.2	2.8	2.4	5.4	6.1	6.8	7,731	6,977	2,126	9	8	2
Rosneft			5.8	5.3	5.6	6.2	5.0	5.0	4.8	4.2	4.2	70,901	73,001	71,376	83	77	68
Surgutneftegaz			4.8	4.9	5.2	2.8	2.9	3.1	2.5	3.2	3.7	-469,602	-514,413	-548,933	-22	-22	-23
Tatneft			6.7	6.0	5.9	4.8	4.6	4.3	3.7	4.3	4.5	10,366	-25,277	-62,159	2	-4	-10
Sasol*			10.4	7.2	9.8	10.4	9.5	9.3	3.0	3.3	3.5	-9,212	-7,173	20,174	-6	-4	11
Ecopetrol			9.9	9.9	7.7	8.6	7.3	6.4	7.4	5.5	7.0	14,938,790	20,063,943	19,366,855	27	34	26
Reliance Industries**			15.7	14.6	13.0	10.8	14.3	11.4	1.0	1.0	1.1	567,630	1,007,770	1,048,341	38	61	57
Average			9.4	7.8	7.4	8.1	6.3	5.8	3.9	4.2	4.5				29	33	32

NB: The reported estimates are in reporting currencies except for Gazprom, Surgutneftegaz, Tatneft, MOL and Petrobras w hich are in \$.

#### **UK & European oilfield services valuations**

#### **Table 4: Summary valuation multiples**

Pan-European Oilfield Services - Analyst Team James Thompson (44-20) 7325 9460 james.a.thompson1@jpmorgan.com For specialist sales advice please contact: lan Mitchell (44-20) 7134 1356 ian.e.mitchell@jprrorgan.com

Prices as of c.o.b. 30-Jun-14

Company	Reporting	Trading	Price	Rec	MV	MV	EV		P/E (x)	- 1	Cash Ac	ljusted P	/E (x)	EV/E	BITDA (x	)	EV/S	Sales (x)	- :	EBIT	Margin (S	%)		P/BV		JPM Ca	zenove E	:PS
	Currency	Currency				(mn)	(mn)	12E	13E	14E	12E	13E	14E	12E	13E	14E	12E	13E	14E	12E	13E	14E	12E	13E	14E	12E	13E	14E
Lamprell	\$	£	155.5	OW	693	405	369	nm	26.4	16.1	nm	22.2	13.5	nm	10.1	8.0	0.6	0.6	0.6	-8.6	3.5	4.9	1.7	1.6	1.5	-0.43	0.10	0.17
GMS	\$	£	158.3	N	946	553	744	16.9	11.0	11.0	na	na	na	13.1	10.5	9.5	8.6	6.9	6.1	54.1	56.4	54.5	4.4	4.4	2.6	0.16	0.25	0.25
Average								16.9	18.7	13.6	nm	22.2	13.5	13.1	10.3	8.8	4.6	3.8	3.4				3.0	3.0	2.0		•••••	******

NB: The reported Market Value (MV) and Enterprise Value (EV 09) in trading currencies.

NB: The reported JPM Cazenove EPS are in reporting currencies.

Com pany	Reporting	Trading	Price	Rec	MV	MV	EV		FCF	- 1	FCF	Yield (%)	- 1		DPS		Dividen	d Yield (	%)	Net Deb	t/Equity	(%)	R	OE (%)		RC	OCE (%)	$\neg$
	Currency	Currency			(\$ m n)	(mn)	(m n)	12E	13E	14E	12E	13E	14E	12E	13E	14E	12E	13E	14E	12E	13E	14E	12E	13E	14E	12E	13E	14E
Lamprell	\$	£	155.5	OW	693	405	369	231	-27	32	33.3	-3.9	4.6	0.0	0.0	0.0	0.0	0.0	0.0	-26	-14	-17	-27.4	6.1	9.1	-29.8	9.8	13.11
GMS	\$	£	158.3	N	946	553	744	60	61	-29	6.2	6.4	-3.1	0.0	0.0	2.3	0.0	0.0	8.0	132	167	76	25.8	40.5	23.8	17.8	21.2	17.0
Average											19.8	1.2	0.8				0.0	0.0	0.4				-0.8	23.3	16.4	-6.0	15.5	15.0

#### North American oilfield services valuations

**Table 4: Summary valuation multiples** 

**J. David Anderson, PE, CFA (AC)** 212-622-6684

jdavid.anderson@jpmorgan.com

Samantha Hoh, CFA 212-622-5248 samantha.k.hoh@jpmorgan.com William Thompson 212-622-9978 william.s.thompson@jpmorgan.com

Prices as of c.o.b 6/30/2014

Company		Rating	PT	Price	Mkt Cap	EV	EP	'S	P/	E	EBITD	A (\$m)	EV/E	BITDA	Net De	bt/Cap	Return	on Capi	ital (net
Services			(\$/shr)	06/30/14	(\$, b	n)	2013E	2014E	2013E	2014E	2013E	2014E	2013E	2014E	2012E	2013E	2012E	2013E	2014E
Schlumberger	SLB	OW	\$125	117.95	158.1	163.4	4.24	5.67	27.8x	20.8x	13,071	14,409	12.5x	11.3x	12%	10%	14%	15%	15%
Halliburton	HAL	OW	\$78	71.01	66.1	68.4	2.41	4.02	29.4x	16.5x	6,185	7,310	11.1x	0.3x	12%	26%	16%	15%	16%
Baker Hughes	BHI	N	\$74	74.45	33.1	37.0	2.73	4.03	27.3x	18.5x	4,070	5,045	9.1x	7.3x	18%	13%	8%	7%	9%
Weatherford	WFT	OW	\$27	23.00	17.8	26.1	0.30	1.15	76.8x	20.0x	2,653	3,261	9.8x	8.0x	49%	48%	4%	5%	8%
AVG									40.3x	18.9x			10.6x	6.8x	23%	24%	11%	11%	12%
Capital Equipment																			
Nat'l Oilwell	NOV	OW	\$87	82.35	35.2	35.0	5.52	5.84	14.9x	14.1x	4,223	4,473	8.3x	7.8x	-1%	-1%	12%	10%	10%
Cameron	CAM	N	\$70	67.71	16.8	17.7	3.03	3.85	22.4x	17.6x	1,460	1,594	12.1x	11.1x	13%	12%	12%	10%	10%
FMC Tech.	FTI	OW	\$65	61.07	14.6	15.9	2.12	2.80	28.8x	21.8x	1,066	1,387	14.9x	11.5x	47%	27%	20%	17%	19%
Dresser-Rand	DRC	N	\$57	63.73	4.9	5.8	2.21	2.58	28.8x	24.7x	475	474	12.2x	12.3x	46%	46%	11%	12%	9%
Dril-Quip	DRQ	N	\$110	109.24	4.4	4.2	4.19	4.89	26.1x	22.4x	258	305	16.2x	13.7x	-26%	-33%	12%	15%	15%
AVG									24.2x	20.1x			12.7x	11.3x	16%	10%	14%	13%	13%
Offshore Drillers																			
Transocean	RIG	N	\$45	45.03	16.2	23.5	3.91	4.07	11.5x	11.1x	3,536	3,517	6.7x	6.7x	26%	27%	7%	7%	7%
Ensco	ESV	OW	\$59	55.57	12.8	17.2	6.15	5.95	9.0x	9.3x	2,409	2,417	7.1x	7.1x	27%	27%	8%	9%	8%
Diamond	DO	OW	\$60	49.63	6.9	6.9	3.95	3.25	12.6x	15.3x	1,278	1,126	5.4x	6.1x	0%	6%	12%	10%	7%
Noble	NE	N	\$44	33.56	8.5	12.9	3.25	4.35	10.3x	7.7x	1,952	2,538	6.6x	5.1x	37%	41%	5%	7%	9%
Rowan	RDC	OW	\$37	31.93	4.0	4.9	1.94	2.64	16.5x	12.1x	587	739	8.4x	6.7x	16%	14%	5%	5%	5%
AVG									12.0x	11.1x			6.8x	6.3x	21%	23%	7%	8%	7%
Small Caps																			
C&J	CJES	N	\$35	33.78	1.8	2.0	1.26	1.32	26.8x	25.6x	189	228	10.5x	8.7x	27%	18%	31%	9%	8%
Ex terran	EXH	N	\$46	44.99	3.0	4.5	1.80	1.50	24.9x	30.1x	595	639	7.5x	7.0x	49%	47%	5%	5%	5%

#### **Global E&P valuations**

#### **Table 5: Summary valuation multiples**

Global Exploration & Production - Analyst Team

Europe E&P

james.a.thompson1@jpmorgan.com

Emerging Oils - Asia Scott Darling (852) 2800-8578 scott.darling@jpmorgan.com Emerging Oils - India Neil Gupte (91-22) 6157 3592 neil.x.gupte@jpmorgan.com Emerging Oils - LatAm Caio Carvalhal (55-11) 3048 3946 caio.mcarvalhal@jpmchase.com

Emerging Oils - Australia Ben Wilson (61-2) 9220-1384 benjamin.x.wilson@jpmorgan.com

For specialist sales advice please contact: lan Mitchell

(44-20) 7134 1356 ian.e.mitchell@jpmorgan.com Prices as of c.o.b. 30-Jun-14

Company	Analyst	Reporting	Trading	Share	Rec	NOSH	MV	MV	EV		EPS			DPS		Pos	st tax Cl	FDS	YE Net	debt / (ca	sh) (m)	,	Reserve	
Company	Analyst		Currency		1400	(m)	(\$m)	(m)	(m)	13	14E	15E	13	14E	15E	13	14E	15E	13	14E	15E	2P	2P+2C	
Europe						/	····/	····/		<u> </u>						<u> </u>								
Afren	Thompson	ŝ	£	145.0	UW	1.081	2.681	1,567	1,957	0.21	0.21	0.35	0.0	0.0	0.0	0.57	0.51	0.79	667	1.022	902	286	1.096	NΑ
Cairn Energy	Thompson	ŝ	£	200.0	OW	597	1.971	1.153	420	(0.48)	(0.39)	(0.13)	0.0	0.0	0.0	0.07	-0.09	-0.12	-1.253	-631	-158	30	126	N/A
EnQuest	Thompson	ŝ	£	141.2	OW	765	1.925	1.125	1.338	0.27	0.27	0.27	0.0	0.0	0.0	0.80	1.11	1.17	363	296	73	195	316	NA
Genel Energy	Thompson	\$	£	1.015.0	N	281	4.885	2,856	2,447	0.67	1.01	1.47	0.0	0.0	0.0	1.11	1.80	2.83	-700	-525	-237	453	1,541	N/A
Ophir Energy	Thompson	\$	£	220.3	OW	588	2,216	1,296	906	(0.42)	(0.14)	(0.13)	0.0	0.0	0.0	-0.03	-0.06	-0.06	-667	-1,154	-720	N/A	1,250	N/A
Serica	Thompson	\$	£	11.9	UW	183	37	22	6	(0.02)	(0.02)	(0.02)	0.0	0.0	0.0	0.02	-0.03	-0.02	-27	-5	25	N/A	6	N/A
SOCO	Thompson	\$	£	412.6	N	328	2,314	1,353	1,235	0.65	0.63	0.61	0.6	0.0	0.0	0.89	0.85	0.71	-202	-245	-221	130	N/A	129
Tullow	Thompson	\$	£	853.5	OW	910	13.285	7.766	9.687	0.19	0.48	0.43	0.2	0.2	0.2	1.92	1.58	1.50	1.921	2.951	4.018	382	1.049	NA
Lundin Petroleum	Thompson	\$	SEK	135.2	OW	311	6,282	41,985	49,820	0.41	0.55	0.83	0.0	0.0	0.0	2.81	3.06	4.29	1,172	1,968	2,099	194	1,124	840
DNO International	Thompson	\$	NOK	23.6	N	1,023	3,936	24,142	24,667	1.08	2.75	2.52	0.0	0.0	0.0	1.76	3.91	4.50	86	-1,385	-4,547	520	563	N/A
Asia	,																		}					
CNOOC	Darling	CNY	HKD	13.9	N	44,669	80,228	621,795	768,612	1.26	1.26	1.36	0.4	0.4	0.4	2.75	2.84	2.54	117,534	174,912	191,341	N/A	N/A	N/A
ONGC*	Darling	INR	INR	424.9	N	8,556	60,393	3,634,825	3,646,685	28.3	28.2	36.5	9.5	9.5	11.5	46.0	53.8	53.8	11,188	276,569	276,640	10,453	N/A	N/A
PTTEP	Darling	THB	THB	167.5	OW	3,970	20,499	664,973	719,638	14.8	17.7	18.7	6.0	6.6	6.8	32.8	29.8	0.0	54,666	74,821	75,763	1,749	2,399	2,399
Australia																								
AWE**	Wilson	AUD	AUD	1.80	OW	522	887	940	975	0.04	0.18	0.11	0.00	0.00	0.00	0.23	0.19	0.33	35	-51	28	56	245	N/A
Beach Energy**	Wilson	AUD	AUD	1.68	UW	1,269	2,012	2,133	1,905	0.12	0.21	0.22	0.03	0.04	0.06	0.21	0.39	0.40	-228	-225	-514	93	559	N/A
Oil Search	Wilson	\$	AUD	9.67	UW	1,343	12,223	12,958	16,773	0.15	0.38	0.66	0.04	0.04	0.10	0.27	0.75	0.96	3,815	4,077	3,085	552	1,500	N/A
ROC Oil	Wilson	\$	AUD	0.60	OW	686	387	410	345	0.07	0.15	0.07	0.00	0.00	0.00	0.15	0.25	0.24	-65	-112	-165	15	38	N/A
Santos	Wilson	AUD	AUD	14.3	OW	972	12,989	13,770	18,897	0.53	0.57	1.07	0.30	0.35	0.55	1.56	1.73	2.14	5,127	7,558	7,079	1,406	3,371	N/A
Woodside	Wilson	\$	AUD	41.1	N	824	31,920	33,838	35,379	2.13	2.98	2.61	2.49	2.39	2.09	4.04	4.94	5.06	1,541	431	-456	1,544	3,154	N/A
<u>Latam</u>																			}					
Gran Tierra	Carvalhal	\$	\$	8.1	OW	287	2,335	2,335	1,906	0.44	0.52	0.60	0.0	0.0	0.0	NM	NM	NM	-429	-458	-303	57	N/A	N/A
HRT	Carvalhal	BRL	BRL	1.2	N	6	160	353	262	(4.57)	0.01	0.14	0.0	0.0	0.0	NM	NM	NM	-91	28	442	N/A	N/A	1,888
Pacific Rubiales	Carvalhal	\$	CAD	21.7	N	322	6,561	7,002	10,187	1.43	2.46	2.75	0.7	0.7	0.8	NM	NM	NM	3,186	3,172	2,964	588	N/A	232
QGEP	Carvalhal	BRL	BRL	9.0	N	266	1,080	2,392	2,202	0.72	0.45	0.48	0.0	0.0	0.0	NM	NM	NM	-190	-215	26	63	169	N/A
Russia			1																1					
Novatek	Gromadin	Rb	\$	124.4	N	304	37,772	37,772	42,566	8.19	10.32	13.04	0.24	0.27	0.33	NM	NM	NM	4,794	1,646	421	15,597	22,355	N/A

NB: The reported Market Value (MV) and Enterprise Value (EV) in trading currencies.

				_		_																		
Company	Core NAV		RENAV	Premium	TNAV	Premium		duction (kbd			PER (x)			end Yiel			//DACF (			ebt/Equi			V per bo	
	per share	(Dis count)	per share	(Discount)	per share	(Discount)	12	13E	14E	13	14E	15E	13	14E	15E	13	14E	15E	13	14E	15E	2P	2P+2C	JPMe
Europe	1	:	{																			}		
Afren	144	1%	211	(31)%	370	(61)%	42	47	50	11.6	11.5	7.1	0.0	0.0	0.0	5.5	6.8	4.2	39	53	39	11.7	3.1	NM
Cairn Energy	312	(36)%	389	(49)%	793	(75)%	0	0	0	NM	NM	NM	0.0	0.0	0.0	18.3	NM	NM	-39	-22	-6	23.9	5.7	NM
EnQuest	168	(16)%	218	(35)%	330	(57)%	23	23	32	8.9	9.1	8.9	0.0	0.0	0.0	3.7	2.6	2.2	24	17	4	11.7	7.2	NM
Genel Energy	839	21%	1,252	(19)%	2,535	(60)%	44	44	67	26.1	17.2	11.8	0.0	0.0	0.0	13.4	8.6	5.8	-17	-12	-5	9.2	2.7	NM
Ophir Energy	246	(10)%	373	(41)%	1,016	(78)%	NM	NM	NM	NM	NM	NM	0.0	0.0	0.0	NM	NM	NM	-40	-44	-29	NM	1.2	NM
Serica	28	(57)%	47	(75)%	224	(95)%	1	0	0	NM	NM	NM	0.0	0.0	0.0	3.5	NM	NM	-26	-5	27	NM	1.7	NM
SOCO	362	14%	407	1%	521	(21)%	15	17	18	10.9	11.2	11.6	8.9	0.0	0.0	7.3	7.4	9.0	-17	-20	-18	16.2	NM	16.4
Tullow	516	66%	1,000	(15)%	1,919	(56)%	79	84	81	78.6	30.6	34.1	1.3	1.3	1.3	8.7	11.3	12.7	36	53	69	43.3	15.8	NM
Lundin Petroleum	162	(17)%	209	(35)%	335	(60)%	36	34	37	49.3	36.6	24.4	0.0	0.0	0.0	8.5	8.7	6.3	90	133	121	38.4	6.6	8.9
DNO International	15	54%	21	14%	28	(16)%	38	43	78	21.9	8.6	9.4	0.0	0.0	0.0	13.5	5.7	4.3	2	-17	-43	7.7	7.1	NM
Average		(2)%		(30)%		(59)%				28.6	18.0	14.7	1.0	0.1	0.1	8.8	8.9	6.9	8	18	22	20.1	5.4	9.9
Asia	·																							
CNOOC	13	7%	} -	-	-	-	884	1177	1244	11.0	11.0	10.2	2.9	2.7	2.9	5.0	5.3	6.1	34	52	57	NM	NM	NM
ONGC*	-	-	} -	-	-	-	1184	1231	NM	15.0	15.1	11.6	2.2	2.2	2.7	7.4	6.9	6.9	1	16	15	5.8	NM	NM
PTTEP	157	7%	- 1	-	-	-	276	310	340	11.4	9.5	9.0	3.6	3.9	4.1	5.5	6.3	NM	14	17	16	12.7	9.2	9.2
Average	1	(29)%	}	-						12.5	11.9	10.3	2.9	3.0	3.2	6.0	6.2	6.5	16	29	29	9.2	9.2	9.2
<u>Australia</u>	1	; :	}																			·····	~~~~	
AWE**	1.3	43%	1.8	(2)%	2.3	(22)%	13	14	16	47.0	10.1	16.2	0.0	0.0	0.0	8.2	9.2	5.5	4	-5	3	16.4	3.8	NM
Beach Energy**	1.4	17%	1.5	10%	1.5	10%	21	24	28	13.0	7.6	7.4	1.6	2.2	3.8	7.2	3.8	3.2	-13	-11	-23	19.3	3.2	NM
Oil Search	7.2	34%	8.9	9%	9.5	2%	17	18	24	59.4	24.1	13.7	0.4	0.4	1.1	45.7	16.8	12.4	112	81	52	29.1	10.7	NM
ROC Oil	0.5	20%	0.7	(9)%	0.8	(28)%	6	7	7	8.6	3.8	7.9	0.0	0.0	0.0	3.4	1.7	1.5	-24	-30	-39	21.4	8.5	NM
Santos	17.0	(16)%	16.9	(15)%	19.0	(25)%	143	155	164	26.7	25.2	13.4	2.1	2.5	3.9	12.4	12.7	10.0	50	72	63	12.7	5.3	NM
Woodside	38.9	6%	45.2	(9)%	61.7	(33)%	232	254	252	18.2	13.0	14.8	6.4	6.2	5.4	10.6	8.4	8.0	10	3	-3	21.7	10.6	NM
Average		17%		(3)%		(16)%	1			28.8	14.0	12.2	1.8	1.9	2.4	14.6	8.8	6.8	23	18	9	20.1	7.0	NM
<u>Latam</u>		<del>.</del>	<del>}</del>			<del></del>			~~~~~~	•				~~~~~										~~~~
Gran Tierra	-	-		-	4	93%	16	20	22	18.4	15.6	NM	0.0	0.0	0.0	2.9	14.8	NM	-30	-30	-22	33.6	NM	NM
HRT			- 1	-	-	-	NM	NM	NM	NM	NM	NM	0.0	0.0	0.0	NM	NM	NM	-4	1	15	NM	NM	0.0
Pacific Rubiales			-	-	36	(40)%	100	130	141	14.2	8.3	NM	3.3	3.6	4.1	8.1	5.8	NM	76	74	66	16.6	NM	42.0
QGEP	11	0	į	1	17	(47)%	0	0	0	12.4	19.9	18.8	0.0	0.0	0.0	5.8	7.9	22.1	-8	-10	1	14.1	5.3	NM
Average	<del> </del>		}	·	·	(24)%				15.0	14.6	18.8	0.8	0.9	1.0	5.6	9.5	22.1	9	9	15	21.5	5.3	21.0
Russia	<b>;</b>	<u>,</u>	<del> </del>	<del> </del>	,			~~~~~	~~~~	<u> </u>		•••••							·····			·····		
Novatek	58.6	112%	§ -	-	- 1	-	1106	1165	1277	15.2	12.1	9.5	1.9	2.2	2.7	13.1	11.0	9.2	43	12	3	2.7	1.9	NM
Average		112%	}							15.2	12.1	9.5	1.9	2.2	****	13.1	11.0	9.2	43	12	3	2.7	1.9	NM

NB: The reported walnet value (mW) and Enterprise value (EV) in Industry currentees.

NB: The reported estimates are in reporting currences except for OGX and Novatek which are in \$.

NB: PTTEP reports only 1Preserves data, hence 2P and 2P+2C are necessarily JPMe.

\*- Fiscal year end March, \*\* - Fiscal year end June.



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For access to all J. P. Morgan's research on energy simply click on <a href="https://www.morganmarkets.com">www.morganmarkets.com</a>

#### J.P. Morgan Global Energy Coverage

#### UK Integrateds Fred Lucas

(44-20) 7134-5943 fred.lucas@jpmorgan.com

**UK Exploration &Production** 

James Thompson

(44-20) 7134-5942

James.a.thompson1@jpmorgan.com

**European Integrateds** 

Nitin Sharma

(44-20) 7134-5947

nitin.sharma@jpmorgan.com

**European Oilfield Services** 

Rahul Bhat

(44-20) 7134-9059

rahul.bhat@jpmorgan.com

Emerging Oils - Russia & Turkey

Andrey Gromadin, CFA

(7-495) 967 1037

andrey.gromadin@jpmorgan.com

Neeraj Kumar

(971) 4428-1740

neeraj.z.kumar@jpmorgan.com

Emerging Oils - Asia + Japan

**Scott Darling** 

(852) 2800 8578

scott.darling@jpmorgan.com

Samuel Lee

(852) 2800-8536

samuel.sw.lee@jpmorgan.com

Yuji Nishiyama

(81-3) 6736-8617

yuji.nishiyama@jpmorgan.com

Australian Oils

**Benjamin Wilson** (61-2) 9220 1384

benjamin.x.wilson@jpmorgan.com

**Daniel Butcher** 

(61-2) 9220 1405

daniel.butcher@jpmorgan.com

**Indian Oils** 

**Neil Gupte** 

(91-22) 6157 3592

neil.x.gupte@jpmorgan.com

For Specialist Sales advice, please contact:

lan Mitchell

(44-20) 7134 1356

ian.e.mitchell@jpmorgan.com

Americas Exploration and Production

Joseph Allman, CFA

(1-212) 622 4864

joseph.d.allman@jpmorgan.com

Jeanine Wai

(1-212) 622-6489

jeanine.wai@jpmorgan.com

Jessica Lee

(1-212) 622-9812

jessica.s.lee@jpmorgan.com

Americas Oil Services & Equipment

J.David Anderson, PE, CFA

(1-212) 622-6684

jdavid.anderson@jpmchase.com

Samantha Hoh, CFA

(1-212) 622-5248

samantha.k.hoh@jpmchase.com

William S Thompson

(1-212) 622-9978

william.s.thompson@jpmorgan.com

Americas Integrated Oils & Refiners

Timothy Li

(1-212) 622-6490

timothy.li@jpmorgan.com

Emerging Oils - LatAm

Caio Carvalhal

(55-11) 3048-3946

caio.m.carvalhal@jpmchase.com

Felipe Dos Santos

(55-11) 4950-3796

felipe.dossantos@jpmorgan.com

South African Oils

**Alex Comer** 

(44-20) 7325 1964

alex.r.comer@jpmorgan.com

**Head of Global Commodity Research** 

Colin Fenton

(1-212) 834-5648

colin.p.fenton@jpmorgan.com

Energy Strategy – Oil David G Martin

(44-20) 7777-0211

david.g.martin@jpmorgan.com

**Energy Strategy - Gas** 

Scott Speaker

(1-212) 834-3878

scott.c.speaker@jpmorgan.com

#### J.P. Morgan Oil & Gas Coverage Names

#### **UK Integrateds - Fred Lucas**

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