

# Canadian Overseas Petroleum

## Diversifying asset base

Canadian Overseas Petroleum (COPL) has acquired an 80% interest in Essar Nigeria through its joint venture with Shoreline, ShoreCan. Essar Nigeria owns a 100% operated interest in OPL 226, a shallow water licence in Nigeria containing the Noa West oil discovery (16.1mmbbls 2C gross) and the Noa Complex, which is estimated to contain mid-case prospective oil resources of 461mmbbls. We now include a risked notional 200mmbbl oil development for OPL 226 in our RENAV; combining this with FX adjustments and dilution from in-the-money warrants drives an increase in our RENAV from 8.5p/share (C\$0.15 /share) to 15.3p/share (C\$0.26/share).

Year end	Revenue (US\$m)	EBITDA (US\$m)	PBT* (US\$m)	Net cash (US\$m)	Capex (US\$m)
12/14	0.0	(7.7)	(6.6)	4.7	(0.5)
12/15	0.0	(6.5)	(7.8)	2.0	(0.2)
12/16e	0.0	(6.5)	(6.7)	2.3	(0.2)
12/17e	0.0	(5.5)	(5.4)	4.5	0.0**

Note: \*PBT is normalised, excluding amortisation of acquired intangibles, exceptional items and share-based payments. \*\*Assuming farm-out of OPL 226.

## ShoreCan acquires 80% of Essar Nigeria

COPL has added diversification to its asset base, with ShoreCan completing the acquisition of an 80% interest in Essar Nigeria in September 2016. The JV's core asset is OPL 226; a licence containing the Noa West oil discovery, as well as prospective oil resource in the Noa Complex. The acquisition adds a relatively low geological risk, shallow water exploration/appraisal asset to the COPL portfolio. Importantly, COPL has greater control over the pace of activity in Nigeria than Liberia, LB-13, where the company retains a carried (ExxonMobil operator) exploration interest in the 400mmbbl Mesurado-1 prospect.

## Forward programme and funding

We expect ShoreCan to drill a well on OPL 226 in 2017/18 targeting a crestal location within the Noa Complex. Potential exists for thicker sand pay than the 18.7m of oil discovered at Noa-1. Prospects have been de-risked by five offset wells, 3D seismic and the use of several advanced AVO techniques that COPL believes help differentiate oil-bearing sands from gas or water. We expect an exploration well on OPL 226 and ongoing SG&A to be funded through a combination of existing cash (\$5.2m at end Q216), cash inflow from the exercise of outstanding options, equity and/or farm-down. Estimated gross well costs for OPL 226 are US\$28m, \$11.2m net to COPL.

## Valuation: Increase in RENAV

Our RENAV assumes COPL farms down its equity interests in Liberia, LB-13 and Nigeria, OPL 226, in the event of exploration success (farminee requiring a 20% IRR). Assuming dilution of working interest and value through farm-down, we estimate a RENAV of 15.3p/share or C\$0.26/share. On an 'undiluted' basis, simply assuming NPV<sub>12.5</sub> asset values, this rises to 19.6p/share or C\$0.34/share.

## Nigerian acquisition

### Oil & gas

25 October 2016

**Price** **C\$0.17**

**Market cap** **C\$103m**

US\$0.75/C\$ £/\$ 1.3

Net cash (US\$m) at 30 June 2016 5.2

Shares in issue (basic) 606.3m

Free float 99%

Code XOP/COPL

Primary exchange TSX-V

Secondary exchange LSE

### Share price performance



% 1m 3m 12m

Abs 32.0 83.3 135.7

Rel (local) 30.0 79.4 120.4

52-week high/low C\$0.17 C\$0.03

### Business description

Canadian Overseas Petroleum (COPL) is an Africa-focused E&P with exploration assets in Liberia and Nigeria (through its ShoreCan JV). COPL is carried through a US\$120m gross exploration programme in Liberia by ExxonMobil.

### Next events

Spud Mesurado - 1 Liberia Q416

### Analysts

Sanjeev Bahl +44 (0)20 3077 5700

Elaine Reynolds +44 (0)20 3077 5713

[oilandgas@edisongroup.com](mailto:oilandgas@edisongroup.com)

[Edison profile page](#)

**Canadian Overseas Canadian  
Overseas Petroleum is a  
research client of Edison  
Investment Research Limited**

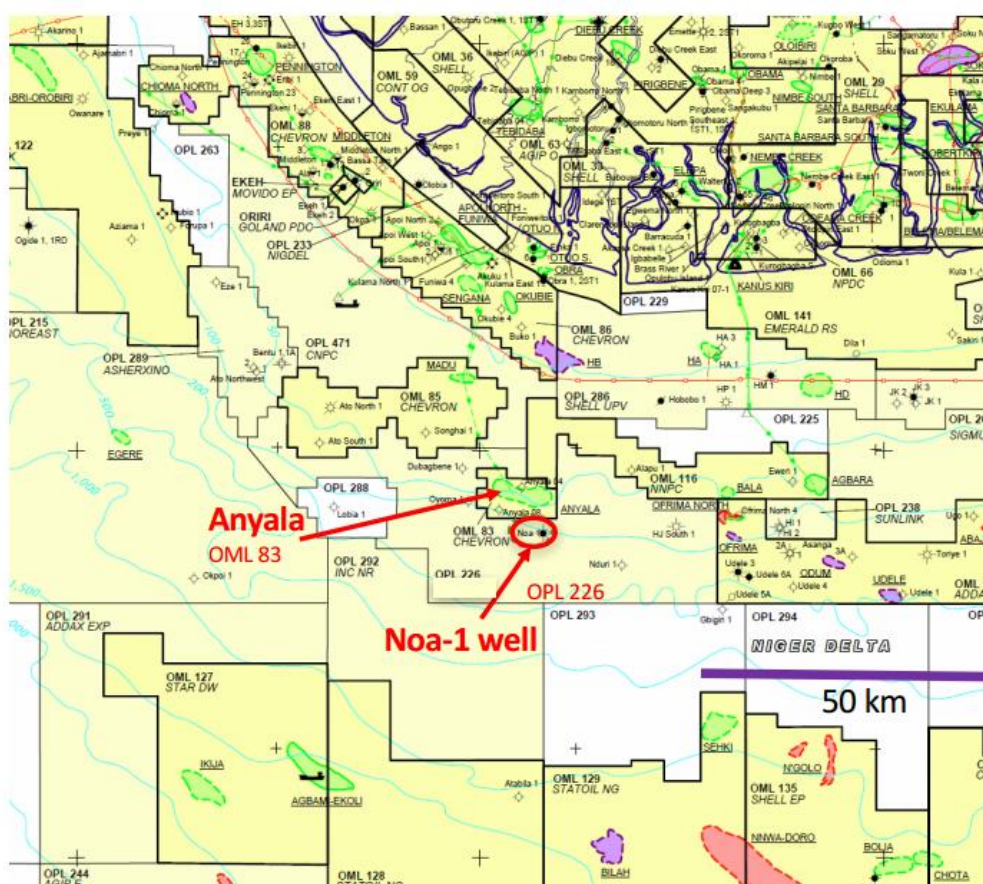
## Diversifying asset base

On 14 September 2016, COPL announced that its 50%-owned affiliate, ShoreCan, had completed the acquisition of 80% of the share capital of Essar Nigeria. Essar Nigeria's sole asset is a 100% interest and operatorship of OPL 226 Nigeria. We believe the addition of OPL 226 brings asset diversity, portfolio depth and, importantly, control. The acquired asset provides shareholders with exposure to low-risk exploration/appraisal upside in Nigeria, as well as higher-risk/impact exploration offshore Liberia. Importantly, COPL will have control over the pace of activity on OPL 226 through the ShoreCan JV.

## OPL 226: Asset description

OPL 226 is located 50km offshore in the central delta region of Nigeria and in shallow water ranging between 40m and 180m. The block covers an area of 1530km<sup>2</sup> and benefits from extensive seismic data, including 1,750km<sup>2</sup> of 2D seismic and 1,300km<sup>2</sup> of 3D. Five wells have been drilled on the block and an oil discovery was made in 2001 with the last of these wells, Noa-1.

**Exhibit 1: Location of Noa-1**



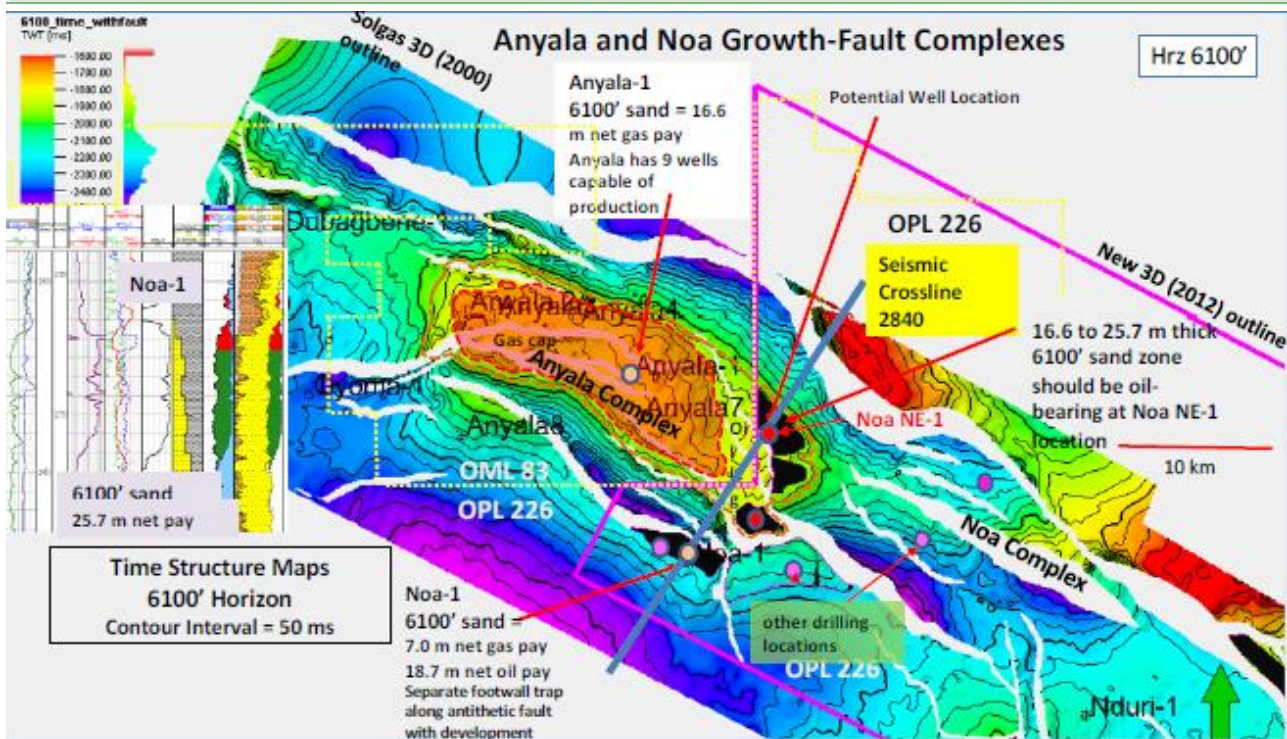
Source: COPL

OPL 226 has generally been thought to be gas bearing (even though oil was encountered in two wells in nearby Anyala) and has historically been underexplored. This has been exacerbated by poor-quality seismic data sets due to the presence of thick soft deposits of mud on the seabed. The block sits on a large-growth, fault-controlled structural complex running in a NW-SE direction and known within the company as the Noa Complex. The Noa Complex benefits from the presence of five wells that can be used to calibrate the 3D seismic and COPL has applied the advanced AVO

techniques of extended elastic impedance (EEI) and Joint impedance & Facies inversion (Ji-Fi) to the most recent 568km<sup>2</sup> 3D survey acquired by Essar Energy in 2012. Based on this detailed technical work, COPL has identified a number of anomalies associated with sand lithology and oil fluid content that tie in with structural and stratigraphic features. Although the Noa Complex is adjacent to the Anyala Complex in OML 83, the company believes that the two areas are isolated from each other by a fault.

The area of initial focus for COPL will be in the vicinity of the Noa-1 discovery well at the western edge of the block. Noa-1 was the only well drilled in the block on 3D seismic and it encountered 20m of good-quality sand typical of the Tertiary sands of the Niger Delta, with porosities around 30% and permeabilities between 800mD and 5D. However, Noa-1 was drilled on the flank of the structure and COPL expects that the sands will be thicker in the crestal part of the field. Producing fields in the Niger Delta can have compartmentalised sands with different oil-water contacts (OWC), but they are also thick and tend to have the same drive mechanism.

**Exhibit 2: Anyala and Noa time structure map 6,100ft horizon**



Source: COPL

The company has identified a drilling location around 2km from the discovery well, which would target this crestal area to prove the presence of oil in the thickest part of the structure. COPL plans to design the well to be completed as a production well, which can then be brought on stream as part of an early production system (EPS) in the case of success. Under the terms of the PSC, there is a commitment to drill one well by December 2017.

OPL 226 has been independently assessed by Netherland, Sewell & Associates (NSAI) as of March 2016. The primary Noa West discovery is estimated to contain gross unrisks 2C resources of 16mmbbls. A further 15 undrilled prospects across the Noa Complex have been assigned gross best estimate prospective resources of 461mmbbls, with a high case of 808mmbbls. In addition, prospective gas resources on the block are estimated at 1.7tcf on a best estimate basis. It should be noted that NSAI's estimate is based on the 20m sand thickness encountered in Noa-1, so that there is upside to these figures if COPL can demonstrate thicker sands in the crestal area in line with its current models.



The majority of the resources assessed by NSAI sit within the Noa Complex. Once this area has been investigated, the company sees potential for substantial upside to these figures in the foot wall area of the licence to the north-east of Noa-1, where it has identified multiple prospects.

## OPL 226: Development assumptions

We base our risked valuation of OPL 226 on the notional development of a gross 200mmbbl oil field, a subset of prospective resource within the Noa Complex. Noa sits in relatively shallow water with depths ranging from 50m to 180m; we assume a jack-up based production platform and tanker offload from a single buoy mooring. Key inputs that drive our economic modelling are highlighted below.

**Exhibit 3: OPL 226 development key assumptions**

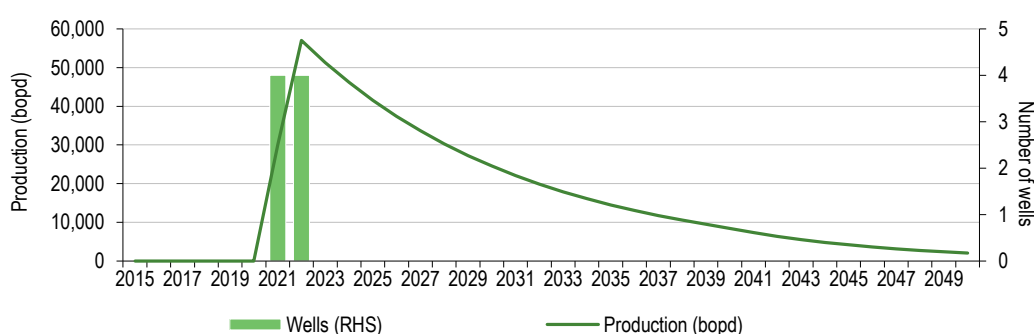
OPL 226	
Opex (\$/bbl)	12.8
Capex (\$/bbl)	11.8
Gross prospect size (mmbbls)	200
Completed well cost (\$m)	28
Gross project IRR	39%
First oil	2020
Plateau production rate (mb/d)	57,000
Gross value per bbl (\$/bbl)	2.43

Source: Edison Investment Research

In addition to the key assumptions in Exhibit 3, we assume first oil in 2020 with production from eight development wells driving peak production of 57mb/d. Our analysis indicates a gross project IRR of 39% at US\$70/bbl long-term and an NPV<sub>12.5</sub> break-even oil price of US\$33\$/bbl.

We note that the terms of the OPL 226 PSC, signed by Essar Nigeria, are typical of Nigerian contracts, which are subject to high levels of government take. Key elements of the PSC include royalty, cost recovery, tax oil and contractor profit share. While IRRs are strong, NPV per barrel is low in a global context. We model 2.43\$/bbl at US\$70/bbl Brent. We estimate total government take over the life of the contract at 95% (government share of revenues after all costs) based on our notional 200mmbbl development.

**Exhibit 4: OPL 226 assumed production profile and well count**



Source: Edison Investment Research

Assuming COPL farms out its equity interest in exchange for a development cost carry through to first oil, we estimate that net working interest would fall from 40% to 15.5% (farminee requiring a 20% IRR). Including cost-carry increases the net value per barrel, which rises from US\$2.43/bbl to US\$4.6/bbl reflecting the cost carry, partially offsetting this reduction in working interest.

## OPL 226: Planned activity

ShoreCan is yet to firm up its work programme for OPL 226, but we expect the JV to look to drill at least one exploration well on the licence over the course of 2017/18. At current rig day rates, the company expects this well to cost c US\$28m gross, which would equate to a net cost to COPL of US\$11.2m.

## Valuation and financials

As per our previous published research, we provide two valuation scenarios for COPL: firstly, a valuation made on the basis of COPL farming down its LB-13 and OPL 226 working interests in exchange for full development cost carries through to first oil. Key changes to our valuation since the last time we published include:

- the addition of OPL 226 on completion of ShoreCan's Essar Nigeria acquisition;
- a change in FX rates: C\$:US\$ from 0.77 to 0.75. £:US\$ from 1.4 to 1.3; and
- the addition of all in-the-money stock warrants to diluted share count and cash on exercise to NAV.

**Exhibit 5: COPL – Scenario 1 summary valuation assuming farm-down\* and cost carry**

Asset		Diluted WI			Recoverable reserves			Net risked	Value per share	
	Country	(pre back-in)	Catalyst	CoS	Gross	Net	NPV/boe	value	Riskd	Riskd
		%		%	mmboe	mmboe	US\$/boe**	US\$m	C\$/share	p/share
Net (debt)/cash inc cash from in-the-money exercised warrants								22	0.04	2.0
SG&A								-11	-0.02	-1.1
Core NAV								10	0.02	1.0
Exploration (2016)										
Mesurado-1 (LB-13)	Liberia	7.7%		19.5%	409	32	9.2	57	0.09	5.3
Prospect 2 (LB-13)	Liberia	7.7%		19.5%	400	31	9.2	55	0.09	5.2
Noa (OPL 226)	Nigeria	15.5%		30.0%	191	30	4.6	41	0.07	3.8
RENAV								163	0.26	15.3

Source: Edison Investment Research. Note: \*Farminee 20% IRR. \*\*Includes impact of cost-carry.

Please see our [note](#) published on 2 August 2016 for further details of COPL's interest in LB-13, Liberia and asset valuation details.

We also provided an 'undiluted' valuation, which reflects the full NPV<sub>12.5</sub> risk value of the company's interests in Liberia and Nigeria. This valuation is more indicative of a CPR or 'high case' valuation and is a 28% premium to our farm-out RENAV. Nevertheless, under both scenarios we see material upside from the current share price.

**Exhibit 6: COPL – Scenario 2 summary valuation**

Asset		Diluted WI			Recoverable reserves			Net risked	Value per share	
	Country	(pre back-in)	Catalyst	CoS	Gross	Net	NPV/boe	value	Risked	Risked
		%		%	mmboe	mmboe	US\$/boe	US\$m	C\$/share	p/share
Net (debt)/cash inc cash from exercised warrants								22	0.04	2.0
SG&A three years								-11	-0.02	-1.1
Core NAV								10	0.02	1.0
Exploration (2016)										
Mesurado-1 (LB-13)	Liberia	17.0%		19.5%	409	70	5.4	73	0.12	6.8
Prospect 2 (LB-13)	Liberia	17.0%		19.5%	400	68	5.4	71	0.12	6.7
Noa (OPL 226)	Nigeria	40.0%		30.0%	191	76	2.4	56	0.09	5.2
RENAV								210	0.34	19.6

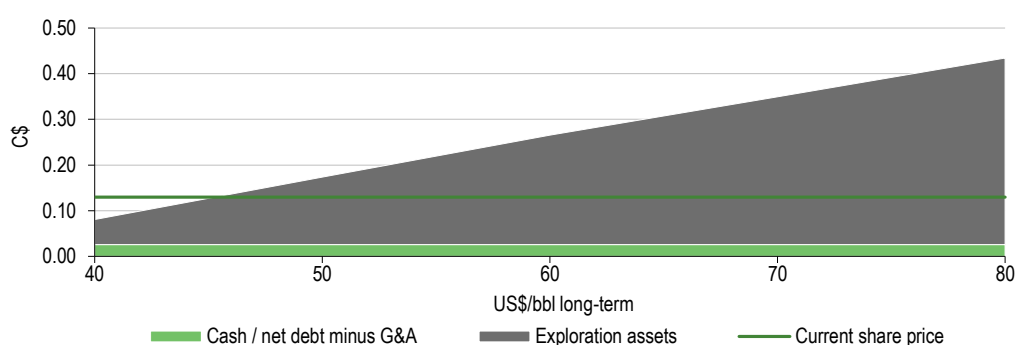
Source: Edison Investment Research

After an equity injection of c C\$8m in Q216, COPL is funded to cover SG&A costs for 2016 and 2017 based on our forecasts. Liberia exploration is funded through a US\$120m cost carry from partner ExxonMobil, which has the potential to cover COPL for a two-well programme. Recent statements from NOCAL and ExxonMobil suggest that the Mesurado-1 prospect (estimated gross unrisked c.400mmboe) is likely to be spud in November/December 2016, COPL guidance remains Q416. Please see our last published note '[Liberia – looking for Liza's conjugate](#)' for further details.

We expect ShoreCan to look at funding options to drill one well on OPL 226 in 2017/18 at a net cost of US\$11.2m. One option to fund this cost would be from cash inflow from the exercise of in-the-money stock options. If all in-the-money options were exercised, we could expect c US\$16m of cash inflow over the course of 2017/18.

We provide a valuation sensitivity to long-term oil price assumptions in the graph below. We note that this is on the basis of NPV<sub>12.5</sub> asset values excluding the dilutive impact of farm-downs.

**Exhibit 7: RENAV sensitivity to oil price (Scenario 2)**



Source: Edison Investment Research

**Exhibit 8: Financial summary**

	US\$'000s	2013	2014	2015	2016e	2017e
December		IFRS	IFRS	IFRS	IFRS	IFRS
<b>PROFIT &amp; LOSS</b>						
Revenue		0	0	0	0	0
Cost of Sales		0	0	0	0	0
Gross Profit		0	0	0	0	0
EBITDA		(9,166)	(7,685)	(6,505)	(6,476)	(5,468)
Operating Profit (before amort. and except.)		(9,225)	(7,747)	(6,564)	(6,514)	(5,486)
Intangible Amortisation		0	0	0	0	0
Exceptionals		0	0	0	0	0
Other		0	0	0	0	0
Operating Profit		(9,225)	(7,747)	(6,564)	(6,514)	(5,486)
Net Interest		23	28	41	59	62
Forex gains/(losses)		729	1,138	(530)	(248)	0
Derivative gain/(losses)		0	27	1,097	(259)	0
Share in jvs/associates		0	0	(729)	(2)	0
Profit Before Tax (norm)		(8,473)	(6,581)	(7,782)	(6,705)	(5,423)
Profit Before Tax (FRS 3)		(8,473)	(6,554)	(6,685)	(6,964)	(5,423)
Tax		0	0	0	0	0
Profit After Tax (norm)		(8,473)	(6,581)	(7,782)	(6,705)	(5,423)
Profit After Tax (FRS 3)		(8,473)	(6,554)	(6,685)	(6,964)	(5,423)
Average Number of Shares Outstanding (m)		301.9	365.2	440.5	575.3	648.7
EPS - normalised (c)		(2.8)	(2.2)	(1.7)	(1.1)	(0.8)
EPS - normalised fully diluted (c)		(2.8)	(2.2)	(1.7)	(1.1)	(0.8)
EPS - (IFRS) (c)		(2.8)	(1.8)	(1.5)	(1.2)	(0.8)
Dividend per share (c)		0.0	0.0	0.0	0.0	0.0
Gross Margin (%)		N/A	N/A	N/A	N/A	N/A
EBITDA Margin (%)		N/A	N/A	N/A	N/A	N/A
Operating Margin (before GW and except.) (%)		N/A	N/A	N/A	N/A	N/A
<b>BALANCE SHEET</b>						
Fixed Assets		16,581	16,502	16,615	16,779	16,762
Intangible Assets		16,347	16,305	16,455	16,659	16,659
Tangible Assets		175	134	109	69	52
Investments		60	63	51	51	51
Current Assets		2,580	5,203	2,383	2,764	6,219
Stocks		0	0	0	0	0
Debtors		67	134	149	212	212
Cash		2,227	4,705	2,015	2,392	5,847
Other		286	364	219	160	160
Current Liabilities		(1,736)	(1,437)	(1,791)	(4,861)	(4,861)
Creditors		(1,736)	(1,437)	(1,791)	(4,861)	(4,861)
Short term borrowings		0	0	0	0	0
Long Term Liabilities		0	0	0	0	(1,362)
Long term borrowings		0	0	0	0	(1,362)
Other long term liabilities		0	0	0	0	0
Net Assets		17,425	20,268	17,207	14,682	16,758
<b>CASH FLOW</b>						
Operating Cash Flow		(7,483)	(7,515)	(6,255)	(5,364)	(5,468)
Net Interest		23	28	41	59	62
Tax		0	0	0	0	0
Capex		(1,434)	(507)	(190)	(204)	0*
Acquisitions/disposals		0	0	0	0	0
Equity financing and convertible debt		6,952	10,842	4,951	5,864	7,500**
Dividends		0	0	0	0	0
Other		83	(384)	(1,237)	(83)	0
Net Cash Flow		(1,859)	2,464	(2,690)	272	2,094
Opening net debt/(cash)		(4,405)	(2,241)	(4,705)	(2,015)	(2,392)
HP finance leases initiated		0	0	0	0	0
Other		(305)	0	0	0	0
Closing net debt/(cash)		(2,241)	(4,705)	(2,015)	(2,287)	(4,486)

Source: Company accounts, Edison Investment Research. Note: \*Nigeria net well costs to be funded by bridge finance, equity or farm-down. \*\*Assumes exercise of in-the-money warrants expiring in July 2017. 2013 audited IFRS financials have been converted from reported currency of C\$ to US\$ at an average annual FX rate of US\$0.934/C\$. 2014 financials are for comparative purposes only and are as provided by the company in the 2015 financial report, which reflects the change in accounting policy resulting from a change in currency presentation to US\$. 2015 financials are IFRS audited US\$ accounts. With effect from 1 January 2015, the functional currency was changed from Canadian dollars to US dollars.

Edison, the investment intelligence firm, is the future of investor interaction with corporates. Our team of over 100 analysts and investment professionals work with leading companies, fund managers and investment banks worldwide to support their capital markets activity. We provide services to more than 400 retained corporate and investor clients from our offices in London, New York, Frankfurt, Sydney and Wellington. Edison is authorised and regulated by the [Financial Conduct Authority](#). Edison Investment Research (NZ) Limited (Edison NZ) is the New Zealand subsidiary of Edison. Edison NZ is registered on the New Zealand Financial Service Providers Register (FSP number 247505) and is registered to provide wholesale and/or generic financial adviser services only. Edison Investment Research Inc (Edison US) is the US subsidiary of Edison and is regulated by the Securities and Exchange Commission. Edison Investment Research Limited (Edison Aus) [46085869] is the Australian subsidiary of Edison and is not regulated by the Australian Securities and Investment Commission. Edison Germany is a branch entity of Edison Investment Research Limited [4794244]. [www.edisongroup.com](http://www.edisongroup.com)

#### DISCLAIMER

Copyright 2016 Edison Investment Research Limited. All rights reserved. This report has been commissioned by Canadian Overseas Petroleum and prepared and issued by Edison for publication globally. All information used in the publication of this report has been compiled from publicly available sources that are believed to be reliable, however we do not guarantee the accuracy or completeness of this report. Opinions contained in this report represent those of the research department of Edison at the time of publication. The securities described in the Investment Research may not be eligible for sale in all jurisdictions or to certain categories of investors. This research is issued in Australia by Edison Aus and any access to it, is intended only for "wholesale clients" within the meaning of the Australian Corporations Act. The Investment Research is distributed in the United States by Edison US to major US institutional investors only. Edison US is registered as an investment adviser with the Securities and Exchange Commission. Edison US relies upon the "publishers' exclusion" from the definition of investment adviser under Section 202(a)(11) of the Investment Advisers Act of 1940 and corresponding state securities laws. As such, Edison does not offer or provide personalised advice. We publish information about companies in which we believe our readers may be interested and this information reflects our sincere opinions. The information that we provide or that is derived from our website is not intended to be, and should not be construed in any manner whatsoever as, personalised advice. Also, our website and the information provided by us should not be construed by any subscriber or prospective subscriber as Edison's solicitation to effect, or attempt to effect, any transaction in a security. The research in this document is intended for New Zealand resident professional financial advisers or brokers (for use in their roles as financial advisers or brokers) and habitual investors who are "wholesale clients" for the purpose of the Financial Advisers Act 2008 (FAA) (as described in sections 5(c) (1)(a), (b) and (c) of the FAA). This is not a solicitation or inducement to buy, sell, subscribe, or underwrite any securities mentioned or in the topic of this document. This document is provided for information purposes only and should not be construed as an offer or solicitation for investment in any securities mentioned or in the topic of this document. A marketing communication under FCA Rules, this document has not been prepared in accordance with the legal requirements designed to promote the independence of investment research and is not subject to any prohibition on dealing ahead of the dissemination of investment research. Edison has a restrictive policy relating to personal dealing. Edison Group does not conduct any investment business and, accordingly, does not itself hold any positions in the securities mentioned in this report. However, the respective directors, officers, employees and contractors of Edison may have a position in any or related securities mentioned in this report. Edison or its affiliates may perform services or solicit business from any of the companies mentioned in this report. The value of securities mentioned in this report can fall as well as rise and are subject to large and sudden swings. In addition it may be difficult or not possible to buy, sell or obtain accurate information about the value of securities mentioned in this report. Past performance is not necessarily a guide to future performance. Forward-looking information or statements in this report contain information that is based on assumptions, forecasts of future results, estimates of amounts not yet determinable, and therefore involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of their subject matter to be materially different from current expectations. For the purpose of the FAA, the content of this report is of a general nature, is intended as a source of general information only and is not intended to constitute a recommendation or opinion in relation to acquiring or disposing (including refraining from acquiring or disposing) of securities. The distribution of this document is not a "personalised service" and, to the extent that it contains any financial advice, is intended only as a "class service" provided by Edison within the meaning of the FAA (ie without taking into account the particular financial situation or goals of any person). As such, it should not be relied upon in making an investment decision. To the maximum extent permitted by law, Edison, its affiliates and contractors, and their respective directors, officers and employees will not be liable for any loss or damage arising as a result of reliance being placed on any of the information contained in this report and do not guarantee the returns on investments in the products discussed in this publication. FTSE International Limited ("FTSE") © FTSE 2016. "FTSE®" is a trade mark of the London Stock Exchange Group companies and is used by FTSE International Limited under license. All rights in the FTSE indices and/or FTSE ratings vest in FTSE and/or its licensors. Neither FTSE nor its licensors accept any liability for any errors or omissions in the FTSE indices and/or FTSE ratings or underlying data. No further distribution of FTSE Data is permitted without FTSE's express written consent.