

28 April 2017

# **March 2017 Quarterly Activity and Cashflow Report**

# **Summary**

- Indago completes the acquisition of Hydrocarbon Dynamics
- Nick Castellano and Allan Ritchie join Indago Board
- Cash position at March 31st of A\$3.2m
- Indago commences review of projects on which to trial HCD technology
- Operator at Newkirk proposes two wells to appraise project

#### **HCD Acquisition**

At a meeting of shareholders on April 3, 2017, approval was given to complete the acquisition of Hong Kong based HCD Holdings Ltd, its related companies and associated Intellectual Property (collectively "the Companies"). As a result of the acquisition Indago now owns an exceptional new oil technology and business that allows for the swift, clean and cost effective treatment of heavy, asphaltenic and paraffinic oils.

As reported previously, the technology can be applied to improve oil flow rates by the re-liquification of oil deposition from oil wells and pipelines and can also be used to recover oil from storage facilities. The product has proved its effectiveness in large-scale commercial oil wells and pipelines in Malaysia and India.

Indago have commenced an active review of oil accumulations, particularly in North America, where HCD technologies present an opportunity for the Company to develop its own production and reserves.

Indago, via HCD's existing sales arrangements, is also actively pursuing numerous sales opportunities for its product lines throughout all heavy or paraffinic oil producing regions of the world.

The key product, HCD Multiflow  $^{\text{TM}}$  comprises small, specially engineered carbon-based organic molecules that can disaggregate the large, naturally occurring agglomerations of waxes and



asphaltenes in heavy or paraffinic oil. Once disaggregated, these agglomerations are reabsorbed into the crude oil, reducing its pour point, viscosity and increasing API gravity thus providing outstanding flow assurance and transfer system efficiency. The HCD Multiflow™ molecule can also separate water and sediment from the crude oil and the product will have far-reaching applications in the producability and transport of heavy/paraffinic crudes, as already evidenced by the product's use in a large offshore oil field and with many successful trials to its credit.

At completion of the transaction, Indago had paid ~A\$1m in cash or assumed liabilities plus 30million fully paid shares and 33.2 million options (exercisable at \$0.25c for two years) and a 5% net royalty payment (subject to a US\$20,000 per month minimum). An additional 20 million shares will be issued pending either the re-instatement of drums sales to Malaysia or a new contract for mdrum sales of roughly the same amount). Subject to certain EBITDA hurdles being met, Indago may issue up to a further 30 million shares in April/May 2018 and 50 million shares in April/May 2019.

HCD comes debt free and with approximately US\$500,000 worth of stock (Multiflow), previously financed by Indago, for HCD to sell to potential customers

As approved by Indago shareholders, Nick Castellano, the founder and inventor of the technology, along with HCD's Managing Director Allan Ritchie, have joined the Indago board in Executive Director roles.

The technology is **proven**, **however** is at an early stage of application in the industry with revenues of around A\$1.2m in 2016 where HCD Multiflow<sup>TM</sup> was being used by Malaysia's national oil company, Petronas, on a major offshore platform and pipeline system. This contract has not resumed in 2017 while an alternate product is tested. Early encouraging and reproducible results have been reported in trials at a major oilfield in India. Test work is also scheduled for Brazil later in the year as well as new projects identified by Indago.

Now that the acquisition is complete, the merged group will use its technical, financial and commercial resources to expand the technology rapidly and will also look to acquire existing oil accumulations where the technology will be used to increase or commence oil production. Many of the world's oil provinces produce waxy or heavy crudes and experience associated production and transport problems and will represent early targets for the growth in both oil production and technology sales.

The Company is further developing its sales and marketing strategy whilst supporting all pre-existing sales initiatives. The Company is pursuing both direct sales opportunities for HCD Multi-Flow™ and related products via its own key staff as well as opportunities through existing sales, marketing and distribution partners previously established by HCD.



These sale initiatives include forthcoming presentations and trials to major American, Middle Eastern and Asian oil companies where HCD products may be used to improve production rates in wells, provide low-cost flow assurance solutions so pipelines can operate at or near full capacity when transporting paraffinic or waxy crudes and in large oil storage depots to recover oil from tanks sludge while simultaneously providing a safe and environmentally beneficial method to clean them.

The Company's objective is to build on the past successful applications of the HCD suite of products and win long-term sales contracts with oil producers, pipeline companies and oil field service providers.

#### **Financial**

130,738,214

At March 31st, Indago Energy had cash resources of \$3.2 million prior to financing the HCD acquisition which involved cash outflows of \$1m – including for the purchase of HCD's intellectual property.

Shares and options on issue at the date of this report:

Fully paid ordinary shares

5,000,000	Unlisted options with an exercise price of \$0.10 expiring 1 April 2019
33,200,000	Unlisted options with an exercise price of \$0.25 expiring 24 months from allotment.
1,750,000	Unlisted Management Incentive Options with an exercise price of \$0.14, vesting 1 March 2018, expiring 1 March 2020.
30,000,000	Performance Milestone (Tranche 1)
	Rights entitling each holder to subscribe for 1 ordinary share for each right at a nil issue price subject to EBITDA target for the 12 months ending 31 March 2018 being satisfied. They have no dividend rights until converted into ordinary shares. Once converted will rank pari passu with the ordinary shares of the company at the time of conversion.
50,000,000	Performance Milestone (Tranche 2) 50,000,000 Performance Milestone (Tranche 2) Rights entitling holder to subscribe for 1 ordinary share for each right at a nil issue price subject to EBITDA target for the 12 month period ending 31 March 2019 being satisfied. They have no dividend rights until converted into ordinary shares. Once converted will rank pari passu with the ordinary shares of the company at the time of conversion.

No performance rights were converted or cancelled during the year.



#### Newkirk Project, Kay County Oklahoma (100% WI 81.25%NRI)

During the Quarter the Operator at Newkirk, Empire Energy Limited (ASX:EEG) proposed a two well appraisal project for Newkirk including a water disposal well. The Operator estimated INK's share of costs for this project to be approximately US\$500,000. At the time of this report, the Indago board had not yet notified the Operator on whether it intended to participate in the work programme.

The Newkirk project, where Indago holds a 100% WI and 81.25% NRI in 4,049 acres, is located in Kay County, Oklahoma near Ponca City. The leases were largely acquired during 2015 with a three year primary term and two year bonus term. The project is located within the Mississippi Lime tight oil play, a relatively mature play in which hundreds of wells have been drilled in the past decade.

As reported previously, the main target Mississippian Lime (MSSP) is a carbonate formation which underlies a large portion of northern Oklahoma and southern Kansas. The play lies at shallow depth of 1200-2200m (4000-7000') and is about 100m (300') thick. Oil & gas is sourced from the underlying, highly prolific Woodford shale.

Reservoirs comprise the upper 'Chat' and lower 'Solid' members. The Chat is 12-15m (40-50') thick and is typically high porosity with variable permeability. The underlying Solid displays low porosity with local higher porosity 'sweet spots'.

Both MSSP reservoirs have been the focus of drilling and fracture simulated completions employing vertical wells since the 1940's and horizontals since 2007. Initial flow rates for vertical wells average ~45 Bbls/day oil and ~80 Mcf/d gas. For horizontals, initial flow rates are highly variable dependant on how many 'sweet spots' are encountered. Wells produce significant salt water with low oil cuts, typically 10:1. Consequently, salt water disposal/injection (SWD) is an important consideration at the Newkirk Project.

While the board believes Indago's leases are prospective for oil and gas, it should be noted that there is a paucity of modern wells in the immediate vicinity of Newkirk adding to the risks of exploration. An earlier review by Indago notes the project would present an attractive development when US domestic oil prices approach US\$60/bbl.

It should also be noted that there is a risk that leases will commence to expire prior to the establishment of a commercial play as approximately 31% of leases expiry by the 30 September 2017, another 33% expire by the end of December 2017, the remainder expire during the last quarter of 2018.

Oil and gas leases held by Indago are contiguous with an additional 4,936 acres held by EEG. Under a Joint Operating Agreement, the two companies had agreed to the further development of the combined acreage (8,985 acres) on a 50/50 basis.



# **Oil and Gas Tenements**

Project	Location	Interest acquired or disposed of during the quarter net to Indago	Total acres owned net to Indago	Working Interest held as at 30 June 2016
Newkirk	Kay and Noble Counties, Oklahoma	0	4,049 acres	100% in Acreage,50% in JV

For further information please contact:

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**ASX Code: INK** 



# Glossary

\$ Australian Dollars
US\$ United States Dollars
Bbls/day Barrels (of oil) per day
MBO Thousand barrels of oil
MMBO Millions barrels of oil

MBOE Thousand barrels of oil equivalent
MMBOE Millions barrels of oil equivalent

BOE Barrels of oil equivalent

BOE/day Barrels of oil equivalent per day EUR Estimated Ultimate Recovery

Mcf Thousand cubic feet (of natural gas)

Mcfd Thousand cubic feet (of natural gas) per day

MMcf Million cubic feet of natural gas

NRI Net revenue interest
WI Working interest
TVD Total vertical depth
TMD Total measured depth
MD Measured depth

3.28 feet Equals 1 metre

+Rule 5.5

# **Appendix 5B**

# Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

### Name of entity

Indago Energy Limited

ABN

Quarter ended ("current quarter")

75 117 387 354

31 March 2017

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
1.	Cash flows from operating activities		
144	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	(13)	(13)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(84)	(84)
	(e) administration and corporate costs	(158)	(158)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	10	10
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid		-
1.7	Research and development refunds	-	-
1.8	Other	-	-
1.9	Net cash from / (used in) operating activities	(245)	(245)

2.	Cash flows from investing activities
2.1	Payments to acquire:
	(a) property, plant and equipment
	(b) tenements (see item 10)
	(c) investments
	(d) other non-current assets

<sup>+</sup> See chapter 19 for defined terms

1 September 2016

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment	-	-
5 - - - - - - - - - - - - - - - - - - -	(b) tenements (see item 10)	-	-
	(c) investments	-	-
	(d) other non-current assets	-	-
2.3	Cash flows from loans to other entities	(164)	(164)
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(164)	(164)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of shares	-	-
3.2	Proceeds from issue of convertible notes	-	-
3.3	Proceeds from exercise of share options	-	-
3.4	Transaction costs related to issues of shares, convertible notes or options	-	-
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	-	-

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	3,653	3,653
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(245)	(245)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(164)	(164)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	- I
4.5	Effect of movement in exchange rates on cash held	(26)	(26)
4.6	Cash and cash equivalents at end of period	3,218	3,218

<sup>+</sup> See chapter 19 for defined terms 1 September 2016

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	3,218	3,218
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	3,218	3,218

6.	Payments to directors of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to these parties included in item 1.2	84
6.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	-
6.3	Include below any explanation necessary to understand the transactio items 6.1 and 6.2	ns included in
7.	Payments to related entities of the entity and their	Current quarter

7.	Payments to related entities of the entity and their associates	Current quarter \$A'000
7.1	Aggregate amount of payments to these parties included in item 1.2	
7.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	
7.3	Include below any explanation necessary to understand the transaction items 7.1 and 7.2	ns included in

<sup>+</sup> See chapter 19 for defined terms 1 September 2016

8.	Financing facilities available Add notes as necessary for an understanding of the position	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
8.1	Loan facilities	-	-
8.2	Credit standby arrangements	-	-
8.3	Other (please specify)	-	-
8.4	Include below a description of each facility ab whether it is secured or unsecured. If any add proposed to be entered into after quarter end	ditional facilities have bee	en entered into or are

9.	Estimated cash outflows for next quarter	\$A'000
9.1	Exploration and evaluation	15
9.2	Development	-
9.3	Production	-
9.4	Staff costs	283
9.5	Administration and corporate costs	357
9.6	Other – HCD acquisition costs	1,000
9.7	Total estimated cash outflows	1,655

10.	Changes in tenements (items 2.1(b) and 2.2(b) above)	Tenement reference and location	Nature of interest	Interest at beginning of quarter	Interest at end of quarter
10.1	Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced				
10.2	Interests in mining tenements and petroleum tenements acquired or increased				

<sup>+</sup> See chapter 19 for defined terms 1 September 2016

#### **Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Sign here: Date: 28 April 2017

Company secretary

Print name: Julie Edwards

#### **Notes**

- The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
- 2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.

1 September 2016 Page 5

<sup>+</sup> See chapter 19 for defined terms