

For Immediate Release 21<sup>st</sup> Oct, 2016

# **Cairn India Limited**

# Quarterly Financial Results for the period ended 30<sup>th</sup> Sep, 2016 Net profit more than doubles QoQ to ₹ 779 crore

# **Financial Highlights**

- Revenue at ₹ 2,039 crore; up 8% QoQ
- EBITDA at ₹ 1,039 crore; up 31% QoQ; highest in the last 5 quarters
- Net profit at ₹ 779 crore; up 117% QoQ; highest in the last 6 quarters
- Strong free cash flow of ₹ 1,565 crore even at low oil price; solid Cash and Cash Equivalents position of ₹ 24,339 crore

## **Operational Highlights**

- Average gross oil and gas production across assets steady at 196 kboepd
- Additional production from Mangala EOR up from ~42 kboepd to ~52 kboepd; RJ production marginally up by 0.5% QoQ to 167,699 boepd
- RJ water-flood operating cost at 10 quarters low, reduced by 12% QoQ to US\$ 3.9/boe; blended operating cost also reduced by 10% QoQ to US\$ 5.8/boe

# **Development / Exploration Highlights**

- RDG 8 new wells brought online after completion of the 15-well hydro-frac campaign;
   Implementation of Phase-1 to increase the gas production to 40-45 mmscfd by mid CY17, Phase-2 to increase it further to upwards of 100 mmscfd and condensate to ~5,000 boepd
- Aishwariya EOR 21% reduction in spend from US\$19/bbl to \$15/bbl as a result of Opex and Capex optimization; IRR improved from 10% to 20% even with reduced Brent assumption from US\$ 45 to US\$ 40/bbl
- Bhagyam EOR 17% reduction in spend from US\$ 18/bbl to US\$ 15/bbl as a result of Opex and Capex optimization; IRR improved from 10% to 15% even with reduced Brent assumption from US\$ 45/bbl to US\$ 40/bbl
- Aishwariya Barmer Hill >30% reduction in well completion cost to sub US\$ 4.5 million per well;
   15-20% reduction in capex of US\$ 300 million for EUR of 30 mmbbls; Production from stage-1 expected in current fiscal year
- Palar-Pennar The program for drilling the commitment wells is being advanced and drilling is now planned to commence in Q4 FY17
- Rajasthan Focus on identification of new plays, appraisal of new discoveries, and processing of the new 3D seismic data over high priority areas within the RJ block





## **Corporate and Regulatory Developments**

On July 22, 2016, Cairn India Limited and Vedanta Limited revised the terms of the proposed merger between Cairn India Limited and Vedanta Limited which was initially announced on June 14, 2015. As per the revised terms, upon the merger becoming effective, non-controlling i.e. public shareholders of Cairn India will receive for each equity share held, one equity share in Vedanta Limited of face value ₹1 each and four 7.5% Redeemable Preference Shares in Vedanta Limited with a face value of ₹10 each. No shares will be issued to Vedanta Limited or any of its subsidiaries for their shareholding in Cairn India Limited.

NSE and BSE have provided their 'No Objection' to the proposed merger and shareholders of Cairn India Limited, Vedanta Limited and Vedanta Resources Plc and the secured and unsecured creditors of Vedanta Limited have approved the Scheme with requisite majority. The Scheme is now subject to the approval of the jurisdictional High Courts and other regulatory approvals and is expected to be effective by the end of this financial year. Vedanta Limited will continue to be listed on the BSE Limited and National Stock Exchange of India Limited, with American Depositary Shares listed on the New York Stock Exchange. The Redeemable Preference Shares to be issued to the public shareholders of Cairn India Limited will also be listed on the NSE and BSE.

- The PSC extension writ is *sub judice* in the Hon'ble High Court of Delhi.
- In respect of crude export writ, the High Court while setting aside the writ, has noted that the parties are at liberty to refer the matter to dispute resolution as per contract.

## Mr. Sudhir Mathur, Acting CEO of Cairn India commented:

"I thank our shareholders on approving the planned merger with Vedanta Limited to which the market has responded very positively.

The Cairn India team has delivered a net profit of  $\stackrel{?}{\sim}$  779 crore for the quarter ended September 2016 in a challenging oil price environment. This is the highest quarterly profit for the company over the past six quarters and is reflective of our industry leading technological and operational capabilities.

Our efforts to monetize our world class resource base through improved economics have resulted in the key projects - RDG Gas, Bhagyam and Aishwariya EOR becoming viable by achieving the desired IRR even at Brent at US\$ 40 per barrel."





## **Operational Review**

During Q2 FY17, Cairn had a gross production of 18.1 mmboe across all the assets, of which working interest production was 11.6 mmboe. Gross Sales was 17.6 mmboe averaging at 191,579 boepd.

Average Daily Production	Units	Q2 FY17	Q1 FY17	q-o-q (%)	Q2 FY16	у-о-у (%)
Total Gross operated*	Boepd	206,230	206,455	(0%)	214,247	(4%)
Gross operated	Boepd	196,399	196,861	(0%)	205,361	(4%)
Oil	Bopd	189,873	190,305	(0%)	197,685	(4%)
Gas	Mmscfd	39	39	(0%)	46	(15%)
Working Interest	Boepd	125,575	125,391	0%	128,021	(2%)
	R	ajasthan (Blocl	k RJ-ON-90/1)			
Total Gross operated*	Boepd	176,691	175,760	1%	176,281	0%
Gross operated	Boepd	167,699	166,943	0%	168,126	(0%)
Oil	Bopd	164,833	164,547	0%	165,585	(0%)
Gas	Mmscfd	17	14	20%	15	13%
Gross DA 1	Boepd	151,880	150,699	1%	147,443	3%
Gross DA 2	Boepd	15,820	16,244	(3%)	20,683	(24%)
Gross DA 3	Boepd	-	-	-	-	-
Working Interest	Boepd	117,390	116,860	0%	117,688	(0%)
		Ravva (Block	r PKGM-1)			
Total Gross operated*	Boepd	19,889	20,664	(4%)	27,162	(27%)
Gross operated	Boepd	18,823	19,637	(4%)	26,064	(28%)
Oil	Bopd	16,736	17,014	(2%)	22,491	(26%)
Gas	Mmscfd	13	16	(20%)	21	(42%)
Working Interest	Boepd	4,235	4,418	(4%)	5,864	(28%)
		Cambay (Bloc	·k CB/OS-2)			
Total Gross operated*	Boepd	9,650	10,031	(4%)	10,805	(11%)
Gross operated	Boepd	9,877	10,031	(4%)	11,172	(12%)
Oil	Bopd	8,304	8,744	(5%)	9,609	(14%)
Gas	Mmscfd	9	9	2%	9	1%
Working Interest	Boepd	3,951	4,113	(4%)	4,469	(12%)
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<sup>\*</sup> Includes internal gas consumption

## **Operations**

## Rajasthan (Block RJ-ON-90/1)

Gross production from Rajasthan block was marginally up by 0.5% QoQ to an average rate of 167,699 boepd, aided by continued strong volumes from Mangala EOR and inline performance from Bhagyam and Aishwariya. Total production for the quarter was 15.4 mmboe and the cumulative production was at 369 mmboe by the end of the quarter. Encouraging results from Mangala EOR, driven by enhanced well productivity and new wells coming online, increased the additional production from EOR to an average of 52,000 boepd in Q2 FY17 from 42,000 boepd in Q1 FY17. Continued reservoir management including production optimization and maximization of liquid handling capacity helped maintain strong performance from Bhagyam and Aishwariya. Satellite Fields delivered an improved performance as





production increased ~10% QoQ to an average of ~3.9 Kbopd in Q2 FY17. Total oil sales for the quarter was 14.9 mn barrels, at an average rate of 162,207 bopd.

Gas production from RDG increased from 28 mmscfd in Q1 FY17 to 33 mmscfd in Q2 FY17, amounting to 3 bcf, helped by superior initial well productivity post conclusion of the hydro-frac campaign. An additional 8 wells were brought online during the quarter after completing the fraccing of 15 wells in Q1 FY17. Total gas sales were 1.6 bcf, at an average rate of 17.2 mmscfd.

The water-flood operating cost in Rajasthan was further reduced to the lowest level in last 10 quarters at US\$ 3.9/boe in Q2 FY17 from US\$ 4.4/boe in Q1 FY17 through optimization of facility maintenance and work-over activities. Blended operating cost was also reduced significantly to US\$ 5.8/boe from US\$ 6.4/boe through contracts renegotiation and higher captive power generation while maintaining the injection of polymer at the target level of 400 kblpd.

Maintaining a strong focus on safe operations and asset integrity, the average facility uptime was over 99% in Q2 FY17. Lost Time Incident (LTI) free man-hours for Rajasthan Projects crossed 30.6 million since last LTI.

A routine operational and statutory maintenance shutdown at the Mangala Processing Terminal has been rescheduled in November from the earlier plan of September. The opportunity will be used to create tie-ins for ongoing new facility enhancements, development projects and future growth projects.

## Ravva (Block PKGM-1)

Ravva continues to deliver strong performance with a cumulative production of 280 mmbbls of crude and 347 bcf of gas, demonstrating a good reservoir management practices helping achieve ~50% recovery, far in excess of the initial resource estimates. In Q2 FY17, the production from Ravva declined by 4.1% QoQ to an average rate of 18,823 boepd, amounting to 1.7 mmboe. Incremental opportunities are being targeted to sustain the production rates. Optimization of gas lifted wells, addition of new zones, network optimization to reduce back pressure and water shut-off by zone isolations have helped arrest the natural decline. For Q2 FY17, 1.3 mmbbls of crude and 1.2 bcf of gas were sold, averaging 13,963 bopd of crude oil and 13 mmscfd of gas, respectively.

With a continued emphasis on asset integrity, Ravva recorded an uptime of 99.9% in Q2 FY17. Maintaining its high safety standards, Ravva asset recorded over 5.3 million LTI free man-hours since last LTI.

## Cambay (Block CB/OS-2)

Cambay has also maintained an in-line performance having produced ~27 mmbbls of crude and ~228 bcf of gas, with an overall recovery of ~30% since inception in 2002. In Q2 FY17, the production was lower by 3.9% QoQ at an average rate of 9,877 boepd, amounting to 0.9 mmboe. Continued reservoir management practices and production optimization activities helped offset the natural decline impact. During the quarter, 0.8 mmbbls of crude and 0.9 bcf of gas were sold, averaging 8,883 bopd of crude oil and 9.4 mmscfd of gas, respectively.

Facilities recorded an excellent uptime of ~100% in Q2 FY17 and LTI free man-hours of 3.7 million.





# **Development**

With an aim to enhance recovery from the large base of HIIP at 7.8 billion boe across assets and monetize the resources of over one billion boe in Rajasthan, efforts are on to improve economics through productivity enhancement and cost reduction. Following developments were made in this direction in the key projects:

## Gas Development at RDG Field

In-line with the focus on improving productivity and enhancing recovery through technology adoption, the expected ultimate gas recovery has increased by 26% compared to the initial estimates. Successful completion of the 15-well hydro-frac campaign with encouraging results for initial well productivity and improved reservoir characterization helped increase recovery estimates till 2030, including condensate, from 74 mmboe to 86 mmboe. Higher recovery potential and cost reduction have improved the rate of return to 25-30% from 20% earlier.

The project is being developed in a phased manner to realize capital efficiency while maintaining production growth and is progressing on track. As part of Phase-1, 8 out of the 15 wells have been brought online and will start adding to the production as per plan. Rest of the wells are also planned to be brought online by December 2016. Contract for low cost augmentation of the existing facility will be awarded in October 2016. Tendering for enhancement of existing pipeline capacity is in advance stage and contract is expected to be awarded during Q3 FY17. Completion of Phase-1 is expected to increase the gas production to 40-45 mmscfd by end of 1H CY17. For Phase-2, tendering activity for new gas processing terminal and drilling rig is ongoing as per plan. Tendering process for gas evacuation pipeline, planned to be built by GSPL Gasnet Limited, is also progressing well with bids expected in October 2016. Completion of Phase-2 will increase the gas production upwards of 100 mmscfd and condensate production to about 5,000 boepd.

## Polymer flood in Bhagyam and Aishwariya

With an objective of enhancing recovery from MBA fields in addition to 30-35% estimated from waterflood operations, polymer flood program should provide a further recovery of 10-12%. Initially, the program will provide an incremental oil production of 45 mmbbls from Bhagyam and 15 mmbbls from Aishwariya till 2030 as development is planned in the favourable region to reduce drilling and facility cost. Scope optimization and higher operating efficiency have reduced the cost significantly, helping improve the project economics.

For Aishwariya EOR, the cost optimization efforts brought down the total of development and operating cost further by ~21% to US\$ 15/bbl from US\$ 19/bbl during the quarter. This has helped improve the return to 20% at US\$ 40/bbl of Brent price from 10% at US\$ 45/bbl. The field development plan will be submitted in October 2016. Polymer injection is planned to begin in 1H CY18 subject to approval of the plan.

For Bhagyam EOR, the cost optimization efforts brought down the total of development and operating cost further by ~17% to US\$ 15/bbl from US\$ 18/bbl during the quarter. This has helped improve the return to 15% at US\$ 40/bbl of Brent price from 10% at US\$ 45/bbl. Significant progress has been made





on the multi-well polymer injectivity test to improve injection rate modelling. Based on the test results, a revised field development plan is expected to be submitted to the JV in 1H CY17. First polymer injection is planned in Q1 CY19.

#### **Barmer Hill**

Barmer Hill has a significant growth potential with a large HIIP base of 1.4 billion boe and expected ultimate recovery of 8-10%. At present the focus is on developing Barmer Hill formation of Aishwariya and Mangala by utilizing the infrastructure already in place, in-line with return based capital investment approach. Well completion cost for lateral wells was further reduced by over 30% to sub US\$ 4.5 million per well through frac optimization and well construction design improvements, surpassing the expectation of US\$ 4.5-5 million as indicated earlier. A substantial progress has been made in reducing the surface facility cost by leveraging existing infrastructure.

For Aishwariya Barmer Hill, cost savings from drilling and completion activities, and surface facility will drive 15-20% reduction in the development cost of US\$ 300 million for a EUR of about 30 mmbbls till 2030. Development is planned in stages to de-risk the investment. First oil from Stage - 1 is expected during the current fiscal year.

For Mangala Barmer Hill, water-flood pilot has been initiated to increase field pressure and oil recovery. Development plan will be prepared after incorporating the pilot results.

For other tight oil fields including V&V, DP and NL, internal studies and field pilots are being carried out to optimize and finalize the development plan.

## **Satellite Field**

The objective to unlock opportunities in Satellite Field is being pursued through improvement in the economics by bringing down the cost. Options to realize cost efficiency are being evaluated such as building pipeline between NI and Bhagyam fields to reduce trucking cost, utilizing gas to generate electricity instead of flaring it, optimizing well intervention expense through effective use of low cost alternatives. Progress has been made on the preparation of development plans for key satellite fields at a minimal development cost. For Guda, discussion with the JV partner for development of Stage-1 is ongoing.

## **Exploration**

## Rajasthan

Exploration activities will continue focussing on seismic data processing and interpretation. In order to enhance the current portfolio, efforts are on integration of all available data and identification of high impact new plays.

In Raageshwari field and adjoining areas, Azimuthal processing of the newly acquired 3D seismic data has helped in the reservoir characterization and fracture delineation. Processing of 3D seismic data has been completed for 'Air Field South' area and is ongoing for DP field. Data interpretation and processing





are underway to identify new prospects in these fields that will act to replenish the exploration prospect inventory.

#### **Other India and International Assets**

Palar-Pennar (Block PR-OSN-2004/1): The program for drilling the commitment wells is being advanced and drilling is planned to commence in Q4 FY17. The JV is engaging with the MoPNG for proportionate revision of work program commitment from three wells to two wells in view of lack of access to the full block area.

KG Offshore (Block KG-OSN-2009/3): Cairn continues to engage with the MoPNG for an extension contingent upon full lifecycle clearance from Ministry of Defence. Phase-I was up to 8<sup>th</sup> March 2016. Interpretation of the new seismic volumes has resulted in identification of four prospects and a number of smaller leads over different play types.

KG Onshore (Block KG-ONN-2003/1): ONGC, the development operator, has submitted the Field Development Plan (FDP) to the Management Committee (MC). The FDP is being reviewed by the MC.

South Africa (Block 1): The prospect inventory for the block has been finalised. Assessment of exploration potential of inboard plays is ongoing to provide other drilling options. A decision on the proposed legislative changes to the Mineral and Petroleum Resources Development Act 2002 and the consequent applicable fiscal regime for progressing into the second exploration license phase is awaited.

#### **Financial Review**

₹ Crore	Q2 FY17	Q1 FY17	q-o-q (%)	Q2 FY16	у-о-у (%)
Net Revenue	2,039	1,885	8%	2,242	(9%)
EBITDA	1,039	794	31%	973	7%
Margin (%)	51%	42%		43%	
Reported PAT	779	360	117%	326	139%
Margin (%)	38%	19%		15%	
EPS (₹) – Diluted	4.14	1.92	115%	1.73	139%
Cash EPS (₹)	7.86	6.73	17%	7.36	7%

Note: Numbers for Q2 FY16 have been restated as per IndAS requirement

Average Price Realization	Units	Q2 FY17	Q1 FY17	q-o-q (%)	Q2 FY16	у-о-у (%)
Cairn India	US\$/boe	41.8	38.0	10%	43.7	(4%)
Oil	US\$/bbl	41.7	37.9	10%	43.7	(4%)
Gas	US\$/mscf	7.5	7.1	6%	7.0	7%

Revenue for the quarter increased 8% QoQ to ₹ 2,039 crore as discount to Brent for Rajasthan crude declined substantially from US\$ 8.2/bbl to US\$ 4.3/bbl, implying a reduction in discount from 18% to 9.3%. An improvement in differential between Bonny Light and Brent, and strong refining crack for fuel oil and waxy residue helped reduce the discount. Overall realization was up by 10% QoQ to US\$ 41.8/boe as Rajasthan crude realization increased by 11% to US\$ 41.6/bbl. Brent price was relatively flat on average basis at US\$ 45.8/bbl. Consequent to higher revenue, net profit petroleum increased by 19%





to ₹ 771 crore including ₹ 662 crore for Rajasthan block. Net royalty was ₹ 417 crore with Rajasthan share of ₹414 crore.

Continued drive for cost optimization has reduced the water-flood operating cost for Rajasthan further by 12% QoQ to US\$ 3.9/boe, the lowest in last 10 quarters. Reduction in facility and well maintenance expenses through streamlining the maintenance activities and work-over programs helped lower the operating cost. Blended operating cost for RJ was also reduced by 10% QoQ to US\$ 5.8/boe while maintaining the polymer injection in Mangala at target rate of 400 kbpld.

EBITDA margin improved further from 42% in Q1 FY17 to 51% in Q2 FY17 due to higher revenue and reduction in operating cost. EBITDA for the quarter also increased by 31% QoQ to ₹ 1,039 crore. DD&A charges accounted on entitlement interest basis were lower by 4% QoQ to ₹ 782 crore. Other income was stable at ₹ 535 crore. Forex gain was recorded at ₹ 64 crore due to 1.4% appreciation in Rupee versus US Dollar on closing basis.

Net profit after tax was highest in the last six quarter as it increased significantly by 117% QoQ to ₹779 crore on account of higher EBITDA, lower depreciation and forex gain. A higher profit resulted into Earnings per share of ₹ 4.1 for Q2 FY17. Cash EPS was also up 17% QoQ to ₹ 7.9 due to higher EBITDA.

Total free cash flow for Q2 FY17 was at ₹ 1,565 crore. Net capital investment was ₹ 45 crore with 86% spent on development work and 14% on exploration activities. Positive free cash generation further strengthened the cash and cash equivalent position to ₹ 24,339 crore (US\$ 3.7 billion), of which 68% is invested in rupee funds and 32% in dollar funds.

## Health, Safety, Environment, Quality and Sustainability

Cairn India's strong commitment to health, safety, environment, quality and sustainability has helped sustain excellent HSEQS performance over the years. Rajasthan asset won "D.L. Shah Gold Quality Award" at the 11<sup>th</sup> National Quality Conclave in recognition of effective quality management in Mangala EOR project. Additionally, Mangala Well Pad-18 received the 'Golden Peacock Eco-Innovation Award' for the year 2016. An intensive 3-month campaign on raising awareness about 'Hazard Identification' was successfully completed.

## **Corporate Social Responsibility**

Maintaining focus on social development, a good progress was made during the quarter. Extension of operations was received for the first set of plants under the safe drinking water project through innovative demand generation and awareness initiatives. Key developments at the Cairn Centre of Excellence (CCoE) included quality job offers for trainees, partnerships with Government agencies and unique working models developed by students. On the occasion of 'World Youth Skills Day', Rajasthan Skill and Livelihood Development Corporation, Government of Rajasthan awarded CCoE with the best training partner award for December 2015. A set of major awards were received in different categories during the quarter such as the '6<sup>th</sup> Asia Best CSR Practices Awards 2016' in Singapore, the 'National CSR Leadership Award' at the National CSR Leadership Congress organised by World Sustainability Organization for the CCoE and Safe drinking water project, and the 'CSR Impact Award' at India CSR Summit 2016.





## **FY17 Outlook**

With an aim to create long term value to the shareholders, Cairn India will remain focused on monetizing its Rajasthan resource base. A net capital investment of US\$ 100 million is estimated for FY17, including 20% for exploration activities and 80% for development of RDG Gas project and completion activities of Mangala EOR. The gross production from Rajasthan for FY17 is expected to be maintained at FY16 level. Efforts are ongoing to further improve the economics of key projects -Bhagyam and Aishwariya EOR, Barmer Hill and Satellite Fields, at low oil prices and the pre-development investment is underway to ensure project readiness for the development with grant of extension of PSC. The company retains the flexibility to raise its capital investment as oil prices improve and aims to generate a healthy cash flow post capex so as to retain the ability to pay dividends.

#### **Contact**

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## **Cairn India Limited Fact Sheet**

On 9 January, 2007, Cairn India Limited was listed on the Bombay Stock Exchange and the National Stock Exchange of India. Cairn India is a subsidiary of Vedanta Limited; part of the Vedanta Group, a globally diversified natural resources group.

Cairn India is headquartered in Gurgaon in the National Capital Region. The Company has operational offices in Andhra Pradesh, Gujarat, Rajasthan and Tamil Nadu.

Cairn India is one of the largest independent oil and gas exploration and production companies in India. Together with its JV partners, Cairn India accounted for ~27% of India's domestic crude oil production for FY16. Average gross operated production was 203,703 boepd for FY16. The Company sells its oil and gas to major PSU and private buyers in India.

The Company has a world-class resource base, with interest in seven blocks in India and one in South Africa. Cairn India's resource base is located in four strategically focused areas namely one block in Rajasthan, two on the west coast of India, four on the east coast of India and one in South Africa.

The blocks are located in the Barmer Basin, Krishna-Godavari Basin, the Palar-Pennar Basin, the Cambay Basin, the Mumbai Offshore Basin and Orange Basin.

Cairn India's focus on India has resulted in a significant number of oil and gas discoveries. Cairn India made a major oil discovery (Mangala) in Rajasthan in the north west of India at the beginning of 2004. To date, thirty eight discoveries have been made in the Rajasthan block RJ-ON-90/1

In Rajasthan, Cairn India operates Block RJ-ON-90/1 under a PSC signed on 15 May, 1995 comprising of three development areas. The main Development Area (DA-1; 1,859 km2), which includes discoveries namely Mangala, Aishwariya, Raageshwari and Saraswati is shared between Cairn India and ONGC. Further Development Areas (DA-2; 430 km2), including the Bhagyam, NI and NE fields and (DA-3; 822 km2) comprising of the Kaameshwari West Development Area, is shared between Cairn India and ONGC, with Cairn India holding 70% and ONGC having exercised their back in right for 30%.





In Andhra Pradesh and Gujarat, Cairn India on behalf of its JV partners operates two processing plants, with a production of over 34,000 boepd for FY16.

The farm-in agreement was signed with PetroSA on 16<sup>th</sup> August, 2012 in the 'Block-1' located in Orange basin, South Africa. The block covers an area of 19,898 sq km. The assignment of 60% interest and operatorship has been granted by the South African regulatory authorities.

For further information on Cairn India Limited, kindly visit www.cairnindia.com





Corporate Glossary			
Cairn India	Cairn India Limited and/or its subsidiaries as appropriate		
Company	Cairn India Limited		
Cairn Lanka	Refers to Cairn Lanka (Pvt) Ltd, a wholly owned subsidiary of Cairn India		
Cash EPS	PAT adjusted for DD&A, impact of forex fluctuation, MAT credit and deferred tax		
CFO	Cash Flow from Operations includes PAT (excluding other income and exceptional item) prior to non-cash expenses and exploration costs.		
CPT	Central Processing Terminal		
CY	Calendar Year		
DoC	Declaration of Commerciality		
E&P	Exploration and Production		
EBITDA	Earnings before Interest, Taxes, Depreciation and Amortisation includes forex gain/loss earned as part of operations		
EPS	Earnings Per Share		
FY	Financial Year		
GBA	Gas Balancing Agreement		
Gol	Government of India		
GoR	Government of Rajasthan		
Group	The Company and its subsidiaries		
JV	Joint Venture		
MC	Management Committee		
MoPNG	Ministry of Petroleum and Natural Gas		
NELP	New Exploration Licensing Policy		
Normalized net profit	Net profit before exceptional items		
NRM	National Rural Mission		
ONGC	Oil and Natural Gas Corporation Limited		
OC	Operating Committee		
PPAC	Petroleum Planning & Analysis Cell		
Qoq	Quarter on Quarter		
Vedanta Group	roup Vedanta Resources plc and/or its subsidiaries from time to time		
Yoy	Year on Year		

Technical Glossary				
2P	Proven plus probable			
3P	Proven plus probable and possible			
2D/3D/4D	Two dimensional/three dimensional/ time lapse			
Blpd	Barrel(s) of (polymerized) liquid per day			
Boe	Barrel(s) of oil equivalent			
Boepd	Barrels of oil equivalent per day			
Bopd	Barrels of oil per day			
Bcf	Billion standard cubic feet of gas			
Tcf	Trillion standard cubic feet of gas			
EOR	Enhanced Oil Recovery			
FDP	Field Development Plan			
HIIP	Hydrocarbons Initially In Place			
LTI	Lost Time Incident			
MDT	Modular Dynamic Tester			

Mmboe	million barrels of oil equivalent
Mmscfd	million standard cubic feet of gas per day
Mmt	Million Metric Tonne
PSU	Public Sector Utilities
SPM	Single Point Mooring
PSC	Production Sharing Contract

Field Glossary				
Barmer Hill	Lavora de anace la litta de acestra de la la			
	Lower permeability reservoir which			
Formation	overlies the Fatehgarh			
	Secondary reservoirs in the Guda field and			
Dharvi Dungar	is the reservoir rock encountered in the			
	recent Kaameshwari West discoveries			
	Name given to the primary reservoir rock			
Fatehgarh	of the Northern Rajasthan fields of			
	Mangala, Aishwariya and Bhagyam			
MBARS	Mangala, Bhagyam, Aishwariya,			
	Raageshwari, Saraswati			
Thumbli	Youngest reservoirs encountered in the			
	basin. The Thumbli is the primary reservoir			
	for the Raageshwari field			

#### Disclaimer

This material contains forward-looking statements regarding Cairn India and its affiliates, our corporate plans, future financial condition, future results of operations, future business plans and strategies. All such forward- looking statements are based on our management's assumptions and beliefs in the light of information available to them at this time. These forward-looking statements are by their nature subject to significant risks and uncertainties; and actual results, performance and achievements may be materially different from those expressed in such statements. Factors that may cause actual results, performance or achievements to differ from expectations include, but are not limited to, regulatory changes, future levels of industry product supply, demand and pricing, weather and weather related impacts, wars and acts of terrorism, development and use of technology, acts of competitors and other changes to business conditions. Cairn India undertakes no obligation to revise any such forward-looking statements to reflect any changes in Cairn India's expectations with regard thereto or any change in circumstances or events after the date hereof. Unless otherwise stated the reserves and resource numbers within this document represent the views of Cairn India and do not represent the views of any other party, including the Government of India, the Directorate General of Hydrocarbons or any of Cairn India's joint venture partner